

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8224-1MD00-2AA2



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         | 81.0                   | 673.0                  | 156.0                 | 385                   | 38.8                   | 1,150                   | 1,760                    | 380.0                   | 4,500                     | 673.0                  | 156                   | 0.946 | 0.820 | 78.0                  |
|   | BLM/SLM 400V     | 71.0                   | 678.0                  | 158.0                 | 335                   | 33.8                   | 1,000                   | 1,760                    | 380.0                   | 4,500                     | 678.0                  | 158                   | 0.942 | 0.820 | 77.0                  |
|   | ALM/BLM/SLM 480V | 92.0                   | 651.0                  | 154.0                 | 450                   | 45.5                   | 1,350                   | 1,760                    | 380.0                   | 4,500                     | 651.0                  | 154                   | 0.951 | 0.810 | 78.0                  |

### Mechanical data

|                           |  |
|---------------------------|--|
| Motor type                | Squirrel cage asynchronous motor   |
| Shaft height              | 225  |
| Cooling                   | Forced ventilation DE -> NDE   |
| Vibration severity grade  | A  |
| Shaft and flange accuracy | N  |
| 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                 | 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% 2.0 ... 2.3 A

<sup>1)</sup> at a rated frequency of 2 kHz and a speed range of up to 3500 rpm

### Physical constants

|                       |                          |
|-----------------------|--------------------------|
| Thermal time constant | 49 min                   |
| Moment of inertia     | 14,800 kgcm <sup>2</sup> |
| Weight (approx.)      | 610 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.   | 0.31 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   | 650 Pa                 |