SIEMENS

Figure similar

## Data sheet for SIMOTICS M-1PH8

**Article No. :** **1PH8184-2DD23-1BC1**

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** | **70.0** | **581.0** | **140.0** | **386** | **77.0** | **1,150** | **1,450** | **355.0** | **3,800** | **600.0** | **143** | **0.942** | **0.000** | **0.0** |
| | BLM/SLM 400V | 61.0 | 583.0 | 140.0 | 313 | 67.0 | 1,000 | 1,450 | 355.0 | 3,800 | 600.0 | 143 | 0.937 | 0.000 | 0.0 |
| | ALM/BLM/SLM 480V | 82.0 | 580.0 | 140.0 | 417 | 90.0 | 1,350 | 1,450 | 355.0 | 3,800 | 600.0 | 143 | 0.946 | 0.000 | 0.0 |

### Mechanical data

| | |
|---|---|
| Motor type | Permanent-magnet synchronous motor |
| Shaft height | 180 |
| Cooling | Water cooling |
| Vibration severity grade | R/A |
| Shaft and flange accuracy | R |
| Degree of protection | IP55 |
| Design acc. to Code I | IM B35 with A450 flange (IM V35) |
| Temperature monitoring | Pt1000 temperature sensor in the stator winding |
| Color | Standard (Anthracite RAL 7016) |
| Type of the bearing | Standard |
| Shaft end | Feather key with full key balancing |
| Encoder system | Incremental encoder 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm |

### Physical constants

| | |
|---|---|
| Thermal time constant | 13 min |
| Moment of inertia | 4,500 kgcm² |
| Weight (approx.) | 330 kg |

### Connection

| | |
|---|---|
| Type of electrical connection | Terminal box |
| Position of the connection | NDE top |
| Power connection | NDE |
| Signal connection | right |
| Terminal box designation | 1XB7322-P05 |

### Cooling data and sound pressure level

| | |
|---|---|
| Flow rate, min. | 15 l/min |
| Sound pressure level LpA(1m) motor rated load, tolerance + 3dB | 70 dB [1)] |
| Pressure drop | 0.6 bar |
| NDE thread connection | 0.375 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 or 4 kHz and a speed range of up to 5000 rpm