

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																																																																			
Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code : 12039624 Catalog # : 03012ST3QIE326TC-W22																																																																		
Frame : 324/6TC Output : 30 HP (22 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 460 V Rated current : 36.2 A L. R. Amperes : 224 A LRC : 6.2x(Code G) No load current : 14.5 A Rated speed : 1180 rpm Slip : 1.67 % Rated torque : 134 ft.lb Locked rotor torque : 220 % Breakdown torque : 240 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 13.2 sq.ft.lb Design : B	Locked rotor time : 37s (cold) 21s (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 <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 62.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 611 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>91.5</td> <td>91.2</td> <td>91.7</td> <td>91.3</td> <td rowspan="4">Max. traction</td> <td rowspan="4">: 1175 lb</td> </tr> <tr> <td>91.2</td> <td>90.4</td> <td>91.3</td> <td>90.7</td> </tr> <tr> <td>92.1</td> <td>92.1</td> <td>91.7</td> <td>91.7</td> </tr> <tr> <td>92.4</td> <td>91.0</td> <td>91.7</td> <td>92.4</td> </tr> <tr> <td rowspan="4">Power Factor</td> <td>0.42</td> <td>0.41</td> <td>0.65</td> <td>0.64</td> <td rowspan="4">Max. compression</td> <td rowspan="4">: 1786 lb</td> </tr> <tr> <td>0.77</td> <td>0.76</td> <td>0.82</td> <td>0.83</td> </tr> <tr> <td>0.39</td> <td>0.36</td> <td>0.61</td> <td>0.58</td> </tr> <tr> <td>0.74</td> <td>0.71</td> <td>0.80</td> <td>0.79</td> </tr> <tr> <td></td> <td>0.48</td> <td>0.44</td> <td>0.71</td> <td>0.68</td> <td></td> <td></td> </tr> <tr> <td></td> <td>0.81</td> <td>0.78</td> <td>0.84</td> <td>0.83</td> <td></td> <td></td> </tr> <tr> <td></td> <td>0.41</td> <td>0.65</td> <td>0.76</td> <td>0.82</td> <td></td> <td></td> </tr> </table>	Output	25%	50%	75%	100%	Foundation loads		Efficiency (%)	91.5	91.2	91.7	91.3	Max. traction	: 1175 lb	91.2	90.4	91.3	90.7	92.1	92.1	91.7	91.7	92.4	91.0	91.7	92.4	Power Factor	0.42	0.41	0.65	0.64	Max. compression	: 1786 lb	0.77	0.76	0.82	0.83	0.39	0.36	0.61	0.58	0.74	0.71	0.80	0.79		0.48	0.44	0.71	0.68				0.81	0.78	0.84	0.83				0.41	0.65	0.76	0.82			
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Losses at normative operating points (speed;torque), in percentage of rated output power																																																																			
Losses (%)	P1 (0,9;1,0)	7.3	7.3	7.3	7.3	7.3	7.3	7.3																																																											
	P2 (0,5;1,0)	6.2	6.2	6.2	6.2	6.2	6.2	6.2																																																											
	P3 (0,25;1,0)	6.0	6.0	6.0	6.0	6.0	6.0	6.0																																																											
	P4 (0,9;0,5)	3.5	3.5	3.5	3.5	3.5	3.5	3.5																																																											
	P5 (0,5;0,5)	2.4	2.4	2.4	2.4	2.4	2.4	2.4																																																											
	P6 (0,5;0,25)	1.6	1.6	1.6	1.6	1.6	1.6	1.6																																																											
	P7 (0,25;0,25)	1.1	1.1	1.1	1.1	1.1	1.1	1.1																																																											
Bearing type : Sealing : Lubrication interval : Lubricant amount : Lubricant type :		Drive end 6312 C3 Inpro/Seal 20000 h 21 g Mobil Polyrex EM		Non drive end 6212 C3 Inpro/Seal 20000 h 13 g																																																															
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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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Date	25/03/2024				1 / 1																																																														