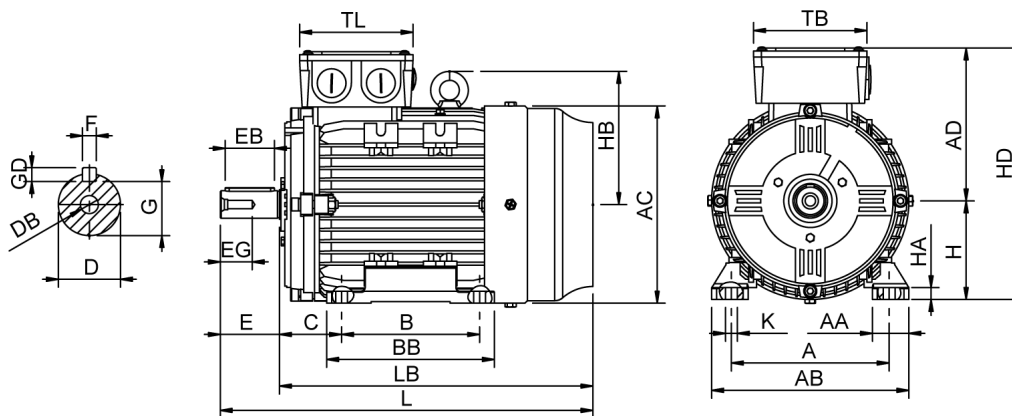


Data Sheet

Itemnumber.....: 6021602100



A = 254	AC = 314	BB = 304	DB = M16	EG = 38	GD = 8	HB = 207	L = 656	TL = 181
AA = 62	AD = 238	C = 108	E = 110	F = 12	H = 160	HD = 398	LB = 546	
AB = 314	B = 254	D = 42	EB = 90	G = 37	HA = 22	K = 14,50	TB = 181	

Version

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

Electrical design

Efficiency.....: IE4
Pole.....: 2
Power at 50 Hz (kW).....: 18,5
Hz.....: 50
Voltage.....: 400VD/690VY
Winding voltage.....: 400VD/690VY 50 Hz
Power output (kW).....: 18,5
Duty.....: S1
Insulation class.....: F
Temperature rise.....: B

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.....: Aluminium
Material approval.....: None
Shaft.....: IEC standard
Key.....: Closed key
Balancing.....: Half key balancing
Vibration class.....: Grade-A
Weight (kg).....: 130

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).....: 0,088
Noise level (dB(A)).....: 71
Starting time (sec.).....: 0,18

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)	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)	32,0 18,6	33,0 19,2	32,0 18,6	33,0
Speed (rpm)	2940	2940	3530	3530
Power factor cos(phi)	0,89	0,90	0,89	0,90
Efficiency, 100/75/50 (%)	93,7/93,5/92,0	93,7/93,5/92,0	93,7/93,5/92,0	93,3/93,0/91,4
Ist/In	8,10	7,15	8,10	7,45
Full load torque (Nm)	60,0	58,0	60,0	58,0
Tst/Tn	2,20	2,04	2,20	1,90
Tmax/Tn	3,80	3,55	3,80	3,30
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45