



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8083-3FM02-2AA1-Z
U60

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	4.5	13.0	13.5	327	112.6	3,300	45	36.0	5,000	21.0	17	0.875	0.740	7.3
	BLM/SLM 400V	4.1	13.0	13.6	298	102.6	3,000	45	36.0	5,000	21.0	17	0.869	0.740	7.3
	ALM/BLM/SLM 480V	4.9	13.0	14.0	355	122.6	3,600	45	36.0	5,000	21.0	17	0.881	0.740	7.3

Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	80
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	Feather key with half key balancing
Encoder system	Absolut encoder 22 bit Singleturn + 12 bit Multiturn, max. encoder speed = 12000 rpm

Physical constants

Thermal time constant	10 min
Moment of inertia with brake	73.3 kgcm ²
Weight with brake (approx.)	42 kg

Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	right
Signal connection	DE
Terminal box designation	gk803

Cooling data and sound pressure level

Airflow, min.	0.02 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	95 Pa

Holding brake

Holding torque	29 Nm
Moment of inertia	9.3 kgcm ²
Power supply voltage	AC 230 V ± 10%
Coil current	0.8 A
Permissible brake work	2.2 kJ
Speed (Emergency Stop)	4,800 rpm
Number of emergency stops	2,000
Number of emergency stops per hour	3
Opening time	150 ms
Closing time	40 ms

External fan

Max. power consumption

1 AC 230 V / 50 Hz (±10%)	0.20 A
1 AC 230 V / 60 Hz (±10%)	0.16 A
1 AC 265 V / 60 Hz (±10%)	0.19 A

Special design

U60 230 V AC holding brake

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