

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8165-3DF03-2AA1-Z
Q31+U60



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	l _μ [A]
Y	ALM 400V	41.0	224.0	76.0	400	59.1	1,750	630	206.0	4,000	304.0	95	0.934	0.88	25.8
	BLM/SLM 400V	37.0	236.0	78.0	350	50.8	1,500	630	206.0	4,000	304.0	95	0.926	0.88	27.0
	ALM/BLM/SLM 480V	45.0	215.0	75.0	440	67.5	2,000	630	206.0	4,000	304.0	95	0.936	0.89	23.6

Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	160
Cooling	Forced ventilation DE -> NDE
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 extension	Feather key with half key balancing
Encoder system	Incremental encoder 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm

Physical constants

Thermal time constant	35 min
Moment of inertia with brake	2,586 kgcm ²
Weight with brake (approx.)	296 kg

Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	right
Signal connection	DE
Terminal box designation	gk863

Cooling data and sound pressure level

Airflow, min.	0.16 m ³ /s
Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB	73 dB ¹⁾
Air discharge	axial
Pressure drop	200 Pa

Holding brake

Holding torque	280 ... 500 Nm ²⁾
Moment of inertia	266 kgcm ²
Power supply voltage	AC 230 V ± 10%
Coil current	1.4 A
Permissible brake work	24 kJ
Speed (Emergency Stop)	3,100 rpm
Number of emergency stops	2,000
Number of emergency stops per hour	3
Opening time	750 ms
Closing time	150 ms

Special design

Q31	Metal instead of adhesive rating plate
U60	230 V AC holding brake

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.