

# Data Sheet

Itemnumber..... 5563151102



A = 508	AC = 618	BB = 680	DB = M20	EG = 56	GD = 14	HB = 430	L = 1333	TL = 299
AA = 120	AD = 546	C = 216	E = 170	F = 22	H = 315	HD = 861	LB = 1163	
AB = 628	B = 457	D = 80	EB = 160	G = 71	HA = 45	K = 28	TB = 420	

## Version

Type..... HMC3 315M-6  
Design..... Induction motor  
Standard series..... IEC 60034  
Phase / Voltage range..... 3~ / Low

## Electrical design

Efficiency..... IE3  
Pole..... 6  
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..... 315  
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)..... 970

## Environment condition

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

## Bearing

DE Bearing..... 6319/C3  
NDE Bearing..... 6319/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-M16

## 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)..... 4,62  
Noise level (dB(A))..... 76  
No load current (A)..... 40,5  
Winding resist. (ohm)..... 0,048  
Starting time (sec.)..... 0,36  
Temp. rise winding (K)..... 58  
Temp. rise surface (K)..... 49

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)	156 90,5	160 93,0	156 90,5	160
Speed (rpm)	990	990	1180	1180
Power factor cos(phi)	0,88	0,89	0,88	0,89
Efficiency, 100/75/50 (%)	94,9/ 95,5 /94,8	94,9/ 95,5 /94,8	94,9/ 95,5 /94,8	94,5/ 95,2 /94,4
Ist/In	5,70	5,00	5,70	5,25
Full load torque (Nm)	870	845	870	845
Tst/Tn	1,86	1,74	1,86	1,62
Tmax/Tn	2,20	2,04	2,20	1,90
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45