

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12216742

Catalog # : 00158ET3ER145TC-W22

Frame : 145TC  
 Output : 1.5 HP (1.1 kW)  
 Poles : 4  
 Frequency : 60 Hz  
 Rated voltage : 230/460 V  
 Rated current : 4.04/2.02 A  
 L. R. Amperes : 33.9/17.0 A  
 LRC : 8.4x(Code L)  
 No load current : 2.20/1.10 A  
 Rated speed : 1755 rpm  
 Slip : 2.50 %  
 Rated torque : 4.49 ft.lb  
 Locked rotor torque : 290 %  
 Breakdown torque : 350 %  
 Insulation class : F  
 Service factor : 1.25  
 Moment of inertia (J) : 0.1431 sq.ft.lb  
 Design : B

Locked rotor time : 25s (cold) 14s (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 : W-6  
 Rotation<sup>1</sup> : Both (CW and CCW)  
 Noise level<sup>2</sup> : 51.0 dB(A)  
 Starting method : Direct On Line  
 Approx. weight<sup>3</sup> : 50.9 lb

Output	25%		50%		75%		100%	
Efficiency (%)	81.3	82.0	82.5	82.5	85.5	84.0	86.5	84.1
	82.1	80.5	82.5	81.0	84.0	84.0	84.1	84.1
Power Factor	0.35	0.41	0.60	0.67	0.70	0.76	0.79	0.82
	0.37	0.34	0.63	0.60	0.74	0.70	0.81	0.79

Foundation loads  
 Max. traction : 126 lb  
 Max. compression : 177 lb

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

Losses (%)	P1 (0,9;1,0)	14.6	14.6	14.6	14.6
	P2 (0,5;1,0)	12.1	12.1	12.1	12.1
	P3 (0,25;1,0)	12.2	12.2	12.2	12.2
	P4 (0,9;0,5)	8.2	8.2	8.2	8.2
	P5 (0,5;0,5)	5.7	5.7	5.7	5.7
	P6 (0,5;0,25)	4.3	4.3	4.3	4.3
	P7 (0,25;0,25)	3.2	3.2	3.2	3.2

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6205 ZZ	6204 ZZ
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	-	-
Lubricant amount	:	-	-
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	26/03/2024			
		Revision		