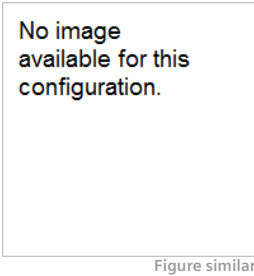


MLFB-Ordering data1FK7061-7AF71-1PH0



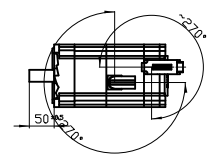
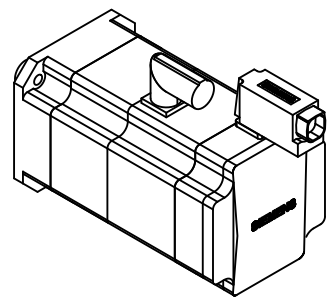
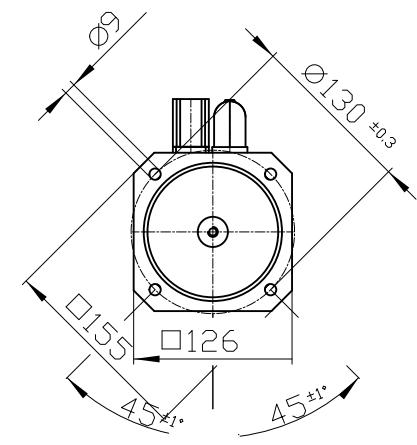
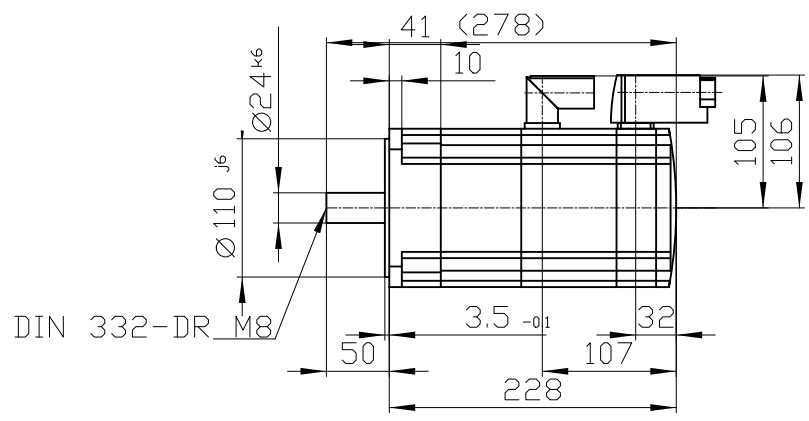
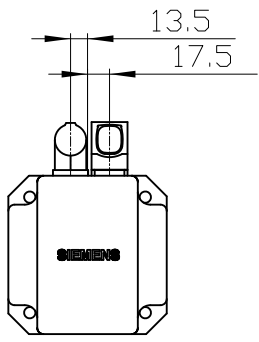
Client order no. :  
Order no. :  
Offer no. :  
Remarks :

Item no. :  
Consignment no. :  
Project :

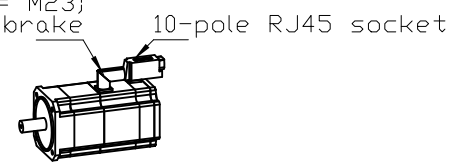
| Engineering data            |                               | Mechanical data          |                                                                      |
|-----------------------------|-------------------------------|--------------------------|----------------------------------------------------------------------|
| Rated speed (100 K)         | 3000 rpm                      | Motor type               | Permanent-magnet synchronous motor                                   |
| Number of poles             | 6                             | Motor type               | High Dynamic                                                         |
| Rated torque (100 K)        | 5.4 Nm                        | Shaft height             | 63                                                                   |
| Rated current               | 5.3 A                         | Cooling                  | Natural cooling                                                      |
| Static torque (60 K)        | 4.90 Nm                       | Radial runout tolerance  | 0.040 mm                                                             |
| Static torque (100 K)       | 6.40 Nm                       | Concentricity tolerance  | 0.10 mm                                                              |
| Stall current (60 K)        | 4.80 A                        | Axial runout tolerance   | 0.10 mm                                                              |
| Stall current (100 K)       | 6.10 A                        | Vibration severity grade | Grade A                                                              |
| Moment of inertia           | 3.740 kgcm²                   | Connector size           | 1                                                                    |
| Efficiency                  | 93.0 %                        | Degree of protection     | IP64                                                                 |
| Physical constants          |                               | Design acc. to Code I    | IM B5 (IM V1, IM V3)                                                 |
| Torque constant             | 1.00 Nm/A                     | Temperature monitoring   | KTY84 temperature sensor in the stator winding                       |
| Voltage constant at 20° C   | 66.0 V/1000*min <sup>-1</sup> | Electrical connectors    | Connectors for signals and power rotatable                           |
| Winding resistance at 20° C | 0.74 Ω                        | Color of the housing     | without                                                              |
| Rotating field inductance   | 20.0 mH                       | Holding brake            | with holding brake                                                   |
| Electrical time constant    | 27.00 ms                      | Shaft end                | Plain shaft                                                          |
| Mechanical time constant    | 0.75 ms                       | Encoder system           | Resolver R14DQ: resolver 14 bits (resolution 16384, internal 2-pole) |
| Thermal time constant       | 45 min                        |                          |                                                                      |
| Shaft torsional stiffness   | 37000 Nm/rad                  |                          |                                                                      |
| Net weight of the motor     | 11.2 kg                       |                          |                                                                      |

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| Optimum operating point           |                        | Recommended Motor Module |          |
|-----------------------------------|------------------------|--------------------------|----------|
| Optimum speed                     | 3000 rpm               | Rated inverter current   | 9 A      |
| Optimum power                     | 1.7 kW                 | Maximum inverter current | 18 A     |
| Limiting data                     |                        | Maximum torque           | 17.30 Nm |
| Max. permissible speed (mech.)    | 6000 rpm               |                          |          |
| Max. permissible speed (inverter) | 8700 rpm               |                          |          |
| Maximum torque                    | 17.3 Nm                |                          |          |
| Maximum current                   | 17.5 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                  |                          |          |



Connector size 1 = M23;  
6-pole for power and brake



|            |         |                     |  |
|------------|---------|---------------------|--|
|            |         |                     |  |
| Unit       | mm [in] | 1FK7061-7AF 71-1PH0 |  |
| Date       | 3/24/23 |                     |  |
| SIEMENS AG |         |                     |  |
|            |         |                     |  |
|            |         | DT                  |  |