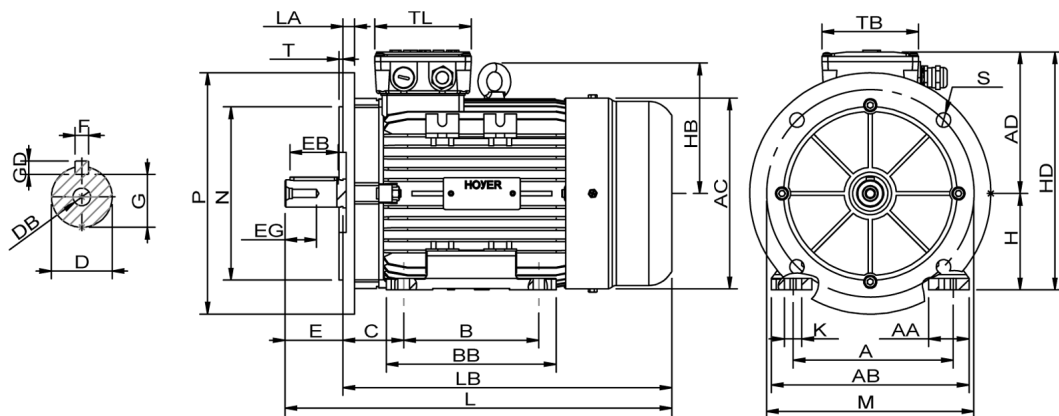


Data Sheet

Itemnumber..... 3221120409



A = 190	AC = 219	BB = 180	DB = M10	EG = 28	GD = 7	HB = 145	L = 405	M = 215	S = 4-Ø15	TL = 120
AA = 45	AD = 168	C = 70	E = 60	F = 8	H = 112	HD = 280	LA = 14	N = 180	T = 4	
AB = 222	B = 140	D = 28	EB = 50	G = 24	HA = 13	K = 12	LB = 345	P = 250	TB = 120	

Version Type..... HMA2 112M1-2 Design..... Induction motor Standard series..... IEC 60034 Phase / Voltage range..... 3~ / Low	Mechanical design Frame size..... 112 Mounting..... B35 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)..... 32,0	Bearing DE Bearing..... 6306-ZZ/C3 NDE Bearing..... 6306-ZZ/C3 Fixed bearing..... DE
Electrical design Efficiency..... IE2 Pole..... 2 Power at 50 Hz (kW)..... 4,00 Hz..... 60 (60 Hz output) Voltage..... 440VD Winding voltage..... 400VD/690VY 50 Hz Power output (kW)..... 4,65 Duty..... S1 Insulation class..... F Temperature rise..... B	Environment condition Ambient temp. min. (°C)..... -20 Ambient temp. max. (°C)..... 45 Altitude (mtr up to)..... 1000	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-M5
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	Test values Rotor inertia (kgm²)..... 0,0068 Noise level (dB(A))..... 71 No load current (A)..... 2,90 Winding resist. (ohm)..... 3,21 Starting time (sec.)..... 0,00 Temp. rise winding (K)..... 63 Temp. rise surface (K)..... 52	
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)	4,00	3,90	4,80	4,65
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)	7,50 4,35	7,75 4,50	7,50 4,35	7,75
Speed (rpm)	2910	2910	3500	3500
Power factor cos(phi)	0,90	0,90	0,90	0,86
Efficiency, 100/75/50 (%) . .	85,8/ 86,0 /84,3	85,8/ 86,0 /84,3	85,8/ 86,0 /84,3	85,1/ 85,3 /83,6
Ist/In	8,65	7,60	8,65	7,95
Full load torque (Nm)	13,2	12,8	13,2	12,8
Tst/Tn	2,75	2,55	2,75	2,40
Tmax/Tn	3,00	2,80	3,00	2,60
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45