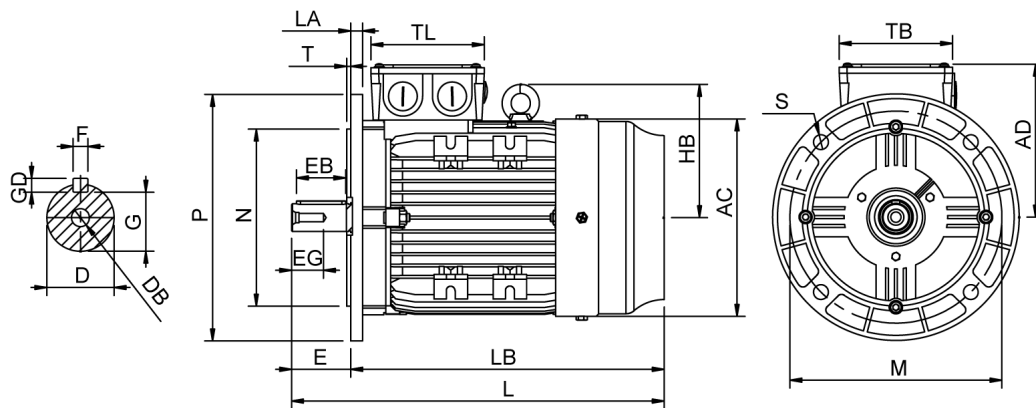


Data Sheet

Itemnumber.....: 6021600200



AC = 314	DB = M16	EG = 38	GD = 8	LA = 15	N = 250	T = 5
AD = 238	E = 110	F = 12	HB = 207	LB = 502	P = 350	TB = 181
D = 42	EB = 90	G = 37	L = 612	M = 300	S = 4-Ø18,5	TL = 181

Version

Type.....: HMA4 160M1-2
Design.....: Induction motor
Standard series.....: IEC 60034
Phase / Voltage range.....: 3~ / Low

Electrical design

Efficiency.....: IE4
Pole.....: 2
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

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.....: Aluminium
Material approval.....: None
Shaft.....: IEC standard
Key.....: Closed key
Balancing.....: Half key balancing
Vibration class.....: Grade-A
Weight (kg).....: 98,0

Environment condition

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

Bearing

DE Bearing.....: 6209-ZZ/C3
NDE Bearing.....: 6209-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.....: M6

Test values

Rotor inertia (kgm²).....: 0,075
Noise level (dB(A)).....: 71
Starting time (sec.).....: 0,26

Motor protection

Thermal protection main.....: PTC 3x 155 dgr
Thermal protection second.....: None
Space heater.....: None 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

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)	19,4 11,2	20,0 11,6	19,4 11,2	20,0
Speed (rpm)	2940	2940	3530	3530
Power factor cos(phi)	0,88	0,89	0,88	0,89
Efficiency, 100/75/50 (%)	92,6/92,5/91,0	92,6/92,5/91,0	92,6/92,5/91,0	92,1/92,0/90,4
Ist/In	7,80	6,85	7,80	7,20
Full load torque (Nm)	35,5	34,5	35,5	34,5
Tst/Tn	2,20	2,04	2,20	1,90
Tmax/Tn	3,70	3,45	3,70	3,20
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45