SIEMENS

Data sheet for SIMOTICS M-1PH8

Figure similar

Article No. : **1PH8284-1FC20-0BD1**

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]
	ALM 400V	**141.0**	**1,683.0**	**260.0**	**375**	**27.0**	**800**	**4,208**	**650.0**	**3,300**	**1,683.0**	**260**	**0.950**	**0.880**	**108.0**
Δ	BLM/SLM 400V	123.0	1,678.0	260.0	330	23.7	700	4,195	650.0	3,300	1,678.0	260	0.945	0.870	108.0
	ALM/BLM/SLM 480V	176.0	1,681.0	265.0	455	33.7	1,000	4,202	663.0	3,300	1,681.0	265	0.956	0.880	102.0

Mechanical data

Motor type	Squirrel cage asynchronous motor
Shaft height	280
Cooling	Water cooling
Vibration severity grade	R/A
Shaft and flange accuracy	R
Degree of protection	IP55
Design acc. to Code I	IM B3 (IM V6)
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	30 min
Moment of inertia	42,000 kgcm²
Weight (approx.)	1,280 kg

Connection

Type of electrical connection	Terminal box
Position of the connection	NDE top
Power connection	DE
Signal connection	right
Terminal box designation	1XB7700-P02

Cooling data and sound pressure level

Flow rate, min.	35 l/min
Sound pressure level LpA(1m) motor rated load, tolerance + 3dB	72 dB [1]
Pressure drop	0.6 bar
NDE thread connection	0.5 Inches

Cooling water specification

pH value	6 ... 9
Total hardness	1.7 mmol/l
Electrical conductivity	2,000 µS/cm
Chloride ions	250 mg/l
Sulfate ions	240 mg/l
Nitrate ions	50 mg/l
Dissolved substances	340 mg/l
Maximum particle size	100 µm
Antifreeze/corrosion protection	20 ... 30 %

[1] at a rated frequency of 2 kHz and a speed range of up to 3300 rpm