

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8228-1DD00-0BA1



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         | 129.0                  | 1,071.0                | 235.0                 | 390                   | 38.8                   | 1,150                   | 2,750                    | 570.0                   | 4,500                     | 1,071.0                | 235                   | 0.953 | 0.860 | 97.0                  |
|   | BLM/SLM 400V     | 113.0                  | 1,079.0                | 235.0                 | 340                   | 33.9                   | 1,000                   | 2,750                    | 570.0                   | 4,500                     | 1,079.0                | 235                   | 0.948 | 0.870 | 97.0                  |
|   | ALM/BLM/SLM 480V | 147.0                  | 1,040.0                | 225.0                 | 460                   | 45.5                   | 1,350                   | 2,750                    | 570.0                   | 4,500                     | 1,040.0                | 225                   | 0.957 | 0.860 | 99.0                  |

### Mechanical data

|                           |                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                                            |
| Shaft height              | 225                                                                                         |
| 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 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm |

### Physical constants

|                       |                          |
|-----------------------|--------------------------|
| Thermal time constant | 55 min                   |
| Moment of inertia     | 23,300 kgcm <sup>2</sup> |
| Weight (approx.)      | 870 kg                   |

### Connection

|                               |              |
|-------------------------------|--------------|
| Type of electrical connection | Terminal box |
| Position of the connection    | NDE top      |
| Power connection              | right        |
| Signal connection             | DE           |
| Terminal box designation      | 1XB7422-P06  |

### Cooling data and sound pressure level

|                                                                                                            |                        |
|------------------------------------------------------------------------------------------------------------|------------------------|
| Airflow, min.                                                                                              | 0.31 m <sup>3</sup> /s |
| Sound pressure level L <sub>pA</sub> (1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB | 73 dB <sup>1)</sup>    |
| Air discharge                                                                                              | axial                  |
| Pressure drop                                                                                              | 650 Pa                 |

### 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