

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11408292

Catalog # : 45018ET3G449T-W22

Frame : L447/9T
 Output : 450 HP (330 kW)
 Poles : 4
 Frequency : 60 Hz
 Rated voltage : 460 V
 Rated current : 513 A
 L. R. Amperes : 4566 A
 LRC : 8.9x(Code K)
 No load current : 215 A
 Rated speed : 1791 rpm
 Slip : 0.50 %
 Rated torque : 1320 ft.lb
 Locked rotor torque : 320 %
 Breakdown torque : 330 %
 Insulation class : F
 Service factor : 1.15
 Moment of inertia (J) : 152 sq.ft.lb
 Design : A

Locked rotor time : 39s (cold) 22s (hot)
 Temperature rise : 80 K
 Duty cycle : Cont.(S1)
 Ambient temperature : -20°C to +40°C
 Altitude : 1000 m.a.s.l.
 Protection degree : IP55
 Cooling method : IC411 - TEFC
 Mounting : F-1
 Rotation¹ : Both (CW and CCW)
 Noise level² : 79.0 dB(A)
 Starting method : Direct On Line
 Approx. weight³ : 3476 lb

Output	25%		50%		75%		100%	
Efficiency (%)	95.3	95.7	95.4	95.8	96.2	96.2	96.2	96.2
	95.0	95.0	95.4	95.4	95.8	95.8	96.2	96.2
Power Factor	0.41	0.45	0.66	0.70	0.78	0.80	0.84	0.84
	0.40	0.36	0.65	0.60	0.77	0.74	0.82	0.80

Foundation loads
 Max. traction : 11416 lb
 Max. compression : 14892 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
	P2 (0,5;1,0)	3.3	3.3	3.3	3.3
	P3 (0,25;1,0)	2.7	2.7	2.7	2.7
	P4 (0,9;0,5)	2.5	2.5	2.5	2.5
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6322 C3	6319 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	6000 h	8000 h
Lubricant amount	:	60 g	45 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		
Checked by				
Date	28/03/2024			
		Revision		