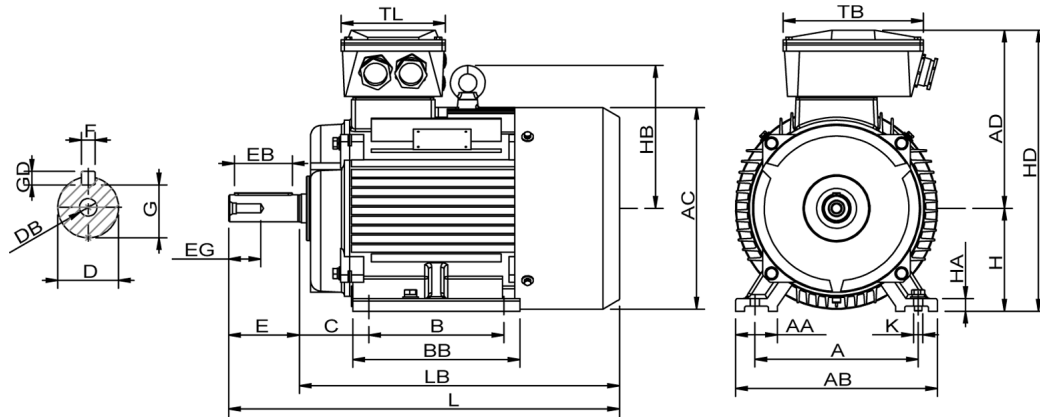


Data Sheet

Itemnumber....: 3241800109



A = 279	AC = 357	BB = 311	DB = M16	EG = 40	GD = 9	HB = 238	L = 688	TL = 162
AA = 70	AD = 293	C = 121	E = 110	F = 14	H = 180	HD = 473	LB = 578	
AB = 349	B = 241	D = 48	EB = 90	G = 42,50	HA = 22	K = 14,50	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

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

General

Direction of rotation.....: CW
 Painting.....: RAL 9005
 Nameplate.....: Multivoltage + VFD
 Special packing.....: No
 Special requirements.....: No

Mechanical design

Frame size.....: 180
 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).....: 163

Environment condition

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

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
 Ø22-32mm metal
 2 x M20x1,5
 Accessory.....: Metal blindcaps
 Terminal board thread.....: 6-M6

Test values

Rotor inertia (kgm²).....: 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

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)	34,5 19,8	35,5 20,4	34,5 19,8	36,0
Speed (rpm)	1470	1470	1740	1740
Power factor cos(phi)	0,86	0,87	0,86	0,87
Efficiency, 100/75/50 (%)	90,3/90,5/89,6	90,3/90,5/89,6	90,3/90,5/89,6	89,6/89,9/88,8
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