

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13025409

Catalog # : 15018ET3E445TC-W22

Frame	: 444/5TC	Locked rotor time	: 48s (cold) 27s (hot)
Output	: 150 HP (110 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 340/170 A	Protection degree	: IP55
L. R. Amperes	: 2244/1122 A	Cooling method	: IC411 - TEFC
LRC	: 6.6x(Code G)	Mounting	: F-1
No load current	: 116/58.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1784 rpm	Noise level ²	: 73.0 dB(A)
Slip	: 0.89 %	Starting method	: Direct On Line
Rated torque	: 442 ft.lb	Approx. weight ³	: 1783 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 66.7 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	95.4 95.1 95.1 94.8 95.4 95.4 95.4	95.8 95.5 95.5 95.5 95.4 95.4 95.4	95.8 95.3 95.3 95.5 95.0 95.0 95.4	Max. traction	: 2509 lb
Power Factor	0.74 0.73 0.70 0.68 0.79 0.76 0.74	0.82 0.83 0.81 0.79 0.85 0.83 0.82	0.85 0.85 0.85 0.84 0.86 0.86 0.85	Max. compression	: 4292 lb

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

Losses (%)	P1 (0,9;1,0)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	P2 (0,5;1,0)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	P3 (0,25;1,0)	3.1	3.1	3.1	3.1	3.1	3.1	3.1
	P4 (0,9;0,5)	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6	0.6	0.6	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6319 C3	6316 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	8000 h	10000 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		Page 1 / 1 Revision		
Checked by				
Date	28/03/2024			