

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																																																								
Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code : 11431991 Catalog # : 01018ST3QIE215TC-W22																																																							
Frame : 213/5TC Output : 10 HP (7.5 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 460 V Rated current : 12.4 A L. R. Amperes : 79.4 A LRC : 6.4x(Code H) No load current : 5.65 A Rated speed : 1765 rpm Slip : 1.94 % Rated torque : 29.8 ft.lb Locked rotor torque : 200 % Breakdown torque : 295 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 1.51 sq.ft.lb Design : B	Locked rotor time : 30s (cold) 17s (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 : 58.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 193 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="3">Efficiency (%)</td> <td>90.8</td> <td>90.0</td> <td>91.0</td> <td>90.0</td> <td rowspan="3">Max. traction</td> <td rowspan="3">: 451 lb</td> </tr> <tr> <td>88.8</td> <td>88.0</td> <td>89.2</td> <td>88.7</td> </tr> <tr> <td>91.6</td> <td>90.7</td> <td>90.3</td> <td>90.3</td> </tr> <tr> <td rowspan="4">Power Factor</td> <td>0.40</td> <td>0.37</td> <td>0.66</td> <td>0.62</td> <td rowspan="4">Max. compression</td> <td rowspan="4">: 644 lb</td> </tr> <tr> <td>0.77</td> <td>0.76</td> <td>0.83</td> <td>0.83</td> </tr> <tr> <td>0.34</td> <td>0.32</td> <td>0.58</td> <td>0.55</td> </tr> <tr> <td>0.46</td> <td>0.43</td> <td>0.73</td> <td>0.69</td> </tr> <tr> <td></td> <td>0.82</td> <td>0.80</td> <td>0.86</td> <td>0.85</td> <td></td> <td></td> </tr> <tr> <td></td> <td>0.40</td> <td>0.66</td> <td>0.78</td> <td>0.84</td> <td></td> <td></td> </tr> </table>	Output	25%	50%	75%	100%	Foundation loads		Efficiency (%)	90.8	90.0	91.0	90.0	Max. traction	: 451 lb	88.8	88.0	89.2	88.7	91.6	90.7	90.3	90.3	Power Factor	0.40	0.37	0.66	0.62	Max. compression	: 644 lb	0.77	0.76	0.83	0.83	0.34	0.32	0.58	0.55	0.46	0.43	0.73	0.69		0.82	0.80	0.86	0.85				0.40	0.66	0.78	0.84			
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Losses at normative operating points (speed;torque), in percentage of rated output power																																																								
Losses (%)	P1 (0,9;1,0)	8.8	8.8	8.8	8.8	8.8	8.8																																																	
	P2 (0,5;1,0)	7.3	7.3	7.3	7.3	7.3	7.3																																																	
	P3 (0,25;1,0)	7.0	7.0	7.0	7.0	7.0	7.0																																																	
	P4 (0,9;0,5)	4.6	4.6	4.6	4.6	4.6	4.6																																																	
	P5 (0,5;0,5)	3.2	3.2	3.2	3.2	3.2	3.2																																																	
	P6 (0,5;0,25)	2.3	2.3	2.3	2.3	2.3	2.3																																																	
	P7 (0,25;0,25)	1.6	1.6	1.6	1.6	1.6	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																																																						
Notes:																																																								
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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Date	29/03/2024				1 / 1																																																			