



Figure similar

MLFB-Ordering data                      1FK7063-2AF74-1TG0-Z  
V40

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)        | 7.3 Nm                        | Shaft height             | 63                                         |
| Rated current               | 5.6 A                         | Cooling                  | Natural cooling                            |
| Static torque (60 K)        | 9.10 Nm                       | Radial runout tolerance  | 0.040 mm                                   |
| Static torque (100 K)       | 11.00 Nm                      | Concentricity tolerance  | 0.10 mm                                    |
| Stall current (60 K)        | 6.50 A                        | Axial runout tolerance   | 0.10 mm                                    |
| Stall current (100 K)       | 8.00 A                        | Vibration severity grade | Grade A                                    |
| Moment of inertia           | 16.900 kgcm <sup>2</sup>      | Connector size           | 1                                          |
| Physical constants          |                               | Degree of protection     | IP64                                       |
| Torque constant             | 1.37 Nm/A                     | Design acc. to Code I    | IM B5 (IM V1, IM V3)                       |
| Voltage constant at 20° C   | 90.5 V/1000*min <sup>-1</sup> | Temperature monitoring   | Pt1000 temperature sensor                  |
| Winding resistance at 20° C | 0.64 Ω                        | Electrical connectors    | Connectors for signals and power rotatable |
| Rotating field inductance   | 8.5 mH                        | Color of the housing     | Standard (Anthracite RAL 7016)             |
| Electrical time constant    | 13.40 ms                      | Holding brake            | without holding brake                      |
| Mechanical time constant    | 1.48 ms                       | Shaft end                | Plain shaft                                |
| Thermal time constant       | 40 min                        | Encoder system           | Resolver 2-pole                            |
| Shaft torsional stiffness   | 34000 Nm/rad                  |                          |                                            |
| Net weight of the motor     | 20.5 kg                       |                          |                                            |
| Recommended Motor Module    |                               |                          |                                            |
| Rated inverter current      | 9 A                           |                          |                                            |
| Maximum inverter current    | 27 A                          |                          |                                            |
| Maximum torque              | 34.00 Nm                      |                          |                                            |



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| Gearbox data                       |                       |                                   |             |
|------------------------------------|-----------------------|-----------------------------------|-------------|
| Gearbox type                       | Planetary gearbox NP+ | Moment of inertia of gearbox      | 2.200 kgcm² |
| Designation                        | NP 035                | Radial output shaft loading, max. | 5000 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              | 6000 rpm              | Torsional backlash                | 8 '         |
| Motor speed S1                     | 2600 rpm              | Gearbox weight                    | 9.40 kg     |
| Output torque S1                   | 125 Nm                |                                   |             |
| Output moment maximum (short-time) | 250 Nm                |                                   |             |

| Limiting data                     |          |
|-----------------------------------|----------|
| Max. permissible speed (mech.)    | 7200 rpm |
| Max. permissible speed (inverter) | 6400 rpm |
| Maximum torque                    | 35.0 Nm  |
| Maximum current                   | 28.0 A   |

| Special design |                                   |
|----------------|-----------------------------------|
| V40            | Mounting of NP+ planetary gearbox |