

## Datasheet for SIMOGEAR Geared Motors



MLFB-Ordering data : **2KJ3102-1DF23-9AT1-Z**  
**B57+C06+C66+D01+K01+K06+L03+L75+M10+M55+N6A+P91**

Client order no. :

Order no. :

Offer no. :

Item no. :

Consignment no. :

Project :

### Motor data

| U   | D/Y | f <sub>N</sub> | P <sub>N</sub> | P <sub>N</sub> | I <sub>N</sub> | n <sub>N</sub> | T <sub>N</sub> | IE-CL | Operating mode | n <sub>2</sub> | T <sub>2</sub> | f <sub>B</sub> | η <sub>4/4 load</sub> | η <sub>3/4 load</sub> | cos φ | I <sub>A</sub> /I <sub>N</sub> | T <sub>A</sub> /T <sub>N</sub> | T <sub>K</sub> /T <sub>N</sub> | T <sub>H</sub> /T <sub>N</sub> |
|-----|-----|----------------|----------------|----------------|----------------|----------------|----------------|-------|----------------|----------------|----------------|----------------|-----------------------|-----------------------|-------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| [V] |     | [Hz]           | [kW]           | [hp]           | [A]            | [rpm]          | [Nm]           |       |                | [rpm]          | [Nm]           |                | [%]                   | [%]                   |       |                                |                                |                                |                                |
| 230 | D   | 50             | 0.750          | 1.00           | 3.04           | 1,450          | 4.93           | IE3   | S1             | 64.216         | 111.54         | 1.26           | 82.5                  | 82.3                  | 0.75  | 7.10                           | 2.70                           | 3.90                           | 3.00                           |
| 400 | D   | 87             | 1.310          | 1.75           | 3.10           | 2,560          | 4.88           | -     | INV.DUTY       | 113.374        | 110.35         | 1.27           | 85.6                  | 0.0                   | 0.71  | 0.00                           | 0.00                           | 3.94                           | 0.00                           |

|                                    |   |
|------------------------------------|---|
| Motor type                         | 1LE motor with Premium Efficiency LE80ZMQ4P |
| Number of poles                    | 4-pole                                      |
| Degree of protection               | (K01) IP55                                  |
| Thermal class                      | 155 (F)                                     |
| Moment of inertia J <sub>mot</sub> | 0.00290 kgm <sup>2</sup>                    |

|                                       |                    |
|---------------------------------------|--------------------|
| Terminal box position                 | (M55) 1A           |
| Electrical connection at terminal box | Cable gland metric |
| Ventilation                           | Standard fan       |

### Geared motor

|                                |  |
|--------------------------------|--|
| Type designation               | SIMOGEAR Z29-LE80ZMQ4P-L4/5N               |
| Gearbox                        | Helical gearbox Z29                        |
| Mounting type gearbox          | Foot-mounted design                        |
| Output shaft                   | V25 x 50 mm (Solid shaft with feather key) |
| Mounting position              | (D01) M1                                   |
| Transmission ratio             | 22.58 (1,242 / 55)                         |
| Nominal torque                 | 140.00 Nm                                  |
| Gear oil                       | (K06) Mineral oil CLP VG220                |
| Oil charge                     | 0.1 l                                      |
| Specification                  | CE (Europe / other countries)              |
| Environment temperature        | -15 ... +40 °C                             |
| Weight without oil             | 16.2 kg                                    |
| Housing material first gearbox | Aluminum                                   |

### Gearbox options

|                      |                  |
|----------------------|------------------|
| Output shaft bearing | Standard bearing |
| Output shaft sealing | Standard sealing |
| Gearbox breather     | Non-ventilated   |
| Oil level control    | Without          |
| Oil drain            | Oil drain plug   |

### Motor options

|                  |  |
|------------------|--|
| Motor protection | (M10) Temperature sensor PTC thermistor, disconnection |
|------------------|--|

### Brake data

|                                   |                              |
|-----------------------------------|------------------------------|
| Brake type (torque at 100 rpm)    | (B57) L4/5 (5 Nm)            |
| Safety factor k (at 50 Hz)        | 1.01                         |
| Supply voltage                    | (C66) 24V DC +/-10%          |
| Rectifier                         | DC voltage control (without) |
| Brake design                      | Open-type (standard)         |
| Wear                              | (C06) wear-resistant         |
| Working capacity                  |                              |
| per switching operation           | 3.0 kJ                       |
| until readjustment of air gap     | 46.0 MJ                      |
| until replacement of brake lining | 351 MJ                       |
| Electrical data                   |                              |
| Coil voltage                      | 24V DC                       |
| Current consumption               | .83 A                        |
| Power consumption at 20 °C        | 20 W                         |
| Switching times                   |                              |
| Application time                  |                              |
| AC switched                       | 158 ms                       |
| AC/DC or DC switched              | 25 ms                        |
| Disconnection time                | 56 ms                        |

### General options

|                    |   |
|--------------------|---|
| Surface treatments | Painted                                       |
| Coating            | (L03) Coating for low environmental stress C2 |
| RAL Color          | (L75) 7016 anthracite gray                    |
| Coating on flange  | -   |
| Packing            | Standard packing                              |

### Legend

U = Voltage  
D / Y = Circuit  
f = Frequency  
P<sub>N</sub> = Rated motor power

I<sub>N</sub> = Rated current  
n<sub>N</sub> = Rated motor speed  
T<sub>N</sub> = Rated motor torque  
IE-CL = Efficiency class

n<sub>2</sub> = Geared motor output speed  
T<sub>2</sub> = Geared motor output torque  
f<sub>B</sub> = Service factor  
η = Efficiency  
\*) On request

cos φ = Power factor  
I<sub>A</sub>/I<sub>N</sub> = Relative starting current  
T<sub>A</sub>/T<sub>N</sub> = Relative starting torque  
T<sub>K</sub>/T<sub>N</sub> = Relative breakdown torque  
T<sub>H</sub>/T<sub>N</sub> = Relative average acceleration torque



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| Further information           |                                       |
|-------------------------------|---------------------------------------|
| General product information   | <a href="#">SIMOGEAR</a>              |
| Configurator                  | <a href="#">2KJ.....</a>              |
| <u>Operating instructions</u> |                                       |
| Gearbox                       | <a href="#">BA 2030</a>               |
| Motor                         | <a href="#">BA 2330</a>               |
| Catalog                       | <a href="#">MD 50.1</a> Geared motors |