

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12445601

Catalog # : 00118ET3E143TC-W22

Frame : 143/5TC
Output : 1 HP (0.75 kW)
Poles : 4
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 2.94/1.47 A
L. R. Amperes : 25.3/12.6 A
LRC : 8.6x(Code M)
No load current : 1.88/0.940 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 : IP55
Cooling method : IC411 - TEFC
Mounting : F-1
Rotation¹ : Both (CW and CCW)
Noise level² : 51.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 46.8 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 : 74 lb
Max. compression : 121 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 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		