



Figure similar

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8224-1DL23-1CA1

Client order no. :  
Order no. :  
Offer no. :  
Remarks :

Item no. :  
Consignment no. :  
Project :

### Engineering data

		P <sub>N</sub> [kW]	M <sub>N</sub> [Nm]	I <sub>N</sub> [A]	U <sub>N</sub> [V]	f <sub>N</sub> [Hz]	n <sub>N</sub> [rpm]	M <sub>max</sub> [Nm]	I <sub>max</sub> [A]	n <sub>max</sub> [rpm]	M <sub>0</sub> [Nm]	I <sub>0</sub> [A]	η	cos φ	I <sub>μ</sub> [A]
Y	ALM 400V	164.0	540.0	285.0	395	97.1	2,900	1,080	570.0	4,500	540.0	285	0.961	0.880	114.0
	BLM/SLM 400V	153.0	584.0	310.0	340	83.8	2,500	1,169	620.0	4,500	584.0	310	0.961	0.870	113.0
	ALM/BLM/SLM 480V	164.0	461.0	255.0	460	114.0	3,400	921	510.0	4,500	461.0	255	0.959	0.840	113.0

### Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	225
Cooling	Water cooling
Vibration severity grade	S/A
Shaft and flange accuracy	R
Degree of protection	IP55
Design acc. to Code I	IM B35 with A550 flange (IM V35)
Temperature monitoring	Pt1000 temperature sensor in the stator winding
Color	Standard (Anthracite RAL 7016)
Type of the bearing	Standard
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	2,000 μS/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 μm
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 4500 rpm

### Physical constants

Thermal time constant	30 min
Moment of inertia	14,520 kgcm <sup>2</sup>
Weight (approx.)	610 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.	20 l/min
Sound pressure level LpA(1m) motor rated load, tolerance + 3dB	70 dB <sup>1)</sup>
Pressure drop	0.6 bar
NDE thread connection	0.375 Inches