



Technical Data Sheet



Project: Location: **United Arab Emirates**

Company: **Trielectric International FZE** | Contact: **Mr.Saravanan(+971564345964)** | Contact: **Mr.Thamizh(+971502353763)** | Item name: **1.00021**

Our ref. Stock: **A** | Rev/Changed by: **A** | Date of issue: **9/14/2021** | Saving ident: | Pages: **1(3)**

No.	Definition	Data	Unit	Remarks
1	Product	TEFC, 3-phase, squirrel cage induction motor		
2	Product code	3GBA 313 230-BDCIN		
3	Type/Frame	M2BAX 315SMC 6		
4	Mounting	IM3001, B5(flange)		
5	Rated output P _N	110	kW	
6	Service factor	1		
7	Type of duty	S1 100%		
8	Rated voltage U _N	400	VD	± 5 %
9	Rated frequency f _N	50	Hz	± 2 %
10	Rated speed n _N	992	r/min	
11	Rated current I _N	203	A	
12				
13	Starting current I _s /I _N	7		
14	Nominal torque T _N	1059	Nm	
15	Locked rotor torque T _s /T _N	2.5		
16	Maximum torque T _{max} /T _N	2.9		
17				
18				
	Load characteristics	Load %	Current A	Efficiency %
19	PLL determined from residual loss	100	203	94.3 / IE2
20		75	158	94.3
21		50	123	92.3
22				
23	Thermal withstand time hot	22	s	
24	Thermal withstand time cold	49	s	
25	Insulation class / Temperature class	F / B		
26	Ambient temperature	50	°C	
27	Altitude	1000	m.a.s.l.	
28	Degree of protection	IP55		
29	Cooling system	IC411		
30	Bearing DE/NDE	6319/C3 - 6316/C3		
31	Sound pressure level (LP dB(A) 1m)	85	dB(A)	at no-load
32	Moment of inertia J = ¼ GD2	4.9	kg-m2	
33	Position of terminal box	Top		
34	Direction of rotation	Bi-directional		
35	Weight of rotor	315	kg	
36	Total weight of motor	957	kg	
37	Paint shade	Munsell Blue		
38	Cable size			
39	Vibration	As Per IS 12075		
40				
41				
42				
43				
44				
45				
46	Ex-motors			
47				
48				

Option Variant Codes / Definition

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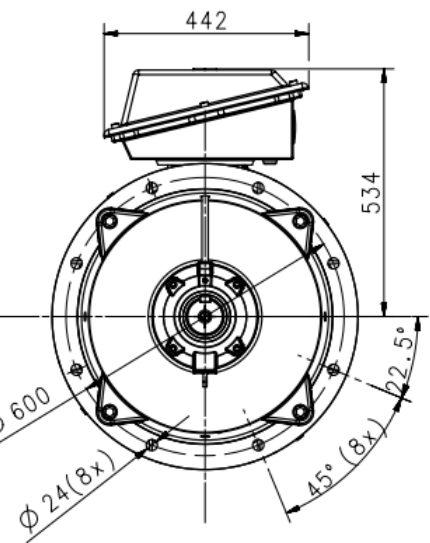
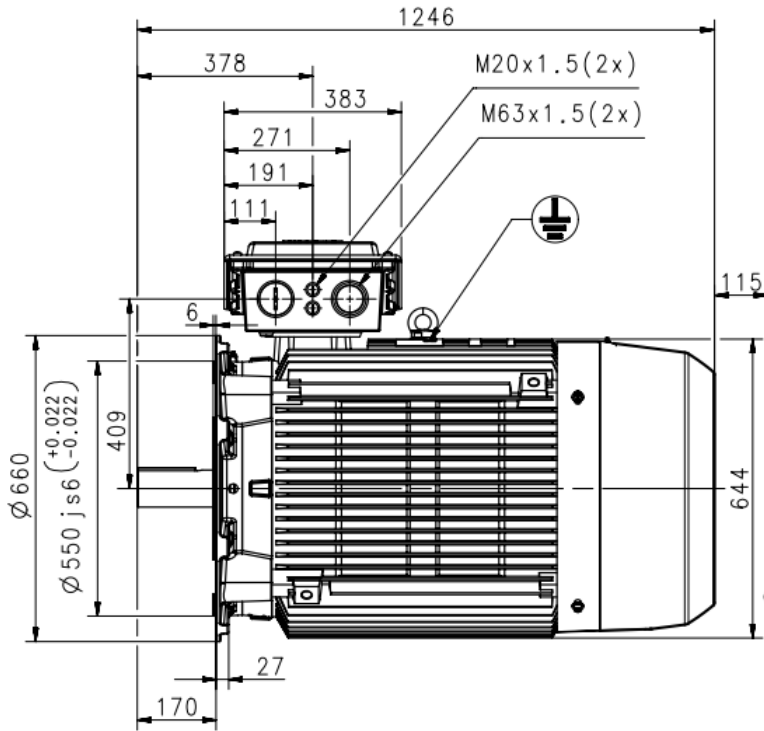
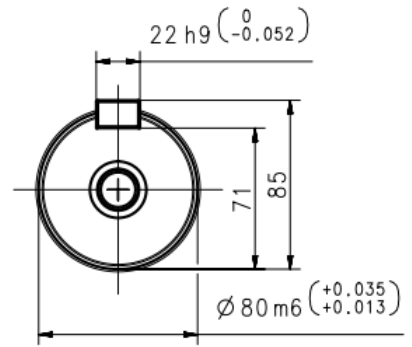
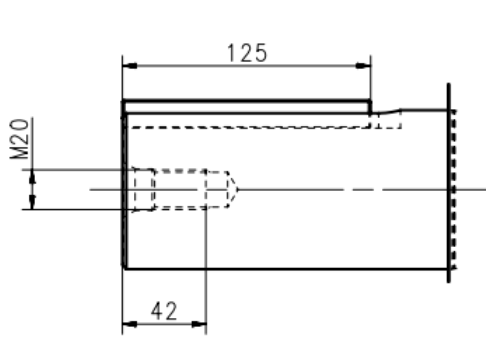
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Remarks:

