

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8186-2ML20-0BA1



Figure similar

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	178.0	586.0	340.0	345	193.0	2,900	1,950	1,125.0	3,800	720.0	405	0.955	0.000	0.0
	BLM/SLM 400V	168.0	642.0	370.0	305	167.0	2,500	1,950	1,125.0	3,800	720.0	405	0.957	0.000	0.0
	ALM/BLM/SLM 480V	183.0	546.0	315.0	375	213.0	3,200	1,950	1,125.0	3,800	720.0	405	0.953	0.000	0.0

### Mechanical data

Motor type	Permanent-magnet synchronous motor
Shaft height	180
Cooling	Water cooling
Vibration severity grade	R/A
Shaft and flange accuracy	R
Degree of protection	IP55
Design acc. to Code I	IM B3 (IM B6, IM B7, IM B8, IM V6)
Temperature monitoring	KTY84 temperature sensor in the stator winding
Color	Standard (Anthracite RAL 7016)
Type of the bearing	Standard
Shaft end	Plain shaft
Encoder system	Incremental encoder sin/cos 1Vpp 2048 S/R with C- and D-Spur, max. encoder speed = 12000 rpm

### Physical constants

Thermal time constant	14 min
Moment of inertia	6,000 kgcm <sup>2</sup>
Weight (approx.)	400 kg

### Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	right
Signal connection	DE
Terminal box designation	1XB7700-P02

### Cooling data and sound pressure level

Flow rate, min.	15 l/min
Sound pressure level LpA(1m) motor rated load, tolerance + 3dB	70 dB <sup>1)</sup>
Pressure drop	0.7 bar
NDE thread connection	0.375 Inches

### Cooling water specification

pH value	6 ... 9
Total hardness	1.7 mmol/l
Electrical conductivity	2,000 $\mu$ S/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 $\mu$ m
Antifreeze/corrosion protection	20 ... 30 %

<sup>1)</sup> at a rated frequency of 2 kHz or 4 kHz and a speed range of up to 5000 rpm