

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																																																																										
Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code : 12378983 Catalog # : 00736ST3QIE213TC-W22																																																																									
Frame : 213/5TC Output : 7.5 HP (5.5 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 460 V Rated current : 8.97 A L. R. Amperes : 64.6 A LRC : 7.2x(Code H) No load current : 3.20 A Rated speed : 3525 rpm Slip : 2.08 % Rated torque : 11.2 ft.lb Locked rotor torque : 210 % Breakdown torque : 290 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.4665 sq.ft.lb Design : B	Locked rotor time : 39s (cold) 22s (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 : 154 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>87.2</td> <td>86.4</td> <td>87.5</td> <td>86.7</td> <td rowspan="4">Max. traction</td> <td rowspan="4">: 136 lb</td> </tr> <tr> <td>89.5</td> <td>88.2</td> <td>89.5</td> <td>88.2</td> </tr> <tr> <td>86.1</td> <td>85.8</td> <td>86.4</td> <td>86.1</td> </tr> <tr> <td>88.3</td> <td>88.5</td> <td>88.3</td> <td>88.5</td> </tr> <tr> <td rowspan="4">Power Factor</td> <td>89.1</td> <td>88.1</td> <td>88.5</td> <td>87.5</td> <td rowspan="4">Max. compression</td> <td rowspan="4">: 290 lb</td> </tr> <tr> <td>88.5</td> <td>88.5</td> <td>87.5</td> <td>87.5</td> </tr> <tr> <td>87.2</td> <td>87.5</td> <td>88.5</td> <td>88.5</td> </tr> <tr> <td>0.49</td> <td>0.44</td> <td>0.74</td> <td>0.68</td> </tr> <tr> <td></td> <td>0.83</td> <td>0.80</td> <td>0.86</td> <td>0.84</td> <td></td> <td></td> </tr> <tr> <td></td> <td>0.41</td> <td>0.37</td> <td>0.66</td> <td>0.62</td> <td></td> <td></td> </tr> <tr> <td></td> <td>0.76</td> <td>0.86</td> <td>0.85</td> <td>0.89</td> <td></td> <td></td> </tr> <tr> <td></td> <td>0.88</td> <td>0.49</td> <td>0.74</td> <td>0.82</td> <td>0.86</td> <td></td> </tr> </table>	Output	25%	50%	75%	100%	Foundation loads		Efficiency (%)	87.2	86.4	87.5	86.7	Max. traction	: 136 lb	89.5	88.2	89.5	88.2	86.1	85.8	86.4	86.1	88.3	88.5	88.3	88.5	Power Factor	89.1	88.1	88.5	87.5	Max. compression	: 290 lb	88.5	88.5	87.5	87.5	87.2	87.5	88.5	88.5	0.49	0.44	0.74	0.68		0.83	0.80	0.86	0.84				0.41	0.37	0.66	0.62				0.76	0.86	0.85	0.89				0.88	0.49	0.74	0.82	0.86		
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Losses at normative operating points (speed;torque), in percentage of rated output power																																																																										
Losses (%)	P1 (0,9;1,0)	11.2	12.8	12.7	12.4	13.6	13.6	12.4																																																																		
	P2 (0,5;1,0)	8.7	9.9	9.8	9.6	10.6	10.6	9.6																																																																		
	P3 (0,25;1,0)	7.6	8.7	8.6	8.4	9.2	9.2	8.4																																																																		
	P4 (0,9;0,5)	6.0	6.9	6.8	6.7	7.3	7.3	6.7																																																																		
	P5 (0,5;0,5)	3.6	4.1	4.0	4.0	4.3	4.3	4.0																																																																		
	P6 (0,5;0,25)	2.4	2.8	2.7	2.7	2.9	2.9	2.7																																																																		
	P7 (0,25;0,25)	1.5	1.7	1.7	1.6	1.8	1.8	1.6																																																																		
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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