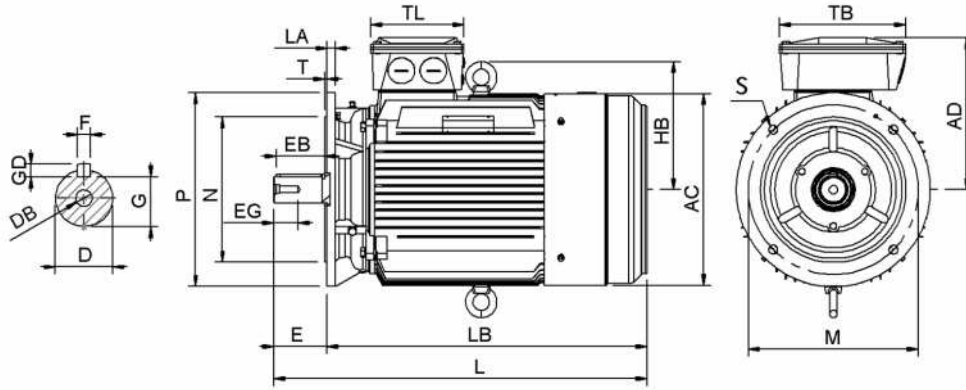


# Data Sheet

Itemnumber....: 5541600200



AC = 313	DB = M16	EG = 36	GD = 8	L = 610	LE = 595	P = 350	TB = 218
AD = 276	E = 110	F = 12	H = 160	LA = 14	M = 300	S = 4-Ø18.5	TL = 162
D = 42	EB = 100	G = 37	HB = 221	LB = 500	N = 250	T = 5	

### Version

Type.....: HMC3 160M-4  
 Design.....: Induction motor  
 Standard series.....: IEC 60034  
 Phase / Voltage range.....: 3~ / Low

### Electrical design

Efficiency.....: IE3  
 Pole.....: 4  
 Power at 50 Hz (kW).....: 11,0  
 Hz.....: 50  
 Voltage.....: 400VD/690VY  
 Winding voltage.....: 400VD/690VY 50 Hz  
 Power output (kW).....: 11,0  
 Duty.....: S1  
 Insulation class.....: F  
 Temperature rise.....: B

### 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 Gloss 10  
 Nameplate.....: Multivoltage  
 Special packing.....: No  
 Special requirements.....: No

### Mechanical design

Frame size.....: 160  
 Mounting.....: B5  
 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).....: 141

### 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  
                     Metal blindcaps  
     Accessory.....: 2 x M20x1,5  
                     Metal blindcaps  
 Connection type.....: Delta (D)  
 Terminal board thread.....: 6-M6

### Test values

Rotor inertia (kgm²).....: 0,11  
 Noise level (dB(A)).....: 71  
 No load current (A).....: 9,15  
 Winding resist. (ohm).....: 0,75  
 Starting time (sec.).....: 0,08  
 Temp. rise winding (K).....: 57  
 Temp. rise surface (K).....: 41

Rated power (kW)	11,0	10,6	13,2	12,8
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)	21,2 12,2	22,0 12,6	21,2 12,2	22,0
Speed (rpm)	1470	1470	1760	1760
Power factor cos(phi)	0,83	0,84	0,83	0,85
Efficiency, 100/75/50 (%)	91,6/92,1/90,1	91,6/92,1/90,1	91,6/92,1/90,1	91,0/91,5/89,4
Ist/In	8,2	7,2	8,2	7,6
Full load torque (Nm)	71,5	69,0	71,5	69,0
Tst/Tn	2,9	2,7	2,9	2,5
Tmax /Tn	3,7	3,4	3,7	3,2
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45