



Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8286-1HC20-0BA1-Z
A72

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	I _μ [A]
Δ	ALM 400V	175.0	2,089.0	320.0	375	27.0	800	5,223	800.0	3,300	2,089.0	320	0.953	0.88	126.0
	BLM/SLM 400V	153.0	2,087.0	320.0	325	23.7	700	5,218	800.0	3,300	2,087.0	320	0.948	0.89	123.0
	ALM/BLM/SLM 480V	219.0	2,091.0	325.0	455	33.7	1,000	5,229	813.0	3,300	2,091.0	325	0.958	0.89	120.0

Mechanical data	
Motor type	Squirrel cage asynchronous motor
Shaft height	280
Cooling	Water cooling
Vibration severity grade	R/A
Shaft and flange accuracy	R
Degree of protection	IP55
Design acc. to Code I	IM B3 (IM V6)
Temperature monitoring	KTY84 temperature sensor in the stator winding
Color	Standard (Anthracite RAL 7016)
Type of the bearing	Standard
Shaft extension	Plain shaft
Encoder system	Incremental encoder HTL 1024 S/R, max. encoder speed = 9000 rpm

Physical constants	
Thermal time constant	33 min
Moment of inertia	52,000 kgcm ²
Weight (approx.)	1,490 kg

Connection	
Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	right
Signal connection	DE
Terminal box designation	1XB7700-P02

Cooling data and sound pressure level	
Flow rate, min.	35 l/min
Sound pressure level LpA(1m) motor rated load, tolerance + 3dB	72 dB ¹⁾
Pressure drop	0.6 bar
NDE thread connection	0.5 Inches

Cooling water specification	
pH value	6 ... 9
Total hardness	1.7 mmol/l
Electrical conductivity	2,000 μS/cm
Chloride ions	250 mg/l
Sulfate ions	240 mg/l
Nitrate ions	50 mg/l
Dissolved substances	340 mg/l
Maximum particle size	100 μm
Antifreeze/corrosion protection	20 ... 30 %

Special design	
A72	Two PT100 resistance thermometers to monitor roller bearing temperature (DE and NDE)

¹⁾ at a rated frequency of 2 kHz and a speed range of up to 3300 rpm