SIEMENS

# Data sheet for SIMOTICS M-1PH8



Figure similar

**Article No. :** 1PH8165-1DG13-2BA1

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** | **44.0** | **183.0** | **85.0** | **394** | **77.4** | **2,300** | **620** | **278.0** | **6,500** | **302.0** | **122** | **0.932** | **0.860** | **31.0** |
| | BLM/SLM 400V | 41.0 | 196.0 | 88.0 | 350 | 67.4 | 2,000 | 620 | 278.0 | 6,500 | 302.0 | 122 | 0.927 | 0.870 | 32.4 |
| | ALM 480V | 50.0 | 171.0 | 81.0 | 483 | 94.1 | 2,800 | 620 | 278.0 | 6,500 | 302.0 | 122 | 0.940 | 0.870 | 28.9 |
| | BLM/SLM 480V | 50.0 | 180.0 | 85.0 | 440 | 89.0 | 2,650 | 620 | 278.0 | 6,500 | 302.0 | 122 | 0.932 | 0.870 | 28.9 |

## Mechanical data

| | |
|---|---|
| Motor type | Squirrel cage asynchronous motor |
| Shaft height | 160 |
| 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 B35 (IM V15, IM V35) |
| Temperature monitoring | Pt1000 temperature sensor in the stator winding |
| Color | Standard (Anthracite RAL 7016) |
| Type of the bearing | Standard with fixed bearing |
| 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 | 35 min |
| Moment of inertia | 2,320 kgcm² |
| Weight (approx.) | 230 kg |

## Connection

| | |
|---|---|
| Type of electrical connection | Terminal box |
| Position of the connection | NDE top |
| Power connection | right |
| Signal connection | DE |
| Terminal box designation | gk863 |

## Cooling data and sound pressure level

| | |
|---|---|
| Airflow, min. | 0.16 m³/s |
| Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB | 73 dB [1] |
| Air discharge | axial |
| Pressure drop | 200 Pa |

## External fan

**Max. power consumption**

| | |
|---|---|
| 3 AC 400 V / 50 Hz (±10%) | 0.16 A |
| 3 AC 400 V / 60 Hz (±10%) | 0.21 A |
| 3 AC 480 V / 60 Hz (±10%) | 0.21 A |

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