


IEC LV Motors		Technical Data Sheet - DOL			
Project		Location			
Department/Author		Customer name		Customer ref	Item name 1.00001
Our ref.		Rev/Changed by A	Date of issue 10/18/2021	Saving ident untitled.xlsm	Pages 1(3)
No.	Definition	Data	Unit	Remarks	
1	Product	TEFC, 3-phase, squirrel cage induction motor			
2	Product code	3GBA 281 250-ADT		Calc. ref.	3GZC021028-143
3	Type/Frame	M2BAX 280SME 2			
4	Mounting	IM1001, B3(foot)			
5	Rated output P _N	90	kW		
6	Service factor	1			
7	Type of duty	S1(IEC) 100%			
8	Rated voltage U _N	400	VD	± 5 % (IEC 60034-1)	
9	Rated frequency f _N	50	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n _N	2970	r/min		
11	Rated current I _N	152	A		
12	No-load current	35	A		
13	Starting current I _s /I _N	8		Meet IEC 60034-12, N	
14	Nominal torque T _N	289	Nm		
15	Locked rotor torque T _s /T _N	3.1			
16	Maximum torque T _{max} /T _N	3.3			
17	Minimum torque T _{min} /T _N	2.5			
18	Speed at minimum torque	2100	r/min		
Load characteristics (IEC 60034-2-1:2014)		Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	100	152	93.0 / IE1	0.91
20		75	118	93.2	0.89
21		50	83	93.1	0.84
22		Start	1216		0.39
23	Maximum starting time from hot	15	s		
24	Maximum starting time from cold	27	s		
25	Insulation class / Temperature class	F / B			
26	Ambient temperature	40	°C		
27	Altitude	1000	m.a.s.l.		
28	Enclosure	IP55			
29	Cooling system	IC411 self ventilated			
30	Bearing DE/NDE	6316/C3 - 6316/C3			
31	Type of Grease				
32	Sound pressure level (LP dB(A) 1m)	76	dB(A)	at load	
33	Moment of inertia J = ¼ GD2	0.7	kg-m2		
34	Balancing				
35	Vibration class				
36	Position of terminal box	Top			
37	Terminal box entries; no, dimens.				
38	Number of power terminals				
39	Direction of rotation	CW or CCW			
40	Weight of rotor	121	kg		
41	Total weight of motor	576	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 7/18/2019					
All data subject to tolerances in accordance with IEC					
Guaranteed values on request					