

Data sheet for SIMOTICS M-1PH8

Article No. : **1PH8131-4FL02-0AC1-Z**
U65



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]	η	cos φ	I _μ [A]
Y	ALM 400V	27.7	95.0	44.0	415	93.3	2,800	220	117.0	4,500	105.0	48	0.949	0.000	0.0
	BLM/SLM 400V	25.0	96.0	44.0	371	83.3	2,500	220	117.0	4,500	105.0	48	0.948	0.000	0.0
	ALM/BLM/SLM 480V	29.5	94.0	43.0	449	100.0	3,000	220	117.0	4,500	105.0	48	0.951	0.000	0.0

Mechanical data

Motor type	Permanent-magnet synchronous 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	Plain shaft
Encoder system	Absolut encoder 22 bit Singleturn + 12 bit Multiturn, max. encoder speed = 12000 rpm

Physical constants

Thermal time constant	10 min
Moment of inertia with brake	587 kgcm ²
Weight with brake (approx.)	131 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 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

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.