



Figure similar

Article No. : 1FK7062-2AF71-1PA0-Z  
N05

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

Item no. :  
Consignment no. :  
Project :

| Engineering data      |                          |
|-----------------------|--------------------------|
| Rated speed (100 K)   | 3,000 rpm                |
| Number of poles       | 8                        |
| Rated torque (100 K)  | 6.0 Nm                   |
| Rated current         | 4.0 A                    |
| Static torque (60 K)  | 7.10 Nm                  |
| Static torque (100 K) | 8.50 Nm                  |
| Stall current (60 K)  | 4.30 A                   |
| Stall current (100 K) | 5.30 A                   |
| Moment of inertia     | 11.200 kgcm <sup>2</sup> |
| Efficiency            | 91.0 %                   |

| Physical constants          |                                |
|-----------------------------|--------------------------------|
| Torque constant             | 1.60 Nm/A                      |
| Voltage constant at 20° C   | 102.5 V/1000*min <sup>-1</sup> |
| Winding resistance at 20° C | 1.15 Ω                         |
| Rotating field inductance   | 14.6 mH                        |
| Electrical time constant    | 12.80 ms                       |
| Mechanical time constant    | 1.49 ms                        |
| Thermal time constant       | 35 min                         |
| Shaft torsional stiffness   | 37,000 Nm/rad                  |
| Net weight of the motor     | 9.1 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     | 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            | without holding brake                                                |
| Shaft end                | Feather key                                                          |
| Encoder system           | Resolver R14DQ: resolver 14 bits (resolution 16384, internal 2-pole) |

| Optimum operating point |           |
|-------------------------|-----------|
| Optimum speed           | 3,000 rpm |
| Optimum power           | 1.9 kW    |

| Limiting data                     |           |
|-----------------------------------|-----------|
| Max. permissible speed (mech.)    | 7,200 rpm |
| Max. permissible speed (inverter) | 5,600 rpm |
| Maximum torque                    | 26.0 Nm   |
| Maximum current                   | 19.2 A    |

| Recommended Motor Module |          |
|--------------------------|----------|
| Rated inverter current   | 5 A      |
| Maximum inverter current | 15 A     |
| Maximum torque           | 22.10 Nm |

| Special design |                                                        |
|----------------|--------------------------------------------------------|
| N05            | Non-standard shaft end (dimensions as for 1FT5 motors) |