



Figure similar

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8107-1HF20-1BA1

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]	$\eta$	$\cos \varphi$	$I_{\mu}$ [A]	
Y	ALM 400V	15.5	85.0	42.0	314	61.4	1,750	180	89.0	9,000	94.0	44	0.847	0.830	17.5
	BLM/SLM 400V	14.0	89.0	43.7	277	53.3	1,500	180	89.0	9,000	94.0	44	0.829	0.830	17.8
	ALM 480V	19.8	86.0	42.6	381	76.3	2,200	180	89.0	9,000	94.0	44	0.880	0.840	19.1
	BLM/SLM 480V	18.0	86.0	42.6	363	69.7	2,000	180	89.0	9,000	94.0	44	0.873	0.810	19.1

### Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	100
Cooling	Water cooling
Vibration severity grade	R/A
Shaft and flange accuracy	R
Degree of protection	IP65
Design acc. to Code I	IM B3 (IM V5, IM V6)
Temperature monitoring	KTY84 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 HTL 1024 S/R, max. encoder speed = 9000 rpm

### Cooling water specification

pH value	6 ... 9
Total hardness	1.7 mmol/l
Electrical conductivity	500 $\mu$ S/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 $\mu$ m
Antifreeze/corrosion protection	20 ... 30 %

<sup>1)</sup> at a rated frequency of 4 kHz and a speed range of up to 5000 rpm

### Physical constants

Thermal time constant	10 min
Moment of inertia	289 kgcm <sup>2</sup>
Weight (approx.)	83 kg

### Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	right
Signal connection	DE
Terminal box designation	gk823

### Cooling data and sound pressure level

Flow rate, min.	8 l/min
Sound pressure level LpA(1m) motor rated load, tolerance + 3dB	68 dB <sup>1)</sup>
Pressure drop	0.4 bar
NDE thread connection	0.25 Inches