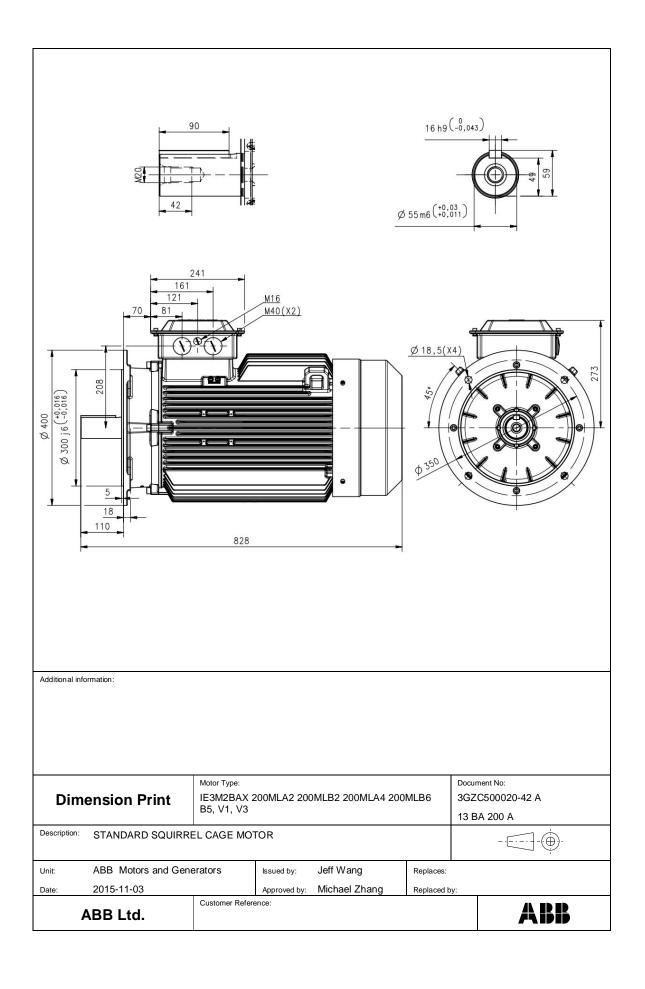
## **IEC LV Motors Technical Data Sheet** Project Location Department/Author Gugan E Item name 1.00004 Customer name Customer ref Our ref. Rev/Changed by Date of issue Saving ident Pages Trielectric International FZE 9/25/2023 untitled.xlsm 1(3) Definition No. Data Unit Remarks TEFC, 3-phase, squirrel cage induction motor Product Product code 3GBA 203 420-BDDIN Calc. ref. 3GZH021020-23 Type/Frame 3 M2BAX 200MLB 6 IM3001, B5(flange) Mounting Rated output P<sub>N</sub> 5 22 6 Service factor S1 100% Type of duty 8 Rated voltage U<sub>N</sub> 400 VD ±5% 9 Rated frequency f<sub>N</sub> 50 ±2% Hz Rated speed n<sub>N</sub> 10 986 r/min 11 Rated current I<sub>N</sub> 43.9 Α 12 13 Starting current I<sub>s</sub>/I<sub>N</sub> 7.5 Nominal torque T<sub>N</sub> 213 Nm 14 15 Locked rotor torque T<sub>S</sub>/T<sub>N</sub> 2.3 Maximum torque T<sub>max</sub>/T<sub>N</sub> 3.1 16 17 18 Efficiency % Load % Current A Power factor Load characteristics PLL determined from residual loss 100 92.2 / IE3 19 43.9 0.79 20 75 35.4 92.2 0.73 21 50 28.1 91.1 0.62 22 Thermal withstand time hot 23 s 24 Thermal withstand time cold 18 s 25 Insulation class / Temperature class F/B 26 Ambient temperature 50 °C 1000 27 Altitude m.a.s.l. 28 Degree of protection IP55 Cooling system IC411 29 30 Bearing DE/NDE 6312-2Z/C3 - 6209-2Z/C3 Sound pressure level (LP dB(A) 1m) 31 dB(A) at no-load Moment of inertia J = 1/4 GD2 0.585 kg-m2 33 Position of terminal box Тор Direction of rotation Bi-directional 35 Weight of rotor 98 kg 36 Total weight of motor 263 Munsell Blue Paint shade 37 38 Cable size 39 Vibration As Per IS 12075 40 41 42 43 44 45 Ex-motors 46 47 48 Variant Codes / Definition **Option** 49 50 51 52 Remarks: Applicable standards: IS 12615:2018, IEC 60034-30-1:2014



## **Motors in brief**

General performance IE3 premium efficency cast iron motors in brief

Size		160	180	200	225	250
	Material	Cast Iron Grade 200:ISO 185				
Stator	Paint colour shade	Munsell blue 8B 4.5/3.25 / NCS 4822 B05G				
	Surface Treatment	C3 medium according to ISO / EN 12944-5				
_		Integrated with stator				
Feet	Material	Cast iron grade 200 : ISO 185				
Bearing end shields	Material	Cast iron grade 200 : ISO 185				
	Paint colour shade	Munsell blue 8B 4.5/3.25/NCS 4822 B05G				
	Surface Treatment	C3 medium according to ISO / EN 12944-5				
Bearings	D-end	6209-2Z/C3	6310-2Z/C3	6312-2Z/C3	6313-2Z/C3	6315-2Z/C3
	N-end	6209-2Z/C3	6209-2Z/C3	6209-2Z/C3	6210-2Z/C3	6212-2Z/C3
Axially-locked	Inner Bearing Cover	As standard, locked at D-end				
Bearing seals		Axial seal standard, radial on request				
Measuring nipple		Not included				
Lubrication		Permanently lubricated shielded bearings				
Rating plate	Material	Aluminium				
Terminal Box	Frame material	Sheet of Steel, cold rolled				
	Cover material	Sheet of Steel, cold rolled				
	Cover screws material	Steel 8.8				
Connections	Cable entries	2xM40, 1xM16 2xM50, 1xM16				
	Cable Sizes	2Rx3Cx70mm2		2Rx3Cx120mm2		
	Terminal Stud Size	M6		M10		
	Terminals	6 terminals for connection, cable lugs (not included)				
Fan	Material	Polypropylene, Reinforced with 20% glass fibre				
Fan Cover	Material	Sheet of steel, cold rolled				
	Paint Colour shade	Munsell blue 8B 4.5/3.25/NCS 4822 B05G				
	Surface Treatment	C3 medium according to ISO/EN 12944-5				
Stator winding	Material	Copper				
	Insulation	Insulation class F, Temperature rise class B unless otherwise stated.				
	Winding protection	-				
Rotor winding	Material	Pressure diecast aluminium				
Balancing method		Half Key Balancing as Standard				
Key ways		Open Key Way				
Enclosure		IP 55, Higher protection on request				
Cooling method IC 411						
Drain holes		Drain holes with closable plastic plugs, open on delivery				
Lifting lugs		Integrated with the stator				