
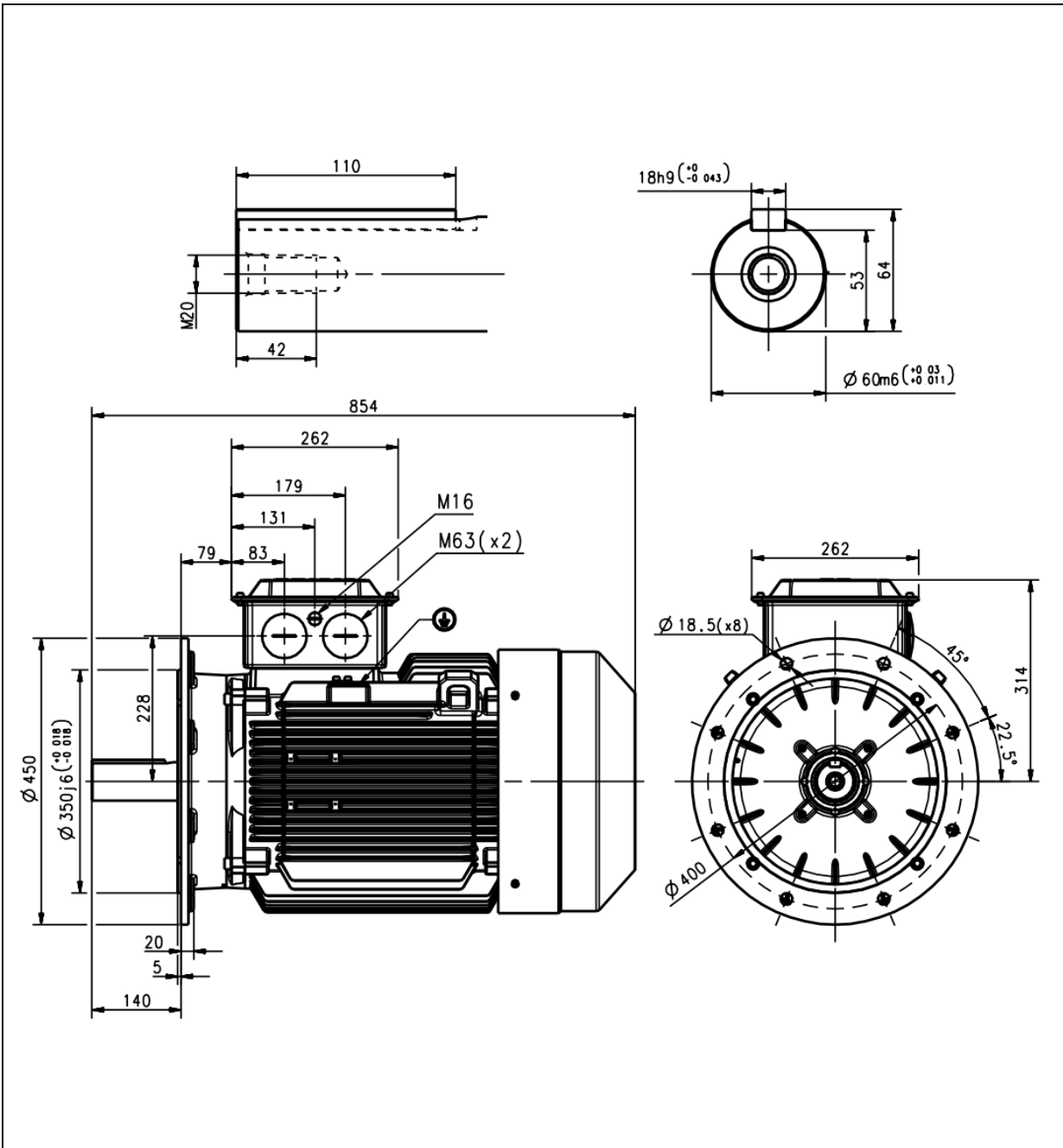
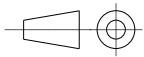
 <b>Technical Data Sheet</b>					
Project		Location <b>United Arab Emirates</b>			
Company <b>Trielectric International FZE</b>	Contact <b>Mr.Saravanan(+971564345964)</b>	Contact <b>Mr.Tamizh(+971502353763)</b>	Item name <b>1.00016</b>		
Our ref. <b>Stock</b>	Rev/Changed by <b>A</b>	Date of issue <b>9/14/2021</b>	Saving ident <b>1(3)</b>		
No.	Definition	Data	Unit	Remarks	
1	Product	<b>TEFC, 3-phase, squirrel cage induction motor</b>			
2	Product code	<b>3GBA 222 210-BDCIN</b>		Calc. ref. 3GZH021022-2	
3	Type/Frame	<b>M2BAX 225SMA 4</b>			
4	Mounting	<b>IM3001, B5(flange)</b>			
5	Rated output P <sub>N</sub>	<b>37</b>	kW		
6	Service factor	<b>1</b>			
7	Type of duty	<b>S1 100%</b>			
8	Rated voltage U <sub>N</sub>	<b>400</b>	VD	± 5 %	
9	Rated frequency f <sub>N</sub>	<b>50</b>	Hz	± 2 %	
10	Rated speed n <sub>N</sub>	<b>1475</b>	r/min		
11	Rated current I <sub>N</sub>	<b>69</b>	A		
12					
13	Starting current I <sub>s</sub> /I <sub>N</sub>	<b>6.5</b>			
14	Nominal torque T <sub>N</sub>	<b>240</b>	Nm		
15	Locked rotor torque T <sub>s</sub> /T <sub>N</sub>	<b>2.1</b>			
16	Maximum torque T <sub>max</sub> /T <sub>N</sub>	<b>2.7</b>			
17					
18					
	Load characteristics	Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	<b>100</b>	<b>69</b>	<b>92.7 / IE2</b>	<b>0.84</b>
20		<b>75</b>	<b>53.1</b>	<b>93.1</b>	<b>0.81</b>
21		<b>50</b>	<b>39.1</b>	<b>92.2</b>	<b>0.74</b>
22					
23	Thermal withstand time hot	<b>17</b>	s		
24	Thermal withstand time cold	<b>28</b>	s		
25	Insulation class / Temperature class	<b>F / B</b>			
26	Ambient temperature	<b>50</b>			°C
27	Altitude	<b>1000</b>			m.a.s.l.
28	Degree of protection	<b>IP55</b>			
29	Cooling system	<b>IC411</b>			
30	Bearing DE/NDE	<b>6313-2Z/C3 - 6210-2Z/C3</b>			
31	Sound pressure level (LP dB(A) 1m)	<b>80</b>	dB(A)	at no-load	
32	Moment of inertia J = ¼ GD2	<b>0.3605</b>	kg-m2		
33	Position of terminal box	<b>Top</b>			
34	Direction of rotation	<b>Bi-directional</b>			
35	Weight of rotor	<b>84</b>	kg		
36	Total weight of motor	<b>267</b>	kg		
37	Paint shade	<b>Munsell Blue</b>			
38	Cable size				
39	Vibration	<b>As Per IS 12075</b>			
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:

