

## Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8131-2DF12-1BC1



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	18.0	98.0	29.0	415	58.3	1,750	220	74.0	4,500	105.0	30	0.947	0.000	0.0
	BLM/SLM 400V	15.7	100.0	29.0	388	50.0	1,500	220	74.0	4,500	105.0	30	0.944	0.000	0.0
	ALM/BLM/SLM 480V	19.9	95.0	29.0	449	66.7	2,000	220	74.0	4,500	105.0	30	0.948	0.000	0.0

### Mechanical data

Motor type	Permanent-magnet synchronous motor
Shaft height	132
Cooling	Forced ventilation NDE -> DE
Vibration severity grade	R/A
Shaft and flange accuracy	R
Degree of protection	IP55
Design acc. to Code I	IM B5 (IM V1, IM V3)
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	Incremental encoder 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm

### Physical constants

Thermal time constant	10 min
Moment of inertia	446 kgcm <sup>2</sup>
Weight (approx.)	85 kg

### Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	NDE
Signal connection	left
Terminal box designation	gk833

### Cooling data and sound pressure level

Airflow, min.	0.09 m <sup>3</sup> /s
Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB	70 dB <sup>1)</sup>
Air discharge	axial
Pressure drop	140 Pa

### External fan

#### Max. power consumption

3 AC 400 V / 50 Hz (±10%)	0.13 A
3 AC 400 V / 60 Hz (±10%)	0.16 A
3 AC 480 V / 60 Hz (±10%)	0.17 A

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