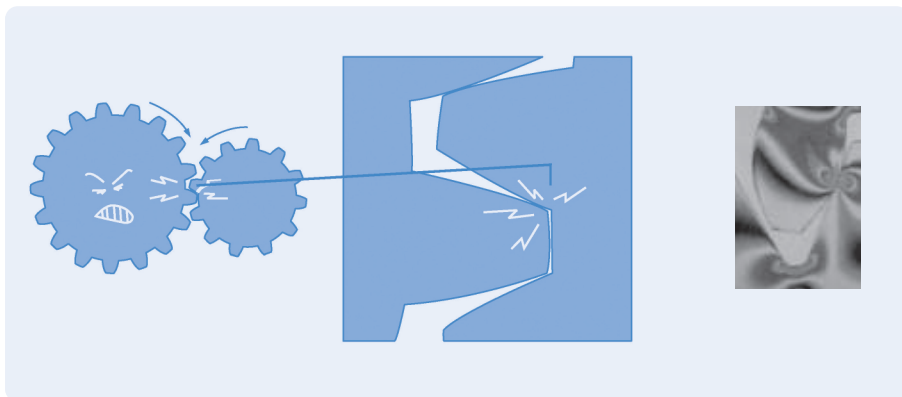


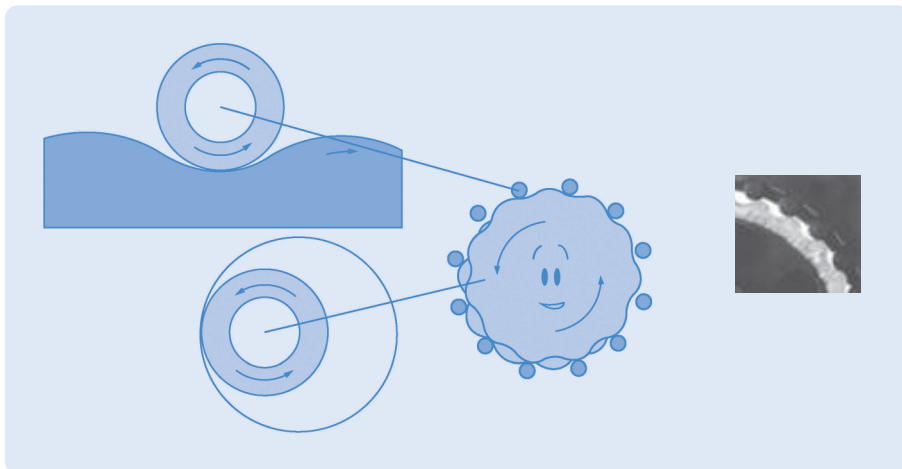
## 01 인볼류트 기어

맞물림율이 적기때문에  
충격하중이 발생하면  
1~2개의 톱니에  
충격이 집중됩니다.



## 02 CYCLO감속기

매끄러운 굴림접촉  
맞물림율이 인볼류트  
기어보다 2~3배 높고,  
충격하중이 발생하여도  
많은 톱니에서 분산  
흡수하므로, 강하고  
긴 수명의 감속기입니다.



## 효율이 높아 경제적이다. Overall Economy.

높은 고효율을 얻을 수 있어 타 감속기보다 경제적입니다.

Competitive initial cost, high reliability, long life and minimal maintenance give CYCLOID speed reducers superior overall economy when compared to conventional gearboxes.

## 소형 경량이다. Compact Size.

1단에서 1/6 ~ 1/119의 감속과 2단, 3단으로 수천에서 수십만 분의 1 감속을 할 수 있어 소형이고 경량화 하였습니다.

Single stage reduction ratios are available from 6 : 1 to 119 : 1, double stage up to 7,569 : 1 and triple stage up to almost 1,000,000 : 1. Fewer stages provide a much smaller footprint and envelope.

## 운전이 원활하고 소음이 적다. Low Noise.

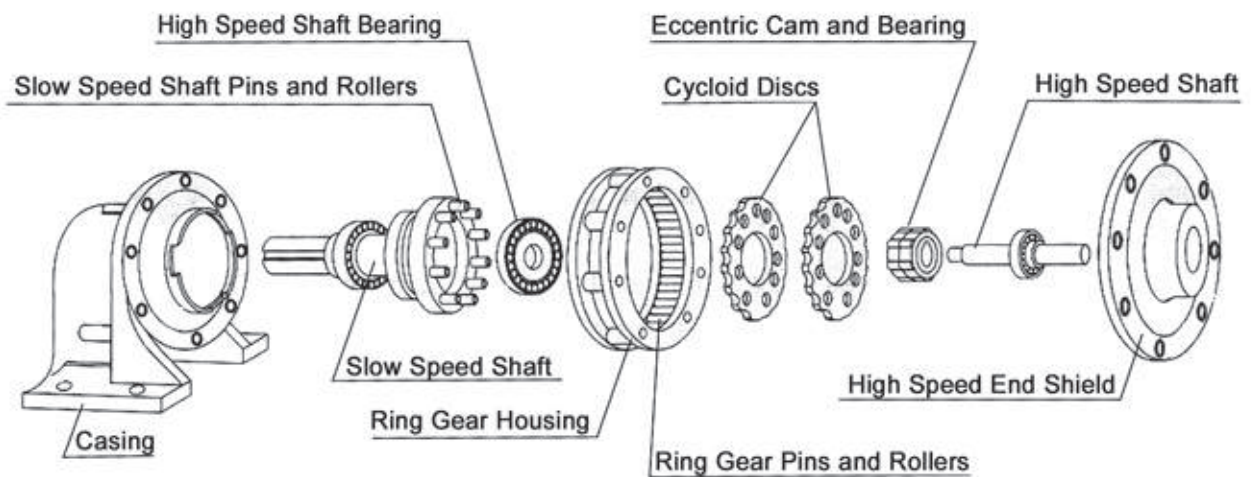
치면이 구름 접촉을 하고, 치면을 정밀 연삭 하여 운전이 원활하고 소음 진동이 적습니다.

When compared with the sliding tooth contact of conventional gearing, the rolling contact of the CYCLOID system reduces noise levels.

## 기종이 다양하고 보전작업이 용이하다. Maintenance Free Durability.

용도에 따라 다양한 취부 형태의 부품이 표준화되어 있어 선택의 폭이 크고, 표준화된 부품과 간단한 구조로 보전 작업이 용이 합니다.

Because of various mounting types of parts as per application, that have already been standardized, it can take a wide room for selection, and it keeps easy maintenance with standard parts and simple structure.

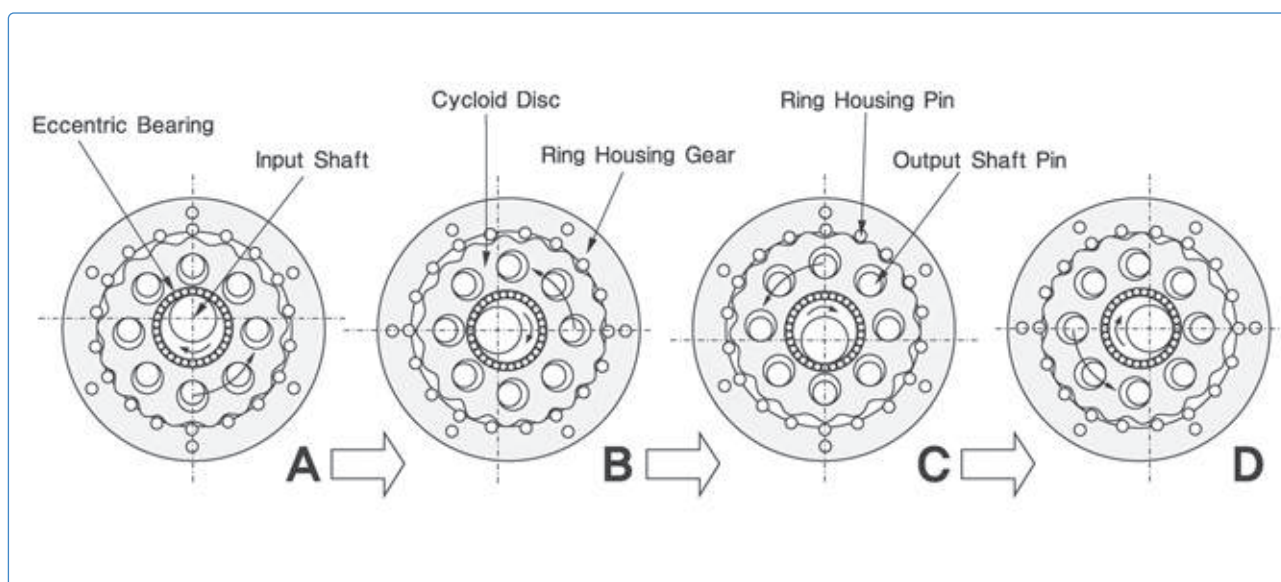


사이크로이드 치형 감속기의 구성은 아래 그림의 부품으로 구성 되어 있다.

- 입력부는 입력축 또는 모터축에 편심캠, 베어링, 오일씰
- 감속부는 곡선판, 링기어하우징, 핀, 롤러
- 출력부는 출력샤프트, 베어링, 케이스로 구성된다.

The cycloidal design basically has three major components.

- Input shaft assembly (high speed) with eccentric cam, roller bearing and oil seals.
- Cycloid disc, Ringgear Housing, Pin, Bush
- Output shaft assembly (slow speed) with support bearings and case.



감속원리는 입력축에 전달된 토크는 편심캠의 운동으로 회전하고 그 운동으로 링기어 하우징의 내부 곡선판을 회전 시킨다. 링기어 하우징에 고정되어 있는 핀과 접촉하는 곡선판의 회전에 의해 출력축이 반대 방향으로 회전하게 된다. 편심캠 1회전시 곡선판 1개 잇수만큼 이동하게 되고, 곡선판 내부 홈에 삽입되어 있는 출력축 고정핀에 의하여 출력축이 회전하면서 감속된 회전수를 얻을 수 있다.

(Torque transmitted to the high-speed shaft rotates the eccentric cam and roller bearing assembly, and rolls the cycloid discs around the internal circumference of the stationary ring gear housing. The teeth of the cycloid discs contact the pins of the stationary ring gear, producing a reverse rotation at a reduced speed.

Each rotation of the high-speed shaft advances the cycloid discs a distance of one tooth pitch in the opposite direction. The reduced rotation of cycloid discs is transmitted to the output shaft assembly by means of drive pins and rollers that are projected through holes located around the bore of the cycloid discs.)

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model     |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |           |
| 6     | 0.2   | 1/4 | 250                   | 0.72                     | 140                                             | 2.00 | 300                   | 0.60                     | 130                                             | 1.80 | 02-8808-6 |
|       | 0.4   | 1/2 |                       | 1.44                     | 140                                             | 1.00 |                       | 1.20                     | 130                                             | 1.05 | 05-8808-6 |
|       |       |     |                       |                          | 262                                             | 3.32 |                       |                          | 248                                             | 3.35 | 05-8809-6 |
|       | 0.75  | 1   |                       | 2.70                     | 262                                             | 1.77 |                       | 2.25                     | 248                                             | 1.79 | 1-8809-6  |
|       |       |     |                       |                          | 415                                             | 2.95 |                       |                          | 390                                             | 3.01 | 1-8810-6  |
|       | 1.5   | 2   |                       | 5.40                     | 415                                             | 1.47 |                       | 4.50                     | 390                                             | 1.51 | 2-8810-6  |
|       |       |     |                       |                          | 516                                             | 3.31 |                       |                          | 487                                             | 3.25 | 2-8811-6  |
|       | 2.2   | 3   |                       | 7.92                     | 415                                             | 1.00 |                       | 6.60                     | 390                                             | 1.03 | 3-8810-6  |
|       |       |     |                       |                          | 516                                             | 2.25 |                       |                          | 487                                             | 2.22 | 3-8811-6  |
|       |       |     |                       |                          | 516                                             | 1.34 |                       |                          | 487                                             | 1.32 | 5-8811-6  |
|       | 3.7   | 5   |                       | 13.3                     | 519                                             | 1.79 |                       | 11.1                     | 487                                             | 1.83 | 5-8812-6  |
|       |       |     |                       |                          | 601                                             | 2.69 |                       |                          | 568                                             | 2.69 | 5-8813-6  |
|       |       |     |                       |                          | 519                                             | 1.20 |                       |                          | 487                                             | 1.23 | 8-8812-6  |
|       | 5.5   | 7.5 |                       | 19.8                     | 601                                             | 1.81 |                       | 16.5                     | 568                                             | 1.81 | 8-8813-6  |
|       |       |     |                       |                          | 601                                             | 1.33 |                       |                          | 568                                             | 1.33 | 10-8813-6 |
|       | 7.5   | 10  |                       | 27.0                     | 940                                             | 1.73 |                       | 22.5                     | 890                                             | 1.73 | 10-8815-6 |
|       |       |     |                       |                          | 975                                             | 1.95 |                       |                          | 920                                             | 1.95 | 10-8816-6 |
|       |       |     |                       |                          | 940                                             | 1.18 |                       |                          | 890                                             | 1.18 | 15-8815-6 |
| 8     | 11    | 15  | 188                   | 39.6                     | 975                                             | 1.33 | 225                   | 33.0                     | 920                                             | 1.33 | 15-8816-6 |
|       |       |     |                       |                          | 1152                                            | 1.94 |                       |                          | 1081                                            | 2.04 | 15-8817-6 |
|       | 15    | 20  |                       | 54.0                     | 1152                                            | 1.43 |                       | 45.0                     | 1081                                            | 1.50 | 20-8817-6 |
|       | 18.5  | 25  |                       | 66.6                     | 1152                                            | 1.16 |                       | 55.5                     | 1081                                            | 1.21 | 25-8817-6 |
|       | 0.2   | 1/4 | 188                   | 0.96                     | 154                                             | 2.00 | 225                   | 0.80                     | 145                                             | 2.00 | 02-8808-8 |
|       | 0.4   | 1/2 |                       | 1.92                     | 154                                             | 1.00 |                       | 1.60                     | 145                                             | 1.00 | 05-8808-8 |
|       |       |     |                       |                          | 289                                             | 3.38 |                       |                          | 272                                             | 3.35 | 05-8809-8 |
|       | 0.75  | 1   |                       | 3.60                     | 289                                             | 1.80 |                       | 3.30                     | 272                                             | 1.79 | 1-8809-8  |
|       |       |     |                       |                          | 455                                             | 3.63 |                       |                          | 429                                             | 3.68 | 1-8810-8  |
|       | 1.5   | 2   |                       | 7.20                     | 455                                             | 1.81 |                       | 6.00                     | 429                                             | 1.84 | 2-8810-8  |
|       |       |     |                       |                          | 570                                             | 3.34 |                       |                          | 537                                             | 3.34 | 2-8811-8  |
|       | 2.2   | 3   |                       | 10.6                     | 455                                             | 1.24 |                       | 8.80                     | 429                                             | 1.25 | 3-8810-8  |
|       |       |     |                       |                          | 570                                             | 2.28 |                       |                          | 537                                             | 2.28 | 3-8811-8  |
|       |       |     |                       |                          | 570                                             | 1.36 |                       |                          | 537                                             | 1.35 | 5-8811-8  |
|       | 3.7   | 5   |                       | 17.8                     | 571                                             | 1.84 |                       | 14.8                     | 540                                             | 1.83 | 5-8812-8  |
|       |       |     |                       |                          | 659                                             | 2.70 |                       |                          | 624                                             | 2.70 | 5-8813-8  |
|       |       |     |                       |                          | 570                                             | 1.24 |                       |                          | 540                                             | 1.23 | 8-8812-8  |
|       | 5.5   | 7.5 |                       | 26.4                     | 659                                             | 1.82 |                       | 22.0                     | 624                                             | 1.82 | 8-8813-8  |
|       |       |     |                       |                          | 659                                             | 1.33 |                       |                          | 624                                             | 1.33 | 10-8813-8 |
|       | 7.5   | 10  |                       | 36.0                     | 1030                                            | 1.73 |                       | 30.0                     | 975                                             | 1.72 | 10-8815-8 |
|       |       |     |                       |                          | 1072                                            | 2.37 |                       |                          | 1010                                            | 2.39 | 10-8816-8 |
|       |       |     |                       |                          | 1030                                            | 1.18 |                       |                          | 975                                             | 1.17 | 15-8815-8 |
|       | 11    | 15  |                       | 52.8                     | 1072                                            | 1.62 |                       | 44.0                     | 1012                                            | 1.63 | 15-8816-8 |
|       | 15    | 20  |                       | 72.0                     | 1072                                            | 1.19 |                       | 60.0                     | 1012                                            | 1.19 | 20-8816-8 |

# 성능 및 선정표(4P)1단

## Selection & Performance table – Single Reduction – 4P

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model<br>Motor(HP)-Frame-Ratio |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|--------------------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                                |
| 11    | 0.2   | 1/4 | 136                   | 1.32                     | 101                                             | 1.20 | 164                   | 1.10                     | 92                                              | 1.20 | 02-8807-11                     |
|       |       |     |                       |                          | 170                                             | 2.00 |                       |                          | 161                                             | 2.00 | 02-8808-11                     |
|       | 0.4   | 1/2 |                       | 2.64                     | 170                                             | 1.00 |                       | 2.20                     | 161                                             | 1.00 | 05-8808-11                     |
|       |       |     |                       |                          | 325                                             | 3.05 |                       |                          | 309                                             | 3.02 | 05-8809-11                     |
|       | 0.75  | 1   |                       | 4.95                     | 325                                             | 1.63 |                       | 4.12                     | 309                                             | 1.61 | 1-8809-11                      |
|       |       |     |                       |                          | 506                                             | 3.62 |                       |                          | 476                                             | 3.60 | 1-8810-11                      |
|       | 1.5   | 2   |                       | 9.90                     | 506                                             | 1.81 |                       | 8.25                     | 476                                             | 1.80 | 2-8810-11                      |
|       |       |     |                       |                          | 634                                             | 3.35 |                       |                          | 597                                             | 3.32 | 2-8811-11                      |
|       | 2.2   | 3   |                       | 14.5                     | 506                                             | 1.24 |                       | 12.1                     | 476                                             | 1.23 | 3-8810-11                      |
|       |       |     |                       |                          | 634                                             | 2.29 |                       |                          | 597                                             | 2.26 | 3-8811-11                      |
|       | 3.7   | 5   |                       | 24.4                     | 634                                             | 1.36 |                       | 20.4                     | 597                                             | 1.34 | 5-8811-11                      |
|       |       |     |                       |                          | 735                                             | 2.62 |                       |                          | 692                                             | 2.64 | 5-8813-11                      |
|       | 5.5   | 7.5 |                       | 36.3                     | 735                                             | 1.76 |                       | 30.2                     | 692                                             | 1.78 | 8-8813-11                      |
|       |       |     |                       |                          | 735                                             | 1.29 |                       |                          | 692                                             | 1.30 | 10-8813-11                     |
|       | 7.5   | 10  |                       | 49.5                     | 968                                             | 1.31 |                       | 41.2                     | 916                                             | 1.32 | 10-8814-11                     |
|       |       |     |                       |                          | 1131                                            | 1.73 |                       |                          | 1070                                            | 1.72 | 10-8815-11                     |
|       |       |     |                       |                          | 1198                                            | 2.41 |                       |                          | 1122                                            | 2.37 | 10-8816-11                     |
|       | 11    | 15  |                       | 72.6                     | 1131                                            | 1.18 |                       | 60.5                     | 1070                                            | 1.17 | 15-8815-11                     |
|       |       |     |                       |                          | 1198                                            | 1.64 |                       |                          | 1122                                            | 1.62 | 15-8816-11                     |
|       | 15    | 20  |                       | 99.0                     | 1198                                            | 1.21 |                       | 82.5                     | 1122                                            | 1.19 | 20-8816-11                     |
|       |       |     |                       |                          | 1407                                            | 1.80 |                       |                          | 1322                                            | 1.79 | 20-8817-11                     |
|       |       |     |                       |                          | 1888                                            | 2.15 |                       |                          | 1780                                            | 2.16 | 20-8818-11                     |
|       | 18.5  | 25  |                       | 122                      | 1407                                            | 1.46 |                       | 102                      | 1322                                            | 1.45 | 25-8817-11                     |
|       |       |     |                       |                          | 1888                                            | 1.74 |                       |                          | 1780                                            | 1.75 | 25-8818-11                     |
|       | 22    | 30  |                       | 145                      | 1407                                            | 1.23 |                       | 121                      | 1322                                            | 1.22 | 30-8817-11                     |
|       |       |     |                       |                          | 1888                                            | 1.47 |                       |                          | 1780                                            | 1.47 | 30-8818-11                     |
|       |       |     |                       |                          | 2647                                            | 1.97 |                       |                          | 2481                                            | 1.97 | 30-8819-11                     |
|       | 30    | 40  |                       | 198                      | 1888                                            | 1.08 |                       | 165                      | 1780                                            | 1.08 | 40-8818-11                     |
|       |       |     |                       |                          | 2647                                            | 1.44 |                       |                          | 2481                                            | 1.44 | 40-8819-11                     |
|       |       |     |                       |                          | 3420                                            | 1.92 |                       |                          | 3242                                            | 1.93 | 40-8820-11                     |
|       | 37    | 50  |                       | 244                      | 2647                                            | 1.17 |                       | 204                      | 2481                                            | 1.17 | 50-8819-11                     |
|       |       |     |                       |                          | 3420                                            | 1.56 |                       |                          | 3242                                            | 1.56 | 50-8820-11                     |
|       |       |     |                       |                          | 4360                                            | 1.89 |                       |                          | 4132                                            | 1.88 | 50-8821-11                     |
|       | 45    | 60  |                       | 297                      | 3420                                            | 1.28 |                       | 248                      | 3242                                            | 1.28 | 60-8820-11                     |
|       |       |     |                       |                          | 4367                                            | 1.55 |                       |                          | 4132                                            | 1.55 | 60-8821-11                     |
|       |       |     |                       |                          | 4592                                            | 2.14 |                       |                          | 4350                                            | 2.13 | 60-8822-11                     |
|       | 55    | 75  |                       | 363                      | 4367                                            | 1.27 |                       | 302                      | 4132                                            | 1.26 | 75-8821-11                     |
|       |       |     |                       |                          | 4592                                            | 1.75 |                       |                          | 4350                                            | 1.74 | 75-8822-11                     |
|       | 75    | 100 |                       | 495                      | 4592                                            | 1.29 |                       | 412                      | 4350                                            | 1.28 | 100-8822-11                    |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model<br>Motor(HP)-Frame-Ratio |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|--------------------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                                |
| 13    | 0.2   | 1/4 | 115                   | 1.56                     | 107                                             | 1.20 | 138                   | 1.30                     | 100                                             | 1.20 | 02-8807-13                     |
|       |       |     |                       |                          | 177                                             | 2.00 |                       |                          | 170                                             | 2.00 | 02-8808-13                     |
|       | 0.4   | 1/2 |                       | 3.12                     | 177                                             | 1.00 |                       | 2.60                     | 170                                             | 1.00 | 05-8808-13                     |
|       |       |     |                       |                          | 334                                             | 3.00 |                       |                          | 325                                             | 3.00 | 05-8809-13                     |
|       | 0.75  | 1   |                       | 5.85                     | 334                                             | 1.60 |                       | 4.88                     | 325                                             | 1.60 | 1-8809-13                      |
|       |       |     |                       |                          | 534                                             | 3.54 |                       |                          | 505                                             | 3.52 | 1-8810-13                      |
|       | 1.5   | 2   |                       | 11.7                     | 534                                             | 1.77 |                       | 9.75                     | 505                                             | 1.76 | 2-8810-13                      |
|       |       |     |                       |                          | 670                                             | 3.25 |                       |                          | 634                                             | 3.24 | 2-8811-13                      |

| Ratio | Motor |      | 50 Hz(1500rpm)        |                          |                                              |            | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|-------|-------|------|-----------------------|--------------------------|----------------------------------------------|------------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|       | KW    | HP   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF         | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   |                       |
|       |       |      |                       |                          |                                              |            |                       |                          |                                              |      | Motor(HP)-Frame-Ratio |
| 13    | 2.2   | 3    | 115                   | 17.2                     | 534                                          | 1.21       | 138                   | 14.3                     | 505                                          | 1.20 | 3-8810-13             |
|       |       |      |                       |                          | 670                                          | 2.22       |                       |                          | 634                                          | 2.21 | 6-8811-13             |
|       | 3.7   | 5    |                       | 28.9                     | 670                                          | 1.32       |                       | 24.0                     | 634                                          | 1.31 | 5-8811-13             |
|       |       |      |                       |                          | 670                                          | 1.35       |                       |                          | 634                                          | 1.35 | 5-8812-13             |
|       |       |      |                       |                          | 775                                          | 2.49       |                       |                          | 736                                          | 2.50 | 5-8813-13             |
|       | 5.5   | 7.5  |                       | 42.9                     | 775                                          | 1.67       |                       | 35.8                     | 736                                          | 1.68 | 8-8813-13             |
|       |       |      |                       |                          | 775                                          | 1.23       |                       |                          | 736                                          | 1.23 | 10-8813-13            |
|       | 7.5   | 10   |                       | 58.5                     | 1190                                         | 1.37       |                       | 48.8                     | 1131                                         | 1.36 | 10-8815-13            |
|       |       |      |                       |                          | 1260                                         | 2.27       |                       |                          | 1197                                         | 2.27 | 10-8816-13            |
|       |       |      |                       |                          | 1260                                         | 1.54       |                       |                          | 1197                                         | 1.54 | 15-8816-13            |
|       | 11    | 15   |                       | 85.8                     | 1478                                         | 2.43       |                       | 71.5                     | 1407                                         | 2.44 | 15-8817-13            |
|       |       |      |                       |                          | 1260                                         | 1.13       |                       |                          | 1197                                         | 1.13 | 20-8816-13            |
|       | 15    | 20   |                       | 117                      | 1478                                         | 1.78       |                       | 97.5                     | 1407                                         | 1.78 | 20-8817-13            |
|       |       |      |                       |                          | 1995                                         | 2.21       |                       |                          | 1884                                         | 2.20 | 20-8818-13            |
|       |       |      |                       |                          | 1478                                         | 1.44       |                       |                          | 120                                          | 1407 | 1.45                  |
|       | 1995  | 1.79 |                       | 1884                     | 1.78                                         | 25-8818-13 |                       |                          |                                              |      |                       |
|       | 18.5  | 25   |                       | 144                      | 1478                                         | 1.21       |                       | 143                      | 1407                                         | 1.22 | 30-8817-13            |
|       |       |      |                       |                          | 1995                                         | 1.50       |                       |                          | 1884                                         | 1.50 | 30-8818-13            |
|       |       |      |                       |                          | 2793                                         | 1.81       |                       |                          | 2632                                         | 1.92 | 30-8819-13            |
|       | 22    | 30   |                       | 172                      | 1995                                         | 1.10       |                       | 195                      | 1884                                         | 1.10 | 40-8818-13            |
|       |       |      |                       |                          | 2793                                         | 1.33       |                       |                          | 2632                                         | 1.41 | 40-8819-13            |
|       | 30    | 40   |                       | 234                      | 2793                                         | 1.08       |                       | 241                      | 2632                                         | 1.14 | 50-8819-13            |
| 37    | 50    | 289  | 2793                  | 1.08                     |                                              |            |                       |                          |                                              |      |                       |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|-------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   |                       |
|       |       |     |                       |                          |                                              |      |                       |                          |                                              |      | Motor(HP)-Frame-Ratio |
| 15    | 0.2   | 1/4 | 100                   | 1.80                     | 110                                          | 1.20 | 120                   | 1.50                     | 106                                          | 1.20 | 02-8807-15            |
|       |       |     |                       |                          | 180                                          | 2.00 |                       |                          | 179                                          | 2.00 | 02-8808-15            |
|       | 0.4   | 1/2 |                       | 3.60                     | 180                                          | 1.00 |                       | 3.00                     | 179                                          | 1.00 | 05-8808-15            |
|       |       |     |                       |                          | 340                                          | 2.62 |                       |                          | 335                                          | 2.00 | 05-8809-15            |
|       | 0.75  | 1   |                       | 6.75                     | 340                                          | 1.40 |                       | 5.62                     | 335                                          | 1.39 | 1-8809-15             |
|       |       |     |                       |                          | 550                                          | 3.65 |                       |                          | 528                                          | 3.63 | 1-8810-15             |
|       | 1.5   | 2   |                       | 13.5                     | 550                                          | 1.83 |                       | 11.3                     | 528                                          | 1.81 | 2-8810-15             |
|       |       |     |                       |                          | 705                                          | 3.23 |                       |                          | 662                                          | 3.21 | 2-8811-15             |
|       | 2.2   | 3   |                       | 19.8                     | 550                                          | 1.24 |                       | 16.5                     | 528                                          | 1.24 | 3-8810-15             |
|       |       |     |                       |                          | 705                                          | 2.20 |                       |                          | 662                                          | 2.19 | 3-8811-15             |
|       | 3.7   | 5   |                       | 33.3                     | 705                                          | 1.31 |                       | 27.8                     | 662                                          | 1.30 | 5-8811-15             |
|       |       |     |                       |                          | 705                                          | 1.34 |                       |                          | 662                                          | 1.34 | 5-8812-15             |
|       |       |     |                       |                          | 818                                          | 2.06 |                       |                          | 765                                          | 2.05 | 5-8813-15             |
|       | 5.5   | 7.5 |                       | 49.5                     | 818                                          | 1.39 |                       | 41.2                     | 765                                          | 1.38 | 8-8813-15             |
|       |       |     |                       |                          | 1060                                         | 1.66 |                       |                          | 1010                                         | 1.66 | 8-8814-15             |
|       | 7.5   | 10  |                       | 67.5                     | 818                                          | 1.02 |                       | 56.2                     | 765                                          | 1.01 | 10-8813-15            |
|       |       |     |                       |                          | 1060                                         | 1.22 |                       |                          | 1010                                         | 1.22 | 10-8814-15            |
|       |       |     |                       |                          | 1241                                         | 1.32 |                       |                          | 1170                                         | 1.32 | 10-8815-15            |
|       |       |     |                       |                          | 1333                                         | 1.97 |                       |                          | 1240                                         | 1.99 | 10-8816-15            |
|       | 11    | 15  |                       | 99.0                     | 1333                                         | 1.36 |                       | 82.5                     | 1240                                         | 1.26 | 15-8816-15            |
|       |       |     |                       |                          | 1565                                         | 2.08 |                       |                          | 1470                                         | 2.07 | 20-8817-15            |
|       | 15    | 20  |                       | 135                      | 1333                                         | 1.00 |                       | 113                      | 1240                                         | 1.00 | 20-8816-15            |
|       |       |     |                       |                          | 1565                                         | 1.53 |                       |                          | 1470                                         | 1.52 | 20-8817-15            |
|       |       |     |                       |                          | 2100                                         | 2.02 |                       |                          | 1970                                         | 2.00 | 20-8818-15            |
|       | 18.5  | 25  |                       | 167                      | 1565                                         | 1.24 |                       | 139                      | 1470                                         | 1.23 | 25-8817-15            |
|       |       |     |                       |                          | 2100                                         | 1.64 |                       |                          | 1970                                         | 1.62 | 25-8818-15            |
|       | 22    | 30  |                       | 198                      | 1565                                         | 1.04 |                       | 165                      | 1470                                         | 1.04 | 30-8817-15            |
|       |       |     |                       |                          | 2100                                         | 1.38 |                       |                          | 1970                                         | 1.36 | 30-8818-15            |
|       |       |     |                       |                          | 2940                                         | 1.94 |                       |                          | 2750                                         | 1.93 | 30-8819-15            |

