

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																																																																														
Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code : 11766896 Catalog # : 00112ST3QIE145TC-W22																																																																													
Frame : 143/5TC Output : 1 HP (0.75 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 460 V Rated current : 1.73 A L. R. Amperes : 10.7 A LRC : 6.2x(Code K) No load current : 1.10 A Rated speed : 1160 rpm Slip : 3.33 % Rated torque : 4.53 ft.lb Locked rotor torque : 260 % Breakdown torque : 300 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.1595 sq.ft.lb Design : B	Locked rotor time : 50s (cold) 28s (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 : 50.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 62.0 lb																																																																													
<table border="1"> <tr> <td>Output</td> <td>25%</td> <td>50%</td> <td>75%</td> <td>100%</td> </tr> <tr> <td>Efficiency (%)</td> <td>76.0</td> <td>73.6</td> <td>77.0</td> <td>74.8</td> <td>82.0</td> <td>78.4</td> <td>82.5</td> <td>79.3</td> </tr> <tr> <td></td> <td>71.6</td> <td>68.6</td> <td>73.2</td> <td>70.7</td> <td>77.5</td> <td>75.8</td> <td>78.9</td> <td>77.9</td> </tr> <tr> <td></td> <td>77.6</td> <td>76.1</td> <td>77.0</td> <td>75.5</td> <td>80.0</td> <td>80.0</td> <td>78.5</td> <td>78.5</td> </tr> <tr> <td></td> <td>73.4</td> <td>74.0</td> <td>78.5</td> <td>78.5</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Power Factor</td> <td>0.26</td> <td>0.25</td> <td>0.45</td> <td>0.44</td> <td>0.57</td> <td>0.57</td> <td>0.66</td> <td>0.66</td> </tr> <tr> <td></td> <td>0.23</td> <td>0.21</td> <td>0.41</td> <td>0.38</td> <td>0.53</td> <td>0.50</td> <td>0.62</td> <td>0.59</td> </tr> <tr> <td></td> <td>0.31</td> <td>0.28</td> <td>0.53</td> <td>0.49</td> <td>0.66</td> <td>0.62</td> <td>0.74</td> <td>0.71</td> </tr> <tr> <td></td> <td>0.26</td> <td>0.46</td> <td>0.59</td> <td>0.68</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Output	25%	50%	75%	100%	Efficiency (%)	76.0	73.6	77.0	74.8	82.0	78.4	82.5	79.3		71.6	68.6	73.2	70.7	77.5	75.8	78.9	77.9		77.6	76.1	77.0	75.5	80.0	80.0	78.5	78.5		73.4	74.0	78.5	78.5					Power Factor	0.26	0.25	0.45	0.44	0.57	0.57	0.66	0.66		0.23	0.21	0.41	0.38	0.53	0.50	0.62	0.59		0.31	0.28	0.53	0.49	0.66	0.62	0.74	0.71		0.26	0.46	0.59	0.68					Foundation loads Max. traction : 104 lb Max. compression : 166 lb
Output	25%	50%	75%	100%																																																																										
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Losses at normative operating points (speed;torque), in percentage of rated output power																																																																														
Losses (%)	P1 (0,9;1,0)	20.0	20.0	20.0	20.0	20.0	20.0	20.0																																																																						
	P2 (0,5;1,0)	16.7	16.7	16.7	16.7	16.7	16.7	16.7																																																																						
	P3 (0,25;1,0)	16.9	16.9	16.9	16.9	16.9	16.9	16.9																																																																						
	P4 (0,9;0,5)	12.6	12.6	12.6	12.6	12.6	12.6	12.6																																																																						
	P5 (0,5;0,5)	9.2	9.2	9.2	9.2	9.2	9.2	9.2																																																																						
	P6 (0,5;0,25)	7.6	7.6	7.6	7.6	7.6	7.6	7.6																																																																						
	P7 (0,25;0,25)	5.8	5.8	5.8	5.8	5.8	5.8	5.8																																																																						
Bearing type	Drive end : 6205 C3	Non drive end : 6204 C3																																																																												
Sealing	Inpro/Seal	Inpro/Seal																																																																												
Lubrication interval	20000 h	20000 h																																																																												
Lubricant amount	4 g	4 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																																																																														
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Date	29/03/2024		1 / 1																																																																											