SIEMENS

# Data sheet for SIMOTICS M-1PH8



Figure similar

**Article No. :** 1PH8131-2FL02-2BA1

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] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **ALM 400V** | **27.7** | **95.0** | **44.0** | **415** | **93.3** | **2,800** | **220** | **117.0** | **4,500** | **105.0** | **48** | **0.949** | **0.000** | **0.0** |
| Y | BLM/SLM 400V | 25.0 | 96.0 | 44.0 | 371 | 83.3 | 2,500 | 220 | 117.0 | 4,500 | 105.0 | 48 | 0.948 | 0.000 | 0.0 |
| | ALM/BLM/SLM 480V | 29.5 | 94.0 | 43.0 | 449 | 100.0 | 3,000 | 220 | 117.0 | 4,500 | 105.0 | 48 | 0.951 | 0.000 | 0.0 |

## Mechanical data

| | |
|---|---|
| Motor type | Permanent-magnet synchronous motor |
| Shaft height | 132 |
| 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 with fixed bearing |
| Shaft end | Feather key with half key balancing |
| Encoder system | Absolut encoder 22 bit Singleturn + 12 bit Multiturn, max. encoder speed = 12000 rpm |

## Physical constants

| | |
|---|---|
| Thermal time constant | 10 min |
| Moment of inertia | 446 kgcm² |
| Weight (approx.) | 85 kg |

## Connection

| | |
|---|---|
| Type of electrical connection | Terminal box |
| Position of the connection | NDE top |
| Power connection | right |
| Signal connection | DE |
| Terminal box designation | gk833 |

## 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%) | 0.10 A |
| 3 AC 400 V / 60 Hz (±10%) | 0.12 A |
| 3 AC 480 V / 60 Hz (±10%) | 0.12 A |

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