# 성능 및 선정표(4P)1단

## Selection & Performance table – Single Reduction – 4P

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                       |
|       |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      | Motor(HP)-Frame-Ratio |
| 15    | 30    | 40  | 100                   | 270                      | 2090                                            | 1.01 | 120                   | 225                      | 1970                                            | 1.00 | 40-8818-15            |
|       |       |     |                       |                          | 2930                                            | 1.42 |                       |                          | 2750                                            | 1.42 | 40-8819-15            |
|       |       |     |                       |                          | 3760                                            | 1.94 |                       |                          | 3560                                            | 1.94 | 40-8820-15            |
|       | 37    | 50  |                       | 333                      | 2930                                            | 1.15 |                       | 278                      | 2750                                            | 1.15 | 50-8819-15            |
|       |       |     |                       |                          | 3760                                            | 1.57 |                       |                          | 3560                                            | 1.57 | 50-8820-15            |
|       |       |     |                       |                          | 4790                                            | 1.93 |                       |                          | 4530                                            | 1.92 | 50-8821-15            |
|       | 45    | 60  |                       | 405                      | 3760                                            | 1.29 |                       | 338                      | 3560                                            | 1.29 | 60-8820-15            |
|       |       |     |                       |                          | 4790                                            | 1.58 |                       |                          | 4530                                            | 1.58 | 60-8821-15            |
|       |       |     |                       |                          | 5040                                            | 2.00 |                       |                          | 4770                                            | 2.00 | 60-8822-15            |
|       | 55    | 75  |                       | 495                      | 4790                                            | 1.30 |                       | 412                      | 4530                                            | 1.29 | 75-8821-15            |
|       |       |     |                       |                          | 5040                                            | 1.64 |                       |                          | 4770                                            | 1.64 | 75-8822-15            |
|       | 75    | 100 |                       | 675                      | 5040                                            | 1.20 |                       | 562                      | 4770                                            | 1.20 | 100-8822-15           |

| Ratio | Motor |      | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|-------|-------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|       | KW    | HP   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|       |       |      |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 17    | 0.2   | 1/4  | 88                    | 2.04                     | 110                                          | 1.20 | 106                   | 1.72                     | 109                                          | 1.20 | 02-8807-17            |
|       |       |      |                       |                          | 180                                          | 2.00 |                       |                          | 179                                          | 2.00 | 02-8808-17            |
|       | 0.4   | 1/2  |                       | 4.08                     | 180                                          | 1.00 |                       | 3.40                     | 179                                          | 1.00 | 05-8808-17            |
|       |       |      |                       |                          | 340                                          | 2.68 |                       |                          | 339                                          | 2.72 | 05-8809-17            |
|       | 0.75  | 1    |                       | 7.65                     | 340                                          | 1.43 |                       | 6.38                     | 339                                          | 1.45 | 1-8809-17             |
|       |       |      |                       |                          | 550                                          | 2.79 |                       |                          | 550                                          | 2.73 | 1-8810-17             |
|       | 1.5   | 2    |                       | 15.3                     | 550                                          | 1.39 |                       | 12.8                     | 550                                          | 1.37 | 2-8810-17             |
|       |       |      |                       |                          | 733                                          | 3.12 |                       |                          | 690                                          | 3.07 | 2-8811-17             |
|       | 2.2   | 3    |                       | 22.4                     | 733                                          | 2.13 |                       | 18.7                     | 690                                          | 2.09 | 3-8811-17             |
|       |       |      |                       |                          | 37.7                                         | 733  |                       |                          | 1.26                                         | 31.4 | 690                   |
|       | 734   | 1.34 |                       | 690                      |                                              | 1.34 |                       | 5-8812-17                |                                              |      |                       |
|       | 850   | 1.90 |                       | 795                      |                                              | 1.91 |                       | 5-8813-17                |                                              |      |                       |
|       | 5.5   | 7.5  |                       | 56.1                     | 850                                          | 1.28 |                       | 46.8                     | 795                                          | 1.28 | 8-8813-17             |
|       |       |      |                       |                          | 1100                                         | 1.65 |                       |                          | 1040                                         | 1.64 | 8-8814-17             |
|       | 7.5   | 10   |                       | 76.5                     | 1100                                         | 1.21 |                       | 63.8                     | 1040                                         | 1.20 | 10-8814-17            |
|       |       |      |                       |                          | 1380                                         | 2.00 |                       |                          | 1310                                         | 1.99 | 10-8816-17            |
|       | 11    | 15   | 112                   | 1380                     | 1.36                                         | 93.5 | 1310                  | 1.35                     | 15-8816-17                                   |      |                       |
|       |       |      |                       | 1620                     | 1.75                                         |      | 1532                  | 1.75                     | 15-8817-17                                   |      |                       |
|       | 15    | 20   | 153                   | 1380                     | 1.00                                         | 128  | 1310                  | 1.00                     | 20-8816-17                                   |      |                       |
|       |       |      |                       | 1620                     | 1.29                                         |      | 1532                  | 1.29                     | 20-8817-17                                   |      |                       |
|       |       |      |                       | 2180                     | 2.00                                         |      | 2050                  | 1.99                     | 20-8818-17                                   |      |                       |
|       | 18.5  | 25   | 189                   | 1620                     | 1.04                                         | 157  | 1532                  | 1.04                     | 25-8817-17                                   |      |                       |
|       |       |      |                       | 2180                     | 1.62                                         |      | 2050                  | 1.61                     | 25-8818-17                                   |      |                       |
|       | 22    | 30   | 224                   | 2180                     | 1.36                                         | 188  | 2050                  | 1.35                     | 30-8818-17                                   |      |                       |
|       |       |      |                       | 3050                     | 1.95                                         |      | 2870                  | 1.94                     | 30-8819-17                                   |      |                       |
|       | 30    | 40   | 306                   | 2180                     | 1.00                                         | 255  | 2050                  | 1.00                     | 40-8818-17                                   |      |                       |
|       |       |      |                       | 3050                     | 1.43                                         |      | 2870                  | 1.42                     | 40-8819-17                                   |      |                       |
|       | 37    | 50   | 377                   | 3050                     | 1.16                                         | 314  | 2870                  | 1.15                     | 50-8819-17                                   |      |                       |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model<br>Motor(HP)-Frame-Ratio |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|--------------------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                                |
| 21    | 0.2   | 1/4 | 71                    | 2.52                     | 110                                             | 1.00 | 89                    | 2.10                     | 110                                             | 1.00 | 02-8807-21                     |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |       | Model<br>Motor(HP)-Frame-Ratio |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|-------|--------------------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF    |                                |
| 21    | 0.2   | 1/4 | 71                    | 2.52                     | 180                                             | 2.00 | 89                    | 2.10                     | 180                                             | 2.00  | 02-8808-21                     |
|       | 0.4   | 1/2 |                       | 5.04                     | 180                                             | 1.00 |                       | 4.20                     | 180                                             | 1.00  | 05-8808-21                     |
|       |       |     |                       |                          | 340                                             | 2.48 |                       |                          | 340                                             | 2.50  | 05-8809-21                     |
|       | 0.75  | 1   |                       | 9.45                     | 340                                             | 1.32 |                       | 7.88                     | 340                                             | 1.33  | 1-8809-21                      |
|       |       |     |                       |                          | 550                                             | 2.69 |                       |                          | 550                                             | 2.68  | 1-8810-21                      |
|       | 1.5   | 2   |                       | 18.9                     | 550                                             | 1.35 |                       | 15.8                     | 550                                             | 1.34  | 2-8810-21                      |
|       |       |     |                       |                          | 787                                             | 2.69 |                       |                          | 740                                             | 2.67  | 2-8811-21                      |
|       | 2.2   | 3   |                       | 27.7                     | 787                                             | 1.83 |                       | 23.1                     | 740                                             | 1.82  | 3-8811-21                      |
|       | 3.7   | 5   |                       | 46.6                     | 787                                             | 1.09 |                       | 38.8                     | 740                                             | 1.08  | 5-8811-21                      |
|       |       |     |                       |                          | 909                                             | 1.64 |                       |                          | 855                                             | 1.63  | 5-8813-21                      |
|       |       |     |                       |                          | 909                                             | 1.10 |                       |                          | 855                                             | 1.09  | 8-8813-21                      |
|       | 5.5   | 7.5 |                       | 69.3                     | 1180                                            | 1.22 |                       | 57.8                     | 1110                                            | 1.21  | 8-8814-21                      |
|       |       |     |                       |                          | 1480                                            | 2.40 |                       |                          | 1390                                            | 2.042 | 8-8816-21                      |
|       | 7.5   | 10  |                       | 94.5                     | 1480                                            | 1.76 |                       | 78.8                     | 1390                                            | 1.77  | 10-8816-21                     |
|       | 11    | 15  |                       | 139                      | 1480                                            | 1.20 |                       | 116                      | 1390                                            | 1.21  | 15-8816-21                     |
|       |       |     |                       |                          | 1740                                            | 1.68 |                       |                          | 1640                                            | 1.67  | 15-8817-21                     |
|       | 15    | 20  |                       | 189                      | 1740                                            | 1.23 |                       | 158                      | 1640                                            | 1.2   | 20-8817-21                     |
|       |       |     |                       |                          | 2340                                            | 1.79 |                       |                          | 2200                                            | 1.79  | 20-8818-21                     |
|       | 18.5  | 25  |                       | 233                      | 1740                                            | 1.00 |                       | 194                      | 1640                                            | 1.00  | 25-8817-21                     |
|       |       |     |                       |                          | 2340                                            | 1.45 |                       |                          | 2200                                            | 1.45  | 25-8818-21                     |
|       |       |     |                       |                          | 3270                                            | 1.95 |                       |                          | 3080                                            | 1.96  | 25-8819-21                     |
|       | 22    | 30  |                       | 277                      | 2340                                            | 1.22 |                       | 231                      | 2200                                            | 1.22  | 30-8818-21                     |
|       |       |     |                       |                          | 3270                                            | 1.64 |                       |                          | 3080                                            | 1.64  | 30-8819-21                     |
|       | 30    | 40  |                       | 378                      | 3270                                            | 1.20 |                       | 315                      | 3080                                            | 1.21  | 40-8819-21                     |
|       |       |     |                       |                          | 4160                                            | 1.54 |                       |                          | 3940                                            | 1.53  | 40-8820-21                     |
|       |       |     |                       |                          | 5300                                            | 1.98 |                       |                          | 5010                                            | 1.98  | 40-8821-21                     |
|       | 37    | 50  |                       | 466                      | 3270                                            | 1.00 |                       | 388                      | 3080                                            | 1.00  | 50-8819-21                     |
|       |       |     |                       |                          | 4160                                            | 1.25 |                       |                          | 3940                                            | 1.24  | 50-8820-21                     |
|       |       |     |                       |                          | 5300                                            | 1.93 |                       |                          | 5010                                            | 1.91  | 50-8821-21                     |
|       |       |     |                       |                          | 5580                                            | 2.44 |                       |                          | 5280                                            | 2.43  | 50-8822-21                     |
|       | 45    | 60  |                       | 567                      | 4160                                            | 1.03 |                       | 472                      | 3940                                            | 1.02  | 60-8820-21                     |
|       |       |     |                       |                          | 5300                                            | 1.58 |                       |                          | 5010                                            | 1.58  | 60-8821-21                     |
|       |       |     |                       |                          | 5580                                            | 2.00 |                       |                          | 5280                                            | 2.00  | 60-8821-21                     |
|       | 55    | 75  |                       | 693                      | 5300                                            | 1.30 |                       | 578                      | 5010                                            | 1.29  | 75-8821-21                     |
|       |       |     |                       |                          | 5580                                            | 1.64 |                       |                          | 5280                                            | 1.64  | 75-8822-21                     |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model<br>Motor(HP)-Frame-Ratio |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|--------------------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                                |
| 25    | 0.2   | 1/4 | 60                    | 3.00                     | 180                                             | 1.25 | 72                    | 2.50                     | 180                                             | 1.25 | 02-8808-25                     |
|       |       |     |                       |                          | 340                                             | 3.75 |                       |                          | 340                                             | 3.75 | 02-8809-25                     |
|       | 0.4   | 1/2 |                       | 6.00                     | 340                                             | 1.88 |                       | 5.00                     | 340                                             | 1.88 | 05-8809-25                     |
|       |       |     |                       |                          | 340                                             | 1.00 |                       | 9.38                     | 340                                             | 1.00 | 1-8809-25                      |
|       | 0.75  | 1   |                       | 11.3                     | 550                                             | 1.92 |                       |                          | 550                                             | 1.96 | 1-8810-25                      |
|       | 1.5   | 2   |                       | 22.5                     | 835                                             | 2.13 |                       | 18.8                     | 785                                             | 2.13 | 2-8811-25                      |
|       |       |     |                       |                          | 835                                             | 1.45 |                       |                          | 785                                             | 1.45 | 3-8811-25                      |
|       | 2.2   | 3   |                       | 33.0                     | 835                                             | 1.52 |                       | 27.5                     | 785                                             | 1.52 | 3-8812-25                      |
|       |       |     |                       |                          | 965                                             | 2.31 |                       |                          | 909                                             | 2.31 | 3-8813-25                      |
|       | 3.7   | 5   |                       | 55.5                     | 965                                             | 1.37 |                       | 46.2                     | 909                                             | 1.37 | 5-8813-25                      |
|       |       |     |                       |                          | 1242                                            | 1.58 |                       |                          | 1170                                            | 1.57 | 5-8814-25                      |
|       |       |     |                       |                          | 1242                                            | 1.06 |                       |                          | 1170                                            | 1.06 | 8-8814-25                      |
|       | 5.5   | 7.5 |                       | 82.5                     | 1453                                            | 1.22 |                       | 68.8                     | 1370                                            | 1.26 | 8-8815-25                      |
|       |       |     |                       |                          | 1580                                            | 2.11 |                       |                          | 1470                                            | 2.11 | 8-8816-25                      |
|       | 7.5   | 10  |                       | 113                      | 1580                                            | 1.55 |                       | 93.8                     | 1470                                            | 1.55 | 10-8816-25                     |
|       |       |     |                       |                          | 1855                                            | 2.07 |                       |                          | 1740                                            | 2.08 | 10-8817-25                     |

# 성능 및 선정표(4P)1단

## Selection & Performance table – Single Reduction – 4P

| Ratio | Motor |    | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|-------|-------|----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|       | KW    | HP | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                       |
|       |       |    |                       |                          |                                                 |      |                       |                          |                                                 |      | Motor(HP)-Frame-Ratio |
| 25    | 11    | 15 | 60                    | 165                      | 1580                                            | 1.05 | 72                    | 138                      | 1470                                            | 1.05 | 15-8816-25            |
|       |       |    |                       |                          | 1855                                            | 1.41 |                       |                          | 1740                                            | 1.42 | 15-8817-25            |
|       |       |    |                       |                          | 2490                                            | 2.07 |                       |                          | 2330                                            | 2.07 | 15-8818-25            |
|       | 15    | 20 |                       | 225                      | 1855                                            | 1.03 |                       | 188                      | 1740                                            | 1.04 | 20-8817-25            |
|       |       |    |                       |                          | 2490                                            | 1.52 |                       |                          | 2330                                            | 1.52 | 20-8818-25            |
|       |       |    |                       |                          | 3490                                            | 2.29 |                       |                          | 3260                                            | 2.28 | 20-8819-25            |
|       | 18.5  | 25 |                       | 278                      | 2490                                            | 1.23 |                       | 231                      | 2330                                            | 1.23 | 25-8818-25            |
|       |       |    |                       |                          | 3490                                            | 1.86 |                       |                          | 3260                                            | 1.85 | 25-8819-25            |
|       | 22    | 30 |                       | 330                      | 2490                                            | 1.04 |                       | 275                      | 2330                                            | 1.04 | 30-8818-25            |
|       |       |    |                       |                          | 3490                                            | 1.56 |                       |                          | 3260                                            | 1.55 | 30-8819-25            |
|       | 30    | 40 |                       | 450                      | 3490                                            | 1.15 |                       | 375                      | 3260                                            | 1.14 | 40-8819-25            |
|       |       |    |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|-------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|       |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 29    | 0.2   | 1/4 | 52                    | 3.48                     | 180                                          | 1.20 | 62                    | 2.90                     | 180                                          | 1.20 | 02-8808-29            |
|       |       |     |                       |                          | 340                                          | 3.35 |                       |                          | 340                                          | 3.40 | 02-8809-29            |
|       | 0.4   | 1/2 |                       | 6.96                     | 340                                          | 1.68 |                       | 5.80                     | 340                                          | 1.70 | 05-8809-29            |
|       | 0.75  | 1   |                       | 13.0                     | 550                                          | 1.84 |                       | 10.9                     | 550                                          | 1.84 | 1-8810-29             |
|       | 1.5   | 2   |                       | 26.1                     | 876                                          | 1.90 |                       | 21.8                     | 824                                          | 1.89 | 2-8811-29             |
|       | 2.2   | 3   |                       | 38.3                     | 876                                          | 1.30 |                       | 31.9                     | 824                                          | 1.29 | 3-8811-29             |
|       |       |     |                       |                          | 1010                                         | 2.00 |                       |                          | 954                                          | 2.00 | 3-8813-29             |
|       | 3.7   | 5   |                       | 64.4                     | 1010                                         | 1.19 |                       | 53.6                     | 954                                          | 1.19 | 5-8813-29             |
|       |       |     |                       |                          | 1300                                         | 1.31 |                       |                          | 1230                                         | 1.31 | 5-8814-29             |
|       |       |     |                       |                          | 1510                                         | 1.58 |                       |                          | 1430                                         | 1.59 | 5-8815-29             |
|       |       |     |                       |                          | 1650                                         | 2.62 |                       |                          | 1550                                         | 2.62 | 5-8816-29             |
|       | 5.5   | 7.5 |                       | 95.7                     | 1510                                         | 1.06 |                       | 79.8                     | 1430                                         | 1.07 | 8-8815-29             |
|       |       |     |                       |                          | 1650                                         | 1.76 |                       |                          | 1550                                         | 1.76 | 8-8816-29             |
|       | 7.5   | 10  |                       | 131                      | 1650                                         | 1.29 |                       | 109                      | 1550                                         | 1.29 | 10-8816-29            |
|       |       |     |                       |                          | 1940                                         | 1.91 |                       |                          | 1830                                         | 1.91 | 10-8817-29            |
|       | 11    | 15  |                       | 191                      | 1940                                         | 1.30 |                       | 160                      | 1830                                         | 1.30 | 15-8817-29            |
|       |       |     |                       |                          | 2610                                         | 1.67 |                       |                          | 2458                                         | 1.66 | 15-8818-29            |
|       | 15    | 20  |                       | 261                      | 2610                                         | 1.23 |                       | 218                      | 2458                                         | 1.22 | 20-8818-29            |
|       |       |     |                       |                          | 3650                                         | 2.01 |                       |                          | 3430                                         | 2.00 | 20-8819-29            |
|       | 18.5  | 25  |                       | 322                      | 2610                                         | 1.00 |                       | 268                      | 2458                                         | 1.00 | 25-8818-29            |
|       |       |     |                       |                          | 3650                                         | 1.63 |                       |                          | 3430                                         | 1.62 | 25-8819-29            |
|       |       |     |                       |                          | 4580                                         | 2.11 |                       |                          | 4340                                         | 2.11 | 25-8820-29            |
|       |       |     |                       |                          | 3650                                         | 1.37 |                       |                          | 3430                                         | 1.36 | 30-8819-29            |
|       | 22    | 30  |                       | 383                      | 4580                                         | 1.78 |                       | 319                      | 4340                                         | 1.77 | 30-8820-29            |
|       |       |     |                       |                          | 3650                                         | 1.00 |                       |                          | 3430                                         | 1.00 | 40-8819-29            |
|       | 30    | 40  |                       | 522                      | 4580                                         | 1.34 |                       | 435                      | 4340                                         | 1.30 | 40-8820-29            |
|       |       |     |                       |                          | 5860                                         | 1.59 |                       |                          | 5539                                         | 1.59 | 40-8821-29            |
|       |       |     |                       |                          | 6161                                         | 1.78 |                       |                          | 5820                                         | 1.78 | 40-8822-29            |
|       |       |     |                       |                          | 4580                                         | 1.06 |                       |                          | 4340                                         | 1.05 | 50-8820-29            |
|       | 37    | 50  |                       | 644                      | 5860                                         | 1.29 |                       | 536                      | 5539                                         | 1.29 | 50-8821-29            |
|       |       |     |                       |                          | 6161                                         | 1.44 |                       |                          | 5820                                         | 1.44 | 50-8822-29            |
|       | 45    | 60  |                       | 783                      | 5860                                         | 1.06 |                       | 652                      | 5539                                         | 1.06 | 60-8821-29            |
|       |       |     |                       |                          | 6161                                         | 1.19 |                       |                          | 5820                                         | 1.18 | 60-8822-29            |
|       | 55    | 75  |                       | 957                      | 6161                                         | 1.00 |                       | 798                      | 5820                                         | 1.00 | 75-8822-29            |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|-------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|       |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 35    | 0.2   | 1/4 | 43                    | 4.20                     | 180                                          | 1.20 | 51                    | 3.5                      | 180                                          | 1.20 | 02-8808-35            |
|       |       |     |                       |                          | 340                                          | 2.90 |                       |                          | 340                                          | 2.90 | 02-8809-35            |
|       | 0.4   | 1/2 |                       | 8.40                     | 340                                          | 1.45 |                       | 7.00                     | 340                                          | 1.45 | 05-8809-35            |
|       |       |     |                       |                          | 550                                          | 2.55 |                       |                          | 550                                          | 2.58 | 05-8810-35            |
|       | 0.75  | 1   |                       | 15.8                     | 550                                          | 1.36 |                       | 13.1                     | 550                                          | 1.37 | 1-8810-35             |
|       |       |     |                       |                          | 880                                          | 3.23 |                       |                          | 878                                          | 3.20 | 1-8811-35             |
|       | 1.5   | 2   |                       | 31.5                     | 880                                          | 1.61 |                       | 26.2                     | 878                                          | 1.60 | 2-8811-35             |
|       |       |     |                       |                          | 1080                                         | 2.43 |                       |                          | 1010                                         | 2.41 | 2-8813-35             |
|       | 2.2   | 3   |                       | 46.2                     | 880                                          | 1.10 |                       | 38.5                     | 878                                          | 1.09 | 3-8811-35             |
|       |       |     |                       |                          | 1080                                         | 1.65 |                       |                          | 1010                                         | 1.64 | 3-8813-35             |
|       | 3.7   | 5   |                       | 77.7                     | 1080                                         | 1.00 |                       | 64.8                     | 1010                                         | 1.00 | 5-8813-35             |
|       |       |     |                       |                          | 1370                                         | 1.25 |                       |                          | 1300                                         | 1.24 | 5-8814-35             |
|       |       |     | 1590                  |                          | 1.31                                         | 1510 | 1.31                  |                          | 5-8815-35                                    |      |                       |
|       |       |     | 1750                  |                          | 2.34                                         | 1650 | 2.32                  |                          | 5-8816-35                                    |      |                       |
|       | 5.5   | 7.5 | 116                   | 1750                     | 1.57                                         | 96.2 | 1650                  | 1.56                     | 8-8816-35                                    |      |                       |
|       |       |     |                       | 2077                     | 2.27                                         |      | 1946                  | 2.25                     | 8-8817-35                                    |      |                       |
|       | 7.5   | 10  | 158                   | 1750                     | 1.15                                         | 131  | 1650                  | 1.15                     | 10-8816-35                                   |      |                       |
|       |       |     |                       | 2077                     | 1.67                                         |      | 1946                  | 1.65                     | 10-8817-35                                   |      |                       |
|       | 11    | 15  | 231                   | 2077                     | 1.14                                         | 193  | 1946                  | 1.13                     | 15-8817-35                                   |      |                       |
|       |       |     |                       | 2773                     | 1.68                                         |      | 2619                  | 1.67                     | 15-8818-35                                   |      |                       |
|       | 15    | 20  | 315                   | 2773                     | 1.23                                         | 262  | 2619                  | 1.23                     | 20-8818-35                                   |      |                       |
|       |       |     |                       | 3880                     | 1.58                                         |      | 3662                  | 1.57                     | 20-8819-35                                   |      |                       |
|       | 18.5  | 25  | 389                   | 2773                     | 1.00                                         | 324  | 2619                  | 1.00                     | 25-8818-35                                   |      |                       |
|       |       |     |                       | 3880                     | 1.28                                         |      | 3662                  | 1.27                     | 25-8819-35                                   |      |                       |
|       | 22    | 30  | 462                   | 3880                     | 1.08                                         | 385  | 3662                  | 1.07                     | 30-8819-35                                   |      |                       |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|-------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|       |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 43    | 0.2   | 1/4 | 35                    | 5.16                     | 180                                          | 1.00 | 42                    | 4.30                     | 180                                          | 1.00 | 02-8808-43            |
|       |       |     |                       |                          | 340                                          | 2.50 |                       |                          | 340                                          | 2.45 | 02-8809-43            |
|       | 0.4   | 1/2 |                       | 10.3                     | 340                                          | 1.25 |                       | 8.60                     | 340                                          | 1.22 | 05-8809-43            |
|       |       |     |                       |                          | 550                                          | 2.32 |                       |                          | 550                                          | 2.32 | 05-8810-43            |
|       | 0.75  | 1   |                       | 19.4                     | 550                                          | 1.24 |                       | 16.1                     | 550                                          | 1.24 | 1-8810-43             |
|       |       |     |                       |                          | 880                                          | 2.56 |                       |                          | 880                                          | 2.56 | 1-8811-43             |
|       | 1.5   | 2   |                       | 38.7                     | 880                                          | 1.28 |                       | 32.2                     | 880                                          | 1.28 | 2-8811-43             |
|       |       |     |                       |                          | 1150                                         | 1.97 |                       |                          | 1094                                         | 1.97 | 2-8813-43             |
|       | 2.2   | 3   |                       | 56.8                     | 1150                                         | 1.34 |                       | 47.3                     | 1094                                         | 1.34 | 3-8813-43             |
|       |       |     |                       |                          | 1460                                         | 1.44 |                       |                          | 1380                                         | 1.43 | 3-8814-43             |
|       |       |     |                       |                          | 1600                                         | 1.75 |                       |                          | 1590                                         | 1.75 | 3-8815-43             |
|       | 3.7   | 5   |                       | 95.5                     | 1600                                         | 1.04 |                       | 79.6                     | 1590                                         | 1.04 | 5-8815-43             |
|       |       |     |                       |                          | 1880                                         | 1.83 |                       |                          | 1776                                         | 1.82 | 5-8816-43             |
|       | 5.5   | 7.5 |                       | 142                      | 1880                                         | 1.23 |                       | 118                      | 1776                                         | 1.88 | 8-8816-43             |
|       |       |     |                       |                          | 2220                                         | 1.69 |                       |                          | 2087                                         | 1.22 | 8-8817-43             |
|       | 7.5   | 10  |                       | 194                      | 2220                                         | 1.24 |                       | 161                      | 2081                                         | 1.24 | 10-8817-43            |
|       |       |     |                       |                          | 2983                                         | 2.00 |                       |                          | 2800                                         | 1.97 | 10-8818-43            |
|       | 11    | 15  |                       | 284                      | 2983                                         | 1.36 |                       | 237                      | 2800                                         | 1.34 | 15-8818-43            |
|       |       |     |                       |                          | 4150                                         | 1.86 |                       |                          | 3910                                         | 1.89 | 15-8819-43            |
|       | 15    | 20  |                       | 387                      | 2985                                         | 1.00 |                       | 323                      | 2800                                         | 1.00 | 20-8818-43            |
|       |       |     |                       |                          | 4150                                         | 1.37 |                       |                          | 3910                                         | 1.39 | 20-8819-43            |

