

## Data sheet for SIMOTICS S-1FL6

MLFB-Ordering data

1FL6090-1AC61-0LG1



Figure similar

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

### Engineering data

|                      |                          |
|----------------------|--------------------------|
| Rated speed          | 2000 rpm                 |
| Rated torque (100 K) | 11.90 Nm                 |
| Rated current        | 7.8 A                    |
| Rated power          | 2.50 kW / 3.40 hp        |
| Max. speed           | 3000 rpm                 |
| Maximum torque       | 35.70 Nm                 |
| Max. current         | 23.4 A                   |
| Static torque        | 15.00 Nm                 |
| Moment of inertia    | 47.400 kgcm <sup>2</sup> |

### Physical constants

|                 |            |
|-----------------|------------|
| Torque constant | 1.60 Nm/A  |
| Thermal class   | B (130 °C) |
| Net weight      | 15.30 kg   |

### Ambient conditions

#### Ambient temperature

|           |             |
|-----------|-------------|
| Operation | 0 ... 40 °C |
|-----------|-------------|

#### Relative humidity

|                |  |
|----------------|--|
| Max. operation | 90 % RH maximum (no condensation at 30 °C) |
|----------------|--|

### Standards

|                           |         |
|---------------------------|---------|
| Compliance with standards | CE, EAC |
|---------------------------|---------|

### Mechanical data

|                          |   |
|--------------------------|---|
| Motor type               | High Inertia                                      |
| Motor type               | Permanent-magnet synchronous motor                |
| Shaft height             | 90  |
| Encoder system           | Absolute encoder 20 bit + 12 bit multi-turn       |
| Cooling                  | Natural cooling                                   |
| Shaft extension          | Plain shaft                                       |
| Radial runout tolerance  | Class N   |
| Vibration severity grade | Grade A   |
| Degree of protection     | IP65  |
| Design acc. to Code I    | IM B5 (IM V1, IM V3)                              |
| Connection type          | Straight connector (fixed cable outlet direction) |