

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8163-1AG22-2BB1



Figure similar

Client order no. :

Item no. :

Order no. :

Consignment no. :

Offer no. :

Project :

Remarks :

Engineering data

| | P_N [kW] | M_N [Nm] | I_N [A] | U_N [V] | f_N [Hz] | n_N [rpm] | M_{max} [Nm] | I_{max} [A] | n_{max} [rpm] | M_0 [Nm] | I_0 [A] | η | $\cos \varphi$ | I_μ [A] | |
|---|------------------|---------------|--------------|--------------|---------------|----------------|-------------------|------------------|--------------------|---------------|--------------|--------|----------------|----------------|------|
| Y | ALM 400V | 48.0 | 199.0 | 93.0 | 382 | 77.6 | 2,300 | 560 | 253.0 | 6,500.0 | 281.0 | 120 | 0.939 | 0.88 | 30.2 |
| | BLM/SLM 400V | 42.0 | 201.0 | 93.0 | 335 | 67.6 | 2,000 | 560 | 253.0 | 6,500.0 | 281.0 | 120 | 0.937 | 0.88 | 30.8 |
| | ALM/BLM/SLM 480V | 55.0 | 198.0 | 90.0 | 450 | 89.2 | 2,650 | 560 | 253.0 | 6,500.0 | 281.0 | 120 | 0.940 | 0.86 | 33.6 |

Mechanical data

| | |
|---------------------------|--|
| Motor type | Squirrel cage asynchronous motor |
| Shaft height | 160 |
| Cooling | Water cooling |
| Vibration severity grade | R/A |
| Shaft and flange accuracy | R |
| Degree of protection | IP65 |
| Design acc. to Code I | IM B5 (IM V1, IM V3) |
| Temperature monitoring | KTY84 temperature sensor in the stator winding |
| Color | Standard (Anthracite RAL 7016) |
| Type of the bearing | Standard with fixed bearing |
| Shaft extension | Feather key with half key balancing |
| Encoder system | Without encoder |

Physical constants

| | |
|-----------------------|------------------------|
| Thermal time constant | 14 min |
| Moment of inertia | 0.216 kgm ² |
| Weight (approx.) | 229 kg |

Connection

| | |
|-------------------------------|--------------|
| Type of electrical connection | Terminal box |
| Position of the connection | NDE top |
| Power connection | left |
| Signal connection | DE |
| Terminal box designation | gk873 |

Cooling data and sound pressure level

| | |
|--|---------------------|
| Flow rate, min. | 15 l/min |
| Sound pressure level LpA(1m) motor rated load, tolerance + 3dB | 69 dB ¹⁾ |
| Pressure drop | 0.2 bar |
| NDE thread connection | 0.5 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 % |

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