



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8131-1DF23-1BB1

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	17.0	93.0	30.0	425	60.6	1,750	145	46.0	8,000	101.0	31	0.897	0.890	8.2
	BLM/SLM 400V	15.0	96.0	30.0	380	52.3	1,500	145	46.0	8,000	101.0	31	0.883	0.890	9.2
	ALM 480V	20.0	87.0	29.0	500	75.9	2,200	145	46.0	8,000	101.0	31	0.910	0.900	7.2
	BLM/SLM 480V	18.5	88.0	30.0	460	68.7	2,000	145	46.0	8,000	101.0	31	0.912	0.900	7.2

Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	132
Cooling	Water cooling
Vibration severity grade	R/A
Shaft and flange accuracy	R
Degree of protection	IP65
Design acc. to Code I	IM B35 (IM V15, IM V35)
Temperature monitoring	Pt1000 temperature sensor in the stator winding
Color	Standard (Anthracite RAL 7016)
Type of the bearing	Standard with fixed bearing
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	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	12 min
Moment of inertia	590 kgcm ²
Weight (approx.)	105 kg

Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	left
Signal connection	DE
Terminal box designation	gk843

Cooling data and sound pressure level

Flow rate, min.	12 l/min
Sound pressure level LpA(1m) motor rated load, tolerance + 3dB	68 dB ¹⁾
Pressure drop	0.9 bar
NDE thread connection	0.375 Inches