



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8131-1DF13-1BB1

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 | $\cos \phi$ | $I\mu$ [A] |
|---|--------------|---------------|---------------|--------------|--------------|---------------|----------------|-------------------|------------------|--------------------|---------------|--------------|--------|-------------|---------------|
| Y | ALM 400V | 13.0 | 71.0 | 24.0 | 416 | 59.9 | 1,750 | 148 | 50.0 | 8,000 | 96.0 | 30 | 0.914 | 0.850 | 10.3 |
| | BLM/SLM 400V | 11.0 | 70.0 | 24.0 | 360 | 51.4 | 1,500 | 148 | 50.0 | 8,000 | 96.0 | 30 | 0.899 | 0.840 | 10.4 |
| | ALM 480V | 16.5 | 72.0 | 24.0 | 500 | 75.0 | 2,200 | 148 | 50.0 | 8,000 | 96.0 | 30 | 0.920 | 0.870 | 10.0 |
| | BLM/SLM 480V | 15.0 | 72.0 | 24.0 | 460 | 68.2 | 2,000 | 148 | 50.0 | 8,000 | 96.0 | 30 | 0.931 | 0.860 | 9.2 |

Mechanical data

| | |
|---------------------------|---|
| Motor type | Squirrel cage asynchronous motor |
| Shaft height | 132 |
| Cooling | Forced ventilation NDE -> DE |
| Vibration severity grade | R/A |
| Shaft and flange accuracy | R |
| Degree of protection | IP55 |
| 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 | Feather key with full key balancing |
| Encoder system | Incremental encoder 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm |

External fan

Max. power consumption

| | |
|-----------------------------------|--------|
| 3 AC 400 V / 50 Hz ($\pm 10\%$) | 0.11 A |
| 3 AC 400 V / 60 Hz ($\pm 10\%$) | 0.13 A |
| 3 AC 480 V / 60 Hz ($\pm 10\%$) | 0.13 A |

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

Physical constants

| | |
|-----------------------|-----------------------|
| Thermal time constant | 30 min |
| Moment of inertia | 590 kgcm ² |
| Weight (approx.) | 89 kg |

Connection

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

Cooling data and sound pressure level

| | |
|---|------------------------|
| Airflow, min. | 0.09 m ³ /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 |