SIEMENS

# Data sheet for SIMOTICS M-1PH8



Figure similar

**Article No. :** **1PH8101-1FG23-0BA1**

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 | $I_\mu$ [A] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Y | **ALM 400V** | **7.3** | **30.0** | **16.8** | **382** | **79.7** | **2,300** | **60** | **33.0** | **9,000** | **34.0** | **18** | **0.874** | **0.800** | **7.8** |
| | BLM/SLM 400V | 6.4 | 31.0 | 16.8 | 335 | 69.8 | 2,000 | 60 | 33.0 | 9,000 | 34.0 | 18 | 0.857 | 0.810 | 7.6 |
| | ALM 480V | 8.3 | 28.0 | 16.5 | 448 | 96.1 | 2,800 | 60 | 33.0 | 9,000 | 34.0 | 18 | 0.890 | 0.760 | 7.7 |
| | BLM/SLM 480V | 8.4 | 30.0 | 16.8 | 435 | 91.4 | 2,650 | 60 | 33.0 | 9,000 | 34.0 | 18 | 0.888 | 0.800 | 7.7 |

## Mechanical data

| | |
|---|---|
| Motor type | Squirrel cage asynchronous motor |
| Shaft height | 100 |
| Cooling | Water cooling |
| Vibration severity grade | R/A |
| Shaft and flange accuracy | R |
| Degree of protection | IP65 |
| 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 | Plain shaft |
| 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 | 138 kgcm² |
| Weight (approx.) | 51 kg |

## Connection

| | |
|---|---|
| Type of electrical connection | Terminal box |
| Position of the connection | NDE top |
| Power connection | right |
| Signal connection | DE |
| Terminal box designation | gk823 |

## Cooling data and sound pressure level

| | |
|---|---|
| Flow rate, min. | 8 l/min |
| Sound pressure level LpA(1m) motor rated load, tolerance + 3dB | 68 dB [1] |
| Pressure drop | 0.4 bar |
| NDE thread connection | 0.25 Inches |

## Cooling water specification

| | |
|---|---|
| pH value | 6 ... 9 |
| Total hardness | 1.7 mmol/l |
| Electrical conductivity | 500 µS/cm |
| Chloride ions | 40 mg/l |
| Sulfate ions | 50 mg/l |
| Nitrate ions | 50 mg/l |
| Dissolved substances | 340 mg/l |
| Maximum particle size | 100 µm |
| Antifreeze/corrosion protection | 20 ... 30 % |

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