



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8184-1EL05-2AA2

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 | $\cos \phi$ | I_{μ} [A] |
|---|------------------|---------------|---------------|--------------|--------------|---------------|----------------|-------------------|------------------|--------------------|---------------|--------------|--------|-------------|------------------|
| Y | ALM 400V | 81.0 | 267.0 | 152.0 | 395 | 97.3 | 2,900 | 730 | 380.0 | 5,000 | 267.0 | 152 | 0.952 | 0.820 | 76.0 |
| | BLM/SLM 400V | 78.0 | 298.0 | 166.0 | 340 | 84.0 | 2,500 | 730 | 380.0 | 5,000 | 298.0 | 166 | 0.952 | 0.840 | 75.0 |
| | ALM/BLM/SLM 480V | 65.0 | 183.0 | 120.0 | 460 | 113.7 | 3,400 | 730 | 380.0 | 5,000 | 183.0 | 120 | 0.944 | 0.720 | 77.0 |

Mechanical data

| | |
|---------------------------|--|
| Motor type | Squirrel cage asynchronous motor |
| Shaft height | 180 |
| Cooling | Forced ventilation DE -> NDE |
| Vibration severity grade | A |
| Shaft and flange accuracy | N |
| Degree of protection | IP55 |
| Design acc. to Code I | IM V15 with A450 flange |
| Temperature monitoring | Pt1000 temperature sensor in the stator winding |
| Color | Standard (Anthracite RAL 7016) |
| Type of the bearing | Standard |
| Shaft end | Feather key with half key balancing |
| Encoder system | Absolut encoder EnDat 2048 S/R, max. encoder speed = 12000 rpm |

¹⁾ at a rated frequency of 2 kHz and a speed range of up to 5000 rpm

Physical constants

| | |
|-----------------------|-------------------------|
| Thermal time constant | 22 min |
| Moment of inertia | 4,890 kgcm ² |
| Weight (approx.) | 350 kg |

Connection

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

Cooling data and sound pressure level

| | |
|---|------------------------|
| Airflow, min. | 0.17 m ³ /s |
| Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB | 73 dB ¹⁾ |
| Air discharge | axial |
| Pressure drop | 550 Pa |

External fan

Max. power consumption

| | |
|---|---------------|
| 1 AC 200 ... 277 V (±10%) 50/60 Hz ±10% | 1.1 ... 1.3 A |
|---|---------------|