

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																																														
Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code : 12709736 Catalog # : 01036ST3QIE215TC-W22																																													
Frame : 213/5TC Output : 10 HP (7.5 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 460 V Rated current : 11.7 A L. R. Amperes : 84.5 A LRC : 7.2x(Code H) No load current : 3.60 A Rated speed : 3520 rpm Slip : 2.22 % Rated torque : 14.9 ft.lb Locked rotor torque : 220 % Breakdown torque : 290 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.6362 sq.ft.lb Design : B	Locked rotor time : 32s (cold) 18s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP56 Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 68.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 171 lb																																													
<table border="1"> <tr> <td>Output</td> <td>25%</td> <td>50%</td> <td>75%</td> <td>100%</td> <td>Foundation loads</td> <td></td> </tr> <tr> <td rowspan="4">Efficiency (%)</td> <td>89.3</td> <td>88.4</td> <td>89.5</td> <td>88.6</td> <td rowspan="4">Max. traction</td> <td rowspan="4">: 189 lb</td> </tr> <tr> <td>88.2</td> <td>87.2</td> <td>88.4</td> <td>87.7</td> </tr> <tr> <td>90.1</td> <td>90.2</td> <td>89.5</td> <td>89.5</td> </tr> <tr> <td>90.2</td> <td>89.5</td> <td>89.5</td> <td>88.5</td> </tr> <tr> <td rowspan="4">Power Factor</td> <td>0.54</td> <td>0.51</td> <td>0.79</td> <td>0.75</td> <td rowspan="4">Max. compression</td> <td rowspan="4">: 360 lb</td> </tr> <tr> <td>0.48</td> <td>0.45</td> <td>0.72</td> <td>0.70</td> </tr> <tr> <td>0.60</td> <td>0.57</td> <td>0.83</td> <td>0.81</td> </tr> <tr> <td>0.54</td> <td>0.79</td> <td>0.86</td> <td>0.88</td> </tr> </table>	Output	25%	50%	75%	100%	Foundation loads		Efficiency (%)	89.3	88.4	89.5	88.6	Max. traction	: 189 lb	88.2	87.2	88.4	87.7	90.1	90.2	89.5	89.5	90.2	89.5	89.5	88.5	Power Factor	0.54	0.51	0.79	0.75	Max. compression	: 360 lb	0.48	0.45	0.72	0.70	0.60	0.57	0.83	0.81	0.54	0.79	0.86	0.88	
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Losses at normative operating points (speed;torque), in percentage of rated output power																																														
Losses (%)	P1 (0,9;1,0)	10.5	11.4	11.4	11.0	12.6	12.6	12.6																																						
	P2 (0,5;1,0)	8.5	9.2	9.2	8.9	10.1	10.1	10.1																																						
	P3 (0,25;1,0)	7.4	8.0	8.0	7.8	8.9	8.9	8.9																																						
	P4 (0,9;0,5)	5.1	5.6	5.6	5.4	6.2	6.2	6.2																																						
	P5 (0,5;0,5)	3.2	3.4	3.4	3.3	3.8	3.8	3.8																																						
	P6 (0,5;0,25)	2.0	2.2	2.2	2.1	2.4	2.4	2.4																																						
	P7 (0,25;0,25)	1.2	1.3	1.3	1.3	1.5	1.5	1.5																																						
Bearing type : Drive end 6308 C3 Non drive end 6207 C3 Sealing : Inpro/Seal Inpro/Seal Lubrication interval : 20000 h 20000 h Lubricant amount : 11 g 7 g Lubricant type : Mobil Polyrex EM																																														
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This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.				These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.																																										
Rev.	Changes Summary			Performed	Checked	Date																																								
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