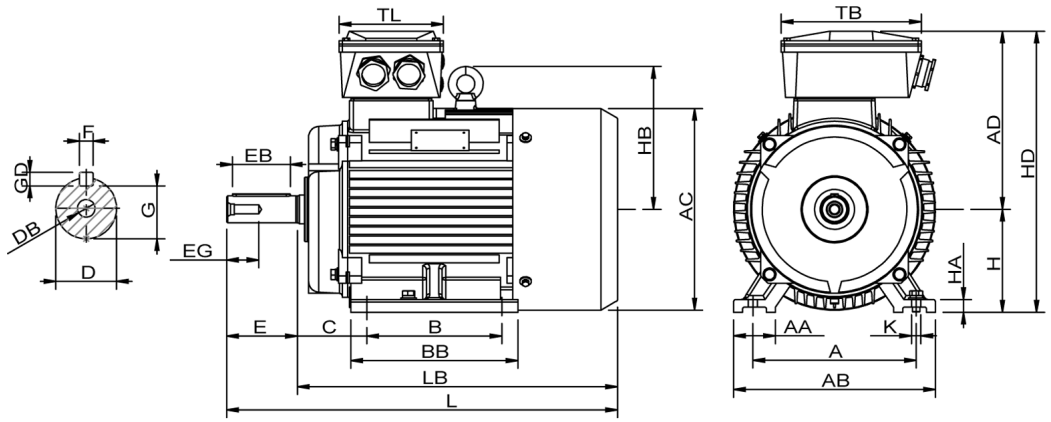
Data Sheet

Itemnumber....: 3221602199



A = 254	**AC = 313**	**BB = 304**	**DB = M16**	**EG = 36**	**GD = 8**	**HB = 222**	**L = 652**	**TL = 162**	
AA = 65	**AD = 277**	**C = 108**	**E = 110**	**F = 12**	**H = 160**	**HD = 437**	**LB = 542**		
AB = 314	**B = 254**	**D = 42**	**EB = 90**	**G = 37**	**HA = 20**	**K = 14,50**	**TB = 218**		

Version
Type.....: HMC2 160L-2
Design.....: Induction motor
Standard series.....: IEC 60034
Phase / Voltage range.....: 3~ / Low

Electrical design
Efficiency.....: IE2
Pole.....: 2
Power at 50 Hz (kW).....: 18,5
Hz.....: 60 (60 Hz output)
Voltage.....: 690VD
Winding voltage.....: 690VD 60 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 50W
Temperature detector.....: No
SPM.....: No
IR wire.....: Yes
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

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).....: 138

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

Bearing
DE Bearing.....: 6309-ZZ/C3
NDE Bearing.....: 6309-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

Test values
Rotor inertia (kgm²).....: 0,066
Noise level (dB(A)).....: 74
No load current (A).....: 4,60
Winding resist. (ohm).....: 0,68
Starting time (sec.).....: 0,13
Temp. rise winding (K).....: 68
Temp. rise surface (K).....: 54

Rated power (kW)	18,5	22,2	21,6
Frequency (Hz)	50	60	60
Voltage (V)	575	690	690
Connection	D	D	D
Full load current (A)	22,0	22,8	22,2
Speed (rpm)	2950	3520	3520
Power factor cos(phi)	0,93	0,93	0,93
Efficiency, 100/75/50 (%)	90,9/ 90,2 /89,3	90,9/ 90,2 /89,3	90,9/ 90,2 /89,3
Ist/In	7,50	7,50	7,75
Full load torque (Nm)	60,0	60,0	58,0
Tst/Tn	2,65	2,65	2,75
Tmax/Tn	3,50	3,50	3,60
Duty	S1	S1	S1
Ambient temp. (°C)	40	40	45