



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8135-1SG22-3LH1

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         | 31.0                   | 129.0                  | 61.0                  | 397                   | 78.1                   | 2,300                   | 320                      | 148.0                   | 10,000                    | 170.0                  | 73                    | 0.933 | 0.85  | 24.1                  |
|   | BLM/SLM 400V     | 29.0                   | 138.0                  | 64.0                  | 348                   | 68.3                   | 2,000                   | 320                      | 148.0                   | 10,000                    | 170.0                  | 73                    | 0.924 | 0.86  | 23.9                  |
|   | ALM/BLM/SLM 480V | 32.0                   | 115.0                  | 58.0                  | 448                   | 89.6                   | 2,650                   | 320                      | 148.0                   | 10,000                    | 170.0                  | 73                    | 0.942 | 0.84  | 23.0                  |

Mechanical data

|                           |                                                                          |
|---------------------------|--------------------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                         |
| Shaft height              | 132                                                                      |
| Cooling                   | Water cooling                                                            |
| Vibration severity grade  | SPECIAL/B                                                                |
| Shaft and flange accuracy | SPECIAL                                                                  |
| Degree of protection      | IP65                                                                     |
| 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       | Performance                                                              |
| Shaft extension           | Smooth hollow shaft                                                      |
| Encoder system            | Incremental encoder 19 bit without commutation position (encoder IN19DQ) |

Physical constants

|                       |                       |
|-----------------------|-----------------------|
| Thermal time constant | 12 min                |
| Moment of inertia     | 940 kgcm <sup>2</sup> |
| Weight (approx.)      | 141 kg                |

Connection

|                               |                      |
|-------------------------------|----------------------|
| Type of electrical connection | Power connector      |
| Position of the connection    | Power connector, top |
| Power connection              | DE                   |
| Signal connection             | left                 |

Cooling data and sound pressure level

|                                                                |                     |
|----------------------------------------------------------------|---------------------|
| Flow rate, min.                                                | 12 l/min            |
| Sound pressure level LpA(1m) motor rated load, tolerance + 3dB | 68 dB <sup>1)</sup> |
| Pressure drop                                                  | 0.9 bar             |
| NDE thread connection                                          | 0.375 Inches        |

Cooling water specification

|                                 |             |
|---------------------------------|-------------|
| pH value                        | 6 ... 9     |
| Total hardness                  | 1.7 mmol/l  |
| Electrical conductivity         | 500 μS/cm   |
| Chloride ions                   | 40 mg/l     |
| Sulfate ions                    | 50 mg/l     |
| Nitrate ions                    | 50 mg/l     |
| Dissolved substances            | 340 mg/l    |
| Maximum particle size           | 100 μm      |
| Antifreeze/corrosion protection | 20 ... 30 % |

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