

# Data Sheet

Itemnumber....: 5521600150



|          |          |          |          |         |         |           |          |          |
|----------|----------|----------|----------|---------|---------|-----------|----------|----------|
| A = 254  | AC = 313 | BB = 260 | DB = M16 | EG = 36 | GD = 8  | HB = 221  | L = 610  | TL = 162 |
| AA = 65  | AD = 276 | C = 108  | E = 110  | F = 12  | H = 160 | HD = 436  | LB = 500 |          |
| AB = 314 | B = 210  | D = 42   | EB = 100 | G = 37  | HA = 20 | K = 14,50 | TB = 218 |          |

## Version

Type.....: HMC3 160M1-2  
Design.....: Induction motor  
Standard series.....: IEC 60034  
Phase / Voltage range.....: 3~ / Low

## Electrical design

Efficiency.....: IE3  
Pole.....: 2  
Power at 50 Hz (kW).....: 11,0  
Hz.....: 50  
Voltage.....: 230VD/400VY  
Winding voltage.....: 230VD/400VY 50 Hz  
Power output (kW).....: 11,0  
Duty.....: S1  
Insulation class.....: F  
Temperature rise.....: B

## Mechanical design

Frame size.....: 160  
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).....: 122

## Environment condition

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

## Bearing

DE Bearing.....: 6309-ZZ/C3  
NDE Bearing.....: 6309-ZZ/C3  
Fixed bearing.....: DE

## Terminal box

Tbox position.....: Top  
Cable entry direction.....: Right (from DE)  
Cable entry  
Main.....: 2 x M40x1,5  
Plastic blindcaps  
Accessory.....: 2 x M20x1,5  
Plastic blindcaps  
Terminal board thread.....: 6-M6

## 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).....: 0,056  
Noise level (dB(A)).....: 78  
No load current (A).....: 5,70  
Winding resist. (ohm).....: 0,21  
Starting time (sec.).....: 0,20  
Temp. rise winding (K).....: 54  
Temp. rise surface (K).....: 37

|                           |                  |                  |                  |                  |
|---------------------------|------------------|------------------|------------------|------------------|
| Rated power (kW)          | 11,0             | 10,6             | 13,2             | 12,8             |
| Frequency (Hz)            | 50               | 50               | 60               | 60               |
| Voltage (V)               | 230 400          | 220 380          | 280 480          | 440              |
| Connection                | D Y              | D Y              | D Y              | Y                |
| Full load current (A)     | 33,5 19,4        | 34,5 20,0        | 33,5 19,4        | 20,0             |
| Speed (rpm)               | 2950             | 2950             | 3540             | 3540             |
| Power factor cos(phi)     | 0,90             | 0,90             | 0,90             | 0,91             |
| Efficiency, 100/75/50 (%) | 91,2/ 91,3 /90,1 | 91,2/ 91,3 /90,1 | 91,2/ 91,3 /90,1 | 90,6/ 90,7 /89,4 |
| Ist/In                    | 8,95             | 7,90             | 8,95             | 8,25             |
| Full load torque (Nm)     | 35,5             | 34,5             | 35,5             | 34,5             |
| Tst/Tn                    | 2,50             | 2,34             | 2,50             | 2,18             |
| Tmax/Tn                   | 3,50             | 3,25             | 3,50             | 3,00             |
| Duty                      | S1               | S1               | S1               | S1               |
| Ambient temp. (°C)        | 40               | 45               | 40               | 45               |