



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8131-1DF02-2BA1-Z
V90

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]	η	cos φ	I _μ [A]
Y	ALM 400V	13.0	71.0	24.0	416	59.9	1,750	148	50.0	8,000	96.0	30	0.914	0.850	10.3
	BLM/SLM 400V	11.0	70.0	24.0	360	51.4	1,500	148	50.0	8,000	96.0	30	0.899	0.840	10.4
	ALM 480V	16.5	72.0	24.0	500	75.0	2,200	148	50.0	8,000	96.0	30	0.920	0.870	10.0
	BLM/SLM 480V	15.0	72.0	24.0	460	68.2	2,000	148	50.0	8,000	96.0	30	0.931	0.860	9.2

Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	132
Cooling	Forced ventilation DE -> NDE
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 half key balancing
Encoder system	Incremental encoder 22 bit with commutation position 11 bit, max. encoder speed = 12000 rpm

Physical constants

Thermal time constant	30 min
Moment of inertia	590 kgcm ²
Weight (approx.)	89 kg

Connection

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

Cooling data and sound pressure level

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

External fan

Max. power consumption

3 AC 400 V / 50 Hz (±10%)	0.10 A
3 AC 400 V / 60 Hz (±10%)	0.12 A
3 AC 480 V / 60 Hz (±10%)	0.12 A

Special design

V90 1PH7-compatible shaft end 42 mm x 110 mm

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