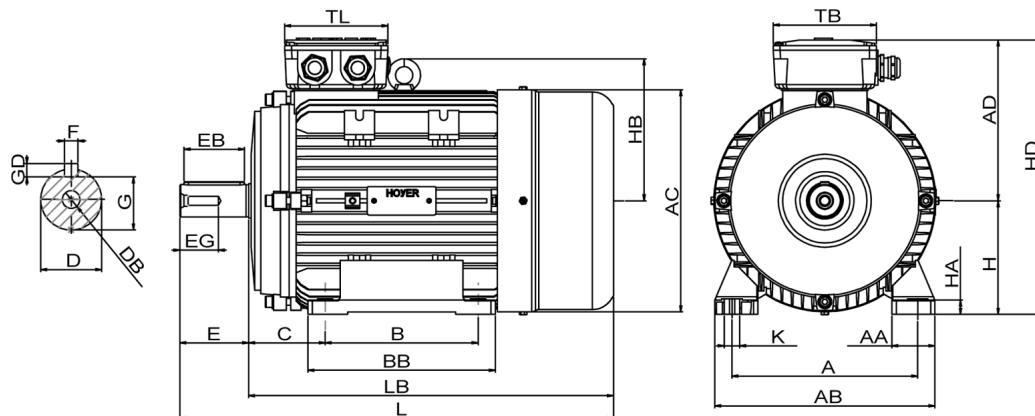


Data Sheet

Itemnumber....: 3220900109



A = 140	AC = 175	BB = 155	DB = M8	EG = 24	GD = 7	HD = 222	LB = 286
AA = 35	AD = 132	C = 56	E = 50	F = 8	H = 90	K = 12	TB = 100
AB = 177	B = 100	D = 24	EB = 40	G = 20	HA = 14	L = 336	TL = 100

Version

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

Electrical design

Efficiency.....: IE2
Pole.....: 2
Power at 50 Hz (kW).....: 1,50
Hz.....: 60 (60 Hz output)
Voltage.....: 440VY
Winding voltage.....: 230VD/400VY 50 Hz
Power output (kW).....: 1,74
Duty.....: S1
Insulation class.....: F
Temperature rise.....: B

Mechanical design

Frame size.....: 90
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).....: 15,0

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).....: 0,0018
Noise level (dB(A)).....: 66
No load current (A).....: 1,70
Winding resist. (ohm).....: 3,79
Starting time (sec.).....: 0,00
Temp. rise winding (K).....: 46
Temp. rise surface (K).....: 39

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)	1,50	1,46	1,80	1,74
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)	5,55 3,20	5,75 3,30	5,55 3,20	3,30
Speed (rpm)	2890	2890	3460	3460
Power factor cos(phi)	0,83	0,84	0,83	0,83
Efficiency, 100/75/50 (%) . .	81,3/ 82,0 /80,6	81,3/ 82,0 /80,6	81,3/ 82,0 /80,6	80,0/ 80,8 /79,2
Ist/In	7,05	6,20	7,05	6,50
Full load torque (Nm)	4,95	4,80	4,95	4,80
Tst/Tn	3,00	2,80	3,00	2,60
Tmax/Tn	3,50	3,25	3,50	3,05
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45