

Data Sheet

Itemnumber....: 5521120159



A = 190	AC = 219	BB = 180	DB = M10	EG = 28	GD = 7	HB = 145	L = 390	TL = 120
AA = 45	AD = 168	C = 70	E = 60	F = 8	H = 112	HD = 280	LB = 330	
AB = 222	B = 140	D = 28	EB = 50	G = 24	HA = 13	K = 12	TB = 120	

Version

Type.....: HMA3 112M-2
Design.....: Induction motor
Standard series.....: IEC 60034
Phase / Voltage range.....: 3~ / Low

Electrical design

Efficiency.....: IE3
Pole.....: 2
Power at 50 Hz (kW).....: 4,00
Hz.....: 50
Voltage.....: 230VD/400VY
Winding voltage.....: 230VD/400VY 50 Hz
Power output (kW).....: 4,00
Duty.....: S1
Insulation class.....: F
Temperature rise.....: B

Mechanical design

Frame size.....: 112
Mounting.....: B3
Rain cap.....: No
Protection class.....: IP55
Cooling method.....: IC411/TEFC
External grounding.....: Yes
Drain hole.....: Yes
Frame material.....: Aluminium
Material approval.....: None
Shaft.....: IEC standard
Key.....: Closed key
Balancing.....: Half key balancing
Vibration class.....: Grade-A
Weight (kg).....: 34,1

Environment condition

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

Bearing

DE Bearing.....: 6306-ZZ/C3
NDE Bearing.....: 6306-ZZ/C3
Fixed bearing.....: DE

Terminal box

Tbox position.....: Top
Cable entry direction.....: Right (from DE)
Cable entry
Main.....: 2 x M20x1,5
Plastic blindcaps
Accessory.....: 1 x M20x1,5
Plastic blindcap
Terminal board thread.....: 6-M5

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).....: 0,0070
Noise level (dB(A)).....: 67
No load current (A).....: 2,12
Winding resist. (ohm).....: 0,97
Starting time (sec.).....: 0,07
Temp. rise winding (K).....: 55
Temp. rise surface (K).....: 33

Rated power (kW)	4,00	3,90	4,80	4,65
Frequency (Hz)	50	50	60	60
Voltage (V)	230 400	220 380	280 480	440
Connection	D Y	D Y	D Y	Y
Full load current (A)	12,4 7,15	12,8 7,35	12,4 7,15	7,35
Speed (rpm)	2910	2910	3500	3500
Power factor cos(phi)	0,92	0,92	0,92	0,92
Efficiency, 100/75/50 (%)	88,1/ 88,5 /87,5	88,1/ 88,5 /87,5	88,1/ 88,5 /87,5	87,3/ 87,7 /86,7
Ist/In	8,70	7,65	8,70	8,00
Full load torque (Nm)	13,2	12,8	13,2	12,8
Tst/Tn	2,60	2,42	2,60	2,26
Tmax/Tn	3,00	2,80	3,00	2,60
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45