

# Data Sheet

Itemnumber.....: 5542801100



A = 457	AC = 546	BB = 536	DB = M20	EG = 56	GD = 12	HB = 361	L = 1030	TL = 230
AA = 85	AD = 403	C = 190	E = 140	F = 20	H = 280	HD = 683	LB = 890	
AB = 542	B = 419	D = 75	EB = 130	G = 67,50	HA = 35	K = 24	TB = 305	

## Version

Type.....: HMC3 280M-4  
Design.....: Induction motor  
Standard series.....: IEC 60034  
Phase / Voltage range.....: 3~ / Low

## Electrical design

Efficiency.....: IE3  
Pole.....: 4  
Power at 50 Hz (kW).....: 90,0  
Hz.....: 50  
Voltage.....: 400VD/690VY  
Winding voltage.....: 400VD/690VY 50 Hz  
Power output (kW).....: 90,0  
Duty.....: S1  
Insulation class.....: F  
Temperature rise.....: B

## Mechanical design

Frame size.....: 280  
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).....: 657

## Environment condition

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

## Bearing

DE Bearing.....: 6317/C3  
NDE Bearing.....: 6314/C3  
Fixed bearing.....: DE

## Terminal box

Tbox position.....: Top  
Cable entry direction.....: Right (from DE)  
Cable entry  
Main.....: 2 x M63x1,5  
Plastic blindcaps  
Accessory.....: 2 x M20x1,5  
Plastic blindcaps  
Terminal board thread.....: 6-M10

## 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).....: 2,11  
Noise level (dB(A)).....: 78  
No load current (A).....: 43,0  
Winding resist. (ohm).....: 0,047  
Starting time (sec.).....: 0,26  
Temp. rise winding (K).....: 60  
Temp. rise surface (K).....: 40

Rated power (kW)	90,0	87,5	108	104
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)	150 87,5	156 90,0	150 87,5	156
Speed (rpm)	1490	1490	1790	1790
Power factor cos(phi)	0,90	0,91	0,90	0,91
Efficiency, 100/75/50 (%)	95,2/ 95,5 /94,5	95,2/ 95,5 /94,5	95,2/ 95,5 /94,5	94,9/ 95,2 /94,1
Ist/In	8,00	7,00	8,00	7,35
Full load torque (Nm)	580	560	580	560
Tst/Tn	2,55	2,38	2,55	2,20
Tmax/Tn	2,80	2,60	2,80	2,42
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45