<b>Dimension Print</b>	Motor Type:	Document No:
	IE2&IE1 M2BAX 225SM_4-6 B5, V1, V3	3GZC500022-10 G
	IE3 M2BAX 225SM_4-6 B5, V1, V3	13 BA 225 A
Description: STANDARD SQUIRREL CAGE MOTOR		
Unit: ABB Motors and Generators	Issued by: Jeff Wang	Replaces:
Date: 2019-07-05	Approved by: Adam Zhu	Replaced by:
<b>ABB Ltd.</b>	Customer Reference:	<b>ABB</b>

## Motors in brief

General performance IE2 high efficiency cast iron motors

Size	160	180	200	225	250	
<b>Stator</b>	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				
<b>Feet</b>		Integrated with stator				
	Material	Cast iron grade 200 : ISO 185				
<b>Bearing end shields</b>	Material	Cast iron grade 200 : ISO 185				
	Paint colour shade	Munsell blue 8B 4.5/3.25 / NCS 4822 B05G				
	Surface Treatment	Aliphatic polyurethane enamel paint_70µm				
<b>Bearings</b>	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
<b>Axially-locked</b>	Inner Bearing Cover	As standard, locked at D-end				
<b>Bearing seals</b>	D-end	V-ring				
	N-end	V-ring				
<b>Lubrication</b>		Permanently lubricated shielded bearings				
<b>Terminal Box</b>	Material	Sheet of Steel, Cold Rolled				
	Surface	Treatment Similar to stator				
	Screws	Steel 8.8				
<b>Connections</b>	Cable Entries	2xM40, 1xM16			2xM50, 1xM16	
	Cable Sizes	2Rx3Cx70mm <sup>2</sup>			2Rx3Cx120mm <sup>2</sup>	
	Terminal Stud Size	M6			M10	
	Terminal Box	6 terminals for connection, cable lugs (not included)				
<b>Fan</b>	Material	Polypropylene, Reinforced with 20% glass fibre				
<b>Fan Cover</b>	Material	Sheet of Steel, Cold Rolled				
	Paint colour shade	Munsell blue 8B 4.5/3.25 / NCS 4822 B05G				
	Surface Treatment	Similar to stator				
<b>Stator winding</b>	Material	Copper				
	Insulation	Insulation class F				
<b>Rotor winding</b>	Material	Diecast aluminum				
<b>Balancing method</b>		Half Key Balancing as standard				
<b>Key ways</b>		Open Key Way				
<b>Enclosure</b>		IP 55				
<b>Cooling method</b>		IC 411				
<b>Drain holes</b>		Drain holes with closable plastic plugs, open on delivery				
<b>Lifting lugs</b>		Integrated with the stator				