

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11600529

Catalog # : 20036ET3E447TS-W22

Frame	: 445/7TS	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 200 HP (150 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 438/219 A	Protection degree	: IP55
L. R. Amperes	: 2847/1424 A	Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code G)	Mounting	: F-1
No load current	: 90.0/45.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3570 rpm	Noise level ²	: 81.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 294 ft.lb	Approx. weight ³	: 2067 lb
Locked rotor torque	: 210 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 44.7 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	95.0 95.0	95.4 95.2	95.4 95.2	Max. traction	: 1135 lb
	95.0 95.0	95.3 95.3	95.3 95.3		
	95.0 95.0	95.0 95.0	94.5 95.0		
	95.0	95.4	95.0		
Power Factor	0.86 0.85	0.89 0.90	0.90 0.91	Max. compression	: 3201 lb
	0.83 0.82	0.89 0.88	0.91 0.90		
	0.88 0.87	0.90 0.89	0.90 0.90		
	0.86	0.89	0.90		

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

Losses (%)	P1 (0,9;1,0)	4.8	4.8	4.8	4.8	4.8	4.8	4.8
	P2 (0,5;1,0)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	P3 (0,25;1,0)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	P4 (0,9;0,5)	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	P6 (0,5;0,25)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	P7 (0,25;0,25)	0.5	0.5	0.5	0.5	0.5	0.5	0.5

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	4000 h	4000 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	28/03/2024			
			Page	Revision
			1 / 1	