

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8137-3DG02-0AF1



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 φ	I _μ [A]
Y	ALM 400V	29.0	120.0	56.0	400	77.9	2,300	340	152.0	4,500	176.0	73	0.929	0.860	21.9
	BLM/SLM 400V	28.0	134.0	60.0	350	68.1	2,000	340	152.0	4,500	176.0	73	0.924	0.870	21.5
	ALM/BLM/SLM 480V	30.0	108.0	52.0	460	89.4	2,650	340	152.0	4,500	176.0	73	0.941	0.830	22.4

Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	132
Cooling	Forced ventilation DE -> NDE
Vibration severity grade	A
Shaft and flange accuracy	N
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
Shaft end	Plain shaft
Encoder system	Incremental encoder 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm

Physical constants

Thermal time constant	30 min
Moment of inertia	1,231 kgcm ²
Weight (approx.)	187 kg

Connection

Type of electrical connection	Power connector
Position of the connection	Power connector, top
Power connection	left
Signal connection	DE

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

Holding brake

Holding torque	140 ... 310 Nm ²⁾
Moment of inertia	141 kgcm ²
Power supply voltage	V ± 10%
Coil current	A
Permissible brake work	15.5 kJ
Speed (Emergency Stop)	3,600 rpm
Number of emergency stops	2,000
Number of emergency stops per hour	3
Opening time	650 ms
Closing time	100 ms

External fan

Max. power consumption

3 AC 400 V / 50 Hz (±10%)	0.21 A
3 AC 400 V / 60 Hz (±10%)	0.19 A
3 AC 480 V / 60 Hz (±10%)	0.23 A

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

²⁾ Holding torque [Nm]: On motors with shaft height 100 ... 160, the holding torque can be gradually set using an adjusting ring within the value range specified (factory setting 100 % of the possible holding torque). The dynamic braking torque is approx. 70 % of the set holding torque.