



Figure similar

MLFB-Ordering data

1FK7060-5AF71-1EH5-Z
J12

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

| Engineering data | | Mechanical data | | | |
|---------------------------------|--------------------------|-----------------------------|------------------------------------|------------------------|---|
| Rated speed (100 K) | 3000 rpm | Motor type | Permanent-magnet synchronous motor | | |
| Number of poles | 8 | Motor type | Compact | | |
| Rated torque (100 K) | 4.7 Nm | Shaft height | 63 | | |
| Rated current | 3.7 A | Cooling | Natural cooling | | |
| Static torque (60 K) | 5.00 Nm | Radial runout tolerance | 0.040 mm | | |
| Static torque (100 K) | 6.0 Nm | Concentricity tolerance | 0.10 mm | | |
| Stall current (60 K) | 3.70 A | Axial runout tolerance | 0.10 mm | | |
| Stall current (100 K) | 4.50 A | Vibration severity grade | Grade A | | |
| Moment of inertia | 12.380 kgcm ² | Connector size | 1 | | |
| Physical constants | | Degree of protection | IP65 and DE flange IP67 | | |
| | | Torque constant | 1.33 Nm/A | Design acc. to Code I | IM B5 (IM V1, IM V3) |
| | | Voltage constant at 20° C | 84.5 V/1000*min ⁻¹ | Temperature monitoring | KTY84 temperature sensor in the stator winding |
| | | Winding resistance at 20° C | 1.44 Ω | Electrical connectors | Connectors for signals and power rotatable |
| | | Rotating field inductance | 14.7 mH | Color of the housing | Standard (Anthracite RAL 7016) |
| | | Electrical time constant | 10.20 ms | Holding brake | with holding brake |
| | | Mechanical time constant | 1.94 ms | Shaft extension | Plain shaft |
| | | Thermal time constant | 30 min | Encoder system | Encoder AM2048S/R: absolute encoder 2048 S/R, 4096 revolutions multi-turn, with EnDat interface |
| | | Shaft torsional stiffness | 42000 Nm/rad | | |
| | | Net weight of the motor | 15.9 kg | | |
| Recommended Motor Module | | | | | |
| | | Rated inverter current | 5 A | | |
| | | Maximum inverter current | 10 A | | |
| Maximum torque | 13.20 Nm | | | | |



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Gearbox data

| | | | |
|--|-----------------------|-----------------------------------|-------------------------|
| Gearbox type | Planetary gearbox SP+ | Moment of inertia of gearbox | 2.180 kgcm ² |
| Designation | SP 100S-MF2 | Radial output shaft loading, max. | 6300 N |
| Gearbox shaft end | With feather key | Axial output shaft load, max. | 2400 N |
| Gear ratio + steps | 16 (2-step) | Efficiency of gearbox | 0.94 |
| Motor speed S3-60 % | 4500 rpm | Torsional backlash | 5 ' |
| Motor speed S1 | 3100 rpm | Gearbox weight | 7.90 kg |
| Output torque S1 | 180 Nm | | |
| Rated output torque at duty type S3-60 % | 300 Nm | | |

Special design

J12 Mounting of SP+ planetary gearbox

Limiting data

| | |
|-----------------------------------|----------|
| Max. permissible speed (mech.) | 7200 rpm |
| Max. permissible speed (inverter) | 6800 rpm |
| Maximum torque | 18.0 Nm |
| Maximum current | 15.0 A |

Holding brake

| | |
|-----------------------|------------------------|
| Holding brake version | Permanent-magnet brake |
| Holding torque | 13.0 Nm |
| Power supply voltage | DC 24 V ± 10 % |
| Coil current | 0.8 A |
| Opening time | 100 ms |
| Closing time | 50 ms |
| Highest braking work | 380 J |