# 성능 및 선정표(4P)1단

## Selection & Performance table – Single Reduction – 4P

| Ratio | Motor |    | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|-------|-------|----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|       | KW    | HP | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                       |
|       |       |    |                       |                          |                                                 |      |                       |                          |                                                 |      | Motor(HP)-Frame-Ratio |
| 43    | 15    | 20 | 35                    | 387                      | 5150                                            | 1.82 | 42                    | 323                      | 4897                                            | 1.80 | 20-8820-43            |
|       | 18.5  | 25 |                       | 477                      | 4150                                            | 1.11 |                       | 398                      | 3910                                            | 1.12 | 25-8819-43            |
|       |       |    |                       |                          | 5150                                            | 1.48 |                       |                          | 4897                                            | 1.46 | 25-8820-43            |
|       |       |    |                       |                          | 6565                                            | 2.02 |                       |                          | 6220                                            | 2.00 | 25-8821-43            |
|       | 22    | 30 |                       | 568                      | 5150                                            | 1.24 |                       | 473                      | 4897                                            | 1.23 | 30-8820-43            |
|       |       |    |                       |                          | 6565                                            | 1.70 |                       |                          | 6220                                            | 1.69 | 30-8821-43            |
|       |       |    |                       |                          | 6910                                            | 2.08 |                       |                          | 6562                                            | 2.08 | 30-8822-43            |
|       | 30    | 40 |                       | 774                      | 6565                                            | 1.24 |                       | 645                      | 6220                                            | 1.24 | 40-8821-43            |
|       |       |    |                       |                          | 6910                                            | 1.52 |                       |                          | 6562                                            | 1.52 | 40-8822-43            |
|       | 37    | 50 |                       | 955                      | 6565                                            | 1.01 |                       | 796                      | 6220                                            | 1.00 | 50-8821-43            |
|       |       |    |                       |                          | 6910                                            | 1.24 |                       |                          | 6562                                            | 1.24 | 50-8822-43            |
|       | 45    | 60 |                       | 1161                     | 6910                                            | 1.02 |                       | 968                      | 6562                                            | 1.02 | 60-8822-43            |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|-------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|       |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 51    | 0.2   | 1/4 | 29                    | 6.12                     | 340                                          | 1.80 | 35                    | 5.10                     | 340                                          | 1.80 | 02-8809-51            |
|       | 0.4   | 1/2 |                       | 12.2                     | 550                                          | 1.68 |                       | 10.2                     | 550                                          | 1.65 | 05-8810-51            |
|       | 0.75  | 1   |                       | 23.0                     | 880                                          | 2.21 |                       | 19.1                     | 880                                          | 2.49 | 1-8811-51             |
|       | 1.5   | 2   |                       | 45.9                     | 880                                          | 1.11 |                       | 38.2                     | 880                                          | 1.25 | 2-8811-51             |
|       |       |     |                       |                          | 1220                                         | 1.67 |                       |                          | 1150                                         | 1.68 | 2-8813-51             |
|       | 2.2   | 3   |                       | 67.3                     | 1220                                         | 1.14 |                       | 56.1                     | 1150                                         | 1.14 | 3-8813-51             |
|       |       |     |                       |                          | 1500                                         | 1.35 |                       |                          | 1460                                         | 1.34 | 3-8814-51             |
|       |       |     |                       |                          | 1600                                         | 1.51 |                       |                          | 1600                                         | 1.55 | 3-8815-51             |
|       |       |     |                       |                          | 1990                                         | 2.59 |                       |                          | 1880                                         | 2.58 | 3-8816-51             |
|       | 3.7   | 5   |                       | 113                      | 1990                                         | 1.54 |                       | 94.4                     | 1880                                         | 1.53 | 5-8816-51             |
|       |       |     |                       |                          | 2340                                         | 2.25 |                       |                          | 2200                                         | 2.86 | 5-8817-51             |
|       | 5.5   | 7.5 |                       | 168                      | 1990                                         | 1.04 |                       | 140                      | 1880                                         | 1.03 | 8-8816-51             |
|       |       |     |                       |                          | 2340                                         | 1.52 |                       |                          | 2200                                         | 1.51 | 8-8817-51             |
|       |       |     |                       |                          | 3150                                         | 2.07 |                       |                          | 2985                                         | 2.07 | 8-8818-51             |
|       | 7.5   | 10  |                       | 230                      | 2340                                         | 1.11 |                       | 191                      | 2200                                         | 1.11 | 10-8817-51            |
|       |       |     |                       |                          | 3150                                         | 1.52 |                       |                          | 2985                                         | 1.52 | 10-8818-51            |
|       |       |     |                       |                          | 4400                                         | 2.39 |                       |                          | 4150                                         | 2.40 | 10-8819-51            |
|       | 11    | 15  |                       | 337                      | 3150                                         | 1.04 |                       | 280                      | 2985                                         | 1.04 | 15-8818-51            |
|       |       |     |                       |                          | 4400                                         | 1.63 |                       |                          | 4150                                         | 1.64 | 15-8819-51            |
|       | 15    | 20  |                       | 459                      | 4400                                         | 1.19 |                       | 383                      | 4150                                         | 1.20 | 20-8819-51            |

| Ratio | Motor |      | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|-------|-------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|       | KW    | HP   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                       |
|       |       |      |                       |                          |                                                 |      |                       |                          |                                                 |      | Motor(HP)-Frame-Ratio |
| 59    | 0.2   | 1/4  | 25                    | 7.08                     | 340                                             | 1.65 | 31                    | 5.90                     | 340                                             | 1.65 | 02-8809-59            |
|       | 0.4   | 1/2  |                       | 14.2                     | 550                                             | 1.50 |                       | 11.8                     | 550                                             | 1.52 | 05-8810-59            |
|       |       |      |                       |                          | 880                                             | 3.42 |                       |                          | 880                                             | 3.45 | 05-8811-59            |
|       | 0.75  | 1    |                       | 26.6                     | 880                                             | 1.83 |                       | 44.3                     | 880                                             | 1.84 | 1-8811-59             |
|       |       |      |                       | 53.1                     | 1295                                            | 1.43 |                       |                          | 1220                                            | 1.44 | 2-8813-59             |
|       | 1500  | 1.87 |                       |                          | 1500                                            | 1.89 |                       | 2-8813-59                |                                                 |      |                       |
|       | 2.2   | 3    |                       | 77.9                     | 1500                                            | 1.27 |                       | 64.9                     | 1500                                            | 1.29 | 3-8814-59             |
|       |       |      |                       |                          | 1600                                            | 1.28 |                       |                          | 1600                                            | 1.32 | 3-8815-59             |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model<br>Motor(HP)-Frame-Ratio |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|--------------------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                                |
| 59    | 2.2   | 3   | 25                    | 77.9                     | 2000                                            | 2.25 | 31                    | 64.9                     | 1985                                            | 2.23 | 3-8816-59                      |
|       | 3.7   | 5   |                       | 131                      | 2090                                            | 1.34 |                       | 109                      | 1985                                            | 1.32 | 5-8816-59                      |
|       |       |     |                       |                          | 2490                                            | 1.97 |                       |                          | 2340                                            | 1.95 | 5-8817-59                      |
|       | 5.5   | 7.5 |                       | 195                      | 2490                                            | 1.32 |                       | 162                      | 2340                                            | 1.31 | 8-8817-59                      |
|       |       |     |                       |                          | 3330                                            | 1.79 |                       |                          | 3140                                            | 1.77 | 8-8818-59                      |
|       | 7.5   | 10  |                       | 266                      | 3300                                            | 1.31 |                       | 221                      | 3140                                            | 1.30 | 10-8818-59                     |
|       |       |     |                       |                          | 4660                                            | 2.07 |                       |                          | 4400                                            | 2.07 | 10-8819-59                     |
|       | 11    | 15  |                       | 389                      | 4660                                            | 1.41 |                       | 325                      | 4400                                            | 1.41 | 15-8819-59                     |
|       |       |     |                       |                          | 5700                                            | 1.74 |                       |                          | 5410                                            | 1.74 | 15-8820-59                     |
|       | 15    | 20  |                       | 531                      | 4660                                            | 1.03 |                       | 443                      | 4400                                            | 1.03 | 20-8819-59                     |
|       |       |     |                       |                          | 5700                                            | 1.27 |                       |                          | 5410                                            | 1.28 | 20-8820-59                     |
|       |       |     |                       |                          | 7265                                            | 1.85 |                       |                          | 4400                                            | 1.85 | 20-8821-59                     |
|       |       |     |                       |                          | 5700                                            | 1.03 |                       |                          | 5410                                            | 1.04 | 25-8820-59                     |
|       | 18.5  | 25  |                       | 655                      | 7265                                            | 1.50 |                       | 546                      | 6890                                            | 1.50 | 25-8821-59                     |
|       |       |     |                       |                          | 7640                                            | 1.80 |                       |                          | 7250                                            | 1.80 | 25-8822-59                     |
|       | 22    | 30  |                       | 779                      | 7265                                            | 1.26 |                       | 649                      | 6890                                            | 1.26 | 30-8821-59                     |
|       |       |     |                       |                          | 7640                                            | 1.52 |                       |                          | 7250                                            | 1.51 | 30-8822-59                     |
|       | 30    | 40  |                       | 1062                     | 7640                                            | 1.11 |                       | 885                      | 7250                                            | 1.11 | 40-8822-59                     |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model<br>Motor(HP)-Frame-Ratio |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|--------------------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                                |
| 71    | 0.2   | 1/4 | 21                    | 8.52                     | 340                                             | 1.30 | 25                    | 7.10                     | 340                                             | 1.30 | 02-8809-71                     |
|       |       |     |                       |                          | 550                                             | 2.45 |                       |                          | 550                                             | 2.45 | 02-8810-71                     |
|       | 0.4   | 1/2 |                       | 17.0                     | 550                                             | 1.22 |                       | 14.2                     | 550                                             | 1.22 | 05-8810-71                     |
|       |       |     |                       |                          | 880                                             | 2.45 |                       |                          | 880                                             | 2.45 | 05-8811-71                     |
|       | 0.75  | 1   |                       | 32.0                     | 880                                             | 1.31 |                       | 26.6                     | 880                                             | 1.31 | 1-8811-71                      |
|       |       |     |                       |                          | 1000                                            | 1.36 |                       |                          | 1000                                            | 1.35 | 1-8812-71                      |
|       |       |     |                       |                          | 1350                                            | 2.40 |                       |                          | 1295                                            | 2.43 | 1-8813-71                      |
|       | 1.5   | 2   |                       | 63.9                     | 1350                                            | 1.20 |                       | 53.2                     | 1295                                            | 1.21 | 2-8813-71                      |
|       |       |     |                       |                          | 1500                                            | 1.41 |                       |                          | 1500                                            | 1.40 | 2-8814-71                      |
|       |       |     |                       |                          | 1600                                            | 1.45 |                       |                          | 1600                                            | 1.45 | 2-8815-71                      |
|       |       |     |                       |                          | 2000                                            | 2.73 |                       |                          | 2000                                            | 2.73 | 2-8816-71                      |
|       | 2.2   | 3   |                       | 93.7                     | 1600                                            | 1.00 |                       | 78.1                     | 1600                                            | 1.00 | 3-8815-71                      |
|       |       |     |                       |                          | 2000                                            | 1.86 |                       |                          | 2000                                            | 1.86 | 3-8816-71                      |
|       | 3.7   | 5   |                       | 158                      | 2000                                            | 1.10 |                       | 131                      | 2000                                            | 1.11 | 5-8816-71                      |
|       |       |     |                       |                          | 2680                                            | 1.62 |                       |                          | 2490                                            | 1.62 | 5-8817-71                      |
|       |       |     |                       |                          | 2680                                            | 1.09 |                       |                          | 2460                                            | 1.09 | 8-8817-71                      |
|       | 5.5   | 7.5 |                       | 234                      | 3590                                            | 1.34 |                       | 195                      | 3330                                            | 1.33 | 8-8818-71                      |
|       |       |     |                       |                          | 5020                                            | 2.44 |                       |                          | 4660                                            | 2.44 | 8-8819-71                      |
|       | 7.5   | 10  |                       | 320                      | 3590                                            | 1.00 |                       | 266                      | 3330                                            | 1.00 | 10-8818-71                     |
|       |       |     |                       |                          | 5020                                            | 1.79 |                       |                          | 4660                                            | 1.79 | 10-8819-71                     |
|       | 11    | 15  |                       | 469                      | 5020                                            | 1.22 |                       | 391                      | 4660                                            | 1.22 | 10-8819-71                     |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model<br>Motor(HP)-Frame-Ratio |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|--------------------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                                |
| 87    | 0.2   | 1/4 | 17                    | 10.4                     | 340                                             | 1.25 | 21                    | 8.70                     | 340                                             | 1.20 | 02-8809-87                     |
|       |       |     |                       |                          | 550                                             | 2.45 |                       |                          | 550                                             | 2.45 | 02-8810-87                     |

# 성능 및 선정표(4P)1단

## Selection & Performance table – Single Reduction – 4P

CR Drive

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model<br>Motor(HP)-Frame-Ratio |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|--------------------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                                |
| 87    | 0.4   | 1/2 | 17                    | 20.9                     | 550                                             | 1.22 | 21                    | 17.4                     | 550                                             | 1.22 | 05-8810-87                     |
|       |       |     |                       |                          | 880                                             | 2.33 |                       |                          | 880                                             | 2.33 | 05-8811-87                     |
|       | 0.75  | 1   |                       | 39.2                     | 880                                             | 1.24 |                       | 32.6                     | 880                                             | 1.24 | 1-8811-87                      |
|       |       |     |                       |                          | 1364                                            | 1.95 |                       |                          | 1360                                            | 1.96 | 1-8813-87                      |
|       | 1.5   | 2   |                       | 78.3                     | 1500                                            | 1.30 |                       | 65.2                     | 1500                                            | 1.31 | 2-8814-87                      |
|       |       |     |                       |                          | 1600                                            | 1.31 |                       |                          | 1600                                            | 1.33 | 2-8815-87                      |
|       |       |     |                       |                          | 2050                                            | 2.23 |                       |                          | 2000                                            | 2.23 | 2-8816-87                      |
|       | 2.2   | 3   |                       | 115                      | 2050                                            | 1.52 |                       | 95.7                     | 2000                                            | 1.52 | 3-8816-87                      |
|       |       |     |                       |                          | 2900                                            | 2.20 |                       |                          | 2660                                            | 2.20 | 3-8817-87                      |
|       | 3.7   | 5   |                       | 193                      | 2900                                            | 1.31 |                       | 161                      | 2660                                            | 1.31 | 5-8817-87                      |
|       |       |     |                       |                          | 3760                                            | 2.03 |                       |                          | 3540                                            | 2.03 | 5-8818-87                      |
|       | 5.5   | 7.5 |                       | 287                      | 3760                                            | 1.34 |                       | 239                      | 3540                                            | 1.34 | 8-8818-87                      |
|       |       |     |                       |                          | 5260                                            | 2.13 |                       |                          | 4950                                            | 2.13 | 8-8819-87                      |
|       | 7.5   | 10  |                       | 392                      | 5260                                            | 1.56 |                       | 326                      | 4950                                            | 1.56 | 10-8819-87                     |
|       |       |     |                       |                          | 6600                                            | 1.83 |                       |                          | 6030                                            | 1.81 | 10-8820-87                     |
|       | 11    | 15  |                       | 574                      | 5260                                            | 1.06 |                       | 478                      | 4950                                            | 1.06 | 15-8819-87                     |
|       |       |     |                       |                          | 6600                                            | 1.24 |                       |                          | 6030                                            | 1.24 | 15-8820-87                     |
|       |       |     |                       |                          | 8410                                            | 1.65 |                       |                          | 7680                                            | 1.66 | 15-8821-87                     |
|       |       |     |                       |                          | 8840                                            | 1.99 |                       |                          | 8090                                            | 1.99 | 15-8822-87                     |
|       | 15    | 20  |                       | 783                      | 8410                                            | 1.22 |                       | 652                      | 7680                                            | 1.21 | 20-8821-87                     |
|       |       |     |                       |                          | 8840                                            | 1.46 |                       |                          | 8090                                            | 1.46 | 20-8822-87                     |
|       | 18.5  | 25  |                       | 966                      | 8840                                            | 1.18 |                       | 805                      | 8090                                            | 1.18 | 25-8822-87                     |

| Ratio | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model<br>Motor(HP)-Frame-Ratio |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|--------------------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                                |
| 119   | 0.2   | 1/4 | 13                    | 14.6                     | 550                                             | 1.25 | 15                    | 12.2                     | 550                                             | 1.20 | 02-8810-119                    |

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   |                       |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      | Motor(HP)-Frame-Ratio |
| 104<br>(13 x8) | 0.2   | 1/4 | 14                    | 10.1                     | 340                                          | <1.0 | 17                    | 9.48                     | 340                                          | 1.05 | 02-8809/08-104        |
|                |       |     |                       | 11.4                     | 550                                          | 1.80 |                       | 9.48                     | 550                                          | 1.91 | 02-8810/08-104        |
|                | 0.4   | 1/2 |                       | 20.5                     | 550                                          | <1.0 |                       | 18.7                     | 550                                          | 1.06 | 05-8810/08-104        |
|                |       |     |                       | 22.7                     | 880                                          | 1.00 |                       | 19.0                     | 880                                          | 1.02 | 05-8811/08-104        |
|                |       |     |                       | 22.7                     | 880                                          | 2.10 |                       | 19.0                     | 880                                          | 2.42 | 05-8811/09-104        |
|                | 0.75  | 1   |                       | 42.6                     | 880                                          | 1.12 |                       | 35.5                     | 880                                          | 1.29 | 1-8811/09-104         |
|                |       |     |                       | 42.6                     | 1365                                         | 1.80 |                       | 35.5                     | 1365                                         | 2.16 | 1-8813/10-104         |
|                | 1.5   | 2   |                       | 77.0                     | 1365                                         | <1.0 |                       | 71.1                     | 1365                                         | 1.08 | 2-8813/10-104         |
|                |       |     |                       | 85.3                     | 2050                                         | 1.61 |                       | 71.1                     | 2050                                         | 2.25 | 2-8816/10-104         |
|                | 2.2   | 3   |                       | 77.0                     | 1365                                         | <1.0 |                       | 77.0                     | 1365                                         | <1.0 | 3-8813/10-104         |
|                |       |     |                       | 103                      | 1500                                         | <1.0 |                       | 102                      | 1500                                         | <1.0 | 3-8814/10-104         |
|                |       |     |                       | 125                      | 2050                                         | 1.46 |                       | 104                      | 2050                                         | 1.74 | 3-8816/11-104         |
|                | 3.7   | 5   |                       | 183                      | 2050                                         | <1.0 |                       | 175                      | 2050                                         | 1.04 | 5-8816/11-104         |
|                |       |     |                       | 210                      | 2900                                         | 1.32 |                       | 175                      | 2900                                         | 1.38 | 5-8817/11-104         |
|                |       |     |                       | 278                      | 2900                                         | <1.0 |                       | 241                      | 2900                                         | <1.0 | 8-8817/11-104         |
|                | 5.5   | 7.5 |                       | 313                      | 3800                                         | 1.25 |                       | 260                      | 3800                                         | 1.54 | 8-8818/13-104         |
|                |       |     |                       | 400                      | 3800                                         | <1.0 |                       | 355                      | 3800                                         | 1.13 | 10-8818/13-104        |
|                | 7.5   | 10  |                       | 426                      | 5300                                         | 1.33 |                       | 355                      | 5300                                         | 1.41 | 10-8819/13-104        |

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   |                       |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      | Motor(HP)-Frame-Ratio |
| 121<br>(11×11) | 0.2   | 1/4 | 12                    | 10.1                     | 340                                          | <1.0 | 15                    | 10.2                     | 340                                          | <1.0 | 02-8809/08-121        |
|                |       |     |                       | 13.2                     | 550                                          | 1.55 |                       | 11.0                     | 550                                          | 1.90 | 02-8810/08-121        |
|                | 0.4   | 1/2 |                       | 20.5                     | 550                                          | <1.0 |                       | 21.1                     | 550                                          | <1.0 | 05-8810/08-121        |
|                |       |     |                       | 26.4                     | 880                                          | 1.00 |                       | 22.0                     | 880                                          | 1.00 | 05-8811/08-121        |
|                |       |     |                       | 26.4                     | 880                                          | 1.90 |                       | 22.0                     | 880                                          | 2.12 | 05-8811/09-121        |
|                | 0.75  | 1   |                       | 49.6                     | 880                                          | 1.01 |                       | 41.3                     | 880                                          | 1.13 | 1-8811/09-121         |
|                |       |     |                       | 49.6                     | 1370                                         | 1.41 |                       | 41.3                     | 1365                                         | 1.63 | 1-8813/09-121         |
|                |       |     |                       | 77.0                     | 1370                                         | <1.0 |                       | 77.0                     | 1365                                         | <1.0 | 2-8813/10-121         |
|                | 1.5   | 2   |                       | 96.0                     | 1500                                         | <1.0 |                       | 82.7                     | 1500                                         | 1.16 | 2-8814/10-121         |
|                |       |     |                       | 99.2                     | 2100                                         | 1.71 |                       | 82.7                     | 2050                                         | 2.05 | 2-8816/10-121         |
|                |       |     |                       | 96.0                     | 1500                                         | <1.0 |                       | 96.2                     | 1500                                         | <1.0 | 3-8814/10-121         |
|                | 2.2   | 3   |                       | 146                      | 2100                                         | 1.26 |                       | 121                      | 2050                                         | 1.50 | 3-8816/11-121         |
|                |       |     |                       | 146                      | 2950                                         | 1.75 |                       | 121                      | 2900                                         | 2.11 | 3-8817/11-121         |
|                |       |     |                       | 183                      | 2100                                         | <1.0 |                       | 182                      | 2050                                         | <1.0 | 5-8816/11-121         |
|                | 3.7   | 5   |                       | 245                      | 2950                                         | 1.04 |                       | 204                      | 2900                                         | 1.25 | 5-8817/11-121         |
|                |       |     |                       | 245                      | 3800                                         | 1.37 |                       | 204                      | 3800                                         | 1.65 | 5-8818/13-121         |
|                |       |     |                       | 255                      | 2950                                         | <1.0 |                       | 256                      | 2900                                         | <1.0 | 8-8817/11-121         |
|                | 5.5   | 7.5 |                       | 335                      | 3950                                         | <1.0 |                       | 303                      | 3800                                         | 1.11 | 8-8818/13-121         |
|                |       |     |                       | 364                      | 5300                                         | 1.56 |                       | 303                      | 5300                                         | 1.75 | 8-8819/13-121         |
|                |       |     |                       | 496                      | 5300                                         | 1.15 |                       | 413                      | 5300                                         | 1.28 | 10-8819/13-121        |
|                | 7.5   | 10  |                       | 496                      | 7100                                         | 1.16 |                       | 413                      | 6650                                         | 1.32 | 10-8820/13-121        |
|                |       |     |                       | 496                      | 8850                                         | 1.48 |                       | 413                      | 8470                                         | 1.72 | 10-8821/16-121        |
|                |       |     |                       | 728                      | 8850                                         | 1.01 |                       | 606                      | 8470                                         | 1.17 | 15-8821/16-121        |
|                | 11    | 15  |                       | 728                      | 10450                                        | 1.32 |                       | 606                      | 8910                                         | 1.47 | 15-8822/17-121        |
|                |       |     |                       | 960                      | 10450                                        | <1.0 |                       | 827                      | 8910                                         | 1.10 | 20-8822/17-121        |
|                | 15    | 20  |                       | 992                      | 12500                                        | 1.15 |                       | 827                      | 11100                                        | 1.30 | 20-8823/16-121        |
|                |       |     |                       | 992                      | 14100                                        | 1.43 |                       | 827                      | 12400                                        | 1.72 | 20-8824/18-121        |
|                |       |     |                       | 960                      | 10450                                        | <1.0 |                       | 910                      | 8930                                         | <1.0 | 25-8822/17-121        |
|                | 18.5  | 25  |                       | 1120                     | 12500                                        | <1.0 |                       | 1020                     | 11150                                        | 1.09 | 25-8823/18-121        |
|                |       |     |                       | 1224                     | 14100                                        | 1.15 |                       | 1020                     | 12450                                        | 1.38 | 25-8824/18-121        |
|                |       |     |                       | 1224                     | 17105                                        | 1.47 |                       | 1020                     | 15100                                        | 1.48 | 25-8825/19-121        |

