



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8165-1MF00-OCA1

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 | 0.88  | 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 | 0.88  | 27.0                  |
|   | ALM/BLM/SLM 480V | 45.0                   | 215.0                  | 75.0                  | 440                   | 67.5                   | 2,000                   | 630                      | 206.0                   | 6,500                     | 304.0                  | 95                    | 0.936 | 0.89  | 23.6                  |

| Mechanical data           |                                                                                              |
|---------------------------|----------------------------------------------------------------------------------------------|
| Motor type                | Squirrel cage asynchronous motor                                                             |
| Shaft height              | 160                                                                                          |
| Cooling                   | Forced ventilation DE -> NDE                                                                 |
| Vibration severity grade  | S/A                                                                                          |
| Shaft and flange accuracy | R                                                                                            |
| Degree of protection      | IP55                                                                                         |
| Design acc. to Code I     | IM B3 (IM V5, IM V6, IM B6, IM B7, IM B8)                                                    |
| Temperature monitoring    | KTY84 temperature sensor in the stator winding                                               |
| Color                     | Standard (Anthracite RAL 7016)                                                               |
| Type of the bearing       | Standard with fixed bearing                                                                  |
| Shaft extension           | Plain shaft                                                                                  |
| Encoder system            | Incremental encoder sin/cos 1Vpp 2048 S/R with C- and D-Spur, max. encoder speed = 12000 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 m <sup>3</sup> /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                 |

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