



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8186-1DF40-2BB1

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 | 0.88  | 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 | 0.89  | 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 | 0.87  | 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       | 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 | 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              | left         |
| 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              |

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