



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8131-1DF00-1GA1

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     | 13.0                   | 71.0                   | 24.0                  | 416                   | 59.8                   | 1,750                   | 148                      | 50.0                    | 8,000                     | 96.0                   | 30                    | 0.914 | 0.840 | 10.3                  |
|   | BLM/SLM 400V | 11.0                   | 70.0                   | 24.0                  | 360                   | 51.4                   | 1,500                   | 148                      | 50.0                    | 8,000                     | 96.0                   | 30                    | 0.899 | 0.840 | 10.4                  |
|   | ALM 480V     | 16.5                   | 72.0                   | 24.0                  | 500                   | 75.0                   | 2,200                   | 148                      | 50.0                    | 8,000                     | 96.0                   | 30                    | 0.920 | 0.870 | 10.0                  |
|   | BLM/SLM 480V | 15.0                   | 72.0                   | 24.0                  | 460                   | 68.2                   | 2,000                   | 148                      | 50.0                    | 8,000                     | 96.0                   | 30                    | 0.931 | 0.860 | 9.2                   |

Mechanical data

|                           |                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                                            |
| Shaft height              | 132                                                                                         |
| Cooling                   | Forced ventilation DE -> NDE                                                                |
| Vibration severity grade  | R/A                                                                                         |
| Shaft and flange accuracy | R                                                                                           |
| Degree of protection      | IP55                                                                                        |
| Design acc. to Code I     | IM B3 (IM V5, IM V6, IM B6, IM B7, IM B8)                                                   |
| Temperature monitoring    | Pt1000 temperature sensor in the stator winding                                             |
| Color                     | Standard (Anthracite RAL 7016)                                                              |
| Type of the bearing       | Standard                                                                                    |
| Shaft end                 | Feather key with full key balancing                                                         |
| Encoder system            | Incremental encoder 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm |

External fan

Max. power consumption

|                           |        |
|---------------------------|--------|
| 3 AC 400 V / 50 Hz (±10%) | 0.21 A |
| 3 AC 400 V / 60 Hz (±10%) | 0.19 A |
| 3 AC 480 V / 60 Hz (±10%) | 0.23 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 | 30 min                |
| Moment of inertia     | 590 kgcm <sup>2</sup> |
| Weight (approx.)      | 89 kg                 |

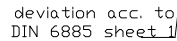
Connection

|                               |              |
|-------------------------------|--------------|
| Type of electrical connection | Terminal box |
| Position of the connection    | NDE top      |
| Power connection              | right        |
| Signal connection             | DE           |
| Terminal box designation      | gk833        |

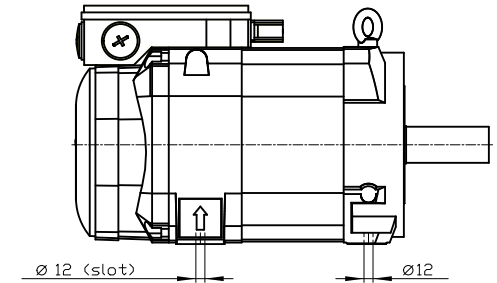
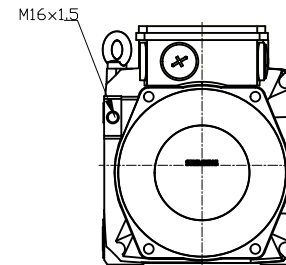
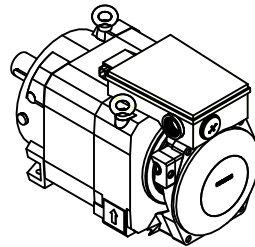
Cooling data and sound pressure level

|                                                                                               |                     |
|-----------------------------------------------------------------------------------------------|---------------------|
| Airflow, min.                                                                                 | 0.09 m³/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                                                                                 | 140 Pa              |

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DIN 332 - DR M16



Type of construction: IM B3 (IM V5, IM V6, IM B6, IM B7, IM B8) of protection: IP55



|              |         |
|--------------|---------|
| Terminal box | gk833   |
| Weight       | 89 kg   |
| Unit         | mm [in] |
| Date         | 4/27/23 |

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SIEMENS AG

not toleranced dimensions:  $\pm 1$

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|  | DT |
|--|----|