

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8184-1MF00-0BA2



Figure similar

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         | 60.0                   | 327.0                  | 120.0                 | 390                   | 58.9                   | 1,750                   | 925                      | 300.0                   | 5,000                     | 327.0                  | 120                   | 0.944 | 0.790 | 64.0                  |
|   | BLM/SLM 400V     | 51.0                   | 325.0                  | 116.0                 | 335                   | 50.6                   | 1,500                   | 925                      | 300.0                   | 5,000                     | 325.0                  | 116                   | 0.940 | 0.800 | 63.0                  |
|   | ALM/BLM/SLM 480V | 68.0                   | 325.0                  | 118.0                 | 450                   | 67.2                   | 2,000                   | 925                      | 300.0                   | 5,000                     | 325.0                  | 118                   | 0.947 | 0.780 | 65.0                  |

### Mechanical data

|                           |                                                                                              |
|---------------------------|----------------------------------------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                                             |
| Shaft height              | 180                                                                                          |
| 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 B6, IM B7, IM B8, IM V6)                                                           |
| Temperature monitoring    | Pt1000 temperature sensor in the stator winding                                              |
| Color                     | Standard (Anthracite RAL 7016)                                                               |
| Type of the bearing       | Standard                                                                                     |
| Shaft end                 | Plain shaft                                                                                  |
| Encoder system            | Incremental encoder sin/cos 1Vpp 2048 S/R with C- and D-Spur, max. encoder speed = 12000 rpm |

### External fan

#### Max. power consumption

1 AC 200 ... 277 V (±10%) 50/60 Hz ±10% 1.1 ... 1.3 A

<sup>1)</sup> at a rated frequency of 2 kHz and a speed range of up to 5000 rpm

### Physical constants

|                       |                         |
|-----------------------|-------------------------|
| Thermal time constant | 22 min                  |
| Moment of inertia     | 4,890 kgcm <sup>2</sup> |
| Weight (approx.)      | 350 kg                  |

### Connection

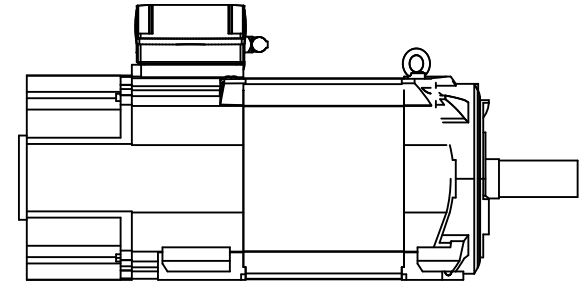
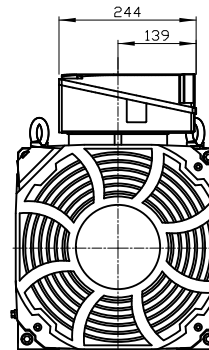
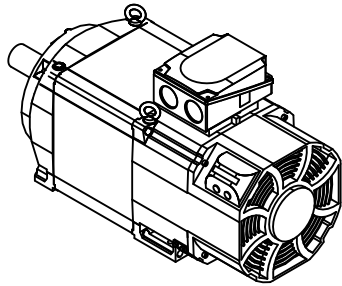
|                               |              |
|-------------------------------|--------------|
| Type of electrical connection | Terminal box |
| Position of the connection    | NDE top      |
| Power connection              | right        |
| Signal connection             | DE           |
| Terminal box designation      | 1XB7322-P05  |

### Cooling data and sound pressure level

|                                                                                               |                        |
|-----------------------------------------------------------------------------------------------|------------------------|
| Airflow, min.                                                                                 | 0.17 m <sup>3</sup> /s |
| Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB | 73 dB <sup>1)</sup>    |
| Air discharge                                                                                 | axial                  |
| Pressure drop                                                                                 | 550 Pa                 |

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|                                                                                       |             |
|---------------------------------------------------------------------------------------|-------------|
| Type of construction IM B3 IM B6, IM B7, IM B8, IM V6x Type of protection: IP55       |             |
|  | —           |
|                                                                                       | —           |
| Terminal box                                                                          | 1X87322-P05 |
| Weight                                                                                | 350 kg      |
| Unit                                                                                  | mm (in)     |
| Date                                                                                  | 5/3/23      |
| SIEMENS AG                                                                            |             |
| not toleranced dimensions: ± 1                                                        | DT          |