

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																																														
Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code : 11431952 Catalog # : 15036ST3QIE445TS-W22																																													
Frame : 444/5TS Output : 150 HP (110 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 460 V Rated current : 163 A L. R. Amperes : 1060 A LRC : 6.5x(Code G) No load current : 41.0 A Rated speed : 3570 rpm Slip : 0.83 % Rated torque : 221 ft.lb Locked rotor torque : 180 % Breakdown torque : 240 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 39.1 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 : 81.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 1742 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>94.0</td> <td>93.0</td> <td>94.1</td> <td>93.7</td> <td rowspan="4">Max. traction</td> <td rowspan="4">: 758 lb</td> </tr> <tr> <td>93.9</td> <td>93.9</td> <td>94.1</td> <td>94.1</td> </tr> <tr> <td>94.3</td> <td>94.8</td> <td>94.1</td> <td>94.5</td> </tr> <tr> <td>94.8</td> <td>94.5</td> <td>95.0</td> <td>94.5</td> </tr> <tr> <td rowspan="4">Power Factor</td> <td>0.60</td> <td>0.59</td> <td>0.83</td> <td>0.81</td> <td rowspan="4">Max. compression</td> <td rowspan="4">: 2499 lb</td> </tr> <tr> <td>0.56</td> <td>0.53</td> <td>0.79</td> <td>0.77</td> </tr> <tr> <td>0.65</td> <td>0.62</td> <td>0.86</td> <td>0.84</td> </tr> <tr> <td>0.60</td> <td>0.83</td> <td>0.88</td> <td>0.89</td> </tr> </table>	Output	25%	50%	75%	100%	Foundation loads		Efficiency (%)	94.0	93.0	94.1	93.7	Max. traction	: 758 lb	93.9	93.9	94.1	94.1	94.3	94.8	94.1	94.5	94.8	94.5	95.0	94.5	Power Factor	0.60	0.59	0.83	0.81	Max. compression	: 2499 lb	0.56	0.53	0.79	0.77	0.65	0.62	0.86	0.84	0.60	0.83	0.88	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)	5.3	5.3	5.3	5.3	5.3	5.3																																							
	P2 (0,5;1,0)	3.5	3.5	3.5	3.5	3.5	3.5																																							
	P3 (0,25;1,0)	2.9	2.9	2.9	2.9	2.9	2.9																																							
	P4 (0,9;0,5)	3.3	3.3	3.3	3.3	3.3	3.3																																							
	P5 (0,5;0,5)	1.7	1.7	1.7	1.7	1.7	1.7																																							
	P6 (0,5;0,25)	1.3	1.3	1.3	1.3	1.3	1.3																																							
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6	0.6	0.6																																							
Bearing type	:	Drive end 6314 C3		Non drive end 6314 C3																																										
Sealing	:	Inpro/Seal		Inpro/Seal																																										
Lubrication interval	:	4000 h		4000 h																																										
Lubricant amount	:	27 g		27 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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Date	25/03/2024				1 / 1																																									