

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code :

13103417

Catalog # :

30018EP3G449TS-W22

Frame	: 447/9TS	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 300 HP (220 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 337 A	Protection degree	: IP55
L. R. Amperes	: 2191 A	Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code G)	Mounting	: F-1
No load current	: 105 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level <sup>2</sup>	: 75.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 885 ft.lb	Approx. weight <sup>3</sup>	: 2615 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 105 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	95.6	95.3	95.4	95.0	95.8	95.5	95.4	95.0	Max. traction	: 4841 lb
	95.3	95.3	95.0	95.0	95.5	95.5	95.0	95.0		
Power Factor	0.52	0.52	0.76	0.77	0.84	0.84	0.86	0.87	Max. compression	: 7456 lb
	0.50	0.48	0.75	0.74	0.83	0.82	0.86	0.85		

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

Losses (%)	P1 (0,9;1,0)	4.9	5.4	5.4	5.4
	P2 (0,5;1,0)	4.1	4.5	4.5	4.5
	P3 (0,25;1,0)	3.8	4.1	4.1	4.1
	P4 (0,9;0,5)	2.4	2.6	2.6	2.6
	P5 (0,5;0,5)	1.7	1.8	1.8	1.8
	P6 (0,5;0,25)	1.1	1.2	1.2	1.2
	P7 (0,25;0,25)	0.7	0.7	0.7	0.7

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	12000 h	12000 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 1 / 1	Revision