

Data sheet for SIMOTICS M-1PH8

Article No.: 1PH8107-3DF02-2AA1-Z

U65



Item no.: Consignment no. : Project :

Chefft order no.
Order no. :
Offer no. :
Remarks:

Engineering data

		P _N [kW]	M _N [Nm]	_N [A]	U _N [V]	f _N [Hz]	n _N [rpm]	M _{max} [Nm]	I _{max} [A]	n _{max} [rpm]	M ₀ [Nm]	l ₀ [A]	η	cos φ	Ιμ [A]
	ALM 400V	10.0	55.0	22.0	380	60.4	1,750	135	54.0	5,000	63.0	25	0.878	0.80	10.9
Υ	BLM/SLM 400V	9.0	57.0	23.5	330	52.2	1,500	135	54.0	5,000	63.0	25	0.869	0.81	10.8
	ALM/BLM/SLM 480V	11.0	53.0	21.5	428	68.6	2,000	135	54.0	5,000	63.0	25	0.901	0.79	10.8

Mechanical data					
Motor type	Squirrel cage asynchronous motor				
Shaft height	100				
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 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	20 min			
Moment of inertia with brake	337 kgcm²			
Weight with brake (approx.)	94 kg			

Connection				
Type of electrical connection	Terminal box			
Position of the connection	NDE top			
Power connection	right			
Signal connection	DE			
Terminal box designation	gk813			

Cooling data and sound pressure level						
Airflow, min.	0.04 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	110 Pa					

Holding brake				
Holding torque	60 150 Nm ²⁾			
Moment of inertia	48 kgcm²			
Power supply voltage	DC 24 V ± 10%			
Coil current	4.7 A			
Permissible brake work	7 kJ			
Speed (Emergency Stop)	4,500 rpm			
Number of emergency stops	2,000			
Number of emergency stops per hour	3			
Opening time	500 ms			
Closing time	60 ms			

Special design

24 V DC 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.