

Data Sheet

Itemnumber..... 5542800100



A = 457	AC = 546	BB = 485	DB = M20	EG = 56	GD = 12	HB = 361	L = 979	TL = 230
AA = 85	AD = 403	C = 190	E = 140	F = 20	H = 280	HD = 683	LB = 839	
AB = 542	B = 368	D = 75	EB = 130	G = 67,50	HA = 35	K = 24	TB = 305	

Version

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

Electrical design

Efficiency..... IE3
Pole..... 4
Power at 50 Hz (kW)..... 75,0
Hz..... 50
Voltage..... 400VD/690VY
Winding voltage..... 400VD/690VY 50 Hz
Power output (kW)..... 75,0
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)..... 565

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)..... 1,74
Noise level (dB(A))..... 78
No load current (A)..... 39,0
Winding resist. (ohm)..... 0,048
Starting time (sec.)..... 0,28
Temp. rise winding (K)..... 57
Temp. rise surface (K)..... 37

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)	124 72,0	128 74,5	124 72,0	128
Speed (rpm)	1490	1490	1790	1790
Power factor cos(phi)	0,88	0,89	0,88	0,89
Efficiency, 100/75/50 (%)	95,0/ 94,8 /93,8	95,0/ 94,8 /93,8	95,0/ 94,8 /93,8	94,7/ 94,5 /93,4
Ist/In	7,25	6,40	7,25	6,70
Full load torque (Nm)	480	465	480	465
Tst/Tn	2,28	2,12	2,28	1,98
Tmax/Tn	2,80	2,60	2,80	2,42
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45