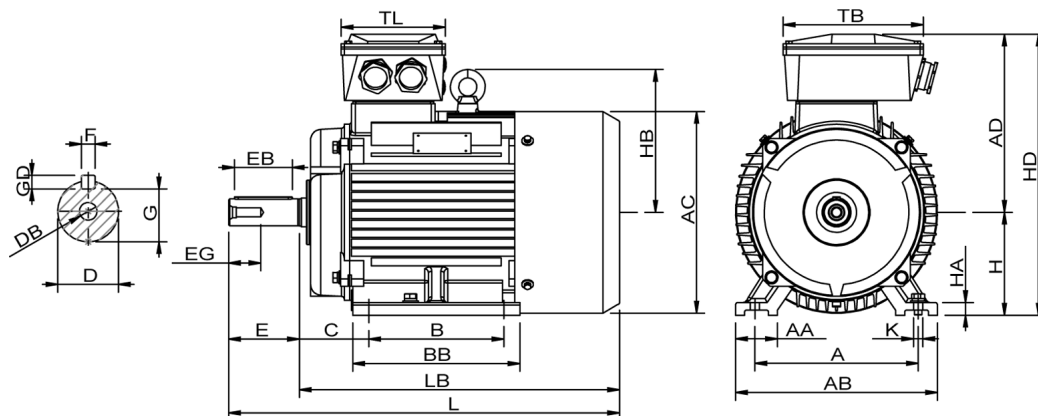


# Data Sheet

Itemnumber....: 3241600109



A = 254	AC = 313	BB = 260	DB = M16	EG = 36	GD = 8	HB = 222	L = 608	TL = 162
AA = 65	AD = 277	C = 108	E = 110	F = 12	H = 160	HD = 437	LB = 498	
AB = 314	B = 210	D = 42	EB = 90	G = 37	HA = 20	K = 14,50	TB = 218	

## Version

Type.....: HMC2 160M-4  
Design.....: Induction motor  
Standard series.....: IEC 60034  
Phase / Voltage range.....: 3~ / Low

## Electrical design

```

Efficiency.....: IE2
Pole.....: 4
Power at 50 Hz (kW).....: 11,0
Hz.....: 60 (60 Hz output)
Voltage.....: 440VD
Winding voltage.....: 400VD/690VY 50 Hz
Power output (kW).....: 12,8
Duty.....: S1
Insulation class.....: F
Temperature rise.....: B

```

## Mechanical design

```

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).....: 125

```

## Environment condition

```
Ambient temp. min. (°C)..: -20
Ambient temp. max. (°C)..: 45
Altitude (mtr up to).....: 1000
```

### Bearing

Bearing

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

Terminal box

```

Terminal box.....:
Tbox position.....: Top
Cable entry direction.....: Right (from DE)
Cable entry
    Main.....: 2 x M40x1,5
                  Ø22-30mm metal
    Accessory.....: 2 x M20x1,5
                  Metal blindcaps
Terminal board thread.....: 6-M6

```

### Motor protection

```

Thermal protection main....: PTC 3x 155 dgr
Thermal protection second..: None
Space heater.....: 1x 230V 50W
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

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)	20,2 11,8	20,8 12,0	20,2 11,8	21,2
Speed (rpm)	1470	1470	1740	1740
Power factor cos(phi)	0,87	0,88	0,87	0,89
Efficiency, 100/75/50 (%)	89,8/ 90,0 /88,6	89,8/ 90,0 /88,6	89,8/ 90,0 /88,6	89,1/ 89,2 /87,8
Ist/In	7,60	6,70	7,60	7,00
Full load torque (Nm)	72,0	70,0	72,0	70,0
Tst/Tn	2,90	2,70	2,90	2,50
Tmax/Tn	3,35	3,15	3,35	2,90
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45