



Figure similar

Data sheet for SIMOTICS M-1PH8

Article No. : 1PH8133-3DF02-2AA1-Z
U65+V90+Y84

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	l _μ [A]
Y	ALM 400V	17.5	96.0	34.0	392	59.8	1,750	240	85.0	4,500	126.0	42	0.913	0.850	13.6
	BLM/SLM 400V	15.0	96.0	34.0	342	51.3	1,500	240	85.0	4,500	126.0	42	0.899	0.850	14.2
	ALM 480V	22.0	96.0	34.0	480	74.8	2,200	240	85.0	4,500	126.0	42	0.930	0.870	13.5
	BLM/SLM 480V	20.0	96.0	34.0	445	68.2	2,000	240	85.0	4,500	126.0	42	0.933	0.850	13.5

Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	132
Cooling	Forced ventilation DE -> NDE
Vibration severity grade	A
Shaft and flange accuracy	N
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
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 with brake	901 kgcm ²
Weight with brake (approx.)	152 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

Holding brake

Holding torque	140 ... 310 Nm ²⁾
Moment of inertia	141 kgcm ²
Power supply voltage	DC 24 V ± 10%
Coil current	6.3 A
Permissible brake work	15.5 kJ
Speed (Emergency Stop)	3,600 rpm
Number of emergency stops	2,000
Number of emergency stops per hour	3
Opening time	650 ms
Closing time	100 ms

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

U65	24 V DC holding brake
V90	1PH7-compatible shaft end 42 mm x 110 mm
Y84	Customer specifications on rating plate:

¹⁾ at a rated frequency of 4 kHz and a speed range of up to 5000 rpm
²⁾ Holding torque [Nm]: On motors with shaft height 100 ... 160, the holding torque can be gradually set using an adjusting ring within the value range specified (factory setting 100 % of the possible holding torque). The dynamic braking torque is approx. 70 % of the set holding torque.