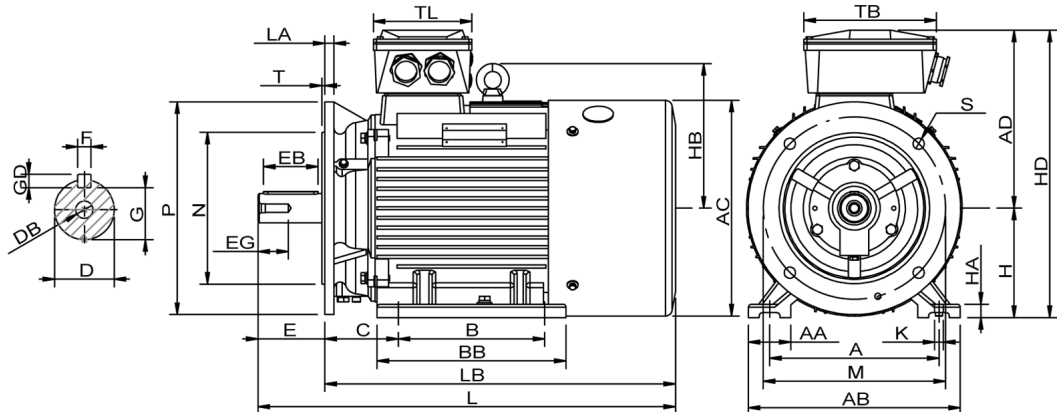


Data Sheet

Itemnumber..... 3221602409



A = 254	AC = 313	BB = 304	DB = M16	EG = 36	GD = 8	HB = 222	L = 652	M = 300	S = 4-Ø18,5	TL = 162
AA = 65	AD = 277	C = 108	E = 110	F = 12	H = 160	HD = 437	LA = 15	N = 250	T = 5	
AB = 314	B = 254	D = 42	EB = 90	G = 37	HA = 20	K = 14,50	LB = 542	P = 350	TB = 218	

Version Type..... HMC2 160L-2 Design..... Induction motor Standard series..... IEC 60034 Phase / Voltage range..... 3~ / Low	Mechanical design Frame size..... 160 Mounting..... B35 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	Bearing DE Bearing..... 6309-ZZ/C3 NDE Bearing..... 6309-ZZ/C3 Fixed bearing..... DE
Electrical design Efficiency..... IE2 Pole..... 2 Power at 50 Hz (kW)..... 18,5 Hz..... 60 (60 Hz output) Voltage..... 440VD Winding voltage..... 400VD/690VY 50 Hz Power output (kW)..... 21,6 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..... 2 x M40x1,5 Ø22-30mm metal Accessory..... 2 x M20x1,5 Metal blindcaps Terminal board thread..... 6-M6
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..... No Tropical insulation..... Yes	Test values Rotor inertia (kgm²)..... 0,066 Noise level (dB(A))..... 74 No load current (A)..... 7,95 Winding resist. (ohm)..... 0,33 Starting time (sec.)..... 0,13 Temp. rise winding (K)..... 68 Temp. rise surface (K)..... 54	
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)	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)	31,5 18,2	32,5 18,8	31,5 18,2	33,5
Speed (rpm)	2950	2950	3520	3520
Power factor cos(phi)	0,93	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	90,4/ 89,7 /88,8
Ist/In	7,50	6,60	7,50	6,90
Full load torque (Nm)	60,0	58,0	60,0	58,0
Tst/Tn	2,65	2,46	2,65	2,30
Tmax/Tn	3,50	3,25	3,50	3,00
Duty	S1	S1	S1	S1
Ambient temp. (°C)	40	45	40	45