



Figure similar

MLFB-Ordering data

1FK7105-2AF71-1RA2

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) | 26.0 Nm | Shaft height | 100 | | |
| Rated current | 18.0 A | Cooling | Natural cooling | | |
| Static torque (60 K) | 40.00 Nm | Radial runout tolerance | 0.050 mm | | |
| Static torque (100 K) | 48.00 Nm | Concentricity tolerance | 0.10 mm | | |
| Stall current (60 K) | 25.00 A | Axial runout tolerance | 0.10 mm | | |
| Stall current (100 K) | 31.00 A | Vibration severity grade | Grade A | | |
| Moment of inertia | 154.000 kgcm ² | Connector size | 1.5 | | |
| Efficiency | 94.0 % | Degree of protection | IP65 and DE flange IP67 | | |
| <th colspan="2">Physical constants</th> | | Physical constants | | Design acc. to Code I | IM B5 (IM V1, IM V3) |
| | | Torque constant | 1.55 Nm/A | Temperature monitoring | Pt1000 temperature sensor |
| | | Voltage constant at 20° C | 102.0 V/1000*min ⁻¹ | Electrical connectors | Connectors for signals and power rotatable |
| | | Winding resistance at 20° C | 0.07 Ω | Color of the housing | Standard (Anthracite RAL 7016) |
| | | Rotating field inductance | 1.9 mH | Holding brake | without holding brake |
| | | Electrical time constant | 26.00 ms | Shaft end | Feather key |
| | | Mechanical time constant | 1.40 ms | Encoder system | Encoder AM20DQI: absolute encoder 20 bits (resolution 1048576, encoder-internal 512 S/R) + 12 bits multi-turn (traversing range 4096 revolutions) |
| | | Thermal time constant | 70 min | | |
| | | Shaft torsional stiffness | 125000 Nm/rad | | |
| | | Net weight of the motor | 39.0 kg | | |



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Optimum operating point

Optimum speed 3000 rpm

Optimum power 8.2 kW

Limiting data

Max. permissible speed (mech.) 5000 rpm

Max. permissible speed (inverter) 5000 rpm

Maximum torque 150.0 Nm

Maximum current 109.0 A

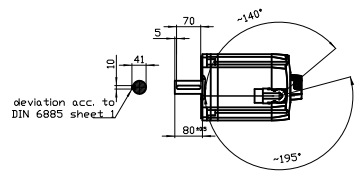
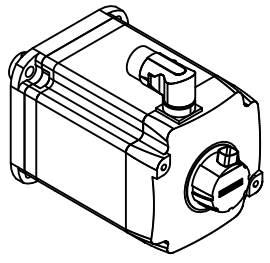
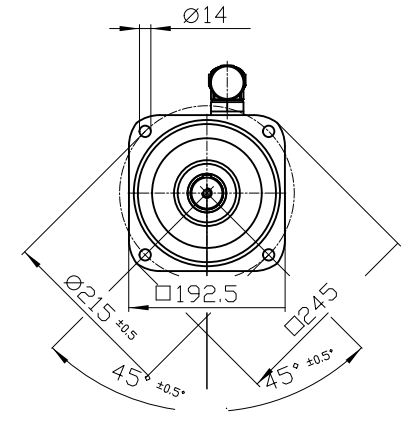
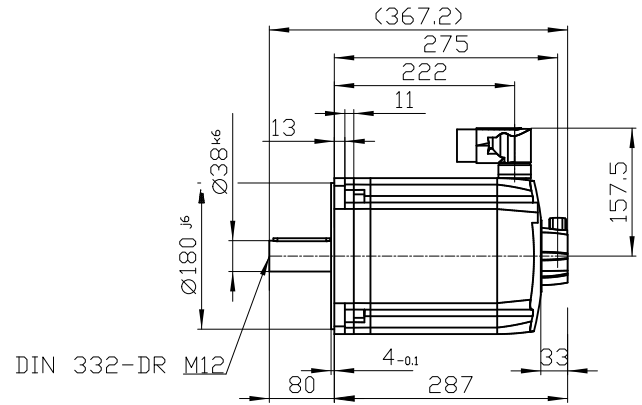
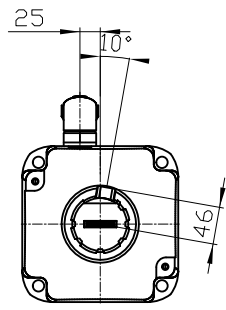
Recommended Motor Module

Rated inverter current 30 A

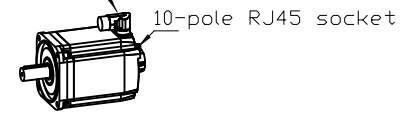
Maximum inverter current 90 A

Maximum torque 129.70 Nm

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Connector size 1.5 = M40;
 6-pole for power and brake



| | | |
|------------|---------|--------------------|
| | | - |
| Unit | mm (in) | 1FK7105-2AF71-1RA2 |
| Date | 7/28/23 | |
| SIEMENS AG | | - |
| | | DT |