



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8224-1DF20-1AB1

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]
Y	ALM 400V	138.0	753.0	240.0	395	58.9	1,750	1,506	480.0	4,500	753.0	240	0.954	0.880	87.0
	BLM/SLM 400V	119.0	758.0	240.0	340	50.6	1,500	1,515	480.0	4,500	758.0	240	0.951	0.890	87.0
	ALM/BLM/SLM 480V	155.0	740.0	235.0	460	67.2	2,000	1,480	470.0	4,500	740.0	235	0.958	0.860	90.0

Mechanical data

Motor type	Squirrel cage asynchronous 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 full key balancing
Encoder system	Incremental encoder 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm

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 %

¹⁾ at a rated frequency of 2 kHz or 4 kHz and a speed range of up to 4500 rpm

Physical constants

Thermal time constant	30 min
Moment of inertia	14,520 kgcm ²
Weight (approx.)	610 kg

Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	left
Signal connection	DE
Terminal box designation	1XB7422-P06

Cooling data and sound pressure level

Flow rate, min.	20 l/min
Sound pressure level LpA(1m) motor rated load, tolerance + 3dB	70 dB ¹⁾
Pressure drop	0.6 bar
NDE thread connection	0.375 Inches