SIEMENS

# Data sheet for SIMOTICS M-1PH8

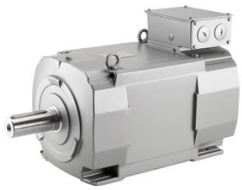
Figure similar

**Article No. :** 1PH8284-1HF20-1AA1

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** | **265.0** | **1,446.0** | **445.0** | **400** | **58.7** | **1,750** | **3,615** | **1,113.0** | **3,300** | **1,446.0** | **445** | **0.966** | **0.89** | **161.0** |
| Δ | BLM/SLM 400V | 227.0 | 1,445.0 | 445.0 | 343 | 50.4 | 1,500 | 3,613 | 1,113.0 | 3,300 | 1,445.0 | 445 | 0.964 | 0.89 | 161.0 |
| | ALM/BLM/SLM 480V | 303.0 | 1,447.0 | 445.0 | 455 | 67.0 | 2,000 | 3,617 | 1,113.0 | 3,300 | 1,447.0 | 445 | 0.967 | 0.89 | 160.0 |

## Mechanical data

| | |
|---|---|
| Motor type | Squirrel cage asynchronous motor |
| Shaft height | 280 |
| Cooling | Water cooling |
| Vibration severity grade | A |
| Shaft and flange accuracy | N |
| Degree of protection | IP55 |
| Design acc. to Code I | IM B3 (IM V6) |
| Temperature monitoring | KTY84 temperature sensor in the stator winding |
| Color | Standard (Anthracite RAL 7016) |
| Type of the bearing | Standard |
| Shaft extension | Feather key with full key balancing |
| Encoder system | Incremental encoder HTL 1024 S/R, max. encoder speed = 9000 rpm |

## Physical constants

| | |
|---|---|
| Thermal time constant | 30 min |
| Moment of inertia | 42,000 kgcm² |
| Weight (approx.) | 1,280 kg |

## Connection

| | |
|---|---|
| Type of electrical connection | Terminal box |
| Position of the connection | NDE top |
| Power connection | right |
| Signal connection | DE |
| Terminal box designation | 1XB7700-P02 |

## Cooling data and sound pressure level

| | |
|---|---|
| Flow rate, min. | 35 l/min |
| Sound pressure level LpA(1m) motor rated load, tolerance + 3dB | 72 dB [1] |
| Pressure drop | 0.6 bar |
| NDE thread connection | 0.5 Inches |

## Cooling water specification

| | |
|---|---|
| pH value | 6 ... 9 |
| Total hardness | 1.7 mmol/l |
| Electrical conductivity | 2,000 µS/cm |
| Chloride ions | 250 mg/l |
| Sulfate ions | 240 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 2 kHz and a speed range of up to 3300 rpm