



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : **1PH8228-2MC20-2AA2-Z
A72+K23+K45+P01+Q31**

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	138.0	1,647.0	305.0	315	53.0	800	4,000	750.0	3,500	1,680.0	306	0.958	0.000	0.0
	BLM/SLM 400V	121.0	1,651.0	305.0	305	47.0	700	4,000	750.0	3,500	1,680.0	306	0.955	0.000	0.0
	ALM/BLM/SLM 480V	172.0	1,642.0	300.0	390	67.0	1,000	4,000	750.0	3,500	1,680.0	306	0.961	0.000	0.0

Mechanical data

Motor type	Permanent-magnet synchronous motor
Shaft height	225
Cooling	Water cooling
Vibration severity grade	A
Shaft and flange accuracy	N
Degree of protection	IP55
Design acc. to Code I	IM B3 (IM B6, IM B7, IM B8, IM V6)
Temperature monitoring	Pt1000 temperature sensor in the stator winding
Color	Standard (Anthracite RAL 7016)
Type of the bearing	Standard
Shaft end	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	19 min
Moment of inertia	20,200 kgcm ²
Weight (approx.)	810 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.	25 l/min
Sound pressure level L _{pA} (1m) motor rated load, tolerance + 3dB	70 dB ¹⁾
Pressure drop	0.9 bar
NDE thread connection	0.375 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)
K23	Special paint finish worldwide
K45	Anti-condensation heater 230 V
P01	Cable entry plate 3 x M63 x 1.5
Q31	Metal instead of adhesive rating plate

¹⁾ at a rated frequency of 2 kHz and a speed range of up to 4500 rpm