

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency
Three-Phase

Product code : 13205894

Catalog # : 00109ST3QIE182T-W22

Frame	: 182/4T	Locked rotor time	: 39s (cold) 22s (hot)
Output	: 1 HP (0.75 kW)	Temperature rise	: 80 K
Poles	: 8	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	: 2.30 A	Protection degree	: IP56
L. R. Amperes	: 13.8 A	Cooling method	: IC411 - TEFC
LRC	: 6.0x(Code M)	Mounting	: F-1
No load current	: 1.70 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 875 rpm	Noise level ²	: 50.0 dB(A)
Slip	: 2.78 %	Starting method	: Direct On Line
Rated torque	: 6.00 ft.lb	Approx. weight ³	: 95.0 lb
Locked rotor torque	: 300 %		
Breakdown torque	: 350 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.3991 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	72.4	74.4	74.0	74.7	77.0	75.5	78.5	75.5	Max. traction	: 97 lb
	71.5	68.4	72.0	70.0	75.5	74.0	75.5	75.5		
Power Factor	0.18	0.21	0.32	0.38	0.42	0.50	0.52	0.60	Max. compression	: 192 lb
	0.19	0.18	0.35	0.33	0.46	0.43	0.56	0.53		

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

Losses (%)	P1 (0,9;1,0)	26.3	26.3	26.3	26.3
	P2 (0,5;1,0)	21.5	21.5	21.5	21.5
	P3 (0,25;1,0)	19.6	19.6	19.6	19.6
	P4 (0,9;0,5)	19.2	19.2	19.2	19.2
	P5 (0,5;0,5)	14.6	14.6	14.6	14.6
	P6 (0,5;0,25)	13.1	13.1	13.1	13.1
	P7 (0,25;0,25)	10.6	10.6	10.6	10.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6207 C3	6206 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	7 g	5 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
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