



Figure similar

Article No. : 1FK7063-2AH71-1PB1

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       | 8                        |
| Rated torque (100 K)  | 3.0 Nm                   |
| Rated current         | 3.8 A                    |
| Static torque (60 K)  | 9.10 Nm                  |
| Static torque (100 K) | 11.00 Nm                 |
| Stall current (60 K)  | 9.70 A                   |
| Stall current (100 K) | 12.00 A                  |
| Moment of inertia     | 15.700 kgcm <sup>2</sup> |
| Efficiency            | 90.0 %                   |

### Physical constants

|                             |                               |
|-----------------------------|-------------------------------|
| Torque constant             | 0.92 Nm/A                     |
| Voltage constant at 20° C   | 60.0 V/1000*min <sup>-1</sup> |
| Winding resistance at 20° C | 0.29 Ω                        |
| Rotating field inductance   | 3.8 mH                        |
| Electrical time constant    | 13.20 ms                      |
| Mechanical time constant    | 1.51 ms                       |
| Thermal time constant       | 40 min                        |
| Shaft torsional stiffness   | 25,000 Nm/rad                 |
| Net weight of the motor     | 12.5 kg                       |

### Mechanical data

|                          |  |
|--------------------------|--|
| Motor type               | Permanent-magnet synchronous motor                                   |
| Motor type               | Compact  |
| 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           | 1  |
| Degree of protection     | IP65   |
| 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                | Feather key  |
| Encoder system           | Resolver R14DQ: resolver 14 bits (resolution 16384, internal 2-pole) |

### Optimum operating point

|               |           |
|---------------|-----------|
| Optimum speed | 3,300 rpm |
| Optimum power | 2.3 kW    |

### Limiting data

|                                   |           |
|-----------------------------------|-----------|
| Max. permissible speed (mech.)    | 7,200 rpm |
| Max. permissible speed (inverter) | 7,200 rpm |
| Maximum torque                    | 35.0 Nm   |
| Maximum current                   | 42.0 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                  |

### Recommended Motor Module

|                          |          |
|--------------------------|----------|
| Rated inverter current   | 18 A     |
| Maximum inverter current | 54 A     |
| Maximum torque           | 35.00 Nm |