

No image  
available for this  
configuration.

Figure similar

MLFB-Ordering data                      1FK7103-5AF71-1FA0

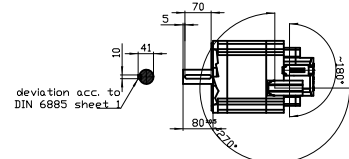
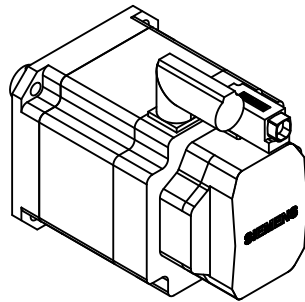
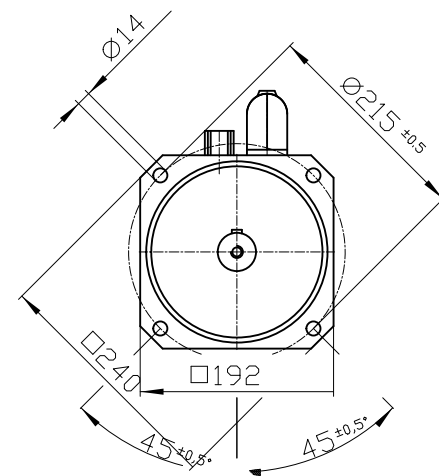
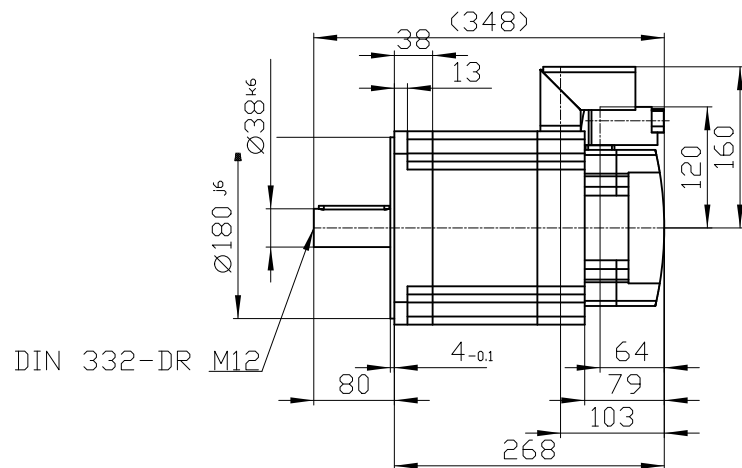
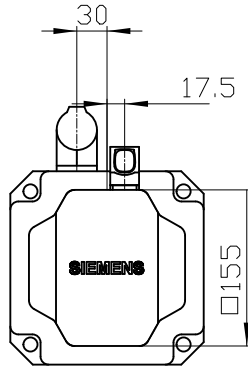
Client order no. :  
Order no. :  
Offer no. :  
Remarks :

Item no. :  
Consignment no. :  
Project :

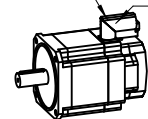
| Engineering data            |                               | Mechanical data          |                                                                                                                                                   |
|-----------------------------|-------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated speed (100 K)         | 3000 rpm                      | Motor type               | Permanent-magnet synchronous motor                                                                                                                |
| Number of poles             | 8                             | Motor type               | Compact                                                                                                                                           |
| Rated torque (100 K)        | 14.0 Nm                       | Shaft height             | 100                                                                                                                                               |
| Rated current               | 12.0 A                        | Cooling                  | Natural cooling                                                                                                                                   |
| Static torque (60 K)        | 30.00 Nm                      | Radial runout tolerance  | 0.050 mm                                                                                                                                          |
| Static torque (100 K)       | 36.00 Nm                      | Concentricity tolerance  | 0.10 mm                                                                                                                                           |
| Stall current (60 K)        | 22.80 A                       | Axial runout tolerance   | 0.10 mm                                                                                                                                           |
| Stall current (100 K)       | 27.50 A                       | Vibration severity grade | Grade A                                                                                                                                           |
| Moment of inertia           | 105.000 kgcm²                 | Connector size           | 1.5                                                                                                                                               |
| Efficiency                  | 93.0 %                        | Degree of protection     | IP64                                                                                                                                              |
| Physical constants          |                               | Design acc. to Code I    | IM B5 (IM V1, IM V3)                                                                                                                              |
| Torque constant             | 1.35 Nm/A                     | Temperature monitoring   | KTY84 temperature sensor in the stator winding                                                                                                    |
| Voltage constant at 20° C   | 86.0 V/1000*min <sup>-1</sup> | Electrical connectors    | Connectors for signals and power rotatable                                                                                                        |
| Winding resistance at 20° C | 0.09 Ω                        | Color of the housing     | without                                                                                                                                           |
| Rotating field inductance   | 2.0 mH                        | Holding brake            | without holding brake                                                                                                                             |
| Electrical time constant    | 22.20 ms                      | Shaft end                | Feather key                                                                                                                                       |
| Mechanical time constant    | 1.55 ms                       | Encoder system           | Encoder AM22DQ: absolute encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + 12 bits multi-turn (traversing range 4096 revolutions) |
| Thermal time constant       | 65 min                        |                          |                                                                                                                                                   |
| Shaft torsional stiffness   | 149000 Nm/rad                 |                          |                                                                                                                                                   |
| Net weight of the motor     | 29.0 kg                       |                          |                                                                                                                                                   |

MLFB-Ordering data 1FK7103-5AF71-1FA0

| Optimum operating point           |          | Recommended Motor Module |          |
|-----------------------------------|----------|--------------------------|----------|
| Optimum speed                     | 2500 rpm | Rated inverter current   | 30 A     |
| Optimum power                     | 5.4 kW   | Maximum inverter current | 56 A     |
| Limiting data                     |          | Maximum torque           | 73.00 Nm |
| Max. permissible speed (mech.)    | 5000 rpm |                          |          |
| Max. permissible speed (inverter) | 6700 rpm |                          |          |
| Maximum torque                    | 108.0 Nm |                          |          |
| Maximum current                   | 84.0 A   |                          |          |



Connector size 1.5 = M40;  
6-pole for power and brake  
10-pole RJ45 socket



|                                                                                       |         |                    |  |
|---------------------------------------------------------------------------------------|---------|--------------------|--|
|  |         |                    |  |
| Unit                                                                                  | mm [in] | 1FK7103-5AF71-1FA0 |  |
| Date                                                                                  | 7/28/23 |                    |  |
| SIEMENS AG                                                                            |         |                    |  |
|                                                                                       |         |                    |  |
|                                                                                       |         | DT                 |  |

Copyright© Siemens AG 2005  
Cod-drawing do not make any manual changes  
The reproduction or use of this document or its contents is not permitted without express written authority. Offenders will be liable for damages. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.  
Weitergabe sowie Vervielfältigung dieser Unterlage, Vervielfältigung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte vorbehalten, insbesondere fuer den Fall der Patenterteilung oder Gk-Entragung.  
Confido como secreto Industrial. Nos reservamos todos los derechos Comunicado como segredo empresarial. Reservados todos os direitos. Confié a titre de secret d'entreprise. Tous droits réservés.