

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :										
Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase			Product code :	12373788					
				Catalog # :	00156ST3QIE143T-W22					
Frame	: 143/5T	Locked rotor time	: 37s (cold) 21s (hot)							
Output	: 1.5 HP (1.1 kW)	Temperature rise	: 80 K							
Poles	: 2	Duty cycle	: Cont.(S1)							
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C							
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.							
Rated current	: 1.96 A	Protection degree	: IP56							
L. R. Amperes	: 17.4 A	Cooling method	: IC411 - TEFC							
LRC	: 8.9x(Code L)	Mounting	: F-1							
No load current	: 0.830 A	Rotation ¹	: Both (CW and CCW)							
Rated speed	: 3480 rpm	Noise level ²	: 68.0 dB(A)							
Slip	: 3.33 %	Starting method	: Direct On Line							
Rated torque	: 2.26 ft.lb	Approx. weight ³	: 51.6 lb							
Locked rotor torque	: 310 %									
Breakdown torque	: 370 %									
Insulation class	: F									
Service factor	: 1.25									
Moment of inertia (J)	: 0.0470 sq.ft.lb									
Design	: B									
Output	50%	75%	100%	Foundation loads						
Efficiency (%)	81.5 80.5	84.0 83.2	84.0 83.4	Max. traction : 48 lb						
	79.3 78.9	82.8 82.7	83.4 83.4							
	81.0 82.0	81.5 82.5	81.5 82.5	Max. compression : 100 lb						
	82.0	82.5	82.5							
Power Factor	0.68 0.63	0.78 0.74	0.84 0.81							
	0.58 0.55	0.71 0.68	0.78 0.76							
	0.75 0.70	0.84 0.80	0.87 0.86							
	0.67	0.78	0.84							
Losses at normative operating points (speed;torque), in percentage of rated output power										
Losses (%)	P1 (0,9;1,0)	17.7	17.7	17.7	17.7	17.7	17.7			
	P2 (0,5;1,0)	13.3	13.3	13.3	13.3	13.3	13.3			
	P3 (0,25;1,0)	12.1	12.1	12.1	12.1	12.1	12.1			
	P4 (0,9;0,5)	9.8	9.8	9.8	9.8	9.8	9.8			
	P5 (0,5;0,5)	5.6	5.6	5.6	5.6	5.6	5.6			
	P6 (0,5;0,25)	3.8	3.8	3.8	3.8	3.8	3.8			
	P7 (0,25;0,25)	2.4	2.4	2.4	2.4	2.4	2.4			
Drive end				Non drive end						
Bearing type	:	6205 C3		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.				These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.						
(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.										
Rev.	Changes Summary			Performed	Checked	Date				
Performed by										
Checked by					Page	Revision				
Date	29/03/2024				1 / 1					