



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8184-1DL13-2BB1-Z  
G14

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 | l <sub>μ</sub><br>[A] |
|---|------------------|------------------------|------------------------|-----------------------|-----------------------|------------------------|-------------------------|--------------------------|-------------------------|---------------------------|------------------------|-----------------------|-------|-------|-----------------------|
| Y | ALM 400V         | 81.0                   | 267.0                  | 152.0                 | 395                   | 97.3                   | 2,900                   | 730                      | 380.0                   | 5,000                     | 267.0                  | 152                   | 0.952 | 0.820 | 76.0                  |
|   | BLM/SLM 400V     | 78.0                   | 298.0                  | 166.0                 | 340                   | 84.0                   | 2,500                   | 730                      | 380.0                   | 5,000                     | 298.0                  | 166                   | 0.952 | 0.840 | 75.0                  |
|   | ALM/BLM/SLM 480V | 65.0                   | 183.0                  | 120.0                 | 460                   | 113.7                  | 3,400                   | 730                      | 380.0                   | 5,000                     | 183.0                  | 120                   | 0.944 | 0.720 | 77.0                  |

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 B35 with A450 flange (IM V35)                                                            |
| Temperature monitoring    | Pt1000 temperature sensor in the stator winding                                             |
| Color                     | Standard (Anthracite RAL 7016)                                                              |
| Type of the bearing       | Standard                                                                                    |
| Shaft extension           | Feather key with half key balancing                                                         |
| Encoder system            | Incremental encoder 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm |

Physical constants

|                       |                         |
|-----------------------|-------------------------|
| Thermal time constant | 22 min                  |
| Moment of inertia     | 4,890 kgcm <sup>2</sup> |
| Weight (approx.)      | 350 kg                  |

Connection

|                               |              |
|-------------------------------|--------------|
| Type of electrical connection | Terminal box |
| Position of the connection    | NDE top      |
| Power connection              | left         |
| 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                 |

Special design

G14 with air filter

<sup>1)</sup> at a rated frequency of 2 kHz and a speed range of up to 5000 rpm