

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11431716

Catalog # : 03009ST3QIE364T-W22

Frame	: 364/5T	Locked rotor time	: 45s (cold) 25s (hot)
Output	: 30 HP (22 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	: 38.1 A	Protection degree	: IP56
L. R. Amperes	: 236 A	Cooling method	: IC411 - TEFC
LRC	: 6.2x(Code G)	Mounting	: F-1
No load current	: 16.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 882 rpm	Noise level ²	: 60.0 dB(A)
Slip	: 2.00 %	Starting method	: Direct On Line
Rated torque	: 179 ft.lb	Approx. weight ³	: 775 lb
Locked rotor torque	: 160 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 23.5 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	91.3	88.7	91.5	89.0	91.7	89.5	91.7	89.5	Max. traction	: 1090 lb
	90.2	90.3	90.5	90.5	90.6	90.6	90.6	90.6		
Power Factor	0.39	0.47	0.62	0.71	0.73	0.79	0.79	0.82	Max. compression	: 1865 lb
	0.43	0.40	0.67	0.65	0.77	0.75	0.81	0.80		

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

Losses (%)	P1 (0,9;1,0)	8.9	8.9	8.9	8.9
	P2 (0,5;1,0)	7.7	7.7	7.7	7.7
	P3 (0,25;1,0)	7.2	7.2	7.2	7.2
	P4 (0,9;0,5)	3.9	3.9	3.9	3.9
	P5 (0,5;0,5)	2.8	2.8	2.8	2.8
	P6 (0,5;0,25)	1.7	1.7	1.7	1.7
	P7 (0,25;0,25)	1.3	1.3	1.3	1.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	27 g	27 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	25/03/2024			
			Page	Revision
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