

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12445706

Catalog # : 00156ET3E143TC-W22

Frame	: 143/5TC	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	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 3.92/1.96 A	Protection degree	: IP55
L. R. Amperes	: 34.9/17.4 A	Cooling method	: IC411 - TEFC
LRC	: 8.9x(Code L)	Mounting	: F-1
No load current	: 1.66/0.830 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	: 46.8 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	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	81.1	79.9	81.5	80.5	84.0	83.2	84.0	83.4	Max. traction	: 50 lb
	78.4	77.9	79.3	78.9	82.8	82.7	83.4	83.4		
	80.6	81.6	81.0	82.0	81.5	82.5	81.5	82.5		
	81.7	82.0	82.0	82.5	82.5	82.5	82.5			
Power Factor	0.43	0.39	0.68	0.63	0.78	0.74	0.84	0.81	Max. compression	: 97 lb
	0.35	0.33	0.58	0.55	0.71	0.68	0.78	0.76		
	0.51	0.46	0.75	0.70	0.84	0.80	0.87	0.86		
	0.43	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	17.7
	P2 (0,5;1,0)	13.3	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	12.1
	P4 (0,9;0,5)	9.8	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	5.6
	P6 (0,5;0,25)	3.8	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	2.4

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6205 ZZ	6204 ZZ
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	-	-
Lubricant amount	:	-	-
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				
Date	26/03/2024		Page 1 / 1	Revision