



Figure similar

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8138-2FG23-1BA1

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]	$\eta$	$\cos \phi$	$I_{\mu}$ [A]
Y	ALM 400V	67.7	281.0	130.0	415	76.7	2,300	460	235.0	4,500	290.0	133	0.961	0.000	0.0
	BLM/SLM 400V	59.3	283.0	131.0	374	66.7	2,000	460	235.0	4,500	290.0	133	0.960	0.000	0.0
	ALM/BLM/SLM 480V	76.3	275.0	130.0	449	88.3	2,650	460	235.0	4,500	290.0	133	0.962	0.000	0.0

### Mechanical data

Motor type	Permanent-magnet synchronous 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	Absolut encoder 22 bit Singleturn + 12 bit Multiturn, max. encoder speed = 12000 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	5 min
Moment of inertia	885 kgcm <sup>2</sup>
Weight (approx.)	156 kg

### Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	right
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 <sup>1)</sup>
Pressure drop	0.9 bar
NDE thread connection	0.375 Inches