

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11584360

Catalog # : 06009ST3QIE405T-W22

Frame	: 404/5T	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 60 HP (45 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	: 73.0 A	Protection degree	: IP56
L. R. Amperes	: 475 A	Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code H)	Mounting	: F-1
No load current	: 30.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 880 rpm	Noise level ²	: 60.0 dB(A)
Slip	: 2.22 %	Starting method	: Direct On Line
Rated torque	: 358 ft.lb	Approx. weight ³	: 1147 lb
Locked rotor torque	: 180 %		
Breakdown torque	: 270 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 40.2 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	93.0 92.4 91.9 91.9 92.4 92.4 92.4	93.0 92.1 92.1 92.2 91.7 91.7 91.7	93.0 91.8 91.8 91.8 90.2 91.0 91.0	Max. traction	: 2818 lb
Power Factor	0.68 0.67 0.64 0.61 0.74 0.71 0.68	0.78 0.79 0.77 0.74 0.82 0.80 0.78	0.83 0.84 0.82 0.81 0.85 0.84 0.83	Max. compression	: 3966 lb

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

Losses (%)	P1 (0,9;1,0)	7.3	7.3	7.3	7.3	7.3	7.3	7.3
	P2 (0,5;1,0)	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	P3 (0,25;1,0)	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1	3.1	3.1	3.1
	P5 (0,5;0,5)	2.3	2.3	2.3	2.3	2.3	2.3	2.3
	P6 (0,5;0,25)	1.3	1.3	1.3	1.3	1.3	1.3	1.3
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0	1.0	1.0	1.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6316 C3	6314 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	34 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	26/03/2024			

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Revision