

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency  
Three-Phase

Product code : 12822411

Catalog # : 00118ST3QIER143TC-W2

Frame : 143TC  
Output : 1 HP (0.75 kW)  
Poles : 4  
Frequency : 60 Hz  
Rated voltage : 460 V  
Rated current : 1.47 A  
L. R. Amperes : 12.6 A  
LRC : 8.6x(Code M)  
No load current : 0.940 A  
Rated speed : 1760 rpm  
Slip : 2.22 %  
Rated torque : 2.98 ft.lb  
Locked rotor torque : 290 %  
Breakdown torque : 350 %  
Insulation class : F  
Service factor : 1.25  
Moment of inertia (J) : 0.1172 sq.ft.lb  
Design : B

Locked rotor time : 32s (cold) 18s (hot)  
Temperature rise : 80 K  
Duty cycle : Cont.(S1)  
Ambient temperature : -20°C to +40°C  
Altitude : 1000 m.a.s.l.  
Protection degree : IP56  
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> : 51.6 lb

Output	25%		50%		75%		100%	
Efficiency (%)	78.4	79.6	80.0	80.0	84.0	82.5	85.5	82.5
	78.4	78.4	80.0	80.0	82.5	82.5	84.0	84.0
Power Factor	0.31	0.36	0.55	0.62	0.68	0.74	0.75	0.81
	0.33	0.31	0.58	0.55	0.71	0.69	0.78	0.76

Foundation loads  
Max. traction : 71 lb  
Max. compression : 123 lb

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

Losses (%)	P1 (0,9;1,0)	15.9	15.9	15.9	15.9
	P2 (0,5;1,0)	12.8	12.8	12.8	12.8
	P3 (0,25;1,0)	12.5	12.5	12.5	12.5
	P4 (0,9;0,5)	10.1	10.1	10.1	10.1
	P5 (0,5;0,5)	7.0	7.0	7.0	7.0
	P6 (0,5;0,25)	5.8	5.8	5.8	5.8
	P7 (0,25;0,25)	4.3	4.3	4.3	4.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6205 C3	6204 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	4 g	4 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	29/03/2024			
		Revision		