



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8186-1HD00-2EA2

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         | 58.0                   | 482.0                  | 112.0                 | 390                   | 38.9                   | 1,150                   | 1,230                    | 265.0                   | 5,000                     | 482.0                  | 112                   | 0.933 | 0.820 | 57.0                  |
|   | BLM/SLM 400V     | 51.0                   | 487.0                  | 112.0                 | 340                   | 34.0                   | 1,000                   | 1,230                    | 265.0                   | 5,000                     | 487.0                  | 112                   | 0.926 | 0.830 | 56.0                  |
|   | ALM/BLM/SLM 480V | 67.0                   | 474.0                  | 112.0                 | 450                   | 45.6                   | 1,350                   | 1,230                    | 265.0                   | 5,000                     | 474.0                  | 112                   | 0.939 | 0.820 | 55.0                  |

Mechanical data

|                           |                                                                 |
|---------------------------|-----------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                |
| Shaft height              | 180                                                             |
| Cooling                   | Forced ventilation DE -> NDE                                    |
| Vibration severity grade  | A                                                               |
| Shaft and flange accuracy | N                                                               |
| 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       | Increased cantilever forces                                     |
| Shaft end                 | Feather key with half key balancing                             |
| Encoder system            | Incremental encoder HTL 1024 S/R, max. encoder speed = 9000 rpm |

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

Cooling data and sound pressure level

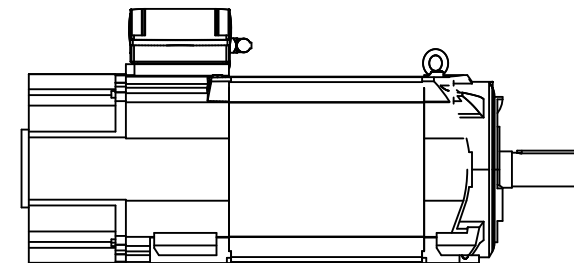
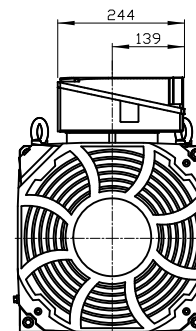
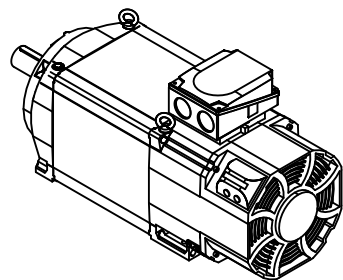
|                                                                                                            |                        |
|------------------------------------------------------------------------------------------------------------|------------------------|
| Airflow, min.                                                                                              | 0.17 m <sup>3</sup> /s |
| Sound pressure level 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                                                                                              | 550 Pa                 |

External fan

Max. power consumption

|                                         |               |
|-----------------------------------------|---------------|
| 1 AC 200 ... 277 V (±10%) 50/60 Hz ±10% | 1.1 ... 1.3 A |
|-----------------------------------------|---------------|

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|                                                                                       |             |                    |
|---------------------------------------------------------------------------------------|-------------|--------------------|
|  |             |                    |
| Terminal box                                                                          | 1XB7322-P05 | 1PH8186-1HD00-2EA2 |
| Weight                                                                                | 422 kg      |                    |
| Unit                                                                                  | mm [in]     |                    |
| Date                                                                                  | 5/4/23      |                    |
| SIEMENS AG                                                                            |             |                    |
| not toleranced dimensions: ± 1                                                        |             | DT                 |