

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																																																	
Product line : W22 NEMA Premium Efficiency Three-Phase	Product code : 11807524 Catalog # : 03018ET3E286TF3-W22																																																
Frame : 286T Output : 30 HP (22 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 230/460 V Rated current : 70.2/35.1 A L. R. Amperes : 428/214 A LRC : 6.1x(Code G) No load current : 24.6/12.3 A Rated speed : 1770 rpm Slip : 1.67 % Rated torque : 89.0 ft.lb Locked rotor torque : 240 % Breakdown torque : 240 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 5.85 sq.ft.lb Design : B	Locked rotor time : 36s (cold) 20s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-3 Rotation ¹ : Both (CW and CCW) Noise level ² : 63.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 438 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>92.3</td> <td>91.8</td> <td>93.0</td> <td>92.1</td> <td rowspan="3">Max. traction</td> <td rowspan="3">: 907 lb</td> </tr> <tr> <td>92.0</td> <td>91.3</td> <td>92.1</td> <td>91.6</td> </tr> <tr> <td>89.8</td> <td>90.3</td> <td>90.0</td> <td>90.5</td> </tr> <tr> <td rowspan="4">Power Factor</td> <td>91.0</td> <td>91.2</td> <td>91.7</td> <td>91.7</td> <td rowspan="4">Max. compression</td> <td rowspan="4">: 1344 lb</td> </tr> <tr> <td>0.46</td> <td>0.47</td> <td>0.70</td> <td>0.70</td> </tr> <tr> <td>0.43</td> <td>0.41</td> <td>0.67</td> <td>0.64</td> </tr> <tr> <td>0.53</td> <td>0.50</td> <td>0.76</td> <td>0.73</td> </tr> <tr> <td></td> <td>0.46</td> <td>0.70</td> <td>0.80</td> <td>0.84</td> <td></td> <td></td> </tr> </table>	Output	25%	50%	75%	100%	Foundation loads		Efficiency (%)	92.3	91.8	93.0	92.1	Max. traction	: 907 lb	92.0	91.3	92.1	91.6	89.8	90.3	90.0	90.5	Power Factor	91.0	91.2	91.7	91.7	Max. compression	: 1344 lb	0.46	0.47	0.70	0.70	0.43	0.41	0.67	0.64	0.53	0.50	0.76	0.73		0.46	0.70	0.80	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)	6.8	6.8	6.8	6.8	6.8	6.8	6.8																																									
	P2 (0,5;1,0)	5.8	5.8	5.8	5.8	5.8	5.8	5.8																																									
	P3 (0,25;1,0)	5.2	5.2	5.2	5.2	5.2	5.2	5.2																																									
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1	3.1	3.1	3.1																																									
	P5 (0,5;0,5)	2.2	2.2	2.2	2.2	2.2	2.2	2.2																																									
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4	1.4	1.4	1.4																																									
	P7 (0,25;0,25)	0.9	0.9	0.9	0.9	0.9	0.9	0.9																																									
		Drive end			Non drive end																																												
Bearing type	:	6311 C3			6211 C3																																												
Sealing	:	V'Ring			V'Ring																																												
Lubrication interval	:	20000 h			20000 h																																												
Lubricant amount	:	18 g			11 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																																										
Performed by																																																	
Checked by							Page	Revision																																									
Date	28/03/2024						1 / 1																																										