

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8105-1FS02-1BD1



Figure similar

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 | 10.0 | 48.0 | 23.0 | 366 | 68.9 | 2,000 | 100 | 46.0 | 9,000 | 55.0 | 25 | 0.891 | 0.800 | 10.9 |
| | BLM/SLM 400V | 7.5 | 48.0 | 23.0 | 285 | 52.1 | 1,500 | 100 | 46.0 | 9,000 | 55.0 | 25 | 0.864 | 0.790 | 11.5 |
| | ALM/BLM/SLM 480V | 12.5 | 48.0 | 23.0 | 451 | 85.5 | 2,500 | 100 | 46.0 | 9,000 | 55.0 | 25 | 0.922 | 0.800 | 10.9 |
| Δ | ALM 400V | 9.3 | 18.0 | 24.0 | 398 | 167.9 | 5,000 | 65 | 86.0 | 9,000 | 36.0 | 34 | 0.914 | 0.710 | 13.2 |
| | BLM/SLM 400V | 7.5 | 18.0 | 24.0 | 308 | 134.6 | 4,000 | 65 | 86.0 | 9,000 | 36.0 | 35 | 0.907 | 0.730 | 12.7 |
| | ALM/BLM/SLM 480V | 11.2 | 18.0 | 22.0 | 460 | 201.3 | 6,000 | 65 | 86.0 | 9,000 | 36.0 | 35 | 0.932 | 0.730 | 12.7 |

Mechanical data

| | |
|---------------------------|--|
| Motor type | Squirrel cage asynchronous motor |
| Shaft height | 100 |
| Cooling | Forced ventilation DE -> NDE |
| Vibration severity grade | R/A |
| Shaft and flange accuracy | R |
| Degree of protection | IP55 |
| Design acc. to Code I | IM B5 (IM V1, IM V3) |
| Temperature monitoring | Pt1000 temperature sensor in the stator winding |
| Color | Standard (Anthracite RAL 7016) |
| Type of the bearing | Standard with fixed bearing |
| Shaft extension | Feather key with full key balancing |
| Encoder system | Absolut encoder 22 bit Singleturn + 12 bit Multiturn, max. encoder speed = 12000 rpm |

Physical constants

| | |
|-----------------------|-----------------------|
| Thermal time constant | 20 min |
| Moment of inertia | 252 kgcm ² |
| Weight (approx.) | 65 kg |

Connection

| | |
|-------------------------------|--------------|
| Type of electrical connection | Terminal box |
| Position of the connection | NDE top |
| Power connection | DE |
| Signal connection | left |
| Terminal box designation | gk826 |

Cooling data and sound pressure level

| | |
|---|------------------------|
| Airflow, min. | 0.04 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 | 110 Pa |

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