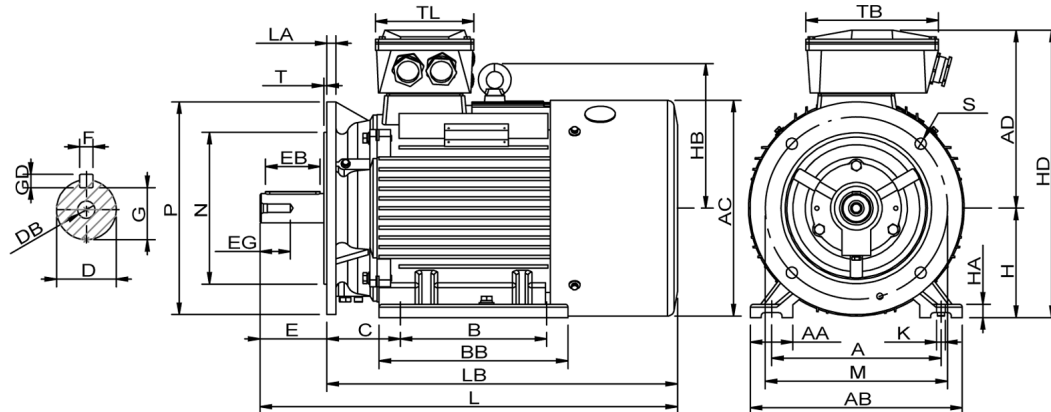


# Data Sheet

Itemnumber....: 3241800409



A = 279	AC = 357	BB = 311	DB = M16	EG = 40	GD = 9	HB = 238	L = 688	M = 300	S = 4-Ø18,5	TL = 162
AA = 70	AD = 293	C = 121	E = 110	F = 14	H = 180	HD = 473	LA = 15	N = 250	T = 5	
AB = 349	B = 241	D = 48	EB = 90	G = 42,50	HA = 22	K = 14,50	LB = 578	P = 350	TB = 218	

## Version

Type.....: HMC2 180M-4  
 Design.....: Induction motor  
 Standard series.....: IEC 60034  
 Phase / Voltage range.....: 3~ / Low

## Electrical design

Efficiency.....: IE2  
 Pole.....: 4  
 Power at 50 Hz (kW).....: 18,5  
 Hz.....: 60 (60 Hz output)  
 Voltage.....: 440VD  
 Winding voltage.....: 400VD/690VY 50 Hz  
 Power output (kW).....: 21,6  
 Duty.....: S1  
 Insulation class.....: F  
 Temperature rise.....: B

## Mechanical design

Frame size.....: 180  
 Mounting.....: B35  
 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).....: 175

## Bearing

DE Bearing.....: 6311-ZZ/C3  
 NDE Bearing.....: 6311-ZZ/C3  
 Fixed bearing.....: DE

## 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

## Environment condition

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

## Test values

Rotor inertia (kgm<sup>2</sup>).....: 0,20  
 Noise level (dB(A)).....: 66  
 No load current (A).....: 11,2  
 Winding resist. (ohm).....: 0,35  
 Starting time (sec.).....: 0,11  
 Temp. rise winding (K).....: 71  
 Temp. rise surface (K).....: 54

## Motor protection

Thermal protection main.....: PTC 3x 155 dgr  
 Thermal protection second.: None  
 Space heater.....: 1x 230V 60W  
 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)	18,5	18,0	22,2	21,6
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)	34,0 19,8	35,0 20,4	34,0 19,8	35,5
Speed (rpm)	1470	1470	1740	1740
Power factor cos(phi)	0,86	0,87	0,86	0,87
Efficiency, 100/75/50 (%)	91,2/ 90,5 /89,6	91,2/ 90,5 /89,6	91,2/ 90,5 /89,6	90,6/ 89,9 /88,8
Ist/In	7,60	6,70	7,60	7,00
Full load torque (Nm)	120	116	120	116
Tst/Tn	2,60	2,40	2,60	2,24
Tmax/Tn	3,25	3,05	3,25	2,85
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45