SIEMENS

# Data sheet for SIMOTICS M-1PH8

Figure similar

**Article No. :** 1PH8137-1US10-2LC1

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** | **29.0** | **138.0** | **56.0** | **398** | **68.0** | **2,000** | **320** | **130.0** | **10,000** | **185.0** | **68** | **0.931** | **0.850** | **22.7** |
| | BLM/SLM 400V | 22.0 | 140.0 | 56.0 | 308 | 51.3 | 1,500 | 320 | 130.0 | 10,000 | 185.0 | 68 | 0.902 | 0.840 | 24.2 |
| | ALM/BLM/SLM 480V | 36.0 | 138.0 | 50.0 | 460 | 84.9 | 2,500 | 320 | 130.0 | 10,000 | 185.0 | 68 | 0.951 | 0.890 | 17.4 |
| Δ | **ALM 400V** | **27.5** | **53.0** | **56.0** | **425** | **167.5** | **5,000** | **160** | **160.0** | **10,000** | **105.0** | **87** | **0.919** | **0.830** | **22.5** |
| | BLM/SLM 400V | 22.0 | 53.0 | 55.0 | 383 | 134.0 | 4,000 | 160 | 160.0 | 10,000 | 105.0 | 87 | 0.907 | 0.760 | 27.6 |
| | ALM/BLM/SLM 480V | 33.0 | 53.0 | 55.0 | 460 | 201.0 | 6,000 | 160 | 160.0 | 10,000 | 105.0 | 87 | 0.942 | 0.870 | 20.0 |

## Mechanical data

| | |
|---|---|
| Motor type | Squirrel cage asynchronous motor |
| Shaft height | 132 |
| Cooling | Forced ventilation NDE -> DE |
| Vibration severity grade | SPECIAL/B |
| Shaft and flange accuracy | SPECIAL |
| Degree of protection | IP55 |
| Design acc. to Code I | IM B3 (IM V5, IM V6, IM B6, IM B7, IM B8) |
| Temperature monitoring | Pt1000 temperature sensor in the stator winding |
| Color | Standard (Anthracite RAL 7016) |
| Type of the bearing | Performance |
| Shaft end | Feather key with half key balancing |
| Encoder system | Incremental encoder 20 bit without commutation position (encoder IN20DQ) |

## Physical constants

| | |
|---|---|
| Thermal time constant | 30 min |
| Moment of inertia | 1,090 kgcm² |
| Weight (approx.) | 141 kg |

## Connection

| | |
|---|---|
| Type of electrical connection | Terminal box |
| Position of the connection | NDE top |
| Power connection | NDE |
| Signal connection | left |
| Terminal box designation | gk846 |

## Cooling data and sound pressure level

| | |
|---|---|
| Airflow, min. | 0.09 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 | 140 Pa |

## External fan

**Max. power consumption**

| | |
|---|---|
| 3 AC 400 V / 50 Hz (±10%) | 0.13 A |
| 3 AC 400 V / 60 Hz (±10%) | 0.16 A |
| 3 AC 480 V / 60 Hz (±10%) | 0.17 A |

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