SIEMENS

# Data sheet for SIMOTICS M-1PH8



Figure similar

**Article No. :** **1PH8103-1DD12-2GA1**

Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

## 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 φ | Iμ [A] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Y | **ALM 400V** | **4.3** | **36.0** | **10.0** | **380** | **40.9** | **1,150** | **60** | **17.0** | **9,000** | **38.0** | **11** | **0.824** | **0.810** | **4.8** |
| | BLM/SLM 400V | 3.7 | 35.0 | 10.0 | 333 | 35.8 | 1,000 | 60 | 17.0 | 9,000 | 38.0 | 11 | 0.814 | 0.820 | 4.6 |
| | ALM 480V | 5.2 | 33.0 | 9.7 | 470 | 52.2 | 1,500 | 60 | 17.0 | 9,000 | 38.0 | 11 | 0.850 | 0.810 | 4.4 |
| | BLM/SLM 480V | 4.7 | 33.0 | 9.7 | 423 | 47.3 | 1,350 | 60 | 17.0 | 9,000 | 38.0 | 11 | 0.848 | 0.820 | 4.4 |

## Mechanical data

| | |
|---|---|
| Motor type | Squirrel cage asynchronous motor |
| Shaft height | 100 |
| Cooling | Forced ventilation NDE -> DE |
| 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 |
| Shaft end | 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 | 20 min |
| Moment of inertia | 172 kgcm² |
| Weight (approx.) | 51 kg |

## Connection

| | |
|---|---|
| Type of electrical connection | Terminal box |
| Position of the connection | NDE top |
| Power connection | right |
| Signal connection | DE |
| Terminal box designation | gk813 |

## Cooling data and sound pressure level

| | |
|---|---|
| Airflow, min. | 0.04 m³/s |
| Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB | 70 dB [1] |
| Air discharge | axial |
| Pressure drop | 110 Pa |

## External fan

**Max. power consumption**

| | |
|---|---|
| 3 AC 400 V / 50 Hz (±10%) | 0.08 A |
| 3 AC 400 V / 60 Hz (±10%) | 0.07 A |
| 3 AC 480 V / 60 Hz (±10%) | 0.11 A |

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