



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8133-1DF12-0BA1

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         | 17.5                   | 96.0                   | 34.0                  | 392                   | 59.7                   | 1,750                   | 240                      | 85.0                    | 8,000                     | 126.0                  | 42                    | 0.913 | 0.850 | 13.6                  |
|   | BLM/SLM 400V     | 15.0                   | 96.0                   | 34.0                  | 342                   | 51.3                   | 1,500                   | 240                      | 85.0                    | 8,000                     | 126.0                  | 42                    | 0.899 | 0.850 | 14.2                  |
|   | ALM/BLM/SLM 480V | 20.0                   | 95.0                   | 34.0                  | 445                   | 68.2                   | 2,000                   | 240                      | 85.0                    | 8,000                     | 126.0                  | 42                    | 0.933 | 0.850 | 13.5                  |

Mechanical data

|                           |                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                                            |
| Shaft height              | 132                                                                                         |
| 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 B5 (IM V1, IM V3)                                                                        |
| Temperature monitoring    | Pt1000 temperature sensor in the stator winding                                             |
| Color                     | Standard (Anthracite RAL 7016)                                                              |
| Type of the bearing       | Standard with fixed bearing                                                                 |
| Shaft end                 | Plain shaft                                                                                 |
| Encoder system            | Incremental encoder 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm |

External fan

Max. power consumption

|                           |        |
|---------------------------|--------|
| 3 AC 400 V / 50 Hz (±10%) | 0.13 A |
| 3 AC 400 V / 60 Hz (±10%) | 0.16 A |
| 3 AC 480 V / 60 Hz (±10%) | 0.17 A |

<sup>1)</sup> at a rated frequency of 4 kHz and a speed range of up to 5000 rpm

Physical constants

|                       |                       |
|-----------------------|-----------------------|
| Thermal time constant | 30 min                |
| Moment of inertia     | 760 kgcm <sup>2</sup> |
| Weight (approx.)      | 106 kg                |

Connection

|                               |              |
|-------------------------------|--------------|
| Type of electrical connection | Terminal box |
| Position of the connection    | NDE top      |
| Power connection              | right        |
| Signal connection             | DE           |
| Terminal box designation      | gk833        |

Cooling data and sound pressure level

|                                                                                               |                        |
|-----------------------------------------------------------------------------------------------|------------------------|
| Airflow, min.                                                                                 | 0.09 m <sup>3</sup> /s |
| Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB | 70 dB <sup>1)</sup>    |
| Air discharge                                                                                 | axial                  |
| Pressure drop                                                                                 | 140 Pa                 |