


IEC LV Motors		Technical Data Sheet - DOL			
Project		Location			
Department/Author		Customer name		Customer ref	Item name <b>1.00001</b>
Our ref.		Rev/Changed by <b>A</b>	Date of issue <b>10/18/2021</b>	Saving ident <b>untitled.xlsm</b>	Pages <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 313 220-ADT</b>		Calc. ref.	3GZC021031-176
3	Type/Frame	<b>M2BAX 315SMB 6</b>			
4	Mounting	<b>IM1001, B3(foot)</b>			
5	Rated output P <sub>N</sub>	<b>90</b>	kW		
6	Service factor	<b>1</b>			
7	Type of duty	<b>S1(IEC) 100%</b>			
8	Rated voltage U <sub>N</sub>	<b>400</b>	VD	± 5 % (IEC 60034-1)	
9	Rated frequency f <sub>N</sub>	<b>50</b>	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n <sub>N</sub>	<b>992</b>	r/min		
11	Rated current I <sub>N</sub>	<b>165</b>	A		
12	No-load current	<b>60</b>	A		
13	Starting current I <sub>s</sub> /I <sub>N</sub>	<b>7.2</b>		Meet IEC 60034-12, N,(H at 60 Hz)	
14	Nominal torque T <sub>N</sub>	<b>866</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	Minimum torque T <sub>min</sub> /T <sub>N</sub>	<b>1.9</b>			
18	Speed at minimum torque	<b>800</b>	r/min		
Load characteristics (IEC 60034-2-1:2014)		Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	<b>100</b>	<b>165</b>	<b>92.9 / IE1</b>	<b>0.83</b>
20		<b>75</b>	<b>133</b>	<b>93</b>	<b>0.79</b>
21		<b>50</b>	<b>101</b>	<b>92</b>	<b>0.7</b>
22		<b>Start</b>	<b>1188</b>		<b>0.35</b>
23	Maximum starting time from hot	<b>16</b>	s		
24	Maximum starting time from cold	<b>29</b>	s		
25	Insulation class / Temperature class	<b>F / B</b>			
26	Ambient temperature	<b>40</b>	°C		
27	Altitude	<b>1000</b>	m.a.s.l.		
28	Enclosure	<b>IP55</b>			
29	Cooling system	<b>IC411 self ventilated</b>			
30	Bearing DE/NDE	<b>6319/C3 - 6316/C3</b>			
31	Type of Grease				
32	Sound pressure level (LP dB(A) 1m)	<b>75</b>	dB(A)	at load	
33	Moment of inertia J = ¼ GD2	<b>4.1</b>	kg-m2		
34	Balancing				
35	Vibration class				
36	Position of terminal box	<b>Top</b>			
37	Terminal box entries; no, dimens.				
38	Number of power terminals				
39	Direction of rotation	<b>CW or CCW</b>			
40	Weight of rotor	<b>277</b>	kg		
41	Total weight of motor	<b>817</b>	kg		
42	Dimension drawing no.				
43					
44					
45					
Ex-motors					
46					
47					
48					
Option Variant Codes / Definition					
49					
50					
51					
52					
Remarks:					
Data based on situation 7/22/2019					
All data subject to tolerances in accordance with IEC					
Guaranteed values on request					