

## **Data sheet for SIMOTICS M-1PH8**

Article No.: 1PH8083-3FG12-2AA1-Z B02+U60





Item no. : Consignment no. : Project :

## **Engineering data**

		P <sub>N</sub> [kW]	M <sub>N</sub> [Nm]	I <sub>N</sub>	U <sub>N</sub> [V]	f <sub>N</sub> [Hz]	n <sub>N</sub> [rpm]	M <sub>max</sub> [Nm]	I <sub>max</sub> [A]	n <sub>max</sub> [rpm]	<b>M</b> <sub>0</sub> [Nm]	l <sub>0</sub> [A]	η	cos φ	<b>Ι</b> μ [A]
Υ	ALM 400V	4.1	17.0	11.3	332	80.0	2,300	45	24.0	5,000	21.0	12	0.852	0.78	5.7
	BLM/SLM 400V	3.7	18.0	11.6	293	70.2	2,000	45	24.0	5,000	21.0	12	0.832	0.79	5.7
	ALM/BLM/SLM 480V	4.6	17.0	11.2	376	91.6	2,650	45	24.0	5,000	21.0	12	0.862	0.78	5.7

Mechanical data				
Motor type	Squirrel cage asynchronous motor			
Shaft height	80			
Cooling	Forced ventilation NDE -> DE			
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	73.3 kgcm²			
Weight with brake (approx.)	42 kg			
Compation				

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

 $<sup>^{\</sup>rm 1)}{\rm at}$  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 <sup>3</sup> /s			
Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB	70 dB <sup>1)</sup>			
Air discharge	axial			
Pressure drop	95 Pa			

Holding brake					
Holding torque	29 Nm				
Moment of inertia	9.3 kgcm²				
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				

B02	Test certification (for ordered motor)
U60	230 V AC holding brake

Special design