



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8165-1JF02-2BA2

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     | 41.0                   | 224.0                  | 76.0                  | 400                   | 59.1                   | 1,750                   | 630                      | 206.0                   | 6,500                     | 304.0                  | 95                    | 0.934 | 0.880 | 25.8                  |
|   | BLM/SLM 400V | 37.0                   | 236.0                  | 78.0                  | 350                   | 50.8                   | 1,500                   | 630                      | 206.0                   | 6,500                     | 304.0                  | 95                    | 0.926 | 0.880 | 27.0                  |
|   | ALM 480V     | 49.5                   | 215.0                  | 75.0                  | 493                   | 74.2                   | 2,200                   | 630                      | 206.0                   | 6,500                     | 304.0                  | 95                    | 0.950 | 0.880 | 23.6                  |
|   | BLM/SLM 480V | 45.0                   | 215.0                  | 75.0                  | 440                   | 67.5                   | 2,000                   | 630                      | 206.0                   | 6,500                     | 304.0                  | 95                    | 0.936 | 0.890 | 23.6                  |

Mechanical data

|                           |                                                                 |
|---------------------------|-----------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                |
| Shaft height              | 160                                                             |
| Cooling                   | Forced ventilation DE -> NDE                                    |
| 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                 | Feather key with half key balancing                             |
| Encoder system            | Incremental encoder HTL 2048 S/R, max. encoder speed = 4600 rpm |

External fan

Max. power consumption

|                           |        |
|---------------------------|--------|
| 3 AC 400 V / 50 Hz (±10%) | 0.16 A |
| 3 AC 400 V / 60 Hz (±10%) | 0.21 A |
| 3 AC 480 V / 60 Hz (±10%) | 0.21 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 | 35 min                  |
| Moment of inertia     | 2,320 kgcm <sup>2</sup> |
| Weight (approx.)      | 230 kg                  |

Connection

|                               |              |
|-------------------------------|--------------|
| Type of electrical connection | Terminal box |
| Position of the connection    | NDE top      |
| Power connection              | right        |
| Signal connection             | DE           |
| Terminal box designation      | gk863        |

Cooling data and sound pressure level

|                                                                                               |                     |
|-----------------------------------------------------------------------------------------------|---------------------|
| Airflow, min.                                                                                 | 0.16 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                                                                                 | 200 Pa              |