▶ S.F 가 "1" 인 제품은 입력용량과 출력허용토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F (1) )

# 성능 및 선정표(4P)2단

## Selection & Performance table – Double Reduction – 4P

| Ratio          | Motor |    | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|----------------|-------|----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                | KW    | HP | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                |       |    |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 121<br>(11×11) | 22    | 30 | 12                    | 1120                     | 12500                                           | <1.0 | 15                    | 1110                     | 11150                                           | <1.0 | 30-8823/18-121        |
|                |       |    |                       | 1410                     | 14100                                           | <1.0 |                       | 1213                     | 12450                                           | 1.16 | 30-8824/18-121        |
|                |       |    |                       | 1455                     | 17105                                           | 1.24 |                       | 1213                     | 15100                                           | 1.50 | 30-8825/19-121        |
|                | 30    | 40 |                       | 1800                     | 17105                                           | 1.0  |                       | 1653                     | 15100                                           | 1.10 | 40-8825/19-121        |
|                |       |    |                       | 1984                     | 20900                                           | 1.21 |                       | 1653                     | 18450                                           | 1.43 | 40-8826/19-121        |
|                |       |    |                       | 37                       | 50                                              | 2400 |                       | 20900                    | <1.0                                            | 2040 | 18450                 |
|                |       |    |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 143<br>(13×11) | 0.2   | 1/4 | 10                    | 10.9                     | 340                                          | <1.0 | 13                    | 11.2                     | 340                                          | <1.0 | 02-8809/08-143        |
|                |       |     |                       | 15.6                     | 550                                          | 1.30 |                       | 13.0                     | 550                                          | 1.70 | 02-8810/08-143        |
|                | 0.4   | 1/2 |                       | 31.3                     | 880                                          | 1.00 |                       | 26.0                     | 880                                          | 1.00 | 05-8811/08-143        |
|                |       |     |                       | 31.3                     | 880                                          | 1.62 |                       | 26.0                     | 880                                          | 1.93 | 05-8811/09-143        |
|                | 0.75  | 1   |                       | 51.0                     | 880                                          | <1.0 |                       | 48.8                     | 880                                          | 1.03 | 1-8811/09-143         |
|                |       |     |                       | 58.6                     | 1365                                         | 1.31 |                       | 48.8                     | 1365                                         | 1.57 | 1-8813/09-143         |
|                | 1.5   | 2   |                       | 77.0                     | 1365                                         | <1.0 |                       | 77.0                     | 1365                                         | <1.0 | 2-8813/10-143         |
|                |       |     |                       | 103                      | 1500                                         | <1.0 |                       | 97.7                     | 1500                                         | 1.04 | 2-8814/10-143         |
|                |       |     |                       | 117                      | 2050                                         | 1.56 |                       | 97.7                     | 2050                                         | 1.84 | 2-8816/10-143         |
|                |       |     |                       | 172                      | 2050                                         | 1.06 |                       | 143                      | 2050                                         | 1.25 | 3-8816/10-143         |
|                | 2.2   | 3   |                       | 172                      | 2050                                         | 1.06 |                       | 143                      | 2050                                         | 1.27 | 3-8816/11-143         |
|                |       |     |                       | 172                      | 2900                                         | 1.62 |                       | 143                      | 2900                                         | 1.92 | 3-8817/11-143         |
|                |       |     |                       | 183                      | 2050                                         | <1.0 |                       | 182                      | 2050                                         | <1.0 | 5-8816/11-143         |
|                |       |     |                       | 278                      | 2900                                         | <1.0 |                       | 241                      | 2900                                         | 1.14 | 5-8817/11-143         |
|                | 3.7   | 5   |                       | 289                      | 3900                                         | 1.39 |                       | 241                      | 3800                                         | 1.66 | 5-8818/13-143         |
|                |       |     |                       | 401                      | 3900                                         | <1.0 |                       | 358                      | 3800                                         | 1.12 | 8-8818/13-143         |
|                | 5.5   | 7.5 |                       | 430                      | 5300                                         | 1.42 |                       | 358                      | 5300                                         | 1.59 | 8-8819/13-143         |
|                |       |     |                       | 7.5                      | 10                                           | 586  |                       | 5300                     | 1.04                                         | 488  | 5300                  |

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 165<br>(15×11) | 0.2   | 1/4 | 9.1                   | 13.0                     | 340                                             | <1.0 | 11                    | 12.7                     | 340                                             | <1.0 | 02-8809/08-165        |
|                |       |     |                       | 18.0                     | 550                                             | 1.45 |                       | 15.0                     | 550                                             | 1.70 | 02-8810/08-165        |
|                | 0.4   | 1/2 |                       | 26.0                     | 550                                             | <1.0 |                       | 26.0                     | 550                                             | <1.0 | 05-8810/08-165        |
|                |       |     |                       | 36.1                     | 880                                             | 1.00 |                       | 30.1                     | 880                                             | 1.00 | 05-8811/08-165        |
|                |       |     |                       | 36.1                     | 880                                             | 1.40 |                       | 30.1                     | 880                                             | 1.70 | 05-8811/09-165        |
|                | 0.75  | 1   |                       | 51.0                     | 880                                             | <1.0 |                       | 51.0                     | 880                                             | <1.0 | 1-8811/09-165         |
|                |       |     |                       | 67.6                     | 1365                                            | 1.13 |                       | 56.4                     | 1365                                            | 1.36 | 1-8813/09-165         |
|                |       |     |                       | 67.6                     | 1500                                            | 1.36 |                       | 56.4                     | 1500                                            | 1.61 | 1-8814/09-165         |
|                | 1.5   | 2   |                       | 77.0                     | 1365                                            | <1.0 |                       | 77.0                     | 1365                                            | <1.0 | 2-8813/10-165         |
|                |       |     |                       | 103                      | 1500                                            | <1.0 |                       | 103                      | 1500                                            | <1.0 | 2-8814/10-165         |
|                |       |     |                       | 135                      | 2050                                            | 1.35 |                       | 113                      | 2050                                            | 1.61 | 2-8816/10-165         |
|                | 2.2   | 3   |                       | 183                      | 2050                                            | <1.0 |                       | 165                      | 2050                                            | 1.10 | 3-8816/10-165         |
|                |       |     |                       | 198                      | 2900                                            | 1.16 |                       | 165                      | 2900                                            | 1.39 | 3-8817/10-165         |
|                |       |     |                       | 198                      | 2900                                            | 1.40 |                       | 165                      | 2900                                            | 1.59 | 3-8817/11-165         |

▶ S.F 가 "1" 인 제품은 입력용량과 출력하중토크를 최대로 사용하지 말것! ( Do not use Max, torque & input capacity at S.F (1) )

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 165<br>(15×11) | 3.7   | 5   | 9.1                   | 278                      | 2900                                         | <1.0 | 11                    | 263                      | 2900                                         | <1.0 | 5-8817/11-165         |
|                |       |     |                       | 334                      | 3900                                         | 1.23 |                       | 278                      | 3850                                         | 1.47 | 5-8818/13-165         |
|                |       |     |                       | 334                      | 5300                                         | 1.83 |                       | 278                      | 5300                                         | 2.05 | 5-8819/13-165         |
|                | 5.5   | 7.5 |                       | 410                      | 3900                                         | <1.0 |                       | 410                      | 3850                                         | <1.0 | 8-8818/13-165         |
|                |       |     |                       | 496                      | 5300                                         | 1.23 |                       | 413                      | 5300                                         | 1.38 | 8-8819/13-165         |
|                |       |     |                       | 610                      | 5300                                         | <1.0 |                       | 564                      | 5300                                         | 1.01 | 10-8819/13-165        |
|                | 7.5   | 10  |                       | 677                      | 7050                                         | 1.03 |                       | 564                      | 7050                                         | 1.19 | 10-8820/13-165        |
|                |       |     |                       | 677                      | 8810                                         | 1.26 |                       | 564                      | 8780                                         | 1.32 | 10-8821/13-165        |
|                |       |     |                       | 855                      | 8810                                         | <1.0 |                       | 827                      | 8780                                         | 1.03 | 15-8821/16-165        |
|                | 11    | 15  |                       | 992                      | 10400                                        | 1.11 |                       | 827                      | 9950                                         | 1.33 | 15-8822/17-165        |
|                |       |     |                       | 992                      | 12900                                        | 1.41 |                       | 827                      | 12200                                        | 1.64 | 15-8823/16-165        |
|                |       |     |                       | 1100                     | 10400                                        | <1.0 |                       | 1100                     | 9950                                         | <1.0 | 20-8822/17-165        |
|                | 15    | 20  |                       | 1353                     | 12900                                        | 1.03 |                       | 1127                     | 12200                                        | 1.21 | 20-8823/16-165        |
|                |       |     |                       | 1353                     | 14400                                        | 1.21 |                       | 1127                     | 13600                                        | 1.21 | 20-8824/16-165        |
|                |       |     |                       | 1400                     | 12900                                        | <1.0 |                       | 1360                     | 12200                                        | <1.0 | 25-8823/18-165        |
|                | 18.5  | 25  |                       | 1669                     | 14400                                        | 1.09 |                       | 1390                     | 13600                                        | 1.30 | 25-8824/18-165        |
|                |       |     |                       | 1669                     | 17600                                        | 1.38 |                       | 1390                     | 16600                                        | 1.73 | 25-8825/19-165        |
|                |       |     |                       | 1400                     | 12900                                        | <1.0 |                       | 1360                     | 12200                                        | <1.0 | 30-8823/18-165        |
|                | 22    | 30  |                       | 1810                     | 14400                                        | <1.0 |                       | 1654                     | 13600                                        | 1.10 | 30-8824/18-165        |
|                |       |     |                       | 1984                     | 17600                                        | 1.16 |                       | 1654                     | 16600                                        | 1.45 | 30-8825/19-165        |
|                |       |     |                       | 1984                     | 21400                                        | 1.54 |                       | 1654                     | 20350                                        | 1.77 | 30-8826/19-165        |
|                | 30    | 40  |                       | 2300                     | 17600                                        | <1.0 |                       | 2255                     | 16600                                        | 1.07 | 40-8825/19-165        |
|                |       |     |                       | 2706                     | 21400                                        | 1.13 |                       | 2255                     | 20350                                        | 1.30 | 40-8826/19-165        |
|                | 37    | 50  |                       | 3050                     | 21400                                        | <1.0 |                       | 2781                     | 20350                                        | 1.05 | 50-8826/19-165        |

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   |                       |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      | Motor(HP)-Frame-Ratio |
| 195<br>(15×13) | 0.2   | 1/4 | 7.7                   | 21.3                     | 550                                          | 1.20 | 9.2                   | 17.8                     | 550                                          | 1.45 | 02-8810/08-195        |
|                |       |     |                       | 21.3                     | 880                                          | 2.00 |                       | 17.8                     | 880                                          | 2.00 | 02-8811/08-195        |
|                | 0.4   | 1/2 |                       | 26.0                     | 550                                          | <1.0 |                       | 26.0                     | 550                                          | <1.0 | 05-8810/08-195        |
|                |       |     |                       | 42.6                     | 880                                          | 1.00 |                       | 35.5                     | 880                                          | 1.00 | 05-8811/08-195        |
|                |       |     |                       | 42.6                     | 880                                          | 1.20 |                       | 35.5                     | 880                                          | 1.42 | 05-8811/09-195        |
|                |       |     |                       | 42.6                     | 1365                                         | 1.72 |                       | 35.5                     | 1365                                         | 2.18 | 05-8813/09-195        |
|                | 0.75  | 1   |                       | 51.0                     | 880                                          | <1.0 |                       | 51.0                     | 880                                          | <1.0 | 1-8811/09-195         |
|                |       |     |                       | 77.0                     | 1365                                         | <1.0 |                       | 66.6                     | 1365                                         | 1.16 | 1-8813/09-195         |
|                |       |     |                       | 80.0                     | 1500                                         | 1.29 |                       | 66.6                     | 1500                                         | 1.55 | 1-8814/10-195         |
|                |       |     |                       | 103                      | 1500                                         | <1.0 |                       | 103                      | 1500                                         | <1.0 | 2-8814/10-195         |
|                | 1.5   | 2   |                       | 160                      | 2050                                         | 1.15 |                       | 133                      | 2050                                         | 1.37 | 2-8816/10-195         |
|                |       |     |                       | 160                      | 2900                                         | 1.61 |                       | 133                      | 2900                                         | 1.79 | 2-8817/10-195         |
|                | 2.2   | 3   |                       | 183                      | 2050                                         | <1.0 |                       | 183                      | 2050                                         | <1.0 | 3-8816/10-195         |
|                |       |     |                       | 234                      | 2900                                         | 1.10 |                       | 195                      | 2900                                         | 1.22 | 3-8817/10-195         |
|                |       |     |                       | 234                      | 2900                                         | 1.19 |                       | 195                      | 2900                                         | 1.41 | 3-8817/11-195         |
|                |       |     |                       | 234                      | 4000                                         | 1.75 |                       | 195                      | 3950                                         | 2.10 | 3-8818/13-195         |
|                | 3.7   | 5   |                       | 278                      | 2900                                         | <1.0 |                       | 278                      | 2900                                         | <1.0 | 5-8817/11-195         |
|                |       |     |                       | 394                      | 4000                                         | 1.04 |                       | 329                      | 3950                                         | 1.25 | 5-8818/13-195         |
|                |       |     |                       | 394                      | 5400                                         | 1.29 |                       | 329                      | 5300                                         | 1.52 | 5-8819/11-195         |
|                | 5.5   | 7.5 |                       | 410                      | 4000                                         | <1.0 |                       | 410                      | 3800                                         | <1.0 | 8-8818/13-195         |
|                |       |     |                       | 586                      | 5400                                         | 1.11 |                       | 488                      | 5300                                         | 1.25 | 8-8819/13-195         |
|                |       |     |                       | 586                      | 8000                                         | 1.18 |                       | 488                      | 7050                                         | 1.42 | 8-8820/13-195         |
|                |       |     |                       | 586                      | 8800                                         | 1.46 |                       | 488                      | 8800                                         | 1.72 | 8-8821/13-195         |

▶ S.F 가 "1" 인 제품은 입력용량과 출력용량토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F (1) )

# 성능 및 선정표(4P)2단

## Selection & Performance table – Double Reduction – 4P

| Ratio          | Motor |    | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|----------------|-------|----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                | KW    | HP | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   |                       |
|                |       |    |                       |                          |                                              |      |                       |                          |                                              |      | Motor(HP)-Frame-Ratio |
| 195<br>(15×13) | 7.5   | 10 | 7.7                   | 650                      | 5400                                         | <1.0 | 9.2                   | 610                      | 5300                                         | <1.0 | 10-8819/13-195        |
|                |       |    |                       | 695                      | 8000                                         | <1.0 |                       | 666                      | 7050                                         | 1.04 | 10-8820/13-195        |
|                |       |    |                       | 800                      | 8800                                         | 1.07 |                       | 666                      | 8800                                         | 1.26 | 10-8821/13-195        |
|                |       |    |                       | 800                      | 10900                                        | 1.26 |                       | 666                      | 10300                                        | 1.30 | 10-8822/13-195        |
|                | 11    | 15 |                       | 855                      | 8800                                         | <1.0 |                       | 850                      | 8800                                         | <1.0 | 15-8821/16-195        |
|                |       |    |                       | 1100                     | 10900                                        | <1.0 |                       | 977                      | 10300                                        | 1.14 | 15-8822/17-195        |
|                |       |    |                       | 1172                     | 13800                                        | 1.19 |                       | 977                      | 12800                                        | 1.44 | 15-8823/16-195        |
|                |       |    |                       | 1172                     | 15300                                        | 1.54 |                       | 977                      | 14300                                        | 1.58 | 15-8824/16-195        |
|                | 15    | 20 |                       | 1100                     | 10900                                        | <1.0 |                       | 1120                     | 10300                                        | <1.0 | 20-8823/17-195        |
|                |       |    |                       | 1400                     | 13800                                        | <1.0 |                       | 1332                     | 12800                                        | 1.06 | 20-8823/16-195        |
|                |       |    |                       | 1599                     | 15300                                        | 1.13 |                       | 1332                     | 14300                                        | 1.16 | 20-8824/16-195        |
|                |       |    |                       | 1599                     | 19100                                        | 1.44 |                       | 1332                     | 17500                                        | 1.76 | 20-8825/17-195        |
|                | 18.5  | 25 |                       | 1810                     | 15300                                        | <1.0 |                       | 1643                     | 14300                                        | 1.16 | 25-8824/18-195        |
|                |       |    |                       | 1972                     | 19100                                        | 1.17 |                       | 1643                     | 17500                                        | 1.32 | 25-8825/17-195        |
|                |       |    |                       | 1972                     | 23200                                        | 1.55 |                       | 1643                     | 21300                                        | 1.85 | 25-8826/19-195        |
|                |       |    |                       | 1810                     | 15300                                        | <1.0 |                       | 1810                     | 14300                                        | <1.0 | 30-8824/18-195        |
|                | 22    | 30 |                       | 2300                     | 19100                                        | <1.0 |                       | 1954                     | 17500                                        | 1.20 | 30-8825/17-195        |
|                |       |    |                       | 2345                     | 23200                                        | 1.30 |                       | 1954                     | 21300                                        | 1.58 | 30-8826/19-195        |
|                |       |    |                       | 3050                     | 23200                                        | <1.0 |                       | 2665                     | 21300                                        | 1.16 | 40-8826/19-195        |

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 231<br>(21×11) | 0.2   | 1/4 | 6.5                   | 25.2                     | 550                                             | 1.01 | 7.8                   | 21.5                     | 550                                             | 1.20 | 02-8810/08-231        |
|                |       |     |                       | 26.0                     | 880                                             | 1.96 |                       | 21.6                     | 880                                             | 1.89 | 02-8811/08-231        |
|                | 0.4   | 1/2 |                       | 52.1                     | 880                                             | 1.01 |                       | 43.1                     | 880                                             | 1.02 | 05-8811/08-231        |
|                |       |     |                       | 52.5                     | 1365                                            | 1.51 |                       | 43.3                     | 1365                                            | 1.81 | 05-8813/09-231        |
|                | 0.75  | 1   |                       | 51.0                     | 880                                             | <1.0 |                       | 51.0                     | 880                                             | <1.0 | 1-8811/09-231         |
|                |       |     |                       | 77.0                     | 1365                                            | <1.0 |                       | 77.0                     | 1365                                            | <1.0 | 1-8813/09-231         |
|                |       |     |                       | 94.7                     | 1500                                            | 1.09 |                       | 78.9                     | 1500                                            | 1.29 | 1-8814/09-231         |
|                |       |     |                       | 94.7                     | 2050                                            | 1.53 |                       | 78.9                     | 2050                                            | 1.77 | 1-8816/09-231         |
|                | 1.5   | 2   |                       | 183                      | 2050                                            | <1.0 |                       | 158                      | 2050                                            | 1.16 | 2-8816/10-231         |
|                |       |     |                       | 189                      | 2900                                            | 1.47 |                       | 158                      | 2900                                            | 1.76 | 2-8817/10-231         |
|                | 2.2   | 3   |                       | 278                      | 2900                                            | 1.00 |                       | 232                      | 2900                                            | 1.20 | 3-8817/10-231         |
|                |       |     |                       | 278                      | 4000                                            | 1.13 |                       | 232                      | 4000                                            | 1.27 | 3-8818/10-231         |
|                |       |     |                       | 278                      | 4000                                            | 1.48 |                       | 232                      | 4000                                            | 1.77 | 3-8818/13-231         |
|                |       |     |                       | 278                      | 2900                                            | <1.0 |                       | 278                      | 2900                                            | <1.0 | 5-8817/11-231         |
|                | 3.7   | 5   |                       | 410                      | 4000                                            | <1.0 |                       | 389                      | 4000                                            | 1.05 | 5-8818/13-231         |
|                |       |     |                       | 467                      | 5400                                            | 1.20 |                       | 389                      | 5400                                            | 1.35 | 5-8819/11-231         |
|                |       |     |                       | 467                      | 5400                                            | 1.56 |                       | 389                      | 5400                                            | 1.84 | 5-8819/13-231         |
|                |       |     |                       | 694                      | 5400                                            | 1.05 |                       | 579                      | 5400                                            | 1.23 | 8-8819/13-231         |
|                | 5.5   | 7.5 |                       | 694                      | 8000                                            | 1.05 |                       | 579                      | 8000                                            | 1.26 | 8-8820/13-231         |
|                |       |     |                       | 694                      | 8800                                            | 1.39 |                       | 579                      | 8800                                            | 1.66 | 8-8821/13-231         |
|                |       |     |                       | 730                      | 7000                                            | <1.0 |                       | 735                      | 8000                                            | <1.0 | 10-8820/13-231        |
|                |       |     |                       | 947                      | 8800                                            | 1.02 |                       | 790                      | 8800                                            | 1.22 | 10-8821/13-231        |
|                | 7.5   | 10  |                       | 947                      | 11900                                           | 1.32 |                       | 798                      | 10900                                           | 1.32 | 10-8822/13-231        |
|                |       |     |                       | 965                      | 8800                                            | <1.0 |                       | 968                      | 8800                                            | <1.0 | 15-8821/16-231        |
|                |       |     |                       | 1275                     | 11900                                           | <1.0 |                       | 1158                     | 10900                                           | 1.08 | 15-8822/17-231        |
|                |       |     |                       | 1389                     | 14000                                           | 1.14 |                       | 1158                     | 13800                                           | 1.31 | 15-8823/16-231        |
|                | 11    | 15  |                       | 1389                     | 16000                                           | 1.45 |                       | 1158                     | 15300                                           | 1.65 | 15-8824/16-231        |
|                |       |     |                       | 1590                     | 14000                                           | <1.0 |                       | 1520                     | 13800                                           | <1.0 | 20-8823/16-231        |
|                |       |     |                       | 1894                     | 16000                                           | 1.07 |                       | 1578                     | 15300                                           | 1.21 | 20-8824/16-231        |

▶ S.F 가 "1" 인 제품은 입력용량과 출력허용토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F (1) )

| Ratio          | Motor |    | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|----------------|-------|----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                | KW    | HP | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                       |
|                |       |    |                       |                          |                                                 |      |                       |                          |                                                 |      | Motor(HP)-Frame-Ratio |
| 231<br>(21×11) | 15    | 20 | 6.5                   | 1894                     | 19400                                           | 1.40 | 7.8                   | 1578                     | 19100                                           | 1.68 | 20-8825/17-231        |
|                | 18.5  | 25 |                       | 2050                     | 16000                                           | <1.0 |                       | 1947                     | 153000                                          | 1.03 | 25-8824/18-231        |
|                |       |    |                       | 2336                     | 19400                                           | 1.14 |                       | 1947                     | 19100                                           | 1.36 | 25-8825/17-231        |
|                |       |    |                       | 2336                     | 23700                                           | 1.48 |                       | 1947                     | 23200                                           | 1.70 | 25-8826/19+231        |
|                |       |    |                       | 2050                     | 16000                                           | <1.0 |                       | 2000                     | 15300                                           | <1.0 | 30-8824/18-231        |
|                | 22    | 30 |                       | 2050                     | 19400                                           | <1.0 |                       | 2315                     | 19100                                           | 1.14 | 30-8825/17-231        |
|                |       |    |                       | 2778                     | 23700                                           | 1.24 |                       | 2315                     | 23200                                           | 1.43 | 30-8826/19-231        |
|                |       |    |                       | 2650                     | 19400                                           | <1.0 |                       | 2650                     | 19100                                           | <1.0 | 40-8825/19-231        |
|                | 30    | 40 |                       | 3460                     | 23700                                           | <1.0 |                       | 3157                     | 23200                                           | 1.05 | 40-8826/19-231        |
|                |       |    |                       | 3460                     | 23700                                           | <1.0 |                       | 3304                     | 23200                                           | <1.0 | 50-8826/19-231        |
|                | 37    | 50 |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |  |
|----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      | Motor(HP)-Frame-Ratio |  |
| 273<br>(21×13) | 0.2   | 1/4 | 5.5                   | 26.0                     | 550                                          | <1.0 | 6.6                   | 24.9                     | 550                                          | 1.05 | 02-8810/08-273        |  |
|                |       |     |                       | 29.8                     | 880                                          | 1.70 |                       | 24.9                     | 880                                          | 2.00 | 02-8811/08-273        |  |
|                | 0.4   | 1/2 |                       | 51.0                     | 880                                          | <1.0 |                       | 49.7                     | 880                                          | 1.00 | 05-8811/08-273        |  |
|                |       |     |                       | 60.0                     | 1365                                         | 1.30 |                       | 49.7                     | 1365                                         | 1.55 | 05-8813/09-273        |  |
|                | 0.75  | 1   |                       | 77.0                     | 1365                                         | <1.0 |                       | 77.0                     | 1365                                         | <1.0 | 1-8813/09-273         |  |
|                |       |     |                       | 103                      | 1500                                         | <1.0 |                       | 93.3                     | 1500                                         | 1.09 | 1-8814/10-273         |  |
|                |       |     |                       | 112                      | 2050                                         | 1.64 |                       | 93.3                     | 2050                                         | 1.96 | 1-8816/10-273         |  |
|                |       |     |                       | 183                      | 2050                                         | <1.0 |                       | 183                      | 2050                                         | <1.0 | 2-8816/10-273         |  |
|                | 1.5   | 2   |                       | 224                      | 2900                                         | 1.24 |                       | 186                      | 2900                                         | 1.49 | 2-8817/10-273         |  |
|                |       |     |                       | 224                      | 4000                                         | 1.80 |                       | 186                      | 4000                                         | 1.78 | 2-8818/10-273         |  |
|                |       |     |                       | 278                      | 2900                                         | <1.0 |                       | 274                      | 2900                                         | 1.02 | 3-8817/10-273         |  |
|                |       |     |                       | 338                      | 4000                                         | 1.23 |                       | 274                      | 4000                                         | 1.21 | 3-8818/10-273         |  |
|                | 2.2   | 3   |                       | 338                      | 4000                                         | 1.25 |                       | 274                      | 4000                                         | 1.50 | 3-8818/13-273         |  |
|                |       |     |                       | 410                      | 4000                                         | <1.0 |                       | 410                      | 4000                                         | <1.0 | 5-8818/13-273         |  |
|                |       |     |                       | 552                      | 5400                                         | 1.05 |                       | 460                      | 5400                                         | 1.17 | 5-8819/11-273         |  |
|                |       |     |                       | 552                      | 5400                                         | 1.32 |                       | 460                      | 5400                                         | 1.59 | 5-8819/13-273         |  |
|                | 3.7   | 5   |                       | 730                      | 5400                                         | <1.0 |                       | 684                      | 5400                                         | 1.07 | 8-8819/13-273         |  |
|                |       |     |                       | 821                      | 8800                                         | 1.18 |                       | 684                      | 8800                                         | 1.42 | 8-8821/13-273         |  |
|                |       |     |                       | 821                      | 12000                                        | 1.55 |                       | 684                      | 11900                                        | 1.71 | 8-8822/13-273         |  |
|                |       |     |                       | 965                      | 8800                                         | <1.0 |                       | 933                      | 8800                                         | 1.04 | 10-8821/13-273        |  |
|                | 5.5   | 7.5 |                       | 1119                     | 12000                                        | 1.14 |                       | 933                      | 11900                                        | 1.36 | 10-8822/17-237        |  |
|                |       |     |                       | 1119                     | 15000                                        | 1.44 |                       | 933                      | 14000                                        | 1.69 | 10-8823/16-273        |  |
|                |       |     |                       | 1275                     | 12000                                        | <1.0 |                       | 1268                     | 11900                                        | <1.0 | 15-8822/17-273        |  |
|                |       |     |                       | 1620                     | 15000                                        | <1.0 |                       | 1368                     | 14000                                        | 1.15 | 15-8823/16-273        |  |
|                | 7.5   | 10  |                       | 1642                     | 16700                                        | 1.24 |                       | 1368                     | 16000                                        | 1.47 | 15-8824/16-273        |  |
|                |       |     |                       | 2050                     | 16700                                        | <1.0 |                       | 1865                     | 16000                                        | 1.08 | 20-8824/16-273        |  |
|                |       |     |                       | 2239                     | 20400                                        | 1.19 |                       | 1965                     | 19400                                        | 1.42 | 20-8825/17-273        |  |
|                |       |     |                       | 2239                     | 24900                                        | 1.56 |                       | 1965                     | 23700                                        | 1.86 | 20-8826/19-273        |  |
|                | 11    | 15  |                       | 2650                     | 20400                                        | <1.0 |                       | 2325                     | 19400                                        | 1.15 | 25-8825/17-273        |  |
|                |       |     |                       | 2761                     | 24900                                        | 1.26 |                       | 2330                     | 23700                                        | 1.51 | 25-8826/19-273        |  |
|                |       |     |                       | 2650                     | 20400                                        | <1.0 |                       | 2650                     | 19400                                        | <1.0 | 30-8825/17-273        |  |
|                |       |     |                       | 3283                     | 24900                                        | 1.06 |                       | 2736                     | 23700                                        | 1.27 | 30-8826/19-273        |  |
|                | 15    | 20  |                       | 3500                     | 24900                                        | <1.0 |                       | 3470                     | 23700                                        | <1.0 | 40-8826/19-273        |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                | 18.5  | 25  |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                | 22    | 30  |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                | 30    | 40  |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |

