

## Data sheet for SIMOTICS M-1PH8

Article No. : **1PH8165-3HF13-2PC1-Z**  
G14+L74+U60



Figure similar

Client order no. :

Item no. :

Order no. :

Consignment no. :

Offer no. :

Project :

Remarks :

### Engineering data

		P <sub>N</sub> [kW]	M <sub>N</sub> [Nm]	I <sub>N</sub> [A]	U <sub>N</sub> [V]	f <sub>N</sub> [Hz]	n <sub>N</sub> [rpm]	M <sub>max</sub> [Nm]	I <sub>max</sub> [A]	n <sub>max</sub> [rpm]	M <sub>0</sub> [Nm]	I <sub>0</sub> [A]	η	cos φ	I <sub>μ</sub> [A]
Y	ALM 400V	41.0	224.0	76.0	400	59.1	1,750	630	206.0	4,000.0	304.0	95	0.934	0.88	25.8
	BLM/SLM 400V	37.0	236.0	78.0	350	50.8	1,500	630	206.0	4,000.0	304.0	95	0.926	0.88	27.0
	ALM/BLM/SLM 480V	45.0	215.0	75.0	440	67.5	2,000	630	206.0	4,000.0	304.0	95	0.936	0.89	23.6

### Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	160
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	Advanced Lifetime
Shaft extension	Feather key with half key balancing
Encoder system	Incremental encoder HTL 1024 S/R, max. encoder speed = 9000 rpm

### Physical constants

Thermal time constant	35 min
Moment of inertia with brake	0.2586 kgm <sup>2</sup>
Weight with brake (approx.)	296 kg

### Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	NDE
Signal connection	left
Terminal box designation	gk863

### Cooling data and sound pressure level

Airflow, min.	0.16 m <sup>3</sup> /s
Sound pressure level L <sub>pA</sub> (1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB	73 dB <sup>1)</sup>
Air discharge	axial
Pressure drop	200 Pa

### Holding brake

Holding torque	280 ... 500 Nm <sup>2)</sup>
Moment of inertia	0.0266 kgm <sup>2</sup>
Power supply voltage	AC 230 V ± 10%
Coil current	1.4 A
Permissible brake work	24 kJ
Speed (Emergency Stop)	3,100 rpm
Number of emergency stops	2,000
Number of emergency stops per hour	3
Opening time	750 ms
Closing time	150 ms

### Special design

G14	with air filter
L74	Fan design in IP65 degree of protection
U60	230 V AC holding brake

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

<sup>2)</sup> 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.