

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																																														
Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code : 12385188 Catalog # : 01536ST3QIE254TC-W22																																													
Frame : 254/6TC Output : 15 HP (11 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 460 V Rated current : 17.2 A L. R. Amperes : 115 A LRC : 6.7x(Code G) No load current : 5.30 A Rated speed : 3530 rpm Slip : 1.94 % Rated torque : 22.3 ft.lb Locked rotor torque : 220 % Breakdown torque : 270 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 1.26 sq.ft.lb Design : B	Locked rotor time : 45s (cold) 25s (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> : 72.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 290 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>89.2</td> <td>90.1</td> <td>89.5</td> <td>90.3</td> <td rowspan="4">Max. traction</td> <td rowspan="4">: 165 lb</td> </tr> <tr> <td>89.9</td> <td>89.7</td> <td>90.1</td> <td>89.9</td> </tr> <tr> <td>89.8</td> <td>90.0</td> <td>89.5</td> <td>90.2</td> </tr> <tr> <td>90.7</td> <td>90.2</td> <td>91.0</td> <td>90.2</td> </tr> <tr> <td rowspan="4">Power Factor</td> <td>0.53</td> <td>0.48</td> <td>0.77</td> <td>0.73</td> <td rowspan="4">Max. compression</td> <td rowspan="4">: 455 lb</td> </tr> <tr> <td>0.44</td> <td>0.42</td> <td>0.69</td> <td>0.67</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>0.89</td> </tr> </table>	Output	25%	50%	75%	100%	Foundation loads		Efficiency (%)	89.2	90.1	89.5	90.3	Max. traction	: 165 lb	89.9	89.7	90.1	89.9	89.8	90.0	89.5	90.2	90.7	90.2	91.0	90.2	Power Factor	0.53	0.48	0.77	0.73	Max. compression	: 455 lb	0.44	0.42	0.69	0.67	0.60	0.57	0.83	0.81	0.54	0.79	0.86	0.89	
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Losses at normative operating points (speed;torque), in percentage of rated output power																																														
Losses (%)	P1 (0,9;1,0)	9.4	9.4	9.4	9.4	9.4	9.4																																							
	P2 (0,5;1,0)	7.5	7.5	7.5	7.5	7.5	7.5																																							
	P3 (0,25;1,0)	6.8	6.8	6.8	6.8	6.8	6.8																																							
	P4 (0,9;0,5)	4.8	4.8	4.8	4.8	4.8	4.8																																							
	P5 (0,5;0,5)	2.8	2.8	2.8	2.8	2.8	2.8																																							
	P6 (0,5;0,25)	1.8	1.8	1.8	1.8	1.8	1.8																																							
	P7 (0,25;0,25)	1.1	1.1	1.1	1.1	1.1	1.1																																							
Bearing type : Sealing : Lubrication interval : Lubricant amount : Lubricant type :		Drive end 6309 C3 Inpro/Seal 19000 h 13 g Mobil Polyrex EM		Non drive end 6209 C3 Inpro/Seal 20000 h 9 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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