SIEMENS

# Data sheet for SIMOTICS M-1PH8



Figure similar

**Article No. :** **1PH8105-1DF12-2GC1**

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** | **8.0** | **44.0** | **17.5** | **400** | **60.2** | **1,750** | **103** | **41.0** | **9,000** | **52.0** | **20** | **0.878** | **0.780** | **8.8** |
| | BLM/SLM 400V | 7.0 | 45.0 | 17.5 | 348 | 51.9 | 1,500 | 103 | 41.0 | 9,000 | 52.0 | 20 | 0.867 | 0.790 | 8.8 |
| | ALM 480V | 9.9 | 43.0 | 17.0 | 485 | 75.3 | 2,200 | 103 | 41.0 | 9,000 | 52.0 | 20 | 0.900 | 0.790 | 8.7 |
| | BLM/SLM 480V | 9.0 | 43.0 | 17.0 | 453 | 68.5 | 2,000 | 103 | 41.0 | 9,000 | 52.0 | 20 | 0.911 | 0.780 | 8.7 |

## 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 | 252 kgcm² |
| Weight (approx.) | 65 kg |

## Connection

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