

Data sheet for SIMOTICS M-1PH8

Article No. : **1PH8163-3MB13-2AB1-Z**
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	12.0	229.0	30.0	325	17.6	500	570	70.0	4,000	239.0	30	0.819	0.90	8.9
	BLM/SLM 400V	9.5	227.0	30.0	260	14.3	400	570	70.0	4,000	239.0	30	0.828	0.91	8.1
	ALM/BLM/SLM 480V	14.5	231.0	30.0	370	21.0	600	570	70.0	4,000	239.0	30	0.851	0.90	8.1

Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	160
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	KTY84 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 sin/cos 1Vpp 2048 S/R with C- and D-Spur, max. encoder speed = 12000 rpm

Physical constants

Thermal time constant	35 min
Moment of inertia with brake	2,426 kgcm ²
Weight with brake (approx.)	262 kg

Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	left
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

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.