



Figure similar

## Data sheet for SIMOTICS M-1PH8

Article No. : **1PH8224-3DC10-2AA1-Z**  
**Q31+U63**

Client order no. :  
 Order no. :  
 Offer no. :  
 Remarks :

Item no. :  
 Consignment no. :  
 Project :

### Engineering data

		<b>P<sub>N</sub></b> [kW]	<b>M<sub>N</sub></b> [Nm]	<b>I<sub>N</sub></b> [A]	<b>U<sub>N</sub></b> [V]	<b>f<sub>N</sub></b> [Hz]	<b>n<sub>N</sub></b> [rpm]	<b>M<sub>max</sub></b> [Nm]	<b>I<sub>max</sub></b> [A]	<b>n<sub>max</sub></b> [rpm]	<b>M<sub>0</sub></b> [Nm]	<b>I<sub>0</sub></b> [A]	<b>η</b>	<b>cos φ</b>	<b>I<sub>μ</sub></b> [A]
Y	<b>ALM 400V</b>	57.0	681.0	126.0	350	27.1	800	1,760	285.0	3,100	681.0	126	0.934	0.800	67.0
	BLM/SLM 400V	55.0	750.0	136.0	310	23.8	700	1,760	285.0	3,100	750.0	136	0.925	0.820	67.0
	ALM/BLM/SLM 480V	71.0	678.0	126.0	425	33.8	1,000	1,760	185.0	3,100	678.0	126	0.943	0.810	64.0

### Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	225
Cooling	Forced ventilation NDE -> DE
Vibration severity grade	A
Shaft and flange accuracy	N
Degree of protection	IP55
Design acc. to Code I	IM B3 (IM B6, IM B7, IM B8)
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	49 min
Moment of inertia with brake	15,310 kgcm <sup>2</sup>
Weight with brake (approx.)	698 kg

### Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	right
Signal connection	DE
Terminal box designation	1XB7322-P05

### Cooling data and sound pressure level

Airflow, min.	0.31 m <sup>3</sup> /s
Sound pressure level LpA(1m) motor + external fan operation 50 HZ rated load, tolerance + 3dB	73 dB <sup>1)</sup>
Air discharge	axial
Pressure drop	650 Pa

### Holding brake

Holding torque	1,600 Nm
Moment of inertia	510 kgcm <sup>2</sup>
Power supply voltage	AC 230 V ± 10%
Coil current	2.7 A
Permissible brake work	210 kJ
Speed (Emergency Stop)	2,800 rpm
Number of emergency stops	1,200
Number of emergency stops per hour	3
Opening time	300 ms
Closing time	100 ms

### External fan

#### Max. power consumption

1 AC 200 ... 277 V (±10%) 50/60 Hz	2.0 ... 2.3 A
±10%	

### Special design

Q31	Metal instead of adhesive rating plate
U63	Holding brake 230V with microswitch and manual relieve lever

<sup>1)</sup> at a rated frequency of 2 kHz and a speed range of up to 3500 rpm