



Figure similar

MLFB-Ordering data

1FK7042-2AK71-1CH0-Z
V40

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

| Engineering data | | Mechanical data | | | |
|---------------------------|-------------------------|---------------------------------|---|--|--|
| Rated speed (100 K) | 6000 rpm | Motor type | Permanent-magnet synchronous motor | | |
| Number of poles | 8 | Motor type | Compact | | |
| Rated torque (100 K) | 1.5 Nm | Shaft height | 48 | | |
| Rated current | 2.5 A | Cooling | Natural cooling | | |
| Static torque (60 K) | 2.50 Nm | Radial runout tolerance | 0.040 mm | | |
| Static torque (100 K) | 3.0 Nm | Concentricity tolerance | 0.08 mm | | |
| Stall current (60 K) | 3.55 A | Axial runout tolerance | 0.08 mm | | |
| Stall current (100 K) | 4.40 A | Vibration severity grade | Grade A | | |
| Moment of inertia | 3.810 kgcm ² | Connector size | 1 | | |
| Physical constants | | Degree of protection | IP64 | | |
| | | Design acc. to Code I | IM B5 (IM V1, IM V3) | | |
| | | Temperature monitoring | Pt1000 temperature sensor | | |
| | | Electrical connectors | Connectors for signals and power rotatable | | |
| | | Color of the housing | Standard (Anthracite RAL 7016) | | |
| | | Holding brake | with holding brake | | |
| | | Shaft extension | Plain shaft | | |
| | | Encoder system | Encoder AM24DQI: absolute encoder 24 bits (resolution 16777216, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions) | | |
| | | Recommended Motor Module | | | |
| | | Rated inverter current | 5 A | | |
| Maximum inverter current | 15 A | | | | |
| Maximum torque | 10.30 Nm | | | | |



Figure similar

MLFB-Ordering data

1FK7042-2AK71-1CH0-Z
V40

Gearbox data

| | | | |
|------------------------------------|-----------------------|-----------------------------------|-------------------------|
| Gearbox type | Planetary gearbox NP+ | Moment of inertia of gearbox | 0.610 kgcm ² |
| Designation | NP 025 | Radial output shaft loading, max. | 2800 N |
| Gearbox shaft end | With feather key | Axial output shaft load, max. | 0 N |
| Gear ratio + steps | 5 (1-step) | Efficiency of gearbox | 0.97 |
| Temporary input speed | 7000 rpm | Torsional backlash | 8 ' |
| Motor speed S1 | 3400 rpm | Gearbox weight | 3.80 kg |
| Output torque S1 | 50 Nm | | |
| Output moment maximum (short-time) | 100 Nm | | |

Special design

V40 Mounting of NP+ planetary gearbox

Limiting data

| | |
|-----------------------------------|----------|
| Max. permissible speed (mech.) | 9000 rpm |
| Max. permissible speed (inverter) | 9000 rpm |
| Maximum torque | 10.5 Nm |
| Maximum current | 15.3 A |

Holding brake

| | |
|-----------------------|------------------------|
| Holding brake version | Permanent-magnet brake |
| Holding torque | 4.0 Nm |
| Power supply voltage | DC 24 V ± 10 % |
| Coil current | 0.5 A |
| Opening time | 70 ms |
| Closing time | 30 ms |
| Highest braking work | 150 J |