

# Data Sheet

Itemnumber..... 3242800109



A = 457	AC = 546	BB = 485	DB = M20	EG = 56	GD = 12	HB = 362	L = 985	TL = 230
AA = 85	AD = 403	C = 190	E = 140	F = 20	H = 280	HD = 683	LB = 845	
AB = 542	B = 368	D = 75	EB = 110	G = 67,50	HA = 35	K = 24	TB = 305	

## Version

Type..... HMC2 280S-4  
Design..... Induction motor  
Standard series..... IEC 60034  
Phase / Voltage range..... 3~ / Low

## Electrical design

Efficiency..... IE2  
Pole..... 4  
Power at 50 Hz (kW)..... 75,0  
Hz..... 60 (60 Hz output)  
Voltage..... 440VD  
Winding voltage..... 400VD/690VY 50 Hz  
Power output (kW)..... 87,5  
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)..... 552

## Environment condition

Ambient temp. min. (°C)..... -20  
Ambient temp. max. (°C)..... 45  
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  
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)..... 1,55  
Noise level (dB(A))..... 77  
No load current (A)..... 37,0  
Winding resist. (ohm)..... 0,087  
Starting time (sec.)..... 0,20  
Temp. rise winding (K)..... 76  
Temp. rise surface (K)..... 68

Rated power (kW)	75,0	73,0	90,0	87,5
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)	126 73,5	130 75,5	126 73,5	134
Speed (rpm)	1480	1480	1780	1780
Power factor cos(phi)	0,91	0,91	0,91	0,92
Efficiency, 100/75/50 (%)	94,0/ 94,8 /94,6	94,0/ 94,8 /94,6	94,0/ 94,8 /94,6	93,6/ 94,4 /94,2
Ist/In	8,05	7,10	8,05	7,40
Full load torque (Nm)	485	470	485	470
Tst/Tn	2,60	2,42	2,60	2,26
Tmax/Tn	3,35	3,10	3,35	2,90
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45