Applicable standards: IS 12615:2018, IEC 60034-30-1:2014

All performance values are subject to IS/IEC tolerances



Additional information:

Dimension Print	Motor Type: M2BA/BAX 315SM_4-8 B5 V1 V3.	Document No: 3GZC500031-153 D 13 BA 315 A
	Description: STANDARD SQUIRREL CAGE MOTOR	
Unit: ABB Ltd., Motors and Generators	Issued by: David Wang	Replaces:
Date: 2020-07-21	Approved by: Adam Zhu	Replaced by:
ABB Ltd.	Customer Reference:	ABB

Motors in brief

General performance IE2 high efficiency cast iron motors

Size		280 2-8 Pole	315 2 Pole	315 4-8 Pole	355 2 Pole	355 4-8 Pole
Stator	Material	Cast iron grade 150, IS:210				
	Paint colour shade	Munsell blue 8B 4.5/3.25 / NCS 4822 B05G				
	Surface Treatment	C3 medium according to ISO / EN 12944-5				
Feet		Integrated with stator				
	Material	Cast iron grade 150, IS:210				
Bearing end shields	Material	Cast iron grade 150, IS:210				
	Paint colour shade	Munsell blue 8B 4.5/3.25 / NCS 4822 B05G				
	Surface Treatment	Aliphatic polyurethane paint ≥ 80µm				
Bearings	D-end	6316/C3	6316/C3	6319/C3	6319/C3	6322/C3
	N-end	6315/C3	6316/C3	6316/C3	6319/C3	6319/C3
Axially-locked	Inner Bearing Cover	As standard, locked at D-end				
Bearing seals	D-end	Oil Seal				
	N-end					
Lubrication		Regreasable Bearings, Regreasing nipple M10X1				
Terminal Box	Material	Cast iron grade 150, IS:210				
	Surface	Similar to stator				
	Screws	Steel				
Connections	Cable Entries	2 x 2" BSC		2 x 2-1/2" BSC*		
	Cable Sizes	280 : 2Rx3Cx185Sqmm Cu/Al Cable 315 : 2Rx3Cx240Sqmm Cu/Al Cable 355 : 2Rx3Cx240Sqmm Cu/Al Cable*				
	Terminal Stud Size	M12		M16		
	Terminal Box	6 terminals for connection, cable lugs (not included)				
	Fan	Material	Polypropylene, Reinforced with 20% glass fibre			Aluminium
Fan Cover	Material	Sheet of steel, Cold Rolled				
	Paint colour shade	Munsell blue 8B 4.5/3.25 / NCS 4822 B05G				
	Surface Treatment	Similar to stator				
Stator winding	Material	Copper				
	Insulation	Insulation class F				
Rotor winding	Material	Diecast aluminum				
Balancing method		Half Key Balancing as standarad				
Key ways		Open Key Way				
Enclosure		IP 55				
Cooling method		IC 411				
Drain holes		Drain holes with closable plastic plugs, open on delivery				
Lifting lugs		Bolted to the Stator				

*Cable Size for 355MLC2,355MLD2,355MLB4, 355MLB6H & 355MLB4H will be 2Rx3Cx300 Sqmm Cu/Al , Threaded opening 2x3" BSC