
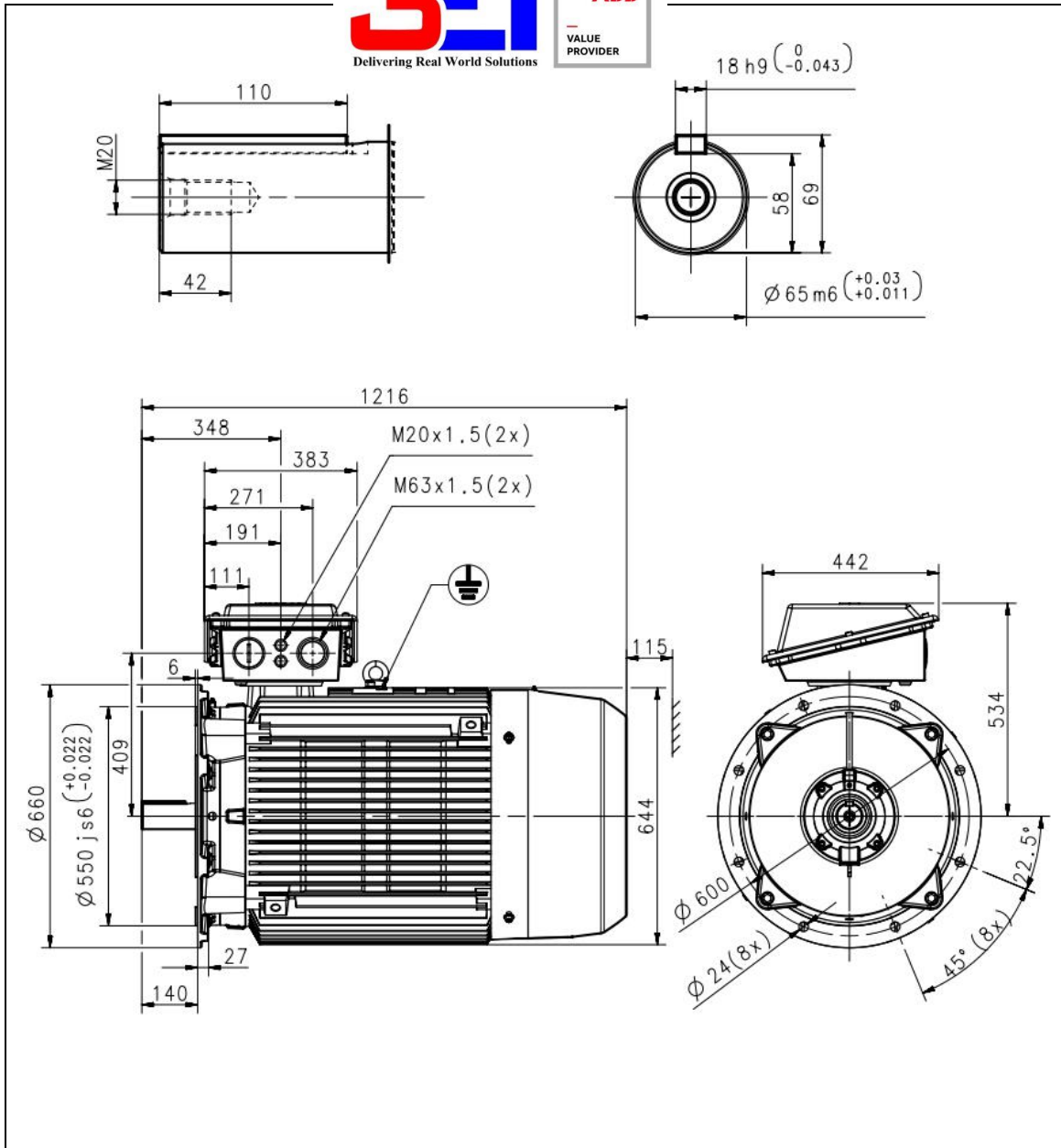


IEC LV Motors		Technical Data Sheet				
		Project	Location			
		United Arab Emirates				
Customer Trielectric International FZE		Contact Mr.Saravanan(+971564345964)	Contact Mr.Tamil(+971502353763)	Item name 1.00023		
Our ref. Stock		Rev/Changed by A	Date of issue 9/14/2021	Saving ident	Pages 1(3)	
No.	Definition	Data	Unit	Remarks		
1	Product	TEFC, 3-phase, squirrel cage induction motor				
2	Product code	3GBA 311 230-BDCIN				
3	Type/Frame	M2BAX 315SMC 2				
4	Mounting	IM3001, B5(flange)				
5	Rated output P _N	160	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	2981	r/min			
11	Rated current I _N	277	A			
12						
13	Starting current I _s /I _N	7				
14	Nominal torque T _N	513	Nm			
15	Locked rotor torque T _s /T _N	2.2				
16	Maximum torque T _{max} /T _N	2.8				
17						
18						
Load characteristics		Load %	Current A	Efficiency %	Power factor	
19	PLL determined from residual loss	100	277	94.8 / IE2	0.88	
20		75	215	94.8	0.85	
21		50	152	93.8	0.81	
22						
23	Thermal withstand time hot	47	s			
24	Thermal withstand time cold	95	s			
25	Insulation class / Temperature class	F / B				
26	Ambient temperature	50				
27	Altitude	1000	m.a.s.l.			
28	Degree of protection	IP55				
29	Cooling system	IC411				
30	Bearing DE/NDE	6316/C3 - 6316/C3				
31	Sound pressure level (LP dB(A) 1m)	90	dB(A)	at no-load		
32	Moment of inertia J = ¼ GD2	1.7	kg-m2			
33	Position of terminal box	Top				
34	Direction of rotation	Bi-directional				
35	Total weight of motor	972	kg			
36	Paint shade	Munsell Blue				
37	Cable size					
38	Vibration	As Per IS 12075				
39						
40						
41						
42						
43						
44						
45						
Ex-motors						
46						
47						
48						
Option Variant Codes / Definition						
49						
50						
51						
52						
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_2 B5 V1 V3.	Document No: 3GZC500031-152 C 13 BA 315 A
	Description: STANDARD SQUIRREL CAGE MOTOR	
Unit: ABB Ltd., Motors and Generators	Issued by: Bin Zou	Replaces:
Date: 2015-08-13	Approved by: Anna Feng	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