

Data Sheet

Itemnumber.....: 5541800100



A = 279	AC = 354	BB = 311	DB = M16	EG = 40	GD = 9	HB = 237	L = 686	TL = 162
AA = 70	AD = 292	C = 121	E = 110	F = 14	H = 180	HD = 472	LB = 576	
AB = 349	B = 241	D = 48	EB = 100	G = 42,50	HA = 22	K = 14,50	TB = 218	

Version

Type.....: HMC3 180M-4
Design.....: Induction motor
Standard series.....: IEC 60034
Phase / Voltage range.....: 3~ / Low

Electrical design

Efficiency.....: IE3
Pole.....: 4
Power at 50 Hz (kW).....: 18,5
Hz.....: 50
Voltage.....: 400VD/690VY
Winding voltage.....: 400VD/690VY 50 Hz
Power output (kW).....: 18,5
Duty.....: S1
Insulation class.....: F
Temperature rise.....: B

Mechanical design

Frame size.....: 180
Mounting.....: B3
Rain cap.....: No
Protection class.....: IP55
Cooling method.....: IC411/TEFC
External grounding.....: Yes
Drain hole.....: Yes
Frame material.....: Cast Iron
Material approval.....: None
Shaft.....: IEC standard
Key.....: Closed key
Balancing.....: Half key balancing
Vibration class.....: Grade-A
Weight (kg).....: 182

Environment condition

Ambient temp. min. (°C)....: -20
Ambient temp. max. (°C)....: 40
Altitude (mtr up to).....: 1000

Bearing

DE Bearing.....: 6311-ZZ/C3
NDE Bearing.....: 6311-ZZ/C3
Fixed bearing.....: DE

Terminal box

Tbox position.....: Top
Cable entry direction.....: Right (from DE)
Cable entry
Main.....: 2 x M40x1,5
Plastic blindcaps
Accessory.....: 2 x M20x1,5
Plastic blindcaps
Terminal board thread.....: 6-M6

Motor protection

Thermal protection main....: PTC 3x 155 dgr
Thermal protection second..: None
Space heater.....: None
Temperature detector.....: No
SPM.....: No
IR wire.....: No
Tropical insulation.....: No

Explosion protection

According to.....: None
Type of protection.....: None

General

Direction of rotation.....: CW
Painting.....: RAL 9005
Nameplate.....: Multivoltage
Special packing.....: No
Special requirements.....: No

Test values

Rotor inertia (kgm²).....: 0,19
Noise level (dB(A)).....: 73
No load current (A).....: 12,2
Winding resist. (ohm).....: 0,47
Starting time (sec.).....: 0,09
Temp. rise winding (K).....: 55
Temp. rise surface (K).....: 37

Rated power (kW)	18,5	18,0	22,2	21,6
Frequency (Hz)	50	50	60	60
Voltage (V)	400 690	380 660	480 830	440
Connection	D Y	D Y	D Y	D
Full load current (A)	32,5 19,0	33,5 19,6	32,5 19,0	33,5
Speed (rpm)	1470	1470	1760	1760
Power factor cos(phi)	0,88	0,89	0,88	0,89
Efficiency, 100/75/50 (%)	92,6/ 93,2 /91,8	92,6/ 93,2 /91,8	92,6/ 93,2 /91,8	92,1/ 92,7 /91,2
Ist/In	8,15	7,15	8,15	7,50
Full load torque (Nm)	120	116	120	116
Tst/Tn	2,65	2,48	2,65	2,30
Tmax/Tn	3,45	3,20	3,45	3,00
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45