▶ S.F 가 "1" 인 제품은 입력용량과 출력하중토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F 1 )

# 성능 및 선정표(4P)2단

## Selection & Performance table – Double Reduction – 4P

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   |                       |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      | Motor(HP)-Frame-Ratio |
| 319<br>(29×11) | 0.2   | 1/4 | 4.7                   | 26.0                     | 550                                          | <1.0 | 5.6                   | 26.0                     | 550                                          | <1.0 | 02-8810/08-319        |
|                |       |     |                       | 34.9                     | 880                                          | 1.45 |                       | 29.1                     | 880                                          | 1.75 | 02-8811/08-319        |
|                | 0.4   | 1/2 |                       | 51.0                     | 880                                          | <1.0 |                       | 51.0                     | 880                                          | <1.0 | 05-8811/08-319        |
|                |       |     |                       | 69.8                     | 1365                                         | 1.10 |                       | 58.1                     | 1365                                         | 1.32 | 05-8813/09-319        |
|                |       |     |                       | 69.8                     | 1500                                         | 1.48 |                       | 58.1                     | 1500                                         | 1.78 | 05-8814/09-319        |
|                | 0.75  | 1   |                       | 77.0                     | 1365                                         | <1.0 |                       | 77.0                     | 1365                                         | <1.0 | 1-8813/09-319         |
|                |       |     |                       | 103                      | 1500                                         | <1.0 |                       | 103                      | 1500                                         | <1.0 | 1-8814/09-319         |
|                |       |     |                       | 131                      | 2050                                         | 1.40 |                       | 109                      | 2050                                         | 1.65 | 1-8816/09-319         |
|                | 1.5   | 2   |                       | 183                      | 2050                                         | <1.0 |                       | 183                      | 2050                                         | <1.0 | 2-8816/10-319         |
|                |       |     |                       | 262                      | 2900                                         | 1.06 |                       | 218                      | 2900                                         | 1.23 | 2-8817/10-319         |
|                |       |     |                       | 262                      | 4000                                         | 1.57 |                       | 218                      | 4000                                         | 1.75 | 2-8818/10-319         |
|                | 2.2   | 3   |                       | 278                      | 2900                                         | <1.0 |                       | 269                      | 2900                                         | <1.0 | 3-8817/10-319         |
|                |       |     |                       | 278                      | 2900                                         | <1.0 |                       | 278                      | 2900                                         | <1.0 | 3-8817/11-319         |
|                |       |     |                       | 384                      | 4000                                         | 1.07 |                       | 320                      | 4000                                         | 1.20 | 3-8818/10-319         |
|                |       |     |                       | 384                      | 4000                                         | 1.07 |                       | 320                      | 4000                                         | 1.28 | 3-8818/13-319         |
|                |       |     |                       | 384                      | 5400                                         | 1.62 |                       | 320                      | 5400                                         | 1.69 | 3-8819/11-319         |
|                |       |     |                       | 410                      | 4000                                         | <1.0 |                       | 410                      | 4000                                         | <1.0 | 5-8818/13-319         |
|                | 3.7   | 5   |                       | 645                      | 5400                                         | 1.13 |                       | 538                      | 5400                                         | 1.31 | 5-8819/13-319         |
|                |       |     |                       | 645                      | 8800                                         | 1.49 |                       | 538                      | 8800                                         | 1.79 | 5-8821/13-319         |
|                |       |     |                       | 730                      | 5400                                         | <1.0 |                       | 703                      | 5400                                         | <1.0 | 8-8819/13-319         |
|                | 5.5   | 7.5 |                       | 959                      | 8800                                         | 1.04 |                       | 799                      | 8800                                         | 1.21 | 8-8821/13-319         |
|                |       |     |                       | 959                      | 12300                                        | 1.33 |                       | 799                      | 12000                                        | 1.55 | 8-8822/13-319         |
|                |       |     |                       | 965                      | 8800                                         | <1.0 |                       | 965                      | 8800                                         | <1.0 | 10-8821/13-319        |
|                | 7.5   | 10  |                       | 1275                     | 12300                                        | <1.0 |                       | 1090                     | 12000                                        | 1.13 | 10-8822/13-319        |
|                |       |     |                       | 1308                     | 15400                                        | 1.20 |                       | 1090                     | 1000                                         | 1.39 | 10-8823/16-319        |
|                |       |     |                       | 1275                     | 12300                                        | <1.0 |                       | 1238                     | 12000                                        | <1.0 | 15-8822/17-319        |
|                | 11    | 15  |                       | 1570                     | 15400                                        | <1.0 |                       | 1511                     | 15000                                        | <1.0 | 15-8823/16-319        |
|                |       |     |                       | 1918                     | 17000                                        | 1.05 |                       | 1600                     | 16700                                        | 1.19 | 15-8824/16-319        |
|                |       |     |                       | 1918                     | 21000                                        | 1.38 |                       | 1600                     | 20400                                        | 1.65 | 15-8825/17-319        |
|                |       |     |                       | 2030                     | 17000                                        | <1.0 |                       | 1970                     | 16700                                        | <1.0 | 20-8824/18-319        |
|                |       |     |                       | 2616                     | 21000                                        | 1.01 |                       | 2200                     | 20400                                        | 1.21 | 20-8825/17-319        |
|                | 15    | 20  |                       | 2616                     | 25700                                        | 1.34 |                       | 2200                     | 24900                                        | 1.53 | 20-8826/19-319        |
|                |       |     |                       | 2650                     | 21000                                        | <1.0 |                       | 2650                     | 20300                                        | <1.0 | 25-8825/17-319        |
|                |       |     |                       | 3226                     | 25700                                        | 1.09 |                       | 2688                     | 24900                                        | 1.24 | 25-8826/19-319        |
|                | 18.5  | 25  |                       | 3226                     | 20000                                        | 1.83 |                       | 2688                     | 20000                                        | 2.05 | 25-8827/19-319        |
|                |       |     |                       | 3500                     | 25700                                        | <1.0 |                       | 3197                     | 24900                                        | 1.04 | 30-8826/19-319        |
|                |       |     |                       | 3836                     | 20000                                        | 1.54 |                       | 3197                     | 20000                                        | 1.72 | 30-8827/19-319        |
|                | 22    | 30  |                       | 5300                     | 20000                                        | 1.13 |                       | 4360                     | 20000                                        | 1.26 | 40-8827/19-319        |
|                | 30    | 40  |                       | 5900                     | 20000                                        | <1.0 |                       | 5377                     | 20000                                        | 1.02 | 50-8827/19-319        |
| 37             | 50    |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 377<br>(29×13) | 0.2   | 1/4 | 4.0                   | 26.0                     | 550                                             | <1.0 | 4.8                   | 25.8                     | 550                                             | <1.0 | 02-8810/08-377        |
|                |       |     |                       | 41.2                     | 880                                             | 1.25 |                       | 35.0                     | 880                                             | 1.50 | 02-8811/08-377        |
|                | 0.4   | 1/2 |                       | 51.0                     | 880                                             | <1.0 |                       | 51.5                     | 880                                             | <1.0 | 05-8811/08-377        |
|                |       |     |                       | 77.0                     | 1365                                            | <1.0 |                       | 69.1                     | 1365                                            | 1.12 | 05-8813/09-377        |
|                |       |     |                       | 82.4                     | 1500                                            | 1.25 |                       | 69.5                     | 1500                                            | 1.50 | 05-8814/09-377        |
|                | 0.75  | 1   |                       | 77.0                     | 1365                                            | <1.0 |                       | 77.5                     | 1365                                            | <1.0 | 1-8813/09-377         |
|                |       |     |                       | 103                      | 1500                                            | <1.0 |                       | 104                      | 1500                                            | <1.0 | 1-8814/09-377         |
|                |       |     |                       | 154                      | 2050                                            | 1.19 |                       | 135                      | 2050                                            | 1.41 | 1-8816/09-377         |
|                |       |     |                       | 154                      | 2900                                            | 1.80 |                       | 135                      | 2900                                            | 2.16 | 1-8817/10-377         |
|                |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |

▶ S.F 가 "1" 인 제품은 입력용량과 출력허용토크를 최대로 사용하지 말것.( Do not use Max. torque & input capacity at S.F (1) )

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 377<br>(29×13) | 1.5   | 2   | 4.0                   | 183                      | 2050                                            | <1.0 | 4.8                   | 183                      | 2050                                            | <1.0 | 2-8816/10-377         |
|                |       |     |                       | 278                      | 2900                                            | <1.0 |                       | 265                      | 2900                                            | 1.08 | 2-8817/10-377         |
|                |       |     |                       | 309                      | 4000                                            | 1.33 |                       | 265                      | 4000                                            | 1.59 | 2-8818/10-377         |
|                | 2.2   | 3   |                       | 410                      | 4000                                            | <1.0 |                       | 385                      | 4000                                            | 1.07 | 3-8818/10-377         |
|                |       |     |                       | 453                      | 5400                                            | 1.61 |                       | 385                      | 5400                                            | 1.93 | 3-8819/13-377         |
|                |       |     |                       | 730                      | 5400                                            | <1.0 |                       | 645                      | 5400                                            | 1.15 | 5-8819/13-377         |
|                | 3.7   | 5   |                       | 762                      | 8800                                            | 1.26 |                       | 645                      | 8800                                            | 1.53 | 5-8821/13-377         |
|                |       |     |                       | 730                      | 5400                                            | <1.0 |                       | 735                      | 5400                                            | <1.0 | 8-8819/13-377         |
|                |       |     |                       | 965                      | 8800                                            | <1.0 |                       | 960                      | 8800                                            | 1.03 | 8-8821/13-377         |
|                | 5.5   | 7.5 |                       | 1134                     | 13200                                           | 1.12 |                       | 960                      | 12300                                           | 1.32 | 8-8822/17-377         |
|                |       |     |                       | 1134                     | 16300                                           | 1.43 |                       | 965                      | 15400                                           | 1.65 | 8-8823/16-377         |
|                |       |     |                       | 1275                     | 13200                                           | <1.0 |                       | 1290                     | 12300                                           | <1.0 | 10-8822/17-377        |
|                | 7.5   | 10  |                       | 1546                     | 16300                                           | 1.05 |                       | 1300                     | 15400                                           | 1.21 | 10-8823/16-377        |
|                |       |     |                       | 1546                     | 18500                                           | 1.33 |                       | 1300                     | 17000                                           | 1.55 | 10-8824/16/377        |
|                |       |     |                       | 1620                     | 16300                                           | <1.0 |                       | 1600                     | 15400                                           | <1.0 | 15-8823/16-377        |
|                | 11    | 15  |                       | 2050                     | 18500                                           | <1.0 |                       | 1920                     | 17000                                           | 1.05 | 15-8824/16-377        |
|                |       |     |                       | 2267                     | 22000                                           | 1.16 |                       | 1920                     | 21000                                           | 1.40 | 15-8825/17-377        |
|                |       |     |                       | 2267                     | 27300                                           | 1.54 |                       | 1920                     | 25700                                           | 1.85 | 15/8826/19-377        |
|                | 15    | 20  |                       | 2650                     | 22000                                           | <1.0 |                       | 2595                     | 21000                                           | 1.03 | 20-8825/17-377        |
|                |       |     |                       | 3091                     | 27300                                           | 1.13 |                       | 2605                     | 25700                                           | 1.36 | 20-8826/19-377        |
|                |       |     |                       | 3091                     | 20000                                           | 1.99 |                       | 2605                     | 20000                                           | 2.25 | 20-8827/19-377        |
|                | 18.5  | 25  |                       | 3500                     | 27300                                           | <1.0 |                       | 3210                     | 25700                                           | 1.10 | 25-8826/19-377        |
|                |       |     |                       | 3813                     | 20000                                           | 1.61 |                       | 3215                     | 20000                                           | 1.83 | 25-8827/19-377        |
|                |       |     |                       | 3500                     | 27300                                           | <1.0 |                       | 3520                     | 25700                                           | <1.0 | 30-8826/19-377        |
|                | 22    | 30  |                       | 4534                     | 20000                                           | 1.35 |                       | 3830                     | 20000                                           | 1.54 | 30-8827/19-377        |
|                |       |     |                       | 6150                     | 20000                                           | <1.0 |                       | 5220                     | 20000                                           | 1.13 | 40-8827/19-377        |

| Ratio           | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|-----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                 | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                 |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 473<br>(43 ×11) | 0.2   | 1/4 | 3.2                   | 51.7                     | 880                                          | 1.00 | 3.8                   | 43.1                     | 880                                          | 1.20 | 02-8811/08-473        |
|                 |       |     |                       | 51.7                     | 1350                                         | 1.50 |                       | 43.1                     | 1365                                         | 1.80 | 02-8813/08-473        |
|                 | 0.4   | 1/2 |                       | 51.0                     | 880                                          | <1.0 |                       | 51.0                     | 880                                          | <1.0 | 05-8811/08-473        |
|                 |       |     |                       | 77.0                     | 1365                                         | <1.0 |                       | 77.0                     | 1365                                         | <1.0 | 05-8813/08-473        |
|                 |       |     |                       | 103                      | 1500                                         | 1.00 |                       | 86.2                     | 1500                                         | 1.20 | 05-8814/09-473        |
|                 |       |     |                       | 103                      | 2050                                         | 1.78 |                       | 86.2                     | 2050                                         | 2.12 | 05-8816/09-473        |
|                 | 0.75  | 1   |                       | 103                      | 1500                                         | <1.0 |                       | 103                      | 1500                                         | <1.0 | 1-8814/09-473         |
|                 |       |     |                       | 183                      | 2050                                         | <1.0 |                       | 162                      | 2050                                         | 1.13 | 1-8816/19-473         |
|                 |       |     |                       | 194                      | 2900                                         | 1.44 |                       | 162                      | 2900                                         | 1.59 | 1-8817/09-473         |
|                 |       |     |                       | 278                      | 2900                                         | <1.0 |                       | 277                      | 2900                                         | <1.0 | 2-8817/10-473         |
|                 | 1.5   | 2   |                       | 388                      | 4000                                         | 1.05 |                       | 323                      | 4000                                         | 1.27 | 2-8818/10-473         |
|                 |       |     |                       | 388                      | 5400                                         | 1.52 |                       | 323                      | 5400                                         | 1.92 | 2-8819/11-473         |
|                 |       |     |                       | 410                      | 4000                                         | <1.0 |                       | 410                      | 4000                                         | <1.0 | 3-8818/10-473         |
|                 | 2.2   | 3   |                       | 569                      | 5400                                         | 1.04 |                       | 474                      | 5400                                         | 1.31 | 3-8819/11-473         |
|                 |       |     |                       | 569                      | 5400                                         | 1.28 |                       | 474                      | 5400                                         | 1.54 | 3-8819/13-473         |
|                 |       |     |                       | 730                      | 5400                                         | <1.0 |                       | 730                      | 5400                                         | <1.0 | 5-8819/13-473         |
|                 | 3.7   | 5   |                       | 855                      | 8000                                         | <1.0 |                       | 797                      | 8000                                         | 1.07 | 5-8820/13-473         |
|                 |       |     |                       | 957                      | 8800                                         | 1.18 |                       | 797                      | 8800                                         | 1.42 | 5-8821/13-473         |
|                 |       |     |                       | 957                      | 14300                                        | 1.50 |                       | 797                      | 13200                                        | 1.79 | 5-8822/13-473         |

▶ S.F 가 "1" 인 제품은 입력용량과 출력허용토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F (1) )

# 성능 및 선정표(4P)2단

## Selection & Performance table – Double Reduction – 4P

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |  |  |
|----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--|--|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |  |  |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |  |
| 473<br>(43×11) | 5.5   | 7.5 | 3.2                   | 855                      | 8000                                         | <1.0 | 3.8                   | 851                      | 8000                                         | <1.0 | 8-8820/13-473         |  |  |
|                |       |     |                       | 1130                     | 8800                                         | <1.0 |                       | 1130                     | 8800                                         | <1.0 | 8-8821/13-473         |  |  |
|                |       |     |                       | 1422                     | 14300                                        | 1.01 |                       | 1185                     | 13200                                        | 1.20 | 8-8822/13-473         |  |  |
|                |       |     |                       | 1422                     | 18000                                        | 1.28 |                       | 1185                     | 16300                                        | 1.48 | 8-8823/16-473         |  |  |
|                | 7.5   | 10  |                       | 1440                     | 14300                                        | <1.0 |                       | 1429                     | 13200                                        | <1.0 | 10-8822/13-473        |  |  |
|                |       |     |                       | 1825                     | 18000                                        | <1.0 |                       | 1616                     | 16300                                        | 1.09 | 10-8823/16-473        |  |  |
|                |       |     |                       | 1939                     | 19500                                        | 1.21 |                       | 1616                     | 18500                                        | 1.43 | 10-8824/16-473        |  |  |
|                |       |     |                       | 1939                     | 24000                                        | 1.57 |                       | 1616                     | 22000                                        | 1.89 | 10-8825/17-473        |  |  |
|                | 11    | 15  |                       | 2350                     | 19500                                        | <1.0 |                       | 2310                     | 18500                                        | <1.0 | 15-8824/16-473        |  |  |
|                |       |     |                       | 2844                     | 24000                                        | 1.07 |                       | 2370                     | 22000                                        | 1.29 | 15-8824/17-473        |  |  |
|                |       |     |                       | 2844                     | 27800                                        | 1.45 |                       | 2370                     | 27300                                        | 1.69 | 15-8826/19-473        |  |  |
|                |       |     |                       | 3050                     | 24000                                        | <1.0 |                       | 3050                     | 22000                                        | <1.0 | 20-8825/17-473        |  |  |
|                | 15    | 20  |                       | 3879                     | 27800                                        | 1.07 |                       | 3232                     | 27300                                        | 1.23 | 20-8826/19-473        |  |  |
|                |       |     |                       | 3879                     | 20000                                        | 1.59 |                       | 3232                     | 20000                                        | 1.78 | 20-8827/19-473        |  |  |
|                |       |     |                       | 4140                     | 27800                                        | <1.0 |                       | 3986                     | 27300                                        | 1.00 | 25-8826/19-473        |  |  |
|                |       |     |                       | 4784                     | 20000                                        | 1.29 |                       | 3986                     | 20000                                        | 1.44 | 25-8827/19-473        |  |  |
|                | 18.5  | 25  |                       | 5689                     | 20000                                        | 1.08 |                       | 4740                     | 20000                                        | 1.21 | 30-8827/19-473        |  |  |
|                | 22    | 30  |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |  |
|                | 30    | 40  |                       | 6150                     | 20000                                        | <1.0 |                       | 5753                     | 20000                                        | <1.0 | 40-8827/19-473        |  |  |

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 559<br>(43×13) | 0.2   | 1/4 | 2.7                   | 51.0                     | 880                                          | <1.0 | 3.2                   | 50.9                     | 880                                          | 1.00 | 02-8811/08-559        |
|                |       |     |                       | 61.1                     | 1365                                         | 1.25 |                       | 50.9                     | 1365                                         | 1.50 | 02-8813/08-559        |
|                | 0.4   | 1/2 |                       | 77.0                     | 1365                                         | <1.0 |                       | 77.0                     | 1365                                         | <1.0 | 05-8813/08-559        |
|                |       |     |                       | 103                      | 1500                                         | <1.0 |                       | 102                      | 1500                                         | 1.00 | 05-8814/08-559        |
|                | 0.75  | 1   |                       | 122                      | 2050                                         | 1.50 |                       | 102                      | 2050                                         | 1.80 | 05-8816/09-559        |
|                |       |     |                       | 183                      | 2050                                         | <1.0 |                       | 183                      | 2050                                         | <1.0 | 1-8816/09-559         |
|                |       |     |                       | 229                      | 2900                                         | 1.21 |                       | 191                      | 2900                                         | 1.41 | 1-8817/09-559         |
|                |       |     |                       | 229                      | 4000                                         | 1.79 |                       | 191                      | 4000                                         | 2.15 | 1-8818/10-559         |
|                | 1.5   | 2   |                       | 278                      | 2900                                         | <1.0 |                       | 277                      | 2900                                         | <1.0 | 2-8817/10-559         |
|                |       |     |                       | 410                      | 4000                                         | <1.0 |                       | 382                      | 4000                                         | 1.07 | 2-8818/10-559         |
|                |       |     |                       | 458                      | 5400                                         | 1.33 |                       | 382                      | 5400                                         | 1.56 | 2-8819/11-559         |
|                |       |     |                       | 610                      | 5400                                         | <1.0 |                       | 560                      | 5400                                         | 1.06 | 3-8819/11-559         |
|                | 2.2   | 3   |                       | 672                      | 5400                                         | 1.09 |                       | 560                      | 5400                                         | 1.30 | 3-8819/13-559         |
|                |       |     |                       | 672                      | 8000                                         | 1.27 |                       | 560                      | 8000                                         | 1.50 | 3-8820/13-559         |
|                |       |     |                       | 730                      | 5400                                         | <1.0 |                       | 730                      | 5400                                         | <1.0 | 5-8819/13-559         |
|                |       |     |                       | 855                      | 8000                                         | <1.0 |                       | 240                      | 8800                                         | <1.0 | 5-8820/13-559         |
|                | 3.7   | 5   |                       | 1131                     | 8800                                         | 1.00 |                       | 942                      | 8800                                         | 1.20 | 5-8821/13-559         |
|                |       |     |                       | 1131                     | 14300                                        | 1.27 |                       | 942                      | 14300                                        | 1.52 | 5-8822/13-559         |
|                |       |     |                       | 1440                     | 14300                                        | <1.0 |                       | 1401                     | 14300                                        | 1.02 | 8-8822/13-559         |
|                |       |     |                       | 1681                     | 18000                                        | 1.08 |                       | 1401                     | 18000                                        | 1.30 | 8-8823/16-559         |
|                | 5.5   | 7.5 |                       | 1681                     | 19500                                        | 1.40 |                       | 1401                     | 19500                                        | 1.69 | 8-8824/16-559         |
|                |       |     |                       | 1825                     | 18000                                        | <1.0 |                       | 1820                     | 18000                                        | <1.0 | 10-8823/16-559        |
|                |       |     |                       | 2292                     | 19500                                        | 1.2  |                       | 1910                     | 19500                                        | 1.24 | 10-8824/16-559        |
|                |       |     |                       | 2292                     | 24000                                        | 1.33 |                       | 1910                     | 24000                                        | 1.59 | 10-8825/17-559        |
|                | 7.5   | 10  |                       | 3050                     | 24000                                        | <1.0 |                       | 2801                     | 24000                                        | 1.08 | 15-8825/17-559        |
|                |       |     |                       | 3361                     | 27800                                        | 1.23 |                       | 2801                     | 27800                                        | 1.46 | 15-8826/19-559        |
|                |       |     |                       | 3361                     | 20000                                        | 1.83 |                       | 2801                     | 20000                                        | 2.18 | 15-8827/19-559        |
|                |       |     |                       | 4140                     | 27800                                        | <1.0 |                       | 3820                     | 27800                                        | 1.07 | 20-8826/19-559        |
|                | 11    | 15  |                       | 4584                     | 20000                                        | 1.34 |                       | 3820                     | 20000                                        | 1.60 | 20-8827/19-559        |
|                |       |     |                       | 5653                     | 20000                                        | 1.09 |                       | 4711                     | 20000                                        | 1.30 | 25-8827/19-559        |
|                | 15    | 20  |                       | 6150                     | 20000                                        | <1.0 |                       | 5602                     | 20000                                        | 1.09 | 30-8827/19-559        |
| 18.5           | 25    |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 22             | 30    |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |

▶ S.F 가 "1" 인 제품은 입력용량과 출력허용토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F (1) )

| Ratio           | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|-----------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                 | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 649<br>(59 ×11) | 0.2   | 1/4 | 2.3                   | 51.0                     | 880                                             | <1.0 | 2.8                   | 51.0                     | 880                                             | <1.0 | 02-8811/08-649        |
|                 |       |     |                       | 59.1                     | 1365                                            | 1.10 |                       | 59.1                     | 1365                                            | 1.30 | 02-8813/08-649        |
|                 |       |     |                       | 59.1                     | 1500                                            | 1.45 |                       | 59.1                     | 1500                                            | 1.75 | 02-8814/08-649        |
|                 | 0.4   | 1/2 |                       | 77.0                     | 1365                                            | <1.0 |                       | 77.0                     | 1365                                            | <1.0 | 05-8813/08-649        |
|                 |       |     |                       | 103                      | 1500                                            | <1.0 |                       | 103                      | 1500                                            | <1.0 | 05-8814/08-649        |
|                 |       |     |                       | 142                      | 2050                                            | 1.30 |                       | 118                      | 2050                                            | 1.55 | 05-8816/09-649        |
|                 | 0.75  | 1   |                       | 183                      | 2050                                            | <1.0 |                       | 183                      | 2050                                            | <1.0 | 1-8816/09-649         |
|                 |       |     |                       | 266                      | 2900                                            | 1.04 |                       | 222                      | 2900                                            | 1.20 | 1-8817/09-649         |
|                 |       |     |                       | 266                      | 4000                                            | 1.55 |                       | 222                      | 4000                                            | 1.84 | 1-8818/09-649         |
|                 | 1.5   | 2   |                       | 278                      | 2900                                            | <1.0 |                       | 276                      | 2900                                            | <1.0 | 2-8817/10-649         |
|                 |       |     |                       | 410                      | 4000                                            | <1.0 |                       | 408                      | 4000                                            | <1.0 | 2-8818/10-649         |
|                 |       |     |                       | 532                      | 5400                                            | 1.19 |                       | 443                      | 5400                                            | 1.37 | 2-8819/11-649         |
|                 | 2.2   | 3   |                       | 630                      | 5400                                            | <1.0 |                       | 610                      | 5400                                            | <1.0 | 3-8819/11-649         |
|                 |       |     |                       | 780                      | 8000                                            | 1.10 |                       | 650                      | 8000                                            | 1.29 | 3-8820/13-649         |
|                 |       |     |                       | 780                      | 8800                                            | 1.44 |                       | 650                      | 8800                                            | 1.74 | 3-8821/13-649         |
|                 | 3.7   | 5   |                       | 630                      | 5400                                            | <1.0 |                       | 610                      | 5400                                            | <1.0 | 5-8819/11-649         |
|                 |       |     |                       | 855                      | 8000                                            | <1.0 |                       | 840                      | 8000                                            | <1.0 | 5-8820/13-649         |
|                 |       |     |                       | 1130                     | 8800                                            | <1.0 |                       | 1094                     | 8800                                            | 1.04 | 5-8821/13-649         |
|                 | 5.5   | 7.5 |                       | 1313                     | 14700                                           | 1.10 |                       | 1094                     | 14300                                           | 1.31 | 5-8822/13-649         |
|                 |       |     |                       | 1313                     | 18000                                           | 1.39 |                       | 1094                     | 18000                                           | 1.62 | 5-8823/16-649         |
|                 |       |     |                       | 1440                     | 14700                                           | <1.0 |                       | 1430                     | 14300                                           | <1.0 | 8-8822/13-649         |
|                 | 7.5   | 10  |                       | 1825                     | 18000                                           | <1.0 |                       | 1626                     | 18000                                           | 1.09 | 8-8823/16-649         |
|                 |       |     |                       | 1951                     | 21000                                           | 1.20 |                       | 1626                     | 19500                                           | 1.41 | 8-8824/16-649         |
|                 |       |     |                       | 1951                     | 26000                                           | 1.56 |                       | 1626                     | 24000                                           | 1.87 | 8-8825/17-649         |
|                 | 11    | 15  |                       | 2350                     | 21000                                           | <1.0 |                       | 2217                     | 19500                                           | 1.04 | 10-8824/16-649        |
|                 |       |     |                       | 2661                     | 26000                                           | 1.15 |                       | 2217                     | 24000                                           | 1.37 | 10-8825/17-649        |
|                 |       |     |                       | 2661                     | 27800                                           | 1.56 |                       | 2217                     | 27800                                           | 1.80 | 10-8826/19-649        |
|                 | 15    | 20  |                       | 3050                     | 26000                                           | <1.0 |                       | 3050                     | 24000                                           | <1.0 | 15-8825/17-649        |
|                 |       |     |                       | 3903                     | 27800                                           | 1.06 |                       | 3252                     | 27800                                           | 1.23 | 15-8826/19-649        |
|                 |       |     |                       | 3903                     | 20000                                           | 1.57 |                       | 3252                     | 20000                                           | 1.83 | 15-8827/19-649        |
|                 | 18.5  | 25  |                       | 4140                     | 27800                                           | <1.0 |                       | 4000                     | 27800                                           | <1.0 | 20-8826/19-649        |
|                 |       |     |                       | 5322                     | 20000                                           | 1.15 |                       | 4435                     | 20000                                           | 1.34 | 20-8827/19-649        |
|                 |       |     |                       | 6150                     | 20000                                           | <1.0 |                       | 5470                     | 20000                                           | 1.09 | 25-8827/19-649        |
|                 | 22    | 30  |                       | 6150                     | 20000                                           | <1.0 |                       | 5950                     | 20000                                           | <1.0 | 30-8827/19-649        |

