

# Data Sheet

Itemnumber..... 3222801109



A = 457	AC = 546	BB = 536	DB = M20	EG = 56	GD = 11	HB = 362	L = 1016	TL = 230
AA = 85	AD = 403	C = 190	E = 140	F = 18	H = 280	HD = 683	LB = 876	
AB = 542	B = 419	D = 65	EB = 110	G = 58	HA = 35	K = 24	TB = 305	

## Version

Type..... HMC2 280M-2  
Design..... Induction motor  
Standard series..... IEC 60034  
Phase / Voltage range..... 3~ / Low

## Electrical design

Efficiency..... IE2  
Pole..... 2  
Power at 50 Hz (kW)..... 90,0  
Hz..... 60 (60 Hz output)  
Voltage..... 440VD  
Winding voltage..... 400VD/690VY 50 Hz  
Power output (kW)..... 104  
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)..... 582

## Environment condition

Ambient temp. min. (°C)..... -20  
Ambient temp. max. (°C)..... 45  
Altitude (mtr up to)..... 1000

## Bearing

DE Bearing..... 6314/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  
Ø37-44mm metal  
Accessory..... 2 x M20x1,5  
Metal blindcaps  
Terminal board thread..... 6-M10

## Motor protection

Thermal protection main..... PTC 3x 155 dgr  
Thermal protection second.. None  
Space heater..... 1x 230V 100W  
Temperature detector..... No  
SPM..... No  
IR wire..... No  
Tropical insulation..... Yes

## Explosion protection

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

## General

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

## Test values

Rotor inertia (kgm²)..... 0,83  
Noise level (dB(A))..... 91  
No load current (A)..... 41,0  
Winding resist. (ohm)..... 0,054  
Starting time (sec.)..... 0,35  
Temp. rise winding (K)..... 64  
Temp. rise surface (K)..... 55

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 87,0	154 89,5	150 87,0	158
Speed (rpm)	2980	2980	3560	3560
Power factor cos(phi)	0,92	0,92	0,92	0,92
Efficiency, 100/75/50 (%)	94,1/ 94,0 /92,9	94,1/ 94,0 /92,9	94,1/ 94,0 /92,9	93,8/ 93,6 /92,5
Ist/In	9,55	8,40	9,55	8,80
Full load torque (Nm)	290	280	290	280
Tst/Tn	2,60	2,40	2,60	2,24
Tmax/Tn	3,60	3,35	3,60	3,10
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45