

Data sheet for SIMOTICS M-1PH8

Article No. : **1PH8131-3MF13-2AB1-Z**
U60+V90



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	l _μ [A]
Y	ALM 400V	13.0	71.0	24.0	416	59.8	1,750	140	48.0	4,500	96.0	30	0.914	0.84	10.3
	BLM/SLM 400V	11.0	70.0	24.0	360	51.4	1,500	140	48.0	4,500	96.0	30	0.899	0.84	10.4
	ALM/BLM/SLM 480V	15.0	72.0	24.0	460	68.2	2,000	140	48.0	4,500	96.0	30	0.931	0.86	9.2

Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	132
Cooling	Forced ventilation NDE -> DE
Vibration severity grade	A
Shaft and flange accuracy	N
Degree of protection	IP55
Design acc. to Code I	IM B35 (IM V15, IM V35)
Temperature monitoring	KTY84 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	30 min
Moment of inertia with brake	731 kgcm ²
Weight with brake (approx.)	135 kg

Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	left
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	AC 230 V ± 10%
Coil current	1.3 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

Special design

U60	230 V AC holding brake
V90	1PH7-compatible shaft extension 42 mm x 110 mm

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.