


ABB Motors and Generators		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 10.05.2017	Saving ident untitled.xls	Pages 1(3)	
No.	Definition	Data	Unit	Remarks		
1	Product	<b>TEFC, 3-phase, squirrel cage induction motor</b>				
2	Product code	<b>3GHP 162 450-BDH</b>			Calc. ref.	LKH81359
3	Type/Frame	<b>M3HP 160MLE 4</b>				
4	Mounting	<b>IM3001, B5(flange)</b>				
5	Rated output P <sub>N</sub>	<b>13,5</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>690</b>	VY			
9	Rated frequency f <sub>N</sub>	<b>50</b>	Hz			
10	Rated speed n <sub>N</sub>	<b>1466</b>	r/min			
11	Rated current I <sub>N</sub>	<b>14,8</b>	A			
12	No-load current	<b>6,4</b>	A			
13	Starting current I <sub>s</sub> /I <sub>N</sub>	<b>8</b>				
14	Nominal torque T <sub>N</sub>	<b>88</b>	Nm			
15	Locked rotor torque T <sub>s</sub> /T <sub>N</sub>	<b>3</b>				
16	Maximum torque T <sub>max</sub> /T <sub>N</sub>	<b>3,6</b>				
17	Minimum torque T <sub>min</sub> /T <sub>N</sub>	<b>2,1</b>				
18	Speed at minimum torque	<b>255</b>	r/min			
Load characteristics (IEC 60034-2-1:2014)		Load %	Current A	Efficiency %	Power factor	
19	PLL determined from residual loss	100	<b>14,8</b>	<b>91,7 / IE2</b>	<b>0,85</b>	
20		75	<b>11,3</b>	<b>92</b>	<b>0,81</b>	
21		50	<b>8,5</b>	<b>91,2</b>	<b>0,73</b>	
22		Start	<b>118</b>		<b>0,55</b>	
23	Maximum starting time from hot	<b>8</b>	s			
24	Maximum starting time from cold		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>6309/C3 - 6309/C3</b>				
31	Type of Grease					
32	Sound pressure level (LP dB(A) 1m)	<b>68</b>	dB(A)			
33	Moment of inertia J = ¼ GD2	<b>0,13</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>46</b>	kg			
41	Total weight of motor	<b>249</b>	kg			
42	Dimension drawing no.					
43						
44						
45						
Ex-motors						
46	Type of protection	<b>Ex e IIC T3 Gb</b>				
47	EC Type Examination No	<b>LCIE 09 ATEX 3022</b>				
48	tE time	<b>8</b>	s			
Option Variant Codes / Definition						
49						
50						
51						
52						
Remarks:						
Data based on situation 20.05.2014						
All data subject to tolerances in accordance with IEC						
Guaranteed values on request						