

Article No. : 1FK7061-4CH71-1UH2



Figure similar

Client order no. :  
Order no. :  
Offer no. :  
Remarks :

Item no. :  
Consignment no. :  
Project :

| Engineering data      |                         |
|-----------------------|-------------------------|
| Rated speed (100 K)   | 4,500 rpm               |
| Number of poles       | 6                       |
| Rated torque (100 K)  | 4.3 Nm                  |
| Rated current         | 6.2 A                   |
| Static torque (60 K)  | 5.30 Nm                 |
| Static torque (100 K) | 6.40 Nm                 |
| Stall current (60 K)  | 7.10 A                  |
| Stall current (100 K) | 8.70 A                  |
| Moment of inertia     | 5.100 kgcm <sup>2</sup> |
| Efficiency            | 93.0 %                  |

| Physical constants          |                               |
|-----------------------------|-------------------------------|
| Torque constant             | 0.73 Nm/A                     |
| Voltage constant at 20° C   | 47.0 V/1000*min <sup>-1</sup> |
| Winding resistance at 20° C | 0.35 Ω                        |
| Rotating field inductance   | 10.7 mH                       |
| Electrical time constant    | 30.50 ms                      |
| Mechanical time constant    | 0.79 ms                       |
| Thermal time constant       | 45 min                        |
| Shaft torsional stiffness   | 26,500 Nm/rad                 |
| Net weight of the motor     | 11.0 kg                       |

| Mechanical data          |                                                                          |
|--------------------------|--------------------------------------------------------------------------|
| Motor type               | Permanent-magnet synchronous motor                                       |
| Motor type               | High Dynamic                                                             |
| Shaft height             | 63                                                                       |
| Cooling                  | Natural cooling                                                          |
| Radial runout tolerance  | 0.040 mm                                                                 |
| Concentricity tolerance  | 0.10 mm                                                                  |
| Axial runout tolerance   | 0.10 mm                                                                  |
| Vibration severity grade | Grade A                                                                  |
| Connector size           | M23                                                                      |
| Degree of protection     | IP65 and DE flange IP67                                                  |
| 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 end                | Plain shaft                                                              |
| Encoder system           | Resolver R15DQ: resolver 15 bits (resolution 32768, internal multi-pole) |

| Optimum operating point |           |
|-------------------------|-----------|
| Optimum speed           | 4,500 rpm |
| Optimum power           | 2.0 kW    |

| Limiting data                     |           |
|-----------------------------------|-----------|
| Max. permissible speed (mech.)    | 7,500 rpm |
| Max. permissible speed (inverter) | 7,500 rpm |
| Maximum torque                    | 17.3 Nm   |
| Maximum current                   | 26.5 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                  |

| Recommended Motor Module |          |
|--------------------------|----------|
| Rated inverter current   | 9 A      |
| Maximum inverter current | 27 A     |
| Maximum torque           | 17.30 Nm |