

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11546903

Catalog # : 20018ET3G447TS-W22

Frame : 445/7TS  
Output : 200 HP (150 kW)  
Poles : 4  
Frequency : 60 Hz  
Rated voltage : 460 V  
Rated current : 230 A  
L. R. Amperes : 1564 A  
LRC : 6.8x(Code G)  
No load current : 70.0 A  
Rated speed : 1785 rpm  
Slip : 0.83 %  
Rated torque : 588 ft.lb  
Locked rotor torque : 229 %  
Breakdown torque : 250 %  
Insulation class : F  
Service factor : 1.15  
Moment of inertia (J) : 76.2 sq.ft.lb  
Design : B

Locked rotor time : 28s (cold) 16s (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  
Rotation<sup>1</sup> : Both (CW and CCW)  
Noise level<sup>2</sup> : 73.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 2252 lb

Output	25%		50%		75%		100%	
Efficiency (%)	95.7	94.3	95.8	94.5	96.2	95.0	96.2	95.0
	94.9	94.9	95.0	95.0	95.4	95.4	95.4	95.4
Power Factor	0.50	0.56	0.73	0.78	0.82	0.85	0.85	0.86
	0.53	0.50	0.76	0.73	0.84	0.82	0.86	0.85

Foundation loads  
Max. traction : 3414 lb  
Max. compression : 5666 lb

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

Losses (%)	P1 (0,9;1,0)	4.0	4.0	4.0	4.0
	P2 (0,5;1,0)	3.2	3.2	3.2	3.2
	P3 (0,25;1,0)	2.9	2.9	2.9	2.9
	P4 (0,9;0,5)	2.0	2.0	2.0	2.0
	P5 (0,5;0,5)	1.3	1.3	1.3	1.3
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9
	P7 (0,25;0,25)	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	:	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		Page 1 / 1		
Checked by				
Date	28/03/2024			
		Revision		