SIEMENS

# Data sheet for SIMOTICS M-1PH8



Figure similar

**Article No. :** **1PH8101-1DS02-1GA1**

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** | **4.9** | **23.0** | **13.2** | **328** | **69.2** | **2,000** | **60** | **34.0** | **9,000** | **29.0** | **15** | **0.870** | **0.800** | **6.3** |
| | BLM/SLM 400V | 3.7 | 24.0 | 13.2 | 253 | 52.4 | 1,500 | 60 | 34.0 | 9,000 | 29.0 | 15 | 0.830 | 0.800 | 6.3 |
| | ALM 480V | 7.4 | 24.0 | 13.2 | 480 | 102.5 | 3,000 | 60 | 34.0 | 9,000 | 29.0 | 15 | 0.900 | 0.790 | 6.2 |
| | BLM/SLM 480V | 6.2 | 24.0 | 13.2 | 404 | 85.9 | 2,500 | 60 | 34.0 | 9,000 | 29.0 | 15 | 0.890 | 0.800 | 6.2 |
| Δ | **ALM 400V** | **4.9** | **9.0** | **13.5** | **360** | **168.0** | **5,000** | **40** | **60.0** | **9,000** | **19.0** | **20** | **0.900** | **0.700** | **7.8** |
| | BLM/SLM 400V | 3.7 | 9.0 | 13.5 | 289 | 134.6 | 4,000 | 40 | 60.0 | 9,000 | 19.0 | 20 | 0.890 | 0.690 | 7.8 |
| | ALM 480V | 7.2 | 10.0 | 13.0 | 503 | 234.8 | 7,000 | 40 | 60.0 | 9,000 | 19.0 | 20 | 0.910 | 0.720 | 8.5 |
| | BLM/SLM 480V | 6.2 | 10.0 | 13.0 | 460 | 201.3 | 6,000 | 40 | 60.0 | 9,000 | 19.0 | 20 | 0.910 | 0.680 | 8.5 |

## Mechanical data

| | |
|---|---|
| Motor type | Squirrel cage asynchronous motor |
| Shaft height | 100 |
| 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 |
| Shaft end | Feather key with full 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 | 138 kgcm² |
| Weight (approx.) | 42 kg |

## Connection

| | |
|---|---|
| Type of electrical connection | Terminal box |
| Position of the connection | NDE top |
| Power connection | right |
| Signal connection | DE |
| Terminal box designation | gk826 |

## 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%) | 0.10 A |
| 3 AC 400 V / 60 Hz (±10%) | 0.08 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

Subject to change. Calculated values may differ from nameplate ratings. © Copyright Siemens