

Data sheet for SIMOTICS M-1PH8

Article No.: 1PH8087-3FF02-2AA1-Z

U65



Client order no. : Item no. : Consignment no. : Order no. : Offer no. : Project : 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	4.3	23.0	10.0	396	61.3	1,750	49	20.0	5,000	27.0	11	0.838	0.78	5.3
Υ	BLM/SLM 400V	3.7	24.0	10.0	336	53.2	1,500	49	20.0	5,000	27.0	11	0.817	0.81	4.9
	ALM/BLM/SLM 480V	4.9	23.0	10.0	435	69.9	2,000	49	20.0	5,000	27.0	11	0.864	0.80	4.9

Mechanical data					
Motor type	Squirrel cage asynchronous motor				
Shaft height	80				
Cooling	Forced ventilation DE -> NDE				
Vibration severity grade	Α				
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	Absolut encoder 22 bit Singleturn + 12 bit Multiturn, max. encoder speed = 12000 rpm				
Physical constants					
Thermal time constant	10 min				

Physical constants				
Thermal time constant	10 min			
Moment of inertia with brake	98.3 kgcm²			
Weight with brake (approx.)	49 kg			

Connection				
Type of electrical connection	Terminal box			
Position of the connection	NDE top			
Power connection	right			
Signal connection	DE			
Terminal box designation	ak803			

 $^{^{\}rm 1)}{\rm at}$ a rated frequency of 4 kHz and a speed range of up to 5000 rpm

Cooling data and sound pressure level					
Airflow, min.	0.02 m ³ /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 kgcm²			
Power supply voltage	DC 24 V ± 10%			
Coil current	4.1 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			

Special design

24 V DC holding brake