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 731<br>(43×17) | 0.2   | 1/4 | 2.1                   | 51.0                     | 880                                             | <1.0 | 2.5                   | 51.0                     | 880                                             | <1.0 | 02-8811/08-731        |
|                |       |     |                       | 79.9                     | 1365                                            | 1.00 |                       | 66.6                     | 1365                                            | 1.15 | 02-8813/08-731        |
|                |       |     |                       | 79.9                     | 1500                                            | 1.30 |                       | 66.6                     | 1500                                            | 1.55 | 02-8814/08-731        |
|                | 0.4   | 1/2 |                       | 77.0                     | 1365                                            | <1.0 |                       | 77.1                     | 1365                                            | <1.0 | 05-8813/08-731        |
|                |       |     |                       | 103                      | 1500                                            | <1.0 |                       | 102                      | 1500                                            | <1.0 | 05-8814/08-731        |
|                |       |     |                       | 160                      | 2050                                            | 1.15 |                       | 133                      | 2050                                            | 1.38 | 05-8816/09-731        |
|                | 0.75  | 1   |                       | 160                      | 2900                                            | 1.75 |                       | 133                      | 2900                                            | 2.08 | 05-8817/09-731        |
|                |       |     |                       | 183                      | 2050                                            | <1.0 |                       | 183                      | 2050                                            | <1.0 | 1-8816/09-731         |
|                |       |     |                       | 278                      | 2900                                            | <1.0 |                       | 250                      | 2900                                            | 1.11 | 1-8817/09-731         |
|                | 1.5   | 2   |                       | 300                      | 4000                                            | 1.36 |                       | 250                      | 4000                                            | 1.64 | 1-8818/10-731         |
|                |       |     |                       | 410                      | 4000                                            | <1.0 |                       | 410                      | 4000                                            | <1.0 | 2-8818/10-731         |
|                |       |     |                       | 599                      | 5400                                            | 1.13 |                       | 500                      | 5400                                            | 1.26 | 2-8819/11-731         |
|                | 2.2   | 3   |                       | 599                      | 8000                                            | 1.47 |                       | 500                      | 8000                                            | 1.68 | 2-8820/13-731         |
|                |       |     |                       | 680                      | 5400                                            | <1.0 |                       | 631                      | 5400                                            | <1.0 | 3-8819/11-731         |
|                |       |     |                       | 879                      | 8800                                            | 1.29 |                       | 733                      | 8800                                            | 1.54 | 3-8821/13-731         |

▶ S.F 가 "1" 인 제품은 입력용량과 출력하중토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F (1) )

# 성능 및 선정표(4P)2단

## Selection & Performance table – Double Reduction – 4P

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 731<br>(43×17) | 3.7   | 5   | 2.1                   | 855                      | 8000                                         | <1.0 | 2.5                   | 840                      | 8000                                         | <1.0 | 5-8820/13-731         |
|                |       |     |                       | 1130                     | 8800                                         | <1.0 |                       | 1136                     | 8800                                         | <1.0 | 5-8821/13-731         |
|                |       |     |                       | 1440                     | 14700                                        | <1.0 |                       | 1232                     | 14500                                        | 1.17 | 5-8822/13-731         |
|                |       |     |                       | 1478                     | 18000                                        | 1.24 |                       | 1232                     | 18000                                        | 1.48 | 5-8823/16-731         |
|                | 5.5   | 7.5 |                       | 1440                     | 14700                                        | <1.0 |                       | 1440                     | 14500                                        | <1.0 | 8-8822/13-731         |
|                |       |     |                       | 1825                     | 18000                                        | <1.0 |                       | 1832                     | 18000                                        | 1.00 | 8-8823/16-731         |
|                |       |     |                       | 2198                     | 21000                                        | 1.07 |                       | 1832                     | 20200                                        | 1.29 | 8-8824/16-731         |
|                |       |     |                       | 2198                     | 26000                                        | 1.39 |                       | 2368                     | 18200                                        | 1.66 | 8-8825/17-731         |
|                | 7.5   | 10  |                       | 2350                     | 21000                                        | <1.0 |                       | 2498                     | 20200                                        | <1.0 | 10-8824/16-731        |
|                |       |     |                       | 2997                     | 26000                                        | 1.02 |                       | 2498                     | 25000                                        | 1.22 | 10-8825/17-731        |
|                |       |     |                       | 2997                     | 27800                                        | 1.39 |                       | 2498                     | 27800                                        | 1.64 | 10-8826/19-731        |
|                |       |     |                       | 3050                     | 26000                                        | <1.0 |                       | 3050                     | 26000                                        | <1.0 | 15-8825/17-731        |
|                | 11    | 15  |                       | 4140                     | 27800                                        | <1.0 |                       | 3663                     | 27800                                        | 1.12 | 15-8826/19-731        |
|                |       |     |                       | 4396                     | 20000                                        | 1.40 |                       | 3663                     | 20000                                        | 1.67 | 15-8827/19-731        |
|                |       |     |                       | 4140                     | 27800                                        | <1.0 |                       | 4100                     | 27800                                        | <1.0 | 20-8826/19-731        |
|                |       |     |                       | 5994                     | 20000                                        | 1.03 |                       | 4995                     | 20000                                        | 1.23 | 20-8827/19-731        |
|                | 18.5  | 25  |                       | 6150                     | 20000                                        | <1.0 |                       | 6161                     | 20000                                        | 1.00 | 25-8827/19-731        |
|                | 22    | 30  |                       | 6150                     | 20000                                        | <1.0 |                       | 6140                     | 20000                                        | <1.0 | 30-8827/19-731        |

| Ratio          | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   |                       |
|                |       |     |                       |                          |                                              |      |                       |                          |                                              |      | Motor(HP)-Frame-Ratio |
| 841<br>(29×29) | 0.2   | 1/4 | 1.8                   | 51.0                     | 880                                          | <1.0 | 2.1                   | 51.0                     | 880                                          | <1.0 | 02-8811/08-841        |
|                |       |     |                       | 91.9                     | 1350                                         | 1.00 |                       | 76.6                     | 1365                                         | 1.00 | 02-8813/08-841        |
|                |       |     |                       | 91.9                     | 1500                                         | 1.10 |                       | 76.6                     | 1500                                         | 1.25 | 02-8814/09-841        |
|                |       |     |                       | 91.9                     | 2050                                         | 2.00 |                       | 76.6                     | 2050                                         | 2.40 | 02-8816/09-841        |
|                | 0.4   | 1/2 |                       | 103                      | 1500                                         | <1.0 |                       | 103                      | 1500                                         | <1.0 | 05-8814/19-841        |
|                |       |     |                       | 184                      | 2050                                         | 1.00 |                       | 153                      | 2050                                         | 1.20 | 05-8816/09-841        |
|                |       |     |                       | 184                      | 2900                                         | 1.50 |                       | 153                      | 2900                                         | 1.72 | 05-8817/09-841        |
|                |       |     |                       | 183                      | 2050                                         | <1.0 |                       | 183                      | 2050                                         | <1.0 | 1-8816/09-841         |
|                | 0.75  | 1   |                       | 278                      | 2900                                         | <1.0 |                       | 277                      | 2900                                         | <1.0 | 1-8817/10-841         |
|                |       |     |                       | 345                      | 4000                                         | 1.19 |                       | 287                      | 4000                                         | 1.43 | 1-8818/10-841         |
|                |       |     |                       | 345                      | 5400                                         | 2.12 |                       | 287                      | 5400                                         | 2.52 | 1-8819/11-841         |
|                |       |     |                       | 410                      | 4000                                         | <1.0 |                       | 410                      | 4000                                         | <1.0 | 2-8818/10-841         |
|                | 1.5   | 2   |                       | 695                      | 5400                                         | 1.06 |                       | 575                      | 5400                                         | 1.26 | 2-8819/11-841         |
|                |       |     |                       | 690                      | 8800                                         | 1.47 |                       | 575                      | 8800                                         | 1.67 | 2-8821/13-841         |
|                |       |     |                       | 730                      | 5400                                         | <1.0 |                       | 725                      | 5400                                         | <1.0 | 3-8819/11-841         |
|                |       |     |                       | 1011                     | 8800                                         | 1.00 |                       | 843                      | 8800                                         | 1.14 | 3-8821/13-841         |
|                | 2.2   | 3   |                       | 1011                     | 14700                                        | 1.24 |                       | 843                      | 14700                                        | 1.60 | 3-8822/13-841         |
|                |       |     |                       | 1250                     | 14700                                        | <1.0 |                       | 1345                     | 14700                                        | <1.0 | 5-8822/13-841         |
|                |       |     |                       | 1640                     | 18000                                        | <1.0 |                       | 1418                     | 18000                                        | 1.14 | 5-8823/16-841         |
|                |       |     |                       | 1701                     | 21000                                        | 1.20 |                       | 1418                     | 21000                                        | 1.48 | 5-8824/16-841         |
|                | 3.7   | 5   |                       | 1701                     | 26000                                        | 1.58 |                       | 1418                     | 26000                                        | 1.90 | 5-8825/17-841         |
|                |       |     |                       | 1640                     | 18000                                        | <1.0 |                       | 1624                     | 18000                                        | <1.0 | 8-8823/16-841         |
|                |       |     |                       | 2050                     | 21000                                        | <1.0 |                       | 2100                     | 21000                                        | <1.0 | 8-8824/16-841         |
|                |       |     |                       | 2529                     | 26000                                        | 1.06 |                       | 2135                     | 26000                                        | 1.28 | 8-8825/17-841         |
|                | 5.5   | 7.5 |                       | 2529                     | 27800                                        | 1.40 |                       | 2135                     | 27800                                        | 1.71 | 8-8826/19-841         |
|                |       |     |                       | 2695                     | 26000                                        | <1.0 |                       | 2690                     | 26000                                        | <1.0 | 10-8825/17-841        |
|                |       |     |                       | 3448                     | 27800                                        | 1.03 |                       | 2873                     | 27800                                        | 1.25 | 10-8826/19-841        |
|                |       |     |                       | 3448                     | 22000                                        | 1.79 |                       | 2873                     | 22000                                        | 2.13 | 10-8827/19-841        |
|                | 7.5   | 10  |                       | 3540                     | 27800                                        | <1.0 |                       | 3600                     | 27800                                        | <1.0 | 15-8826/19-841        |
|                |       |     |                       | 5057                     | 20000                                        | 1.22 |                       | 4214                     | 20000                                        | 1.45 | 15-8827/19-841        |
| 11             | 15    |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |

▶ S.F 가 "1" 인 제품은 입력용량과 출력허용토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F (1) )

| Ratio          | Motor |    | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model<br>Motor(HP)-Frame-Ratio |
|----------------|-------|----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|--------------------------------|
|                | KW    | HP | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                                |
| 841<br>(29×29) | 15    | 20 | 1.8                   | 6150                     | 20000                                           | <1.0 | 2.1                   | 5747                     | 20000                                           | 1.07 | 20-8827/19-841                 |
|                | 18.5  | 25 |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 25-8827/19-841                 |
|                | 22    | 30 |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 30-8827/19-841                 |

| Ratio           | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|-----------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                 | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 1003<br>(59×17) | 0.2   | 1/4 | 1.5                   | 51.0                     | 880                                             | <1.0 | 1.8                   | 51.0                     | 880                                             | <1.0 | 02-8811/08-1003       |
|                 |       |     |                       | 77.0                     | 1365                                            | <1.0 |                       | 77.0                     | 1365                                            | <1.0 | 02-8813/08-1003       |
|                 |       |     |                       | 103                      | 1500                                            | <1.0 |                       | 91.4                     | 1500                                            | 1.10 | 02-8814/08-1003       |
|                 |       |     |                       | 110                      | 2050                                            | 1.67 |                       | 91.4                     | 2050                                            | 1.67 | 02-8816/09-1003       |
|                 | 0.4   | 1/2 |                       | 103                      | 1500                                            | <1.0 |                       | 103                      | 1500                                            | <1.0 | 05-8814/08-1003       |
|                 |       |     |                       | 183                      | 2050                                            | <1.0 |                       | 183                      | 2050                                            | <1.0 | 05-8816/09-1003       |
|                 |       |     |                       | 219                      | 2900                                            | 1.28 |                       | 183                      | 2900                                            | 1.52 | 05-8817/09-1003       |
|                 |       |     |                       | 278                      | 2900                                            | <1.0 |                       | 278                      | 2900                                            | <1.0 | 1-8817/09-1003        |
|                 | 0.75  | 1   |                       | 411                      | 4000                                            | 1.00 |                       | 343                      | 4000                                            | 1.20 | 1-8818/10-1003        |
|                 |       |     |                       | 411                      | 5400                                            | 1.75 |                       | 343                      | 5400                                            | 1.91 | 1-8819/11-1003        |
|                 |       |     |                       | 410                      | 4000                                            | <1.0 |                       | 410                      | 4000                                            | <1.0 | 2-8818/10-1003        |
|                 |       |     |                       | 720                      | 5400                                            | <1.0 |                       | 653                      | 5400                                            | <1.0 | 2-8819/11-1003        |
|                 | 1.5   | 2   |                       | 822                      | 8000                                            | 1.02 |                       | 685                      | 8000                                            | 1.22 | 2-8820/13-1003        |
|                 |       |     |                       | 822                      | 8800                                            | 1.37 |                       | 685                      | 8800                                            | 1.66 | 2-8821/13-1003        |
|                 |       |     |                       | 720                      | 5400                                            | <1.0 |                       | 653                      | 5400                                            | <1.0 | 3-8819/11-1003        |
|                 |       |     |                       | 840                      | 8000                                            | <1.0 |                       | 840                      | 8000                                            | <1.0 | 3-8820/13-1003        |
|                 | 2.2   | 3   |                       | 1130                     | 8800                                            | <1.0 |                       | 1005                     | 8800                                            | 1.13 | 3-8821/13-1003        |
|                 |       |     |                       | 1206                     | 14700                                           | 1.20 |                       | 1005                     | 14700                                           | 1.43 | 3-8822/13-1003        |
|                 |       |     |                       | 1206                     | 18000                                           | 1.51 |                       | 1005                     | 18000                                           | 1.81 | 3-8823/16-1003        |
|                 |       |     |                       | 1440                     | 14700                                           | <1.0 |                       | 1440                     | 14700                                           | <1.0 | 5-8822/13-1003        |
|                 | 3.7   | 5   |                       | 1825                     | 18000                                           | <1.0 |                       | 1691                     | 18000                                           | 1.08 | 5-8823/16-1003        |
|                 |       |     |                       | 2029                     | 21000                                           | 1.16 |                       | 1691                     | 21000                                           | 1.39 | 5-8824/16-1003        |
|                 |       |     |                       | 2029                     | 26000                                           | 1.50 |                       | 1691                     | 26000                                           | 1.80 | 5-8825/17-1003        |
|                 |       |     |                       | 2350                     | 21000                                           | <1.0 |                       | 2350                     | 21000                                           | <1.0 | 8-8824/16-1003        |
|                 | 5.5   | 7.5 |                       | 3016                     | 26000                                           | 1.01 |                       | 2513                     | 26000                                           | 1.21 | 8-8825/17-1003        |
|                 |       |     |                       | 3016                     | 27800                                           | 1.37 |                       | 2513                     | 27800                                           | 1.63 | 8-8826/19-1003        |
|                 |       |     |                       | 3050                     | 26000                                           | <1.0 |                       | 3050                     | 26000                                           | <1.0 | 10-8825/17-1003       |
|                 |       |     |                       | 4112                     | 27800                                           | 1.01 |                       | 3427                     | 27800                                           | 1.20 | 10-8826/19-1003       |
|                 | 7.5   | 10  |                       | 4112                     | 2000                                            | 1.49 |                       | 3427                     | 20000                                           | 1.79 | 10-8827/19-1003       |
|                 |       |     |                       | 4140                     | 27800                                           | <1.0 |                       | 4100                     | 27800                                           | 1.0  | 15-8826/19-1003       |
|                 |       |     |                       | 6031                     | 20000                                           | 1.02 |                       | 5026                     | 20000                                           | 1.22 | 15-8827/19-1003       |
|                 |       |     |                       | 6150                     | 20000                                           | <1.0 |                       | 6140                     | 20000                                           | <1.0 | 20-8827/19-1003       |

| Ratio            | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |  |
|------------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--|
|                  | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |  |
|                  |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |
| 1247<br>(43 x29) | 0.2   | 1/4 | 1.2                   | 77.0                     | 1365                                         | <1.0 | 1.4                   | 77.0                     | 1365                                         | <1.0 | 02-8813/08-1247       |  |
|                  |       |     |                       | 103                      | 1500                                         | <1.0 |                       | 103                      | 1500                                         | <1.0 | 02-8814/08-1247       |  |
|                  |       |     |                       | 136                      | 2050                                         | 1.34 |                       | 114                      | 2050                                         | 1.61 | 02-8816/09-1247       |  |
|                  | 0.4   | 1/2 |                       | 183                      | 2050                                         | <1.0 |                       | 183                      | 2050                                         | <1.0 | 05-8816/09-1247       |  |
|                  |       |     |                       | 278                      | 2900                                         | <1.0 |                       | 227                      | 2900                                         | 1.22 | 05-8817/19-1247       |  |
|                  |       |     |                       | 273                      | 4000                                         | 1.50 |                       | 227                      | 4000                                         | 1.80 | 05-8818/10-1247       |  |
|                  |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |  |

▶ S.F 가 "1" 인 제품은 입력용량과 출력하중토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F 1 )

# 성능 및 선정표(4P)2단

## Selection & Performance table – Double Reduction – 4P

| Ratio           | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|-----------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                 | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 1247<br>(43×29) | 0.75  | 1   | 1.2                   | 278                      | 2900                                            | <1.0 | 1.4                   | 278                      | 2900                                            | <1.0 | 1-8817/09-1247        |
|                 |       |     |                       | 410                      | 4000                                            | <1.0 |                       | 410                      | 4000                                            | <1.0 | 1-8818/10-1247        |
|                 |       |     |                       | 511                      | 5400                                            | 1.43 |                       | 426                      | 5400                                            | 1.71 | 1-8819/11-1247        |
|                 | 1.5   | 2   |                       | 730                      | 5400                                            | <1.0 |                       | 730                      | 5400                                            | <1.0 | 2-8819/11-1247        |
|                 |       |     |                       | 840                      | 800                                             | <1.0 |                       | 810                      | 5400                                            | <1.0 | 2-8820/11-1247        |
|                 |       |     |                       | 1022                     | 8800                                            | 1.10 |                       | 852                      | 8000                                            | 1.34 | 2-8821/13-1247        |
|                 |       |     |                       | 1022                     | 14700                                           | 1.39 |                       | 852                      | 14700                                           | 1.69 | 2-8822/13-1247        |
|                 |       |     |                       | 1130                     | 8800                                            | <1.0 |                       | 1140                     | 8800                                            | <1.0 | 3-8821/13-1247        |
|                 |       |     |                       | 1420                     | 14700                                           | <1.0 |                       | 1250                     | 14700                                           | 1.15 | 3-8822/13-1247        |
|                 | 2.2   | 3   |                       | 1500                     | 18000                                           | 1.22 |                       | 1250                     | 18000                                           | 1.45 | 3-8823/16-1247        |
|                 |       |     |                       | 1500                     | 21000                                           | 1.57 |                       | 1250                     | 21000                                           | 1.88 | 3-8824/16-1247        |
|                 |       |     |                       | 1420                     | 14700                                           | <1.0 |                       | 1440                     | 14700                                           | <1.0 | 5-8822/13-1247        |
|                 |       |     |                       | 1825                     | 18000                                           | <1.0 |                       | 1820                     | 18000                                           | <1.0 | 5-8823/16-1247        |
|                 |       |     |                       | 2350                     | 21000                                           | <1.0 |                       | 2102                     | 21000                                           | 1.12 | 5-8824/16-1247        |
|                 |       |     |                       | 2522                     | 26000                                           | 1.21 |                       | 2102                     | 26000                                           | 1.45 | 5-8825/17-1247        |
|                 | 5.5   | 7.5 |                       | 2350                     | 21000                                           | <1.0 |                       | 2350                     | 21000                                           | <1.0 | 8-8824/17-1247        |
|                 |       |     |                       | 3050                     | 26000                                           | <1.0 |                       | 3050                     | 26000                                           | <1.0 | 8-8825/17-1247        |
|                 |       |     |                       | 3124                     | 27800                                           | 1.10 |                       | 3124                     | 27800                                           | 1.31 | 8-8826/19-1247        |
|                 |       |     |                       | 3124                     | 20000                                           | 1.64 |                       | 3124                     | 20000                                           | 1.97 | 8-8827/19-1247        |
|                 |       |     |                       | 4140                     | 27800                                           | <1.0 |                       | 4100                     | 27800                                           | <1.0 | 10-8826/19-1247       |
|                 |       |     |                       | 5113                     | 20000                                           | 1.20 |                       | 4260                     | 20000                                           | 1.44 | 10-8827/19-1247       |
|                 | 7.5   | 10  |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 15-8827/19-1247       |
|                 | 11    | 15  |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 20-8827/19-1247       |
|                 | 15    | 20  |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 20-8827/19-1247       |

| Ratio           | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|-----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                 | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                 |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 1479<br>(87×17) | 0.2   | 1/4 | 1.0                   | 77.0                     | 1365                                         | <1.0 | 1.2                   | 77.0                     | 1365                                         | <1.0 | 02-8813/08-1479       |
|                 |       |     |                       | 103                      | 1500                                         | <1.0 |                       | 103                      | 1500                                         | <1.0 | 02-8814/08-1479       |
|                 |       |     |                       | 162                      | 2050                                         | 1.13 |                       | 135                      | 2050                                         | 1.36 | 02-8816/09-1497       |
|                 |       |     |                       | 162                      | 2900                                         | 1.72 |                       | 135                      | 2900                                         | 2.05 | 02-8817/09-1479       |
|                 | 0.4   | 1/2 |                       | 183                      | 2050                                         | <1.0 |                       | 183                      | 2050                                         | <1.0 | 05-8816/09-1479       |
|                 |       |     |                       | 278                      | 2900                                         | <1.0 |                       | 270                      | 2900                                         | 1.02 | 05-8817/09-1479       |
|                 |       |     |                       | 323                      | 4000                                         | 1.27 |                       | 270                      | 4000                                         | 1.88 | 05-8818/10-0179       |
|                 |       |     |                       | 410                      | 4000                                         | <1.0 |                       | 410                      | 4000                                         | <1.0 | 1-8818/10-1479        |
|                 | 0.75  | 1   |                       | 606                      | 5400                                         | 1.20 |                       | 505                      | 5400                                         | 1.44 | 1-8819/11-1479        |
|                 |       |     |                       | 730                      | 5400                                         | <1.0 |                       | 730                      | 5400                                         | <1.0 | 2-8819/11-1479        |
|                 |       |     |                       | 1130                     | 8800                                         | <1.0 |                       | 950                      | 8800                                         | <1.0 | 2-8821/13-1479        |
|                 |       |     |                       | 1213                     | 14700                                        | 1.17 |                       | 1011                     | 14700                                        | 1.27 | 2-8822/13-1479        |
|                 | 1.5   | 2   |                       | 1420                     | 14700                                        | <1.0 |                       | 1280                     | 14700                                        | <1.0 | 3-8822/13-1479        |
|                 |       |     |                       | 1640                     | 18000                                        | <1.0 |                       | 1482                     | 18000                                        | 1.09 | 3-8823/16-1479        |
|                 |       |     |                       | 1779                     | 21000                                        | 1.16 |                       | 1482                     | 21000                                        | 1.38 | 3-8824/16-1479        |
|                 |       |     |                       | 1640                     | 18000                                        | <1.0 |                       | 1620                     | 18000                                        | <1.0 | 5-8823/16-1479        |
|                 | 3.7   | 5   |                       | 2070                     | 21000                                        | <1.0 |                       | 2050                     | 21000                                        | <1.0 | 5-8824/16-1479        |
|                 |       |     |                       | 2695                     | 26000                                        | <1.0 |                       | 2493                     | 26000                                        | 1.10 | 5-8825/17-1479        |
|                 |       |     |                       | 2695                     | 26000                                        | <1.0 |                       | 2750                     | 26000                                        | <1.0 | 8-8825/17-1479        |
|                 |       |     |                       | 3650                     | 27800                                        | <1.0 |                       | 3692                     | 27800                                        | <1.0 | 8-8826/19-1479        |
|                 | 5.5   | 7.5 |                       | 4447                     | 20000                                        | 1.38 |                       | 3706                     | 20000                                        | 1.66 | 8-8827/19-1479        |
|                 |       |     |                       | 6064                     | 20000                                        | 1.01 |                       | 5053                     | 20000                                        | 1.22 | 10-8827/19-1479       |
|                 |       |     |                       | 6150                     | 20000                                        | <1.0 |                       | 6150                     | 20000                                        | <1.0 | 15-8827/19-1479       |
|                 |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |

