



0.19.09

Datasheet for SIMOGEAR Geared Motors  
MLFB-Ordering data: **2KJ3212-1KL33-2AF1-Z**  
**D01+K01+K06+L02+L75+M55**

Client order no.:

Order no.:

Offer no.:

Item no.:

Consignment no.:

Project:

## Geared motor basic data

|                                  |                               |
|----------------------------------|-------------------------------|
| Type designation:                | SIMOGEAR D149-LES180MQ4P      |
| Gearbox type:                    | Helical gearbox               |
| Installation size(s):            | 149                           |
| Application:                     | Standard                      |
| Light-duty sector acc. VDI 3643: | -                             |
| Transmission ratio:              | 59.82                         |
| Number of teeth:                 | 96309 // 1610                 |
| Service factor:                  | 1.11 // 1.16                  |
| Nominal torque:                  | 8000 Nm                       |
| Output torque:                   | 7189.59 Nm // 6874.74 Nm      |
| Output speed:                    | 24.6 rpm // 29.6 rpm          |
| Environment temperature:         | -15 ... +40°C                 |
| Specification:                   | CE (Europe / other countries) |
| Additional specifications:       | -                             |
| Weight without oil:              | 422.6 kg                      |
| Oil quantity:                    | 9.10 l                        |

## Motor options

|  |                             |
|--|-----------------------------|
| Thermal class:                         | Temperature class 155 (F)   |
| Motor protection:                      | -                           |
| Motor plug:                            | -                           |
| Ventilation:                           | Standard fan                |
| Degree of protection:                  | [K01] IP55                  |
| Terminal box position:                 | [M55] 1A                    |
| Increased air humidity/temperature:    | -                           |
| Counter Plug:                          | -                           |
| Cable gland:                           | metric                      |
| External ground screw:                 | [N53] External ground screw |
| Motor connection:                      | Standard                    |
| Terminal box potted:                   | -                           |
| Term. Box neutr.:                      | -                           |
| Backstop Motor:                        | -                           |
| Rot. dir. outputshaft                  | -                           |
| Second shaft end:                      | -                           |
| Canopy:                                | -                           |
| Internal corrosion protection:         | -                           |
| Corrosion protect. for motor fittings: | -                           |
| Anti-condens. heating:                 | -                           |

## General options

|                                    |  |
|------------------------------------|--|
| Surface treatments:                | Painted  |
| Coating:                           | [L02] Coating for normal environmental stress C1 |
| RAL Color:                         | [L75] 7016 anthracite gray                       |
| Pretreatment:                      | -  |
| Coating on Flange:                 | -  |
| Conservation:                      | -  |
| Rating Plate stainless steel:      | -  |
| Second rating plate:               | -  |
| Packaging:                         | Standard packing                                 |
| Fast lane:                         | -  |
| Enclosed documentation:            | -  |
| Additional documentation (E-Mail): | -  |

## Gearbox options

|  |                             |
|--|-----------------------------|
| Mounting position:                     | [D01] M1                    |
| Special installation (Angle):          | -                           |
| Permissible mount. position deviation: | -                           |
| Mount. pos. deviation (Angle):         | -                           |
| Mounting type:                         | Foot-mounted design         |
| Position of torque arm:                | -                           |
| Flange diameter:                       | -                           |
| Output flange tightened:               | -                           |
| Output shaft:                          | V90 X 170                   |
| Output shaft bearing:                  | Standard bearing            |
| Hollow shaft cover:                    | -                           |
| Gear oil:                              | [K06] Mineral oil CLP VG220 |
| Output shaft sealing:                  | Standard sealing            |
| Gearbox breather:                      | Pressure breather valve     |
| Oil level control:                     | Oil level screw             |
| Electr. oil temperature monitoring:    | -                           |
| Disconnecter unit, 24 V param.:        | -                           |
| Adapter cable USB/jacks:               | -                           |
| Oil level gauge:                       | -                           |
| Separation switch gear:                | -                           |

|                                   |                |
|-----------------------------------|----------------|
| Oil drain:                        | Oil drain plug |
| Housing material:                 | Cast iron      |
| Backlash Design:                  | -              |
| Relubrication:                    | -              |
| Drywell:                          | -              |
| 24 V Drywell switch disconnecter: | -              |
| Flange-Figure:                    | -              |

### Performance data motor

|                                      |  |
|--------------------------------------|--|
| Rated power PN:                      | 18.50 // 21.30 kW / 25.0 // 28.60 hp     |
| Efficiency class:                    | IE3 // IE3                               |
| Operating mode:                      | S1                                       |
| Frequency, Voltage   Power:          | 50//60Hz 400VD/690VY // 460VD   50 // 60 |
| Circuit (start):                     | D/Y (Y-D/Y) // D (Y-D)                   |
| Rated speed nN:                      | 1470 rpm // 1770 rpm                     |
| Number of poles:                     | 4-pole                                   |
| Rated current IN:                    | 35.00 / 20.22 // 34.50 A                 |
| Rel. starting current IA / IN:       | 7.20 // 7.20                             |
| Power factor cos φ:                  | 0.82 // 0.83                             |
| Load efficiency 4/4-Load η:          | 92.60 % // 93.60 %                       |
| Load efficiency 3/4-Load η:          | 93.10 % // 94.00 %                       |
| Rated motor torque:                  | 120.19 Nm                                |
| Rel. starting torque TA / TN:        | 2.50 // 2.40                             |
| Average acceleration torque TH / TN: | 2.80 // 2.60                             |
| Brakedown torque TK / TN:            | 3.30 // 3.20                             |
| Moment of inertia Jmot:              | 0.13000 kgm <sup>2</sup>                 |