

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12176656
Catalog # : 15009ST3QIE447T-W22

Frame	: 445/7T	Locked rotor time	: 27s (cold) 15s (hot)
Output	: 150 HP (110 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	: 185 A	Protection degree	: IP56
L. R. Amperes	: 1110 A	Cooling method	: IC411 - TEFC
LRC	: 6.0x(Code G)	Mounting	: F-1
No load current	: 75.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 890 rpm	Noise level ²	: 63.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 885 ft.lb	Approx. weight ³	: 2206 lb
Locked rotor torque	: 190 %		
Breakdown torque	: 210 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 125 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	94.4	94.9	94.5	94.5	94.5	94.1	94.5	93.6	Max. traction	: 4809 lb
	94.0	93.5	94.1	93.6	94.1	94.1	94.1	94.1		
Power Factor	0.40	0.40	0.64	0.65	0.74	0.75	0.79	0.80	Max. compression	: 7015 lb
	0.37	0.34	0.61	0.57	0.72	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)	5.9	5.9	5.9	5.9
	P2 (0,5;1,0)	4.8	4.8	4.8	4.8
	P3 (0,25;1,0)	4.4	4.4	4.4	4.4
	P4 (0,9;0,5)	2.9	2.9	2.9	2.9
	P5 (0,5;0,5)	2.0	2.0	2.0	2.0
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6319 C3	6316 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	17000 h	20000 h
Lubricant amount	:	45 g	34 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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