



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8083-1SF00-0LA1

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

Item no. :  
Consignment no. :  
Project :

Engineering data

|   |                  | P <sub>N</sub><br>[kW] | M <sub>N</sub><br>[Nm] | I <sub>N</sub><br>[A] | U <sub>N</sub><br>[V] | f <sub>N</sub><br>[Hz] | n <sub>N</sub><br>[rpm] | M <sub>max</sub><br>[Nm] | I <sub>max</sub><br>[A] | n <sub>max</sub><br>[rpm] | M <sub>0</sub><br>[Nm] | I <sub>0</sub><br>[A] | η     | cos φ | I <sub>μ</sub><br>[A] |
|---|------------------|------------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|--------------------------|-------------------------|---------------------------|------------------------|-----------------------|-------|-------|-----------------------|
| Y | ALM 400V         | 3.3                    | 18.0                   | 7.5                   | 398                   | 61.7                   | 1,750                   | 34                       | 18.0                    | 12,000                    | 21.0                   | 8                     | 0.831 | 0.800 | 3.8                   |
|   | BLM/SLM 400V     | 2.8                    | 18.0                   | 7.5                   | 346                   | 53.3                   | 1,500                   | 34                       | 18.0                    | 12,000                    | 21.0                   | 8                     | 0.809 | 0.800 | 3.8                   |
|   | ALM/BLM/SLM 480V | 3.7                    | 18.0                   | 7.6                   | 447                   | 70.0                   | 2,000                   | 34                       | 18.0                    | 12,000                    | 21.0                   | 8                     | 0.850 | 0.790 | 3.7                   |

Mechanical data

|                           |                                                                          |
|---------------------------|--------------------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                         |
| Shaft height              | 80                                                                       |
| Cooling                   | Forced ventilation DE -> NDE                                             |
| Vibration severity grade  | SPECIAL/B                                                                |
| Shaft and flange accuracy | SPECIAL                                                                  |
| Degree of protection      | IP55                                                                     |
| Design acc. to Code I     | IM B3 (IM V5, IM V6)                                                     |
| Temperature monitoring    | Pt1000 temperature sensor in the stator winding                          |
| Color                     | Standard (Anthracite RAL 7016)                                           |
| Type of the bearing       | Performance                                                              |
| Shaft end                 | Plain shaft                                                              |
| Encoder system            | Incremental encoder 19 bit without commutation position (encoder IN19DQ) |

External fan

Max. power consumption

|                           |        |
|---------------------------|--------|
| 1 AC 230 V / 50 Hz (±10%) | 0.20 A |
| 1 AC 230 V / 60 Hz (±10%) | 0.16 A |
| 1 AC 265 V / 60 Hz (±10%) | 0.19 A |

<sup>1)</sup> at a rated frequency of 4 kHz and a speed range of up to 5000 rpm

Physical constants

|                       |                      |
|-----------------------|----------------------|
| Thermal time constant | 10 min               |
| Moment of inertia     | 64 kgcm <sup>2</sup> |
| Weight (approx.)      | 32 kg                |

Connection

|                               |              |
|-------------------------------|--------------|
| Type of electrical connection | Terminal box |
| Position of the connection    | NDE top      |
| Power connection              | right        |
| Signal connection             | DE           |
| Terminal box designation      | gk803        |

Cooling data and sound pressure level

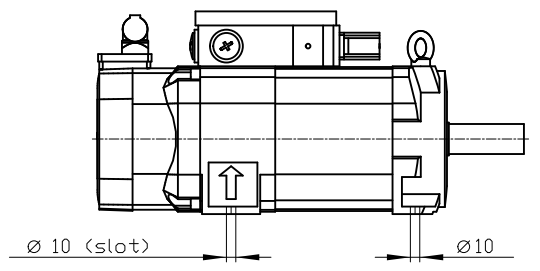
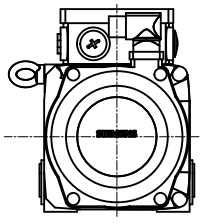
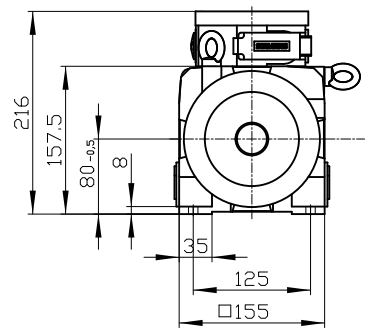
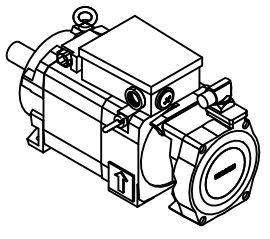
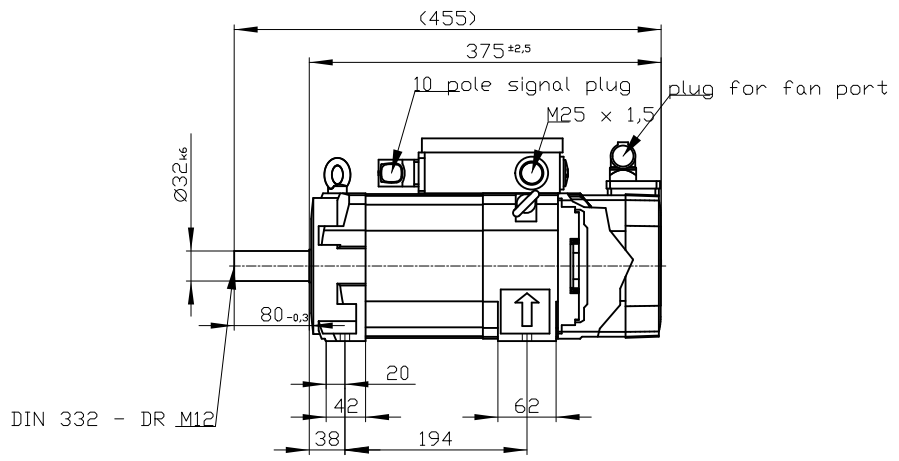
|                                                                                               |                        |
|-----------------------------------------------------------------------------------------------|------------------------|
| Airflow, min.                                                                                 | 0.02 m <sup>3</sup> /s |
| Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB | 70 dB <sup>1)</sup>    |
| Air discharge                                                                                 | axial                  |
| Pressure drop                                                                                 | 95 Pa                  |

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Type of construction: IM B3 (IM V5, IM V6) / Type of protection: IP55

|                                                                                       |         |                    |  |
|---------------------------------------------------------------------------------------|---------|--------------------|--|
|  |         | —                  |  |
|                                                                                       |         | —                  |  |
| Terminal box                                                                          | gk803   | 1PH8083-1SF00-0LA1 |  |
| Weight                                                                                | 32 kg   |                    |  |
| Unit                                                                                  | mm [in] |                    |  |
| Date                                                                                  | 4/11/23 |                    |  |
| SIEMENS AG                                                                            |         |                    |  |
| not toleranced dimensions: ± 1                                                        |         |                    |  |
|                                                                                       |         | DT                 |  |