

# Data Sheet

Itemnumber.....: 5543150100



A = 508	AC = 618	BB = 570	DB = M20	EG = 56	GD = 14	HB = 430	L = 1223	TL = 299
AA = 120	AD = 547	C = 216	E = 170	F = 22	H = 315	HD = 862	LB = 1053	
AB = 628	B = 406	D = 80	EB = 160	G = 71	HA = 45	K = 28	TB = 420	

## Version

Type.....: HMC3 315S-4  
Design.....: Induction motor  
Standard series.....: IEC 60034  
Phase / Voltage range.....: 3~ / Low

## Electrical design

Efficiency.....: IE3  
Pole.....: 4  
Power at 50 Hz (kW).....: 110  
Hz.....: 50  
Voltage.....: 400VD/690VY  
Winding voltage.....: 400VD/690VY 50 Hz  
Power output (kW).....: 110  
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).....: 876

## Environment condition

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

## Bearing

DE Bearing.....: NU319/C3  
NDE Bearing.....: 6319/C3  
Fixed bearing.....: NDE

## 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).....: 3,33  
Noise level (dB(A)).....: 81  
No load current (A).....: 59,5  
Winding resist. (ohm).....: 0,035  
Starting time (sec.).....: 0,34  
Temp. rise winding (K).....: 72  
Temp. rise surface (K).....: 41

Rated power (kW) . . . . .	110	106	132	128
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) . . . .	186 108	192 110	186 108	192
Speed (rpm) . . . . .	1490	1490	1790	1790
Power factor cos(phi) . . . .	0,90	0,90	0,90	0,91
Efficiency, 100/75/50 (%) . .	95,4/ 95,4 /94,1	95,4/ 95,4 /94,1	95,4/ 95,4 /94,1	95,1/ 95,1 /93,7
Ist/In . . . . .	8,25	7,25	8,25	7,55
Full load torque (Nm) . . . .	705	685	705	685
Tst/Tn . . . . .	2,60	2,42	2,60	2,24
Tmax/Tn . . . . .	2,70	2,50	2,70	2,34
Duty . . . . .	S1	S1	S1	S1
Ambient temp. (°C) . . . . .	40	45	40	45