

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447067

Catalog # : 02518ET3E284TC-W22

Frame : 284/6TC  
 Output : 25 HP (18.5 kW)  
 Poles : 4  
 Frequency : 60 Hz  
 Rated voltage : 230/460 V  
 Rated current : 59.0/29.5 A  
 L. R. Amperes : 366/183 A  
 LRC : 6.2x(Code G)  
 No load current : 22.0/11.0 A  
 Rated speed : 1770 rpm  
 Slip : 1.67 %  
 Rated torque : 74.2 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 270 %  
 Insulation class : F  
 Service factor : 1.25  
 Moment of inertia (J) : 5.11 sq.ft.lb  
 Design : B

Locked rotor time : 43s (cold) 24s (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> : 63.0 dB(A)  
 Starting method : Direct On Line  
 Approx. weight<sup>3</sup> : 406 lb

Output	50%	75%	100%
Efficiency (%)	92.4 91.3 91.3 91.2 92.4 92.4 92.4	93.0 92.1 92.5 92.5 91.7 92.4 92.4	93.6 92.1 92.6 92.7 91.0 91.7 92.4
Power Factor	0.70 0.69 0.65 0.62 0.76 0.73 0.70	0.80 0.80 0.78 0.75 0.84 0.82 0.80	0.84 0.85 0.83 0.82 0.86 0.85 0.84

Foundation loads  
 Max. traction : 813 lb  
 Max. compression : 1219 lb

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

Losses (%)	P1 (0,9;1,0)	6.8	6.8	6.8	6.8	6.8	6.8	6.8
	P2 (0,5;1,0)	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	P3 (0,25;1,0)	5.3	5.3	5.3	5.3	5.3	5.3	5.3
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1	3.1	3.1	3.1
	P5 (0,5;0,5)	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0	1.0	1.0	1.0

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type :	6311 C3	6211 C3
Sealing :	V'Ring	V'Ring
Lubrication interval :	20000 h	20000 h
Lubricant amount :	18 g	11 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		