



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8224-1DF15-2BD1

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         | 110.0                  | 600.0                  | 198.0                 | 395                   | 58.9                   | 1,750                   | 1,550                    | 485.0                   | 4,500                     | 600.0                  | 198                   | 0.956 | 0.850 | 87.0                  |
|   | BLM/SLM 400V     | 95.0                   | 605.0                  | 200.0                 | 340                   | 50.5                   | 1,500                   | 1,550                    | 485.0                   | 4,500                     | 605.0                  | 200                   | 0.953 | 0.850 | 87.0                  |
|   | ALM/BLM/SLM 480V | 124.0                  | 592.0                  | 196.0                 | 460                   | 67.2                   | 2,000                   | 1,550                    | 485.0                   | 4,500                     | 592.0                  | 196                   | 0.957 | 0.830 | 90.0                  |

Mechanical data

|                           |                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                                            |
| Shaft height              | 225                                                                                         |
| 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 A550 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 (±10%) 50/60 Hz      2.0 ... 2.3 A  
±10%

<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              | DE           |
| Signal connection             | right        |
| Terminal box designation      | 1XB7322-P05  |

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                 |