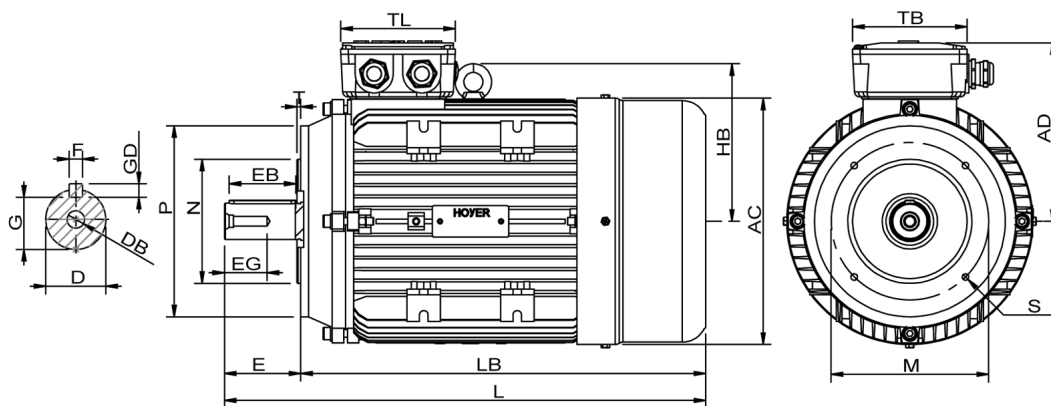


Data Sheet

Itemnumber..... 3220901309



AC = 175	DB = M8	EG = 24	GD = 7	M = 115	S = 4-M8	TL = 100
AD = 132	E = 50	F = 8	L = 362	N = 95	T = 3	
D = 24	EB = 40	G = 20	LB = 312	P = 140	TB = 100	

Version

Type..... HMA2 90L-2
Design..... Induction motor
Standard series..... IEC 60034
Phase / Voltage range..... 3~ / Low

Electrical design

Efficiency..... IE2
Pole..... 2
Power at 50 Hz (kW)..... 2,20
Hz..... 60 (60 Hz output)
Voltage..... 440VY
Winding voltage..... 230VD/400VY 50 Hz
Power output (kW)..... 2,55
Duty..... S1
Insulation class..... F
Temperature rise..... B

Mechanical design

Frame size..... 90
Mounting..... B14
B14 M measure..... 115
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)..... 17,0

Environment condition

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

Bearing

DE Bearing..... 6205-ZZ/C3
NDE Bearing..... 6205-ZZ/C3
Fixed bearing..... DE

Terminal box

Tbox position..... Top
Cable entry direction..... Right (from DE)
Cable entry
Main..... 1 x M20x1,5
Ø8-13mm metal
Accessory..... 1 x M20x1,5
Metal blindcap
Terminal board thread..... 6-M4

Test values

Rotor inertia (kgm²)..... 0,0026
Noise level (dB(A))..... 66
No load current (A)..... 2,00
Winding resist. (ohm)..... 2,56
Starting time (sec.)..... 0,00
Temp. rise winding (K)..... 56
Temp. rise surface (K)..... 47

Motor protection

Thermal protection main..... PTC 3x 155 dgr
Thermal protection second..: None
Space heater..... None
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)	2,20	2,14	2,65	2,55
Frequency (Hz)	50	50	60	60
Voltage (V)	230 400	220 380	280 480	440
Connection	D Y	D Y	D Y	Y
Full load current (A)	7,70 4,45	7,95 4,55	7,70 4,45	4,55
Speed (rpm)	2870	2870	3450	3450
Power factor cos(phi)	0,86	0,87	0,86	0,86
Efficiency, 100/75/50 (%)	83,2/ 84,7 /84,5	83,2/ 84,7 /84,5	83,2/ 84,7 /84,5	82,0/ 83,6 /83,4
Ist/In	7,85	6,95	7,85	7,25
Full load torque (Nm)	7,30	7,10	7,30	7,10
Tst/Tn	3,20	2,95	3,20	2,75
Tmax/Tn	3,10	2,90	3,10	2,70
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45