

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8186-1MF00-2BA1



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         | 85.0                   | 464.0                  | 164.0                 | 385                   | 58.9                   | 1,750                   | 1,230                    | 400.0                   | 5,000                     | 464.0                  | 164                   | 0.949 | 0.820 | 83.0                  |
|   | BLM/SLM 400V     | 74.0                   | 471.0                  | 166.0                 | 330                   | 50.6                   | 1,500                   | 1,230                    | 400.0                   | 5,000                     | 471.0                  | 166                   | 0.945 | 0.830 | 82.0                  |
|   | ALM/BLM/SLM 480V | 94.0                   | 449.0                  | 160.0                 | 445                   | 67.2                   | 2,000                   | 1,230                    | 400.0                   | 5,000                     | 449.0                  | 160                   | 0.952 | 0.800 | 86.0                  |

### 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    | KTY84 temperature sensor in the stator winding                                               |
| Color                     | Standard (Anthracite RAL 7016)                                                               |
| Type of the bearing       | Standard                                                                                     |
| Shaft end                 | Feather key with half key balancing                                                          |
| 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 | 25 min                  |
| Moment of inertia     | 6,520 kgcm <sup>2</sup> |
| Weight (approx.)      | 422 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                 |