



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8166-1DG22-2QB1

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	72.0	299.0	124.0	420	77.8	2,300	600	241.0	4,000	353.0	147	0.946	0.890	35.5
	BLM/SLM 400V	64.0	306.0	125.0	376	67.8	2,000	600	241.0	4,000	353.0	147	0.937	0.880	39.3
	ALM/BLM/SLM 480V	83.0	299.0	125.0	460	89.6	2,650	600	241.0	4,000	353.0	147	0.948	0.900	35.7

Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	160
Cooling	Water cooling
Vibration severity grade	S/A
Shaft and flange accuracy	R
Degree of protection	IP65
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	Advanced Lifetime
Shaft end	Feather key with half 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	500 μS/cm
Chloride ions	40 mg/l
Sulfate ions	50 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 4 kHz and a speed range of up to 5000 rpm

Physical constants

Thermal time constant	14 min
Moment of inertia	2,320 kgcm ²
Weight (approx.)	269 kg

Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	left
Signal connection	DE
Terminal box designation	gk873

Cooling data and sound pressure level

Flow rate, min.	15 l/min
Sound pressure level L _{pA} (1m) motor rated load, tolerance + 3dB	69 dB ¹⁾
Pressure drop	0.2 bar
NDE thread connection	0.5 Inches