SIEMENS

Data sheet for SIMOTICS M-1PH8

Figure similar

Article No. : 1PH8137-3HF13-2AA2-Z
A12+U61

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]
	ALM 400V	**25.0**	**136.0**	**56.0**	**353**	**59.6**	**1,750**	**380**	**151.0**	**4,500**	**172.0**	**68**	**0.907**	**0.840**	**23.1**
Y	BLM/SLM 400V	22.0	140.0	56.0	308	51.3	1,500	380	151.0	4,500	172.0	68	0.904	0.840	24.2
	ALM/BLM/SLM 480V	28.0	134.0	55.0	401	67.9	2,000	380	151.0	4,500	172.0	68	0.931	0.840	23.1

Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	132
Cooling	Forced ventilation NDE -> DE
Vibration severity grade	A
Shaft and flange accuracy	N
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
Shaft end	Feather key with half key balancing
Encoder system	Incremental encoder HTL 1024 S/R, max. encoder speed = 9000 rpm

Physical constants

Thermal time constant	30 min
Moment of inertia with brake	1,231 kgcm²
Weight with brake (approx.)	187 kg

Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	right
Signal connection	DE
Terminal box designation	gk833

Cooling data and sound pressure level

Airflow, min.	0.09 m³/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 kgcm²
Power supply voltage	AC 230 V ± 10%
Coil current	1.3 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%)	0.13 A
3 AC 400 V / 60 Hz (±10%)	0.16 A
3 AC 480 V / 60 Hz (±10%)	0.17 A

Special design

A12	Additional PTC thermistor chain for alarm and tripping
U61	230 V AC holding brake with microswitch

[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.