



Figure similar

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8186-1DC15-2BD1

Client order no. :  
Order no. :  
Offer no. :  
Remarks :

Item no. :  
Consignment no. :  
Project :

### Engineering data

|   |                  | $P_N$<br>[kW] | $M_N$<br>[Nm] | $I_N$<br>[A] | $U_N$<br>[V] | $f_N$<br>[Hz] | $n_N$<br>[rpm] | $M_{max}$<br>[Nm] | $I_{max}$<br>[A] | $n_{max}$<br>[rpm] | $M_0$<br>[Nm] | $I_0$<br>[A] | $\eta$ | $\cos \phi$ | $I\mu$<br>[A] |
|---|------------------|---------------|---------------|--------------|--------------|---------------|----------------|-------------------|------------------|--------------------|---------------|--------------|--------|-------------|---------------|
| Y | ALM 400V         | 40.0          | 478.0         | 83.0         | 360          | 27.3          | 800            | 1,230             | 205.0            | 5,000              | 478.0         | 83           | 0.916  | 0.840       | 41.0          |
|   | BLM/SLM 400V     | 35.0          | 478.0         | 83.0         | 330          | 23.9          | 700            | 1,230             | 205.0            | 5,000              | 478.0         | 83           | 0.909  | 0.810       | 44.0          |
|   | ALM/BLM/SLM 480V | 50.0          | 478.0         | 83.0         | 450          | 33.9          | 1,000          | 1,230             | 205.0            | 5,000              | 478.0         | 83           | 0.929  | 0.830       | 42.0          |

### Mechanical data

|                           |   |
|---------------------------|---|
| Motor type                | Squirrel cage asynchronous motor  |
| Shaft height              | 180   |
| Cooling                   | Forced ventilation NDE -> DE  |
| Vibration severity grade  | R/A   |
| Shaft and flange accuracy | R   |
| Degree of protection      | IP55  |
| Design acc. to Code I     | IM V15 with A450 flange   |
| 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 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm |

### External fan

#### Max. power consumption

1 AC 200 ... 277 V ( $\pm 10\%$ ) 50/60 Hz  $\pm 10\%$  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              | DE           |
| Signal connection             | right        |
| 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                 |