▶ S.F 가 "1" 인 제품은 입력용량과 출력허용토크를 최대로 사용하지 말것( Do not use Max. torque & input capacity at S.F (1) )

| Ratio            | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|------------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                  | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   |                       |
|                  |       |     |                       |                          |                                              |      |                       |                          |                                              |      | Motor(HP)-Frame-Ratio |
| 1849<br>(43 x43) | 0.2   | 1/4 | 0.81                  | 77.0                     | 1365                                         | <1.0 | 0.97                  | 77.0                     | 1365                                         | <1.0 | 02-8813/08-1849       |
|                  |       |     |                       | 103                      | 1500                                         | <1.0 |                       | 103                      | 1500                                         | <1.0 | 02-8814/08-1849       |
|                  |       |     |                       | 202                      | 2900                                         | 1.38 |                       | 168                      | 2900                                         | 1.65 | 02-8817/09-1849       |
|                  | 0.4   | 1/2 |                       | 183                      | 2050                                         | <1.0 |                       | 183                      | 2050                                         | <1.0 | 05-8816/09-1849       |
|                  |       |     |                       | 278                      | 2900                                         | <1.0 |                       | 278                      | 2900                                         | <1.0 | 05-8817/09-1849       |
|                  |       |     |                       | 404                      | 4000                                         | 1.01 |                       | 337                      | 4000                                         | 1.22 | 05-8818/10-1849       |
|                  | 0.75  | 1   |                       | 410                      | 4000                                         | <1.0 |                       | 410                      | 4000                                         | <1.0 | 1-8818/10-1849        |
|                  |       |     |                       | 730                      | 5400                                         | <1.0 |                       | 632                      | 5400                                         | 1.16 | 1-8819/11-1849        |
|                  |       |     |                       | 758                      | 8000                                         | 1.07 |                       | 632                      | 8000                                         | 1.28 | 1-8820/11-1849        |
|                  | 1.5   | 2   |                       | 810                      | 8000                                         | <1.0 |                       | 810                      | 8000                                         | <1.0 | 2-8820/11-1849        |
|                  |       |     |                       | 1140                     | 8800                                         | <1.0 |                       | 1140                     | 8800                                         | <1.0 | 2-8821/13-1849        |
|                  |       |     |                       | 1440                     | 14700                                        | <1.0 |                       | 1263                     | 14700                                        | 1.14 | 2-8822/13-1849        |
|                  | 2.2   | 3   |                       | 1440                     | 14700                                        | <1.0 |                       | 1440                     | 14700                                        | <1.0 | 3-8822/13-1849        |
|                  |       |     |                       | 1825                     | 18000                                        | <1.0 |                       | 1820                     | 18000                                        | <1.0 | 3-8823/16-1849        |
|                  |       |     |                       | 2224                     | 21000                                        | 1.05 |                       | 1853                     | 21000                                        | 1.27 | 3-8824/16-1849        |
|                  | 3.7   | 5   |                       | 2350                     | 21000                                        | <1.0 |                       | 2350                     | 21000                                        | <1.0 | 5-8824/16-1849        |
|                  |       |     |                       | 3050                     | 26000                                        | <1.0 |                       | 3050                     | 26000                                        | <1.0 | 5-8825/17-1849        |
|                  |       |     |                       | 4140                     | 27800                                        | <1.0 |                       | 4100                     | 27800                                        | <1.0 | 8-8826/19-1849        |
|                  | 5.5   | 7.5 |                       | 5559                     | 20000                                        | 1.11 |                       | 4633                     | 20000                                        | 1.33 | 8-8827/19-1849        |
|                  |       |     |                       | 6150                     | 20000                                        | <1.0 |                       | 6150                     | 20000                                        | <1.0 | 10-8827/19-1849       |

| Ratio            | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|------------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                  | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                  |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 2065<br>(59 ×35) | 0.2   | 1/4 | 0.73                  | 77.0                     | 1365                                         | <1.0 | 0.87                  | 77.0                     | 1365                                         | <1.0 | 02-8813/08-2065       |
|                  |       |     |                       | 103                      | 1500                                         | <1.0 |                       | 102                      | 1500                                         | <1.0 | 02-8814/08-2065       |
|                  |       |     |                       | 183                      | 2050                                         | <1.0 |                       | 183                      | 2050                                         | <1.0 | 02-8816/09-2065       |
|                  |       |     |                       | 226                      | 2900                                         | 1.23 |                       | 188                      | 2900                                         | 1.48 | 02-8817/09-2065       |
|                  | 0.4   | 1/2 |                       | 183                      | 2050                                         | <1.0 |                       | 183                      | 2050                                         | <1.0 | 05-8816/09-2065       |
|                  |       |     |                       | 278                      | 2900                                         | <1.0 |                       | 278                      | 2900                                         | <1.0 | 05-8817/09-2065       |
|                  |       |     |                       | 410                      | 4000                                         | <1.0 |                       | 325                      | 4000                                         | 1.09 | 05-8818/10-2065       |
|                  | 0.75  | 1   |                       | 410                      | 4000                                         | <1.0 |                       | 410                      | 4000                                         | <1.0 | 1-8818/10-2065        |
|                  |       |     |                       | 730                      | 5400                                         | <1.0 |                       | 706                      | 5400                                         | 1.04 | 1-8819/11-2065        |
|                  | 1.5   | 2   |                       | 810                      | 8000                                         | <1.0 |                       | 795                      | 8000                                         | <1.0 | 2-8820/11-2065        |
|                  |       |     |                       | 1140                     | 8800                                         | <1.0 |                       | 1140                     | 8800                                         | <1.0 | 2-8821/13-2065        |
|                  |       |     |                       | 1440                     | 14700                                        | <1.0 |                       | 1411                     | 14700                                        | 1.02 | 2-8822/13-2065        |
|                  | 2.2   | 3   |                       | 1440                     | 14700                                        | <1.0 |                       | 1440                     | 14700                                        | <1.0 | 3-8822/13-2065        |
|                  |       |     |                       | 1825                     | 18000                                        | <1.0 |                       | 1820                     | 18000                                        | <1.0 | 3-8823/16-2065        |
|                  |       |     |                       | 2350                     | 21000                                        | <1.0 |                       | 2070                     | 21000                                        | 1.14 | 3-8824/16-2065        |
|                  | 3.7   | 5   |                       | 2350                     | 21000                                        | <1.0 |                       | 2350                     | 21000                                        | <1.0 | 5-8824/16-2065        |
|                  |       |     |                       | 3050                     | 26000                                        | <1.0 |                       | 3050                     | 26000                                        | <1.0 | 5-8825/17-2065        |
|                  |       |     |                       | 4140                     | 27800                                        | <1.0 |                       | 4100                     | 27800                                        | <1.0 | 8-8826/19-2065        |
|                  | 5.5   | 7.5 |                       | 6150                     | 20000                                        | <1.0 |                       | 5174                     | 20000                                        | 1.19 | 8-8827/19-2065        |
|                  |       |     |                       | 6150                     | 20000                                        | <1.0 |                       | 6150                     | 20000                                        | <1.0 | 10-8827/19-2065       |

▶ S.F 가 "1" 인 제품은 입력용량과 출력용량토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F (1) )

# 성능 및 선정표(4P)2단

## Selection & Performance table – Double Reduction – 4P

| Ratio           | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|-----------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                 | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 2537<br>(59×43) | 0.2   | 1/4 | 0.59                  | 77.0                     | 1365                                            | <1.0 | 0.71                  | 77.0                     | 1365                                            | <1.0 | 02-8813/08-2537       |
|                 |       |     |                       | 103                      | 1500                                            | <1.0 |                       | 103                      | 1500                                            | <1.0 | 02-8814/08-2537       |
|                 |       |     |                       | 183                      | 2050                                            | <1.0 |                       | 183                      | 2050                                            | <1.0 | 02-8816/09-2537       |
|                 |       |     |                       | 278                      | 2900                                            | <1.0 |                       | 231                      | 2900                                            | 1.20 | 02-8817/09-2537       |
|                 | 0.4   | 1/2 |                       | 278                      | 2900                                            | <1.0 |                       | 278                      | 2900                                            | <1.0 | 05-8817/09-2537       |
|                 |       |     |                       | 410                      | 4000                                            | <1.0 |                       | 410                      | 4000                                            | <1.0 | 05-8818/10-2537       |
|                 |       |     |                       | 410                      | 4000                                            | <1.0 |                       | 410                      | 4000                                            | <1.0 | 1-8818/10-2537        |
|                 | 0.75  | 1   |                       | 730                      | 5400                                            | <1.0 |                       | 730                      | 5400                                            | <1.0 | 1-8819/11-2537        |
|                 |       |     |                       | 810                      | 8000                                            | <1.0 |                       | 730                      | 8000                                            | <1.0 | 1-8820/11-2537        |
|                 |       |     |                       | 810                      | 8000                                            | <1.0 |                       | 785                      | 8000                                            | <1.0 | 2-8820/11-2537        |
|                 | 1.5   | 2   |                       | 1140                     | 8800                                            | <1.0 |                       | 1140                     | 8800                                            | <1.0 | 2-8821/13-2537        |
|                 |       |     |                       | 1440                     | 14700                                           | <1.0 |                       | 1440                     | 14700                                           | <1.0 | 2-8822/13-2537        |
|                 |       |     |                       | 1825                     | 18000                                           | <1.0 |                       | 1820                     | 18000                                           | <1.0 | 3-8823/16-2537        |
|                 | 2.2   | 3   |                       | 2350                     | 21000                                           | <1.0 |                       | 2350                     | 21000                                           | <1.0 | 3-8824/16-2537        |
|                 |       |     |                       | 3050                     | 26000                                           | <1.0 |                       | 3050                     | 26000                                           | <1.0 | 5-8825/17-2537        |
|                 | 5.5   | 7.5 |                       | 4140                     | 27800                                           | <1.0 |                       | 4100                     | 27800                                           | <1.0 | 8-8826/19-2537        |
|                 |       |     |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 8-8827/19-2537        |
|                 | 7.5   | 10  |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 10-8827/19-2537       |

| Ratio           | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |  |
|-----------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--|
|                 | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                       |  |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      | Motor(HP)-Frame-Ratio |  |
| 3045<br>(87×35) | 0.2   | 1/4 | 0.49                  | 77.0                     | 1365                                            | <1.0 | 0.59                  | 77.0                     | 1365                                            | <1.0 | 02-8813/08-3045       |  |
|                 |       |     |                       | 103                      | 1500                                            | <1.0 |                       | 103                      | 1500                                            | <1.0 | 02-8814/08-3045       |  |
|                 |       |     |                       | 183                      | 2050                                            | <1.0 |                       | 183                      | 2050                                            | <1.0 | 02-8816/09-3045       |  |
|                 |       |     |                       | 278                      | 2900                                            | <1.0 |                       | 277                      | 2900                                            | 1.00 | 02-8817/09-3045       |  |
|                 | 0.4   | 1/2 |                       | 278                      | 2900                                            | <1.0 |                       | 278                      | 2900                                            | <1.0 | 05-8817/09-3045       |  |
|                 |       |     |                       | 410                      | 4000                                            | <1.0 |                       | 410                      | 4000                                            | <1.0 | 05-8818/10-3045       |  |
|                 |       |     |                       | 730                      | 5400                                            | <1.0 |                       | 730                      | 5400                                            | <1.0 | 1-8819/11-3045        |  |
|                 | 0.75  | 1   |                       | 955                      | 8800                                            | <1.0 |                       | 950                      | 8800                                            | <1.0 | 2-8821/13-3045        |  |
|                 |       |     |                       | 1250                     | 14700                                           | <1.0 |                       | 1275                     | 14700                                           | <1.0 | 2-8822/13-3045        |  |
|                 |       |     |                       | 1650                     | 18000                                           | <1.0 |                       | 1600                     | 18000                                           | <1.0 | 3-8823/16-3045        |  |
|                 | 1.5   | 2   |                       | 2050                     | 21000                                           | <1.0 |                       | 2050                     | 21000                                           | <1.0 | 3-8824/16-3045        |  |
|                 |       |     |                       | 2650                     | 26000                                           | <1.0 |                       | 2650                     | 26000                                           | <1.0 | 5-8825/17-3045        |  |
|                 |       |     |                       | 3540                     | 27800                                           | <1.0 |                       | 3520                     | 27800                                           | <1.0 | 8-8826/19-3045        |  |
|                 | 2.2   | 3   |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 8-8827/19-3045        |  |
|                 |       |     |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 8-8827/19-3045        |  |
|                 |       |     |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 10-8827/19-3045       |  |
| 3.7             | 5     |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
| 5.5             | 7.5   |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
| 7.5             | 10    |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |

| Ratio           | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|-----------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                 | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                       |
|                 |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      | Motor(HP)-Frame-Ratio |
| 3481<br>(59×59) | 0.2   | 1/4 | 0.43                  | 77.0                     | 1365                                            | <1.0 | 0.52                  | 77.0                     | 1365                                            | <1.0 | 02-8813/08-3481       |
|                 |       |     |                       | 103                      | 1500                                            | <1.0 |                       | 103                      | 1500                                            | <1.0 | 02-8814/08-3481       |
|                 |       |     |                       | 183                      | 2050                                            | <1.0 |                       | 183                      | 2050                                            | <1.0 | 02-8816/09-3481       |
|                 |       |     |                       | 278                      | 2900                                            | <1.0 |                       | 278                      | 2900                                            | <1.0 | 02-8817/09-3481       |
|                 | 0.4   | 1/2 |                       | 278                      | 2900                                            | <1.0 |                       | 278                      | 2900                                            | <1.0 | 05-8817/09-3481       |
|                 |       |     |                       | 410                      | 4000                                            | <1.0 |                       | 410                      | 4000                                            | <1.0 | 05-8818/10-3481       |
|                 |       |     |                       | 730                      | 5400                                            | <1.0 |                       | 730                      | 5400                                            | <1.0 | 1-8819/11-3481        |
|                 | 0.75  | 1   |                       | 860                      | 8000                                            | <1.0 |                       | 860                      | 8000                                            | <1.0 | 1-8820/11-3481        |

▶ S.F 가 "1" 인 제품은 입력용량과 출력허용토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F 1 )

| Ratio            | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |  |  |
|------------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--|--|
|                  | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                       |  |  |
|                  |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      | Motor(HP)-Frame-Ratio |  |  |
| 3481<br>(59 x59) | 1.5   | 2   | 0.43                  | 1140                     | 8800                                            | <1.0 | 0.52                  | 1140                     | 8800                                            | <1.0 | 2-8821/13-3481        |  |  |
|                  |       |     |                       | 1440                     | 14700                                           | <1.0 |                       | 1440                     | 14700                                           | <1.0 | 2-8822/13-3481        |  |  |
|                  | 2.2   | 3   |                       | 1810                     | 18000                                           | <1.0 |                       | 1810                     | 18000                                           | <1.0 | 3-8823/16-3481        |  |  |
|                  |       |     |                       | 2350                     | 21000                                           | <1.0 |                       | 2350                     | 21000                                           | <1.0 | 3-8824/16-3481        |  |  |
|                  | 3.7   | 5   |                       | 3050                     | 26000                                           | <1.0 |                       | 3050                     | 26000                                           | <1.0 | 5-8825/17-3481        |  |  |
|                  |       |     |                       | 4100                     | 27800                                           | <1.0 |                       | 4100                     | 27800                                           | <1.0 | 8-8826/19-3481        |  |  |
|                  | 5.5   | 7.5 |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 8-8827/19-3481        |  |  |
|                  |       |     |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 10-8827/19-3481       |  |  |
|                  | 7.5   | 10  |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |  |
|                  |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |  |
|                  |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |  |
|                  |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |  |

| Ratio            | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|------------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                  | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                       |
|                  |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      | Motor(HP)-Frame-Ratio |
| 4437<br>(87 x51) | 0.2   | 1/4 | 0.34                  | 77.0                     | 1365                                            | <1.0 | 0.41                  | 77.0                     | 1365                                            | <1.0 | 02-8813/08-4437       |
|                  |       |     |                       | 103                      | 1500                                            | <1.0 |                       | 103                      | 1500                                            | <1.0 | 02-8814/08-4437       |
|                  |       |     |                       | 183                      | 2050                                            | <1.0 |                       | 183                      | 2050                                            | <1.0 | 02-8816/09-4437       |
|                  |       |     |                       | 278                      | 2900                                            | <1.0 |                       | 278                      | 2900                                            | <1.0 | 02-8817/09-4437       |
|                  | 0.4   | 1/2 |                       | 410                      | 4000                                            | <1.0 |                       | 410                      | 4000                                            | <1.0 | 05-8818/10-4437       |
|                  | 0.75  | 1   |                       | 730                      | 5400                                            | <1.0 |                       | 730                      | 5400                                            | <1.0 | 1-8819/11-4437        |
|                  | 1.5   | 2   |                       | 950                      | 8800                                            | <1.0 |                       | 950                      | 8800                                            | <1.0 | 2-8821/13-4437        |
|                  |       |     |                       | 1275                     | 14700                                           | <1.0 |                       | 1275                     | 14700                                           | <1.0 | 2-8822/13-4437        |
|                  | 2.2   | 3   |                       | 1600                     | 18000                                           | <1.0 |                       | 1600                     | 18000                                           | <1.0 | 3-8823/16-4437        |
|                  |       |     |                       | 2050                     | 21000                                           | <1.0 |                       | 2050                     | 21000                                           | <1.0 | 3-8824/16-4437        |
|                  | 3.7   | 5   |                       | 2650                     | 26000                                           | <1.0 |                       | 2650                     | 26000                                           | <1.0 | 5-8825/17-4437        |
|                  | 5.5   | 7.5 |                       | 3520                     | 27800                                           | <1.0 |                       | 3520                     | 27800                                           | <1.0 | 8-8826/19-4437        |
|                  |       |     |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 8-8827/19-4437        |
|                  | 7.5   | 10  |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 10-8827/19-4437       |

| Ratio            | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |
|------------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|                  | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                  |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 5133<br>(87 x59) | 0.2   | 1/4 | 0.29                  | 77.0                     | 1365                                            | <1.0 | 0.35                  | 77.0                     | 1365                                            | <1.0 | 02-8813/08-5133       |
|                  |       |     |                       | 103                      | 1500                                            | <1.0 |                       | 103                      | 1500                                            | <1.0 | 02-8814/08-5133       |
|                  |       |     |                       | 183                      | 2050                                            | <1.0 |                       | 183                      | 2050                                            | <1.0 | 02-8816/09-5133       |
|                  |       |     |                       | 278                      | 2900                                            | <1.0 |                       | 278                      | 2900                                            | <1.0 | 02-8817/09-5133       |
|                  | 0.4   | 1/2 |                       | 410                      | 4000                                            | <1.0 |                       | 410                      | 4000                                            | <1.0 | 05-8818/10-5133       |
|                  |       |     |                       | 730                      | 5400                                            | <1.0 |                       | 730                      | 5400                                            | <1.0 | 1-8819/11-5133        |
|                  | 0.75  | 1   |                       | 860                      | 8000                                            | <1.0 |                       | 860                      | 8000                                            | <1.0 | 1-8820/11-5133        |
|                  |       |     |                       | 1140                     | 8800                                            | <1.0 |                       | 1140                     | 8800                                            | <1.0 | 2-8821/13-5133        |
|                  | 1.5   | 2   |                       | 1440                     | 14700                                           | <1.0 |                       | 1440                     | 14700                                           | <1.0 | 2-8822/13-5133        |
|                  |       |     |                       | 1810                     | 18000                                           | <1.0 |                       | 1810                     | 18000                                           | <1.0 | 3-8823/16-5133        |
|                  | 2.2   | 3   |                       | 2350                     | 21000                                           | <1.0 |                       | 2350                     | 21000                                           | <1.0 | 3-8824/16-5133        |
|                  |       |     |                       | 3050                     | 26000                                           | <1.0 |                       | 3050                     | 26000                                           | <1.0 | 5-8825/17-5133        |
|                  | 3.7   | 5   |                       | 4100                     | 27800                                           | <1.0 |                       | 4100                     | 27800                                           | <1.0 | 8-8826/19-5133        |
|                  |       |     |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 8-8827/19-5133        |
|                  | 5.5   | 7.5 |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 10-8827/19-5133       |
|                  |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
|                  | 7.5   | 10  |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
|                  |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |

▶ S.F 가 "1" 인 제품은 입력용량과 출력허용토크를 최대로 사용하지 말것. (Do not use Max. torque & input capacity at S.F (1) )

# 성능 및 선정표(4P)2단

## Selection & Performance table – Double Reduction – 4P

| Ratio           | Motor |     | 50 Hz(1500rpm)        |                          |                                              |      | 60 Hz(1800rpm)        |                          |                                              |      | Model                 |
|-----------------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|                 | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|                 |       |     |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 6177<br>(87×71) | 0.2   | 1/4 | 0.24                  | 77.0                     | 1365                                         | <1.0 | 0.29                  | 77.0                     | 1365                                         | <1.0 | 02-8813/09-6177       |
|                 |       |     |                       | 103                      | 1500                                         | <1.0 |                       | 103                      | 1500                                         | <1.0 | 02-8814/09-6177       |
|                 |       |     |                       | 183                      | 2050                                         | <1.0 |                       | 183                      | 2050                                         | <1.0 | 02-8816/09-6177       |
|                 |       |     |                       | 278                      | 2900                                         | <1.0 |                       | 278                      | 2900                                         | <1.0 | 02-8817/09-6177       |
|                 | 0.4   | 1/2 |                       | 410                      | 4000                                         | <1.0 |                       | 410                      | 4000                                         | <1.0 | 05-8818/10-6177       |
|                 | 0.75  | 1   |                       | 730                      | 5400                                         | <1.0 |                       | 730                      | 5400                                         | <1.0 | 1-8819/11-6177        |
|                 | 1.5   | 2   |                       | 950                      | 8800                                         | <1.0 |                       | 950                      | 8800                                         | <1.0 | 2-8821/13-6177        |
|                 |       |     |                       | 1275                     | 14700                                        | <1.0 |                       | 1275                     | 14700                                        | <1.0 | 2-8822/13-6177        |
|                 | 2.2   | 3   |                       | 1600                     | 18000                                        | <1.0 |                       | 1600                     | 18000                                        | <1.0 | 3-8823/16-6177        |
|                 |       |     |                       | 2050                     | 21000                                        | <1.0 |                       | 2050                     | 21000                                        | <1.0 | 3-8824/16-6177        |
|                 | 3.7   | 5   |                       | 2650                     | 26000                                        | <1.0 |                       | 2650                     | 26000                                        | <1.0 | 5-8825/17-6177        |
|                 | 5.5   | 7.5 |                       | 3520                     | 27800                                        | <1.0 |                       | 3520                     | 27800                                        | <1.0 | 8-8826/19-6177        |
|                 |       |     |                       | 6150                     | 20000                                        | <1.0 |                       | 6150                     | 20000                                        | <1.0 | 8-8827/19-6177        |
|                 | 7.5   | 10  |                       | 6150                     | 20000                                        | <1.0 |                       | 6150                     | 20000                                        | <1.0 | 10-8827/19-6177       |

| Ratio            | Motor |     | 50 Hz(1500rpm)        |                          |                                                 |      | 60 Hz(1800rpm)        |                          |                                                 |      | Model                 |  |
|------------------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--|
|                  | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |  |
|                  |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
| 7569<br>(87 x87) | 0.2   | 1/4 | 0.20                  | 77.0                     | 1365                                            | <1.0 | 0.24                  | 77.0                     | 1365                                            | <1.0 | 02-8813/08-7569       |  |
|                  |       |     |                       | 103                      | 1500                                            | <1.0 |                       | 103                      | 1500                                            | <1.0 | 02-8814/08-7569       |  |
|                  |       |     |                       | 183                      | 2050                                            | <1.0 |                       | 183                      | 2050                                            | <1.0 | 02-8816/09-7569       |  |
|                  |       |     |                       | 278                      | 2900                                            | <1.0 |                       | 278                      | 2900                                            | <1.0 | 02-8817/09-7569       |  |
|                  | 0.4   | 1/2 |                       | 410                      | 4000                                            | <1.0 |                       | 410                      | 4000                                            | <1.0 | 05-8818/10-7569       |  |
|                  |       |     |                       | 730                      | 5400                                            | <1.0 |                       | 730                      | 5400                                            | <1.0 | 1-8819/11-7569        |  |
|                  | 0.75  | 1   |                       | 950                      | 8800                                            | <1.0 |                       | 950                      | 8800                                            | <1.0 | 2-8821/13-7569        |  |
|                  |       |     |                       | 1275                     | 14700                                           | <1.0 |                       | 1275                     | 14700                                           | <1.0 | 2-8822/13-7569        |  |
|                  | 1.5   | 2   |                       | 1600                     | 18000                                           | <1.0 |                       | 1600                     | 18000                                           | <1.0 | 3-8823/16-7569        |  |
|                  |       |     |                       | 2050                     | 21000                                           | <1.0 |                       | 2050                     | 21000                                           | <1.0 | 3-8824/16-7569        |  |
|                  | 2.2   | 3   |                       | 2650                     | 26000                                           | <1.0 |                       | 2650                     | 26000                                           | <1.0 | 5-8825/17-7569        |  |
|                  |       |     |                       | 3500                     | 27800                                           | <1.0 |                       | 3520                     | 27800                                           | <1.0 | 8-8826/19-7569        |  |
|                  | 3.7   | 5   |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 8-8827/19-7569        |  |
|                  |       |     |                       | 6150                     | 20000                                           | <1.0 |                       | 6150                     | 20000                                           | <1.0 | 10-8827/19-7569       |  |
|                  | 5.5   | 7.5 |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
|                  |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
| 7.5              | 10    |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |
|                  |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |  |

