



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8186-1AF40-2FA2-Z  
G14+L76

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         | 125.0                  | 682.0                  | 225.0                 | 385                   | 59.2                   | 1,750                   | 1,230                    | 400.0                   | 5,000                     | 682.0                  | 225                   | 0.942 | 0.880 | 80.0                  |
|   | BLM/SLM 400V     | 108.0                  | 688.0                  | 225.0                 | 330                   | 50.9                   | 1,500                   | 1,230                    | 400.0                   | 5,000                     | 688.0                  | 225                   | 0.936 | 0.890 | 79.0                  |
|   | ALM/BLM/SLM 480V | 135.0                  | 645.0                  | 210.0                 | 445                   | 67.5                   | 2,000                   | 1,230                    | 400.0                   | 5,000                     | 645.0                  | 210                   | 0.948 | 0.870 | 83.0                  |

Mechanical data

|                           |                                                 |
|---------------------------|-------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                |
| Shaft height              | 180                                             |
| Cooling                   | Open circuit cooling NDE-> DE                   |
| Vibration severity grade  | R/A                                             |
| Shaft and flange accuracy | R                                               |
| Degree of protection      | IP23                                            |
| 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            | Without encoder                                 |

Special design

|     |                            |
|-----|----------------------------|
| G14 | with air filter            |
| L76 | EC fan 400 V 3 AC 50/60 Hz |

<sup>1)</sup> at a rated frequency of 2 kHz and a speed range of up to 3000 rpm

Physical constants

|                       |                         |
|-----------------------|-------------------------|
| Thermal time constant | 29 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      | 1XB7422-P06  |

Cooling data and sound pressure level

|                                                                                               |                     |
|-----------------------------------------------------------------------------------------------|---------------------|
| Airflow, min.                                                                                 | 0.21 m³/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                                                                                 | 450 Pa              |

External fan

|                                                  |                 |
|--------------------------------------------------|-----------------|
| Max. power consumption                           |                 |
| 3 AC 380 ... 480 V (-5% / +10%)<br>50/60 Hz ±10% | 0.44 ... 0.50 A |