

## Data sheet for SIMOTICS M-1PH8

Article No. : **1PH8186-1MF23-2AC2-Z**  
A12+K23+L00



Figure similar

Client order no. :

Item no. :

Order no. :

Consignment no. :

Offer no. :

Project :

Remarks :

### 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	111.0	606.0	200.0	385	59.3	1,750	1,211	400.0	5,000.0	606.0	200	0.939	0.89	85.0
	BLM/SLM 400V	93.0	592.0	198.0	330	51.0	1,500	1,184	396.0	5,000.0	592.0	198	0.935	0.88	85.0
	ALM/BLM/SLM 480V	126.0	602.0	200.0	445	67.3	2,000	1,203	400.0	5,000.0	602.0	200	0.943	0.87	89.0

### Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	180
Cooling	Water cooling
Vibration severity grade	A
Shaft and flange accuracy	N
Degree of protection	IP55
Design acc. to Code I	IM B35 with A450 flange (IM V35)
Temperature monitoring	Pt1000 temperature sensor in the stator winding
Color	Standard (Anthracite RAL 7016)
Type of the bearing	Standard
Shaft extension	Feather key with half key balancing
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	28 min
Moment of inertia	0.652 kgm <sup>2</sup>
Weight (approx.)	410 kg

### Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	NDE
Signal connection	right
Terminal box designation	1XB7422-P06

### 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 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 %

### Special design

- A12 Additional PTC thermistor chain for alarm and tripping
- K23 Special paint finish worldwide
- L00 Terminal box replaced by the next larger terminal box

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