▶ S.F 가 "1" 인 제품은 입력용량과 출력허용토크를 최대로 사용하지 말것.( Do not use Max, torque & input capacity at S.F (1) )

| Ratio | Motor |     | 50 Hz(1000rpm)        |                          |                                                 |       | 60 Hz(1200rpm)        |                          |                                                 |      | Model                 |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|-------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF    | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|       |       |     |                       |                          |                                                 |       |                       |                          |                                                 |      |                       |
| 11    | 55    | 75  | 91                    | 544                      | 6450                                            | 1.68  | 109                   | 454                      | 6100                                            | 1.69 | 75/6-8823-11          |
|       | 75    | 100 |                       | 742                      | 6450                                            | 1.24  |                       | 619                      | 6100                                            | 1.24 | 100/6-8823-11         |
|       |       |     |                       |                          | 7200                                            | 1.60  |                       |                          | 6800                                            | 1.57 | 100/6-8824-11         |
|       |       |     |                       |                          | 8850                                            | 1.93  |                       |                          | 8350                                            | 1.93 | 100/6-8825-11         |
|       | 90    | 125 |                       | 891                      | 6450                                            | 1.05  |                       | 742                      | 6100                                            | 1.05 | 125/6-8823-11         |
|       |       |     |                       |                          | 7200                                            | 1.33  |                       |                          | 6800                                            | 1.33 | 125/6-8824-11         |
|       |       |     |                       |                          | 8850                                            | 1.61  |                       |                          | 8350                                            | 1.58 | 125/6-8825-11         |
|       |       |     |                       |                          | 10750                                           | 1.85  |                       |                          | 10250                                           | 1.86 | 125/6-8826-11         |
|       | 110   | 150 |                       | 1089                     | 7200                                            | 1.03  |                       | 908                      | 6800                                            | 1.03 | 150/6-8824-11         |
|       |       |     |                       |                          | 8850                                            | 1.27  |                       |                          | 8350                                            | 1.27 | 150/6-8825-11         |
|       |       |     |                       |                          | 10750                                           | 1.52  |                       |                          | 10250                                           | 1.52 | 150/6-8826-11         |
|       | 132   | 175 |                       | 1307                     | 8850                                            | 1.06  |                       | 1089                     | 8350                                            | 1.06 | 175/6-8825-11         |
|       |       |     | 10750                 |                          | 1.28                                            | 10250 | 1.28                  |                          | 175/6-8826-11                                   |      |                       |

| Ratio | Motor |     | 50 Hz(1000rpm)        |                          |                                                 |      | 60 Hz(1200rpm)        |                          |                                                 |      | Model                 |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|       |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 15    | 37    | 50  | 67                    | 500                      | 7095                                            | 2.50 | 80                    | 416                      | 6720                                            | 2.51 | 50/6-8823-15          |
|       | 45    | 60  |                       | 608                      | 7095                                            | 2.07 |                       | 506                      | 6720                                            | 2.08 | 60/6-8823-15          |
|       | 55    | 75  |                       | 745                      | 7095                                            | 1.69 |                       | 619                      | 6720                                            | 1.68 | 75/6-8823-15          |
|       | 75    | 100 |                       | 1012                     | 7095                                            | 1.24 |                       | 844                      | 6720                                            | 1.24 | 100/6-8823-15         |
|       |       |     |                       |                          | 7905                                            | 1.51 |                       |                          | 7500                                            | 1.51 | 100/6-8824-15         |
|       |       |     |                       |                          | 9600                                            | 1.86 |                       |                          | 9145                                            | 1.86 | 100/6-8825-15         |
|       | 90    | 125 |                       | 1215                     | 7095                                            | 1.05 |                       | 1012                     | 6720                                            | 1.03 | 125/6-8823-15         |
|       |       |     |                       |                          | 7905                                            | 1.26 |                       |                          | 7500                                            | 1.26 | 125/6-8824-15         |
|       |       |     |                       |                          | 9600                                            | 1.53 |                       |                          | 9145                                            | 1.55 | 125/6-8825-15         |
|       |       |     |                       |                          | 11900                                           | 1.87 |                       |                          | 11250                                           | 1.86 | 125/6-8826-15         |
|       | 110   | 150 |                       | 1485                     | 7905                                            | 1.03 |                       | 1238                     | 7500                                            | 1.03 | 150/6-8824-15         |
|       |       |     |                       |                          | 9600                                            | 1.27 |                       |                          | 9145                                            | 1.27 | 150/6-8825-15         |
|       |       |     |                       |                          | 11900                                           | 1.52 |                       |                          | 11250                                           | 1.52 | 150/6-8826-15         |
|       | 132   | 175 |                       | 1785                     | 9600                                            | 1.06 |                       | 1485                     | 9145                                            | 1.06 | 175/6-8825-15         |
|       |       |     |                       |                          | 11900                                           | 1.27 |                       |                          | 11250                                           | 1.27 | 175/6-8826-15         |

| Ratio | Motor |    | 50 Hz(1000rpm)        |                          |                                              |      | 60 Hz(1200rpm)        |                          |                                              |      | Model                 |
|-------|-------|----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|       | KW    | HP | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|       |       |    |                       |                          |                                              |      |                       |                          |                                              |      |                       |
| 21    | 30    | 40 | 48                    | 567                      | 7850                                         | 2.47 | 57                    | 472                      | 7440                                         | 2.47 | 40/6-8823-21          |
|       | 37    | 50 |                       | 699                      | 7850                                         | 1.97 |                       | 583                      | 7440                                         | 1.98 | 50/6-8823-21          |
|       | 45    | 60 |                       | 850                      | 7850                                         | 1.61 |                       | 709                      | 7440                                         | 1.62 | 60/6-8823-21          |
|       |       |    |                       |                          | 8735                                         | 2.15 |                       |                          | 8275                                         | 2.16 | 60/6-8824-21          |
|       | 55    | 75 |                       | 1040                     | 7850                                         | 1.31 |                       | 866                      | 7440                                         | 1.35 | 75/6-8823-21          |
|       |       |    |                       |                          | 8735                                         | 1.74 |                       |                          | 8275                                         | 1.74 | 75/6-8824-21          |

# 성능 및 선정표(6P)1단

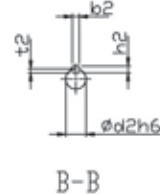
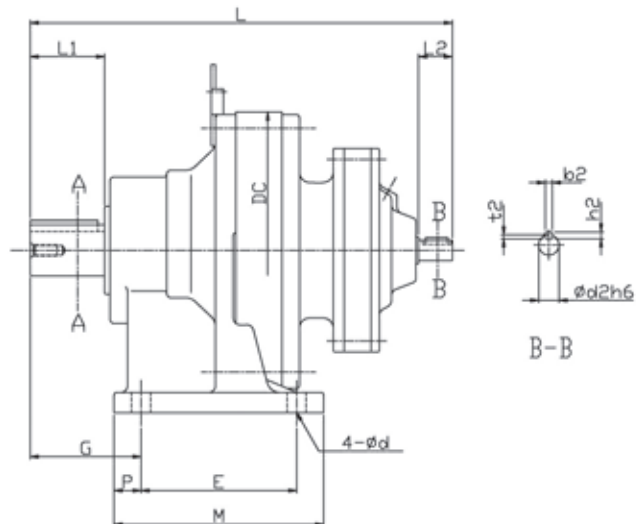
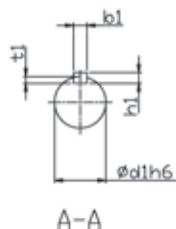
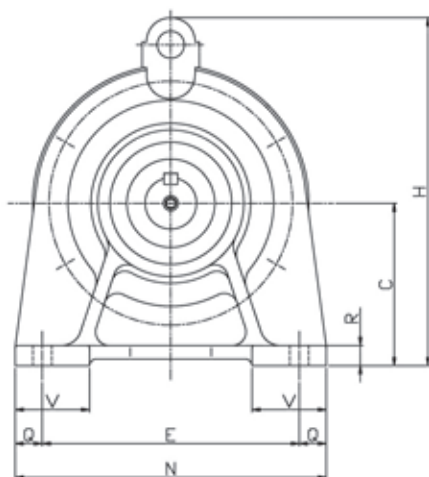
## Selection & Performance table – Single Reduction – 6P

| Ratio | Motor |     | 50 Hz(1000rpm)        |                          |                                                 |      | 60 Hz(1200rpm)        |                          |                                                 |      | Model                 |
|-------|-------|-----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   |                       |
|       |       |     |                       |                          |                                                 |      |                       |                          |                                                 |      | Motor(HP)-Frame-Ratio |
| 21    | 75    | 100 | 48                    | 1418                     | 7850                                            | 1.01 | 57                    | 1181                     | 7440                                            | 1.01 | 100/6-8823-21         |
|       |       |     |                       |                          | 8735                                            | 1.27 |                       |                          | 8275                                            | 1.27 | 100/6-8824-21         |
|       |       |     |                       |                          | 10750                                           | 1.52 |                       |                          | 10150                                           | 1.52 | 100/6-8825-21         |
|       |       |     |                       |                          | 13050                                           | 1.88 |                       |                          | 12350                                           | 1.88 | 100/6-8826-21         |
|       | 90    | 125 |                       | 1701                     | 8735                                            | 1.06 |                       | 1418                     | 8275                                            | 1.06 | 125/6-8824-21         |
|       |       |     |                       |                          | 10750                                           | 1.27 |                       |                          | 10150                                           | 1.27 | 125/6-8825-21         |
|       |       |     |                       |                          | 13050                                           | 1.56 |                       |                          | 12350                                           | 1.60 | 125/6-8826-21         |
|       | 110   | 150 |                       | 2079                     | 10750                                           | 1.05 |                       | 1732                     | 10150                                           | 1.05 | 150/6-8825-21         |
|       |       |     |                       |                          | 13050                                           | 1.27 |                       |                          | 12350                                           | 1.28 | 150/6-8826-21         |
|       | 132   | 175 |                       | 2495                     | 13050                                           | 1.06 |                       | 2079                     | 12350                                           | 1.06 | 175/6-8826-21         |

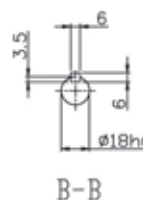
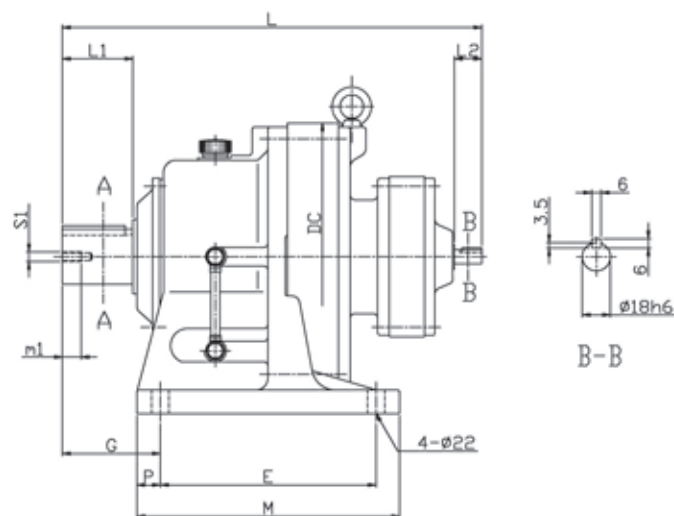
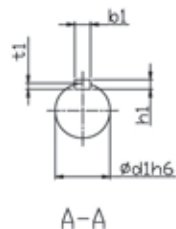
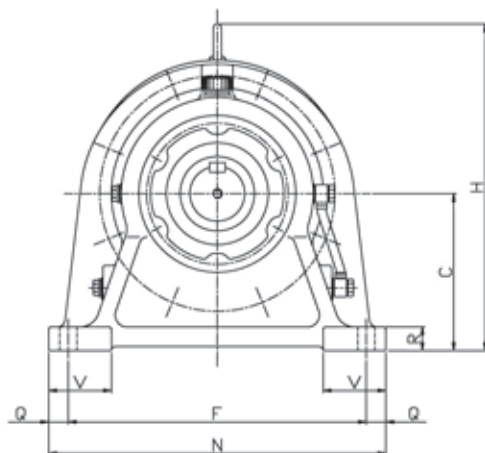
| Ratio | Motor |     | 50 Hz(1000rpm)        |                          |                                              |      | 60 Hz(1200rpm)        |                          |                                              |      | Model                 |
|-------|-------|-----|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|--------------------------|----------------------------------------------|------|-----------------------|
|       | KW    | HP  | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft Overhung load<br>(kg) | SF   |                       |
|       |       |     |                       |                          |                                              |      |                       |                          |                                              |      | Motor(HP)-Frame-Ratio |
| 29    | 30    | 40  | 34                    | 783                      | 8650                                         | 1.87 | 41                    | 652                      | 8200                                         | 1.87 | 40/6-8823-29          |
|       | 37    | 50  |                       | 966                      | 8650                                         | 1.51 |                       | 805                      | 8200                                         | 1.51 | 50/6-8823-29          |
|       |       |     |                       |                          | 9650                                         | 1.88 |                       |                          | 9150                                         | 1.88 | 50/6-8824-29          |
|       | 45    | 60  |                       | 1174                     | 8650                                         | 1.24 |                       | 979                      | 8200                                         | 1.24 | 60/6-8823-29          |
|       |       |     |                       |                          | 9650                                         | 1.55 |                       |                          | 9150                                         | 1.55 | 60/6-8824-29          |
|       |       |     |                       |                          | 11850                                        | 2.13 |                       |                          | 11150                                        | 2.14 | 60/6-8825-29          |
|       | 55    | 75  |                       | 1436                     | 8650                                         | 1.02 |                       | 1196                     | 8200                                         | 1.02 | 75/6-8823-29          |
|       |       |     |                       |                          | 9650                                         | 1.26 |                       |                          | 9150                                         | 1.26 | 75/6-8824-29          |
|       |       |     |                       |                          | 11850                                        | 1.74 |                       |                          | 11150                                        | 1.74 | 75/6-8825-29          |
|       | 75    | 100 |                       | 1958                     | 11850                                        | 1.27 |                       | 1631                     | 11150                                        | 1.27 | 100/6-8825-29         |
|       |       |     |                       |                          | 14500                                        | 1.79 |                       |                          | 13500                                        | 1.82 | 100/6-8826-29         |
|       | 90    | 125 |                       | 2349                     | 11850                                        | 1.06 |                       | 1958                     | 11150                                        | 1.06 | 125/6-8825-29         |
|       |       |     |                       |                          | 14500                                        | 1.50 |                       |                          | 13500                                        | 1.50 | 125/6-8826-29         |
|       |       |     |                       |                          | 20000                                        | 1.61 |                       |                          | 20000                                        | 1.61 | 125/6-8827-29         |
|       | 110   | 150 |                       | 2871                     | 14500                                        | 1.22 |                       | 2392                     | 13500                                        | 1.24 | 150/6-8826-29         |
|       |       |     |                       |                          | 20000                                        | 1.30 |                       |                          | 20000                                        | 1.30 | 150/6-8827-29         |
|       | 132   | 175 |                       | 3445                     | 14500                                        | 1.02 |                       | 2871                     | 13500                                        | 1.04 | 175/6-8826-29         |

| Ratio | Motor |    | 50 Hz(1000rpm)        |                          |                                                 |      | 60 Hz(1200rpm)        |                          |                                                 |      | Model                 |
|-------|-------|----|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|--------------------------|-------------------------------------------------|------|-----------------------|
|       | KW    | HP | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Output speed<br>(rpm) | Output Torque<br>(kgf.m) | Allowable Output Shaft<br>Overhung load<br>(kg) | SF   | Motor(HP)-Frame-Ratio |
|       |       |    |                       |                          |                                                 |      |                       |                          |                                                 |      |                       |
| 43    | 18.5  | 25 | 23                    | 716                      | 9750                                            | 2.15 | 29                    | 597                      | 9200                                            | 2.32 | 25/6-8823-43          |
|       | 22    | 30 |                       | 851                      | 9750                                            | 1.85 |                       | 710                      | 9200                                            | 1.95 | 30/6-8823-43          |
|       | 30    | 40 |                       | 1161                     | 9750                                            | 1.39 |                       | 968                      | 9200                                            | 1.43 | 40/6-8823-43          |
|       |       |    |                       |                          | 10850                                           | 1.84 |                       |                          | 10350                                           | 1.86 | 40/6-8824-43          |
|       | 37    | 50 |                       | 1432                     | 9750                                            | 1.13 |                       | 1193                     | 9200                                            | 1.16 | 50/6-8823-43          |
|       |       |    |                       |                          | 10850                                           | 1.50 |                       |                          | 10350                                           | 1.52 | 50/6-8824-43          |
|       |       |    |                       |                          | 13250                                           | 1.85 |                       |                          | 12550                                           | 1.85 | 50/6-8825-43          |
|       | 45    | 60 |                       | 1742                     | 10850                                           | 1.23 |                       | 1451                     | 10350                                           | 1.25 | 60/6-8824-43          |
|       |       |    |                       |                          | 13250                                           | 1.52 |                       |                          | 12550                                           | 1.54 | 60/6-8825-43          |
|       |       |    |                       |                          | 16250                                           | 2.13 |                       |                          | 15300                                           | 2.13 | 60/6-8826-43          |
|       | 55    | 75 |                       | 2128                     | 10850                                           | 1.02 |                       | 1774                     | 10350                                           | 1.02 | 75/6-8824-43          |
|       |       |    |                       |                          | 13250                                           | 1.23 |                       |                          | 12550                                           | 1.23 | 75/6-8825-43          |
|       |       |    |                       |                          | 16250                                           | 1.74 |                       |                          | 15300                                           | 1.74 | 75/6-8826-43          |

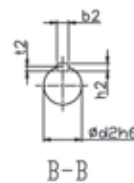
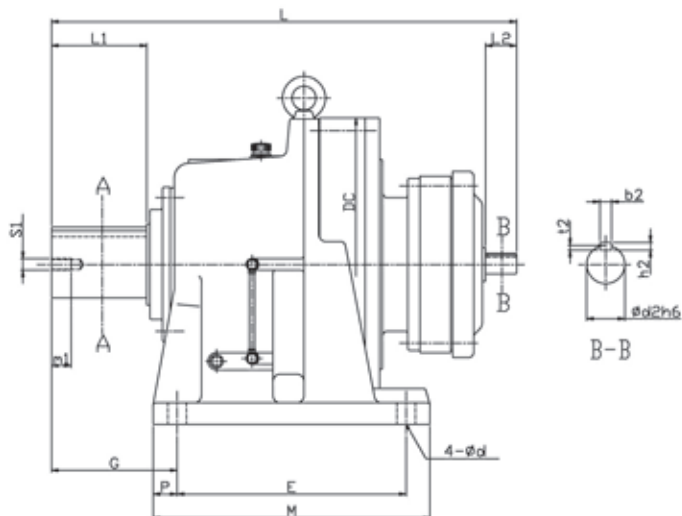
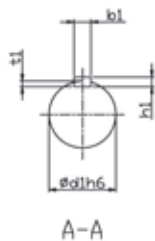
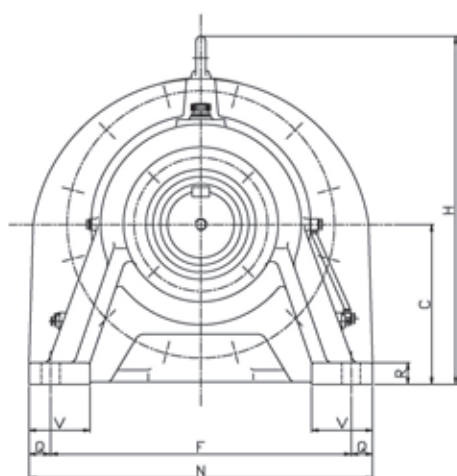
## ● KNH 8807/07~8811/09



## ● KHH 8813/08~8818/13



## ● KHH 8819/11~8827/19



| Model       | Dim. Of side |      |     |    |     |    |      |     |     |       |      |     | Output Shaft |    |      |     |     |     |           |    | Input Shaft |          |      | WT<br>(kg) |
|-------------|--------------|------|-----|----|-----|----|------|-----|-----|-------|------|-----|--------------|----|------|-----|-----|-----|-----------|----|-------------|----------|------|------------|
|             | N            | F    | C   | R  | V   | Q  | M    | E   | P   | d     | L    | DC  | S1           | m1 | H    | G   | L1  | d1  | b1×h1×t1  | L2 | d2          | b2×h2×t2 |      |            |
| KNH-8807/07 | 148          | 120  | 80  | 10 | 35  | 14 | 88   | 60  | 14  | 4-φ9  | 178  | 110 |              |    | 135  | 41  | 25  | 14  | 5×5×3     | 25 | 12          | 4×4×2.5  | 4    |            |
| KNH-8808/07 | 148          | 120  | 80  | 10 | 35  | 14 | 88   | 60  | 14  | 4-φ9  | 184  | 110 |              |    | 135  | 47  | 30  | 18  | 6×6×3.5   | 25 | 12          | 4×4×2.5  | 4.5  |            |
| KNH-8809/08 | 184          | 150  | 100 | 12 | 40  | 17 | 134  | 90  | 17  | 4-φ11 | 243  | 150 |              |    | 207  | 60  | 35  | 28  | 8×7×4     | 25 | 12          | 4×4×2.5  | 13   |            |
| KNH-8810/08 | 184          | 150  | 100 | 12 | 40  | 17 | 139  | 90  | 17  | 4-φ11 | 257  | 150 |              |    | 207  | 60  | 35  | 28  | 8×7×4     | 25 | 12          | 4×4×2.5  | 15   |            |
| KNH-8811/08 | 234          | 190  | 120 | 15 | 55  | 22 | 159  | 115 | 22  | 4-φ14 | 293  | 204 |              |    | 257  | 82  | 55  | 38  | 10×8×5    | 25 | 12          | 4×4×2.5  | 25   |            |
| KNH-8811/09 | 234          | 190  | 120 | 15 | 55  | 22 | 159  | 115 | 22  | 4-φ14 | 312  | 204 |              |    | 257  | 82  | 55  | 38  | 10×8×5    | 25 | 15          | 5×5×3    | 30   |            |
| KHH-8813/08 | 334          | 290  | 150 | 22 | 65  | 22 | 199  | 145 | 27  | 4-φ18 | 347  | 230 | M10          | 18 | 300  | 100 | 70  | 50  | 14×9×5.5  | 25 | 12          | 4×4×2.5  | 42   |            |
| KHH-8813/09 | 334          | 290  | 150 | 22 | 65  | 22 | 199  | 145 | 27  | 4-φ18 | 363  | 230 | M10          | 18 | 300  | 100 | 70  | 50  | 14×9×5.5  | 25 | 15          | 5×5×3    | 46   |            |
| KHH-8813/10 | 334          | 290  | 150 | 22 | 65  | 22 | 199  | 145 | 27  | 4-φ18 | 369  | 230 | M10          | 18 | 300  | 100 | 70  | 50  | 14×9×5.5  | 25 | 15          | 5×5×3    | 46   |            |
| KHH-8814/08 | 334          | 290  | 150 | 22 | 65  | 22 | 199  | 145 | 27  | 4-φ18 | 367  | 230 | M10          | 18 | 300  | 120 | 90  | 50  | 14×9×5.5  | 25 | 12          | 4×4×2.5  | 41   |            |
| KHH-8814/09 | 334          | 290  | 150 | 22 | 65  | 22 | 199  | 145 | 27  | 4-φ18 | 383  | 230 | M10          | 18 | 300  | 120 | 90  | 50  | 14×9×5.5  | 25 | 15          | 5×5×3    | 46   |            |
| KHH-8814/10 | 334          | 290  | 150 | 22 | 65  | 22 | 199  | 145 | 27  | 4-φ18 | 389  | 230 | M10          | 18 | 300  | 120 | 90  | 50  | 14×9×5.5  | 25 | 15          | 5×5×3    | 46   |            |
| KHH-8816/09 | 414          | 370  | 160 | 25 | 75  | 22 | 242  | 150 | 46  | 4-φ18 | 433  | 300 | M10          | 18 | 349  | 139 | 90  | 60  | 18×11×7   | 25 | 15          | 5×5×3    | 86   |            |
| KHH-8816/10 | 414          | 370  | 160 | 25 | 75  | 22 | 242  | 150 | 46  | 4-φ18 | 439  | 300 | M10          | 18 | 349  | 139 | 90  | 60  | 18×11×7   | 25 | 15          | 5×5×3    | 88   |            |
| KHH-8816/11 | 414          | 370  | 160 | 25 | 75  | 22 | 242  | 150 | 46  | 4-φ18 | 462  | 300 | M10          | 18 | 349  | 139 | 90  | 60  | 18×11×7   | 35 | 18          | 6×6×3.5  | 95   |            |
| KHH-8817/09 | 434          | 380  | 200 | 30 | 80  | 27 | 339  | 275 | 32  | 4-φ22 | 478  | 340 | M12          | 24 | 416  | 125 | 90  | 70  | 20×12×7.5 | 25 | 15          | 5×5×3    | 120  |            |
| KHH-8817/10 | 434          | 380  | 200 | 30 | 80  | 27 | 339  | 275 | 32  | 4-φ22 | 484  | 340 | M12          | 24 | 416  | 125 | 90  | 70  | 20×12×7.5 | 25 | 15          | 5×5×3    | 125  |            |
| KHH-8817/11 | 434          | 380  | 200 | 30 | 80  | 27 | 339  | 275 | 32  | 4-φ22 | 509  | 340 | M12          | 24 | 416  | 125 | 90  | 70  | 20×12×7.5 | 35 | 18          | 6×6×3.5  | 130  |            |
| KHH-8818/10 | 474          | 420  | 220 | 30 | 85  | 27 | 384  | 320 | 32  | 4-φ22 | 526  | 370 | M12          | 24 | 451  | 145 | 110 | 80  | 22×14×9   | 25 | 15          | 5×5×3    | 166  |            |
| KHH-8818/13 | 474          | 420  | 220 | 30 | 85  | 27 | 384  | 320 | 32  | 4-φ22 | 577  | 370 | M12          | 24 | 451  | 145 | 110 | 80  | 22×14×9   | 40 | 22          | 6×6×3.5  | 185  |            |
| KHH-8819/11 | 534          | 480  | 250 | 35 | 90  | 27 | 444  | 380 | 32  | 4-φ26 | 629  | 430 | M20          | 34 | 531  | 170 | 135 | 95  | 25×14×9   | 35 | 18          | 6×6×3.5  | 240  |            |
| KHH-8819/13 | 534          | 480  | 250 | 35 | 90  | 27 | 444  | 380 | 32  | 4-φ26 | 653  | 430 | M20          | 34 | 531  | 170 | 135 | 95  | 25×14×9   | 40 | 22          | 6×6×3.5  | 250  |            |
| KHH-8820/11 | 534          | 440  | 250 | 35 | 100 | 47 | 444  | 360 | 42  | 4-φ26 | 670  | 448 | M20          | 34 | 530  | 215 | 165 | 100 | 28×16×10  | 35 | 18          | 6×6×3.5  | 261  |            |
| KHH-8820/13 | 534          | 440  | 250 | 35 | 100 | 47 | 444  | 360 | 42  | 4-φ26 | 705  | 448 | M20          | 34 | 530  | 215 | 165 | 100 | 28×16×10  | 40 | 22          | 6×6×3.5  | 275  |            |
| KHH-8821/13 | 584          | 480  | 265 | 40 | 110 | 52 | 479  | 395 | 42  | 4-φ26 | 731  | 485 | M20          | 34 | 575  | 210 | 165 | 110 | 28×16×10  | 40 | 22          | 6×6×3.5  | 355  |            |
| KHH-8821/16 | 584          | 480  | 265 | 40 | 110 | 52 | 479  | 395 | 42  | 4-φ26 | 780  | 485 | M20          | 34 | 575  | 210 | 165 | 110 | 28×16×10  | 45 | 30          | 8×7×4    | 375  |            |
| KHH-8822/13 | 624          | 540  | 280 | 40 | 115 | 42 | 524  | 420 | 52  | 4-φ33 | 773  | 526 | M20          | 34 | 610  | 230 | 165 | 120 | 32×18×11  | 40 | 22          | 6×6×3.5  | 430  |            |
| KHH-8822/17 | 624          | 540  | 280 | 40 | 115 | 42 | 524  | 420 | 52  | 4-φ33 | 860  | 526 | M20          | 34 | 610  | 230 | 165 | 120 | 32×18×11  | 55 | 35          | 10×8×5   | 475  |            |
| KHH-8823/16 | 674          | 580  | 300 | 45 | 120 | 47 | 564  | 460 | 52  | 4-φ33 | 883  | 562 | M24          | 41 | 667  | 260 | 200 | 130 | 32×18×11  | 45 | 30          | 8×7×4    | 550  |            |
| KHH-8823/18 | 674          | 580  | 300 | 45 | 120 | 47 | 564  | 460 | 52  | 4-φ33 | 938  | 562 | M24          | 41 | 667  | 260 | 200 | 130 | 32×18×11  | 65 | 40          | 12×8×5   | 583  |            |
| KHH-8824/16 | 724          | 630  | 335 | 45 | 128 | 47 | 584  | 480 | 52  | 4-φ39 | 921  | 614 | M24          | 41 | 729  | 263 | 200 | 140 | 36×20×12  | 45 | 30          | 8×7×4    | 655  |            |
| KHH-8824/18 | 724          | 630  | 335 | 45 | 128 | 47 | 584  | 480 | 52  | 4-φ39 | 975  | 614 | M24          | 41 | 729  | 263 | 200 | 140 | 36×20×12  | 65 | 40          | 12×8×5   | 688  |            |
| KHH-8825/17 | 784          | 670  | 375 | 50 | 140 | 57 | 634  | 520 | 57  | 4-φ39 | 1081 | 670 | M30          | 49 | 815  | 320 | 240 | 160 | 40×22×13  | 55 | 35          | 10×8×5   | 1012 |            |
| KHH-8825/19 | 784          | 670  | 375 | 50 | 140 | 57 | 634  | 520 | 57  | 4-φ39 | 1133 | 670 | M30          | 49 | 815  | 320 | 240 | 160 | 40×22×13  | 70 | 45          | 14×9×5.5 | 1087 |            |
| KHH-8826/19 | 884          | 770  | 400 | 55 | 160 | 57 | 704  | 590 | 57  | 4-φ45 | 1243 | 736 | M30          | 49 | 874  | 390 | 300 | 170 | 40×22×13  | 70 | 45          | 14×9×5.5 | 1343 |            |
| KHH-8827/19 | 1164         | 1050 | 540 | 60 | 200 | 57 | 1044 | 840 | 102 | 6-φ45 | 1504 | 950 | M30          | 52 | 1161 | 485 | 330 | 180 | 45×25×15  | 70 | 45          | 14×9×5.5 | 2483 |            |

A  
B  
C  
D  
E  
F  
G