

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12373436
Catalog # : 00118ST3QIE143TC-W22

Frame	: 143/5TC	Locked rotor time	: 32s (cold) 18s (hot)
Output	: 1 HP (0.75 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 1.47 A	Protection degree	: IP56
L. R. Amperes	: 12.6 A	Cooling method	: IC411 - TEFC
LRC	: 8.6x(Code M)	Mounting	: F-1
No load current	: 0.940 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1760 rpm	Noise level ²	: 51.0 dB(A)
Slip	: 2.22 %	Starting method	: Direct On Line
Rated torque	: 2.98 ft.lb	Approx. weight ³	: 54.9 lb
Locked rotor torque	: 290 %		
Breakdown torque	: 350 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1172 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	78.4	79.6	80.0	80.0	84.0	82.5	85.5	82.5	Max. traction	: 70 lb
	78.4	78.4	80.0	80.0	82.5	82.5	84.0	84.0		
Power Factor	0.31	0.36	0.55	0.62	0.68	0.74	0.75	0.81	Max. compression	: 125 lb
	0.33	0.31	0.58	0.55	0.71	0.69	0.78	0.76		

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	15.9	15.9	15.9	15.9
	P2 (0,5;1,0)	12.8	12.8	12.8	12.8
	P3 (0,25;1,0)	12.5	12.5	12.5	12.5
	P4 (0,9;0,5)	10.1	10.1	10.1	10.1
	P5 (0,5;0,5)	7.0	7.0	7.0	7.0
	P6 (0,5;0,25)	5.8	5.8	5.8	5.8
	P7 (0,25;0,25)	4.3	4.3	4.3	4.3

		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.

- (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	29/03/2024			
			Page	Revision
			1 / 1	