

Data Sheet

Itemnumber.....: 5522801100



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|----------|----------|----------|----------|---------|---------|----------|----------|----------|
| A = 457 | AC = 546 | BB = 536 | DB = M20 | EG = 56 | GD = 11 | HB = 361 | L = 1010 | TL = 230 |
| AA = 85 | AD = 403 | C = 190 | E = 140 | F = 18 | H = 280 | HD = 683 | LB = 870 | |
| AB = 542 | B = 419 | D = 65 | EB = 130 | G = 58 | HA = 35 | K = 24 | TB = 305 | |

Version

Type.....: HMC3 280M-2
Design.....: Induction motor
Standard series.....: IEC 60034
Phase / Voltage range.....: 3~ / Low

Electrical design

Efficiency.....: IE3
Pole.....: 2
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.....: 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).....: 600

Environment condition

Ambient temp. min. (°C)....: -20
Ambient temp. max. (°C)....: 40
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
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).....: 0,89
Noise level (dB(A)).....: 89
No load current (A).....: 43,0
Winding resist. (ohm).....: 0,039
Starting time (sec.).....: 0,42
Temp. rise winding (K).....: 72
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) | 146 85,0 | 150 87,5 | 146 85,0 | 150 |
| Speed (rpm) | 2980 | 2980 | 3580 | 3580 |
| Power factor cos(phi) | 0,91 | 0,91 | 0,91 | 0,92 |
| Efficiency, 100/75/50 (%) | 95,0/ 95,1 /94,4 | 95,0/ 95,1 /94,4 | 95,0/ 95,1 /94,4 | 94,7/ 94,7 /94,0 |
| Ist/In | 8,05 | 7,10 | 8,05 | 7,45 |
| Full load torque (Nm) | 290 | 280 | 290 | 280 |
| Tst/Tn | 2,80 | 2,60 | 2,80 | 2,40 |
| Tmax/Tn | 2,75 | 2,55 | 2,75 | 2,40 |
| Duty | S1 | S1 | S1 | S1 |
| Ambient temp. (°C) | 40 | 45 | 40 | 45 |