

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11438008

Catalog # : 02018ET3E256T-W22

Frame	: 254/6T	Locked rotor time	: 54s (cold) 30s (hot)
Output	: 20 HP (15 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 48.2/24.1 A	Protection degree	: IP55
L. R. Amperes	: 333/166 A	Cooling method	: IC411 - TEFC
LRC	: 6.9x(Code H)	Mounting	: F-1
No load current	: 19.2/9.60 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1770 rpm	Noise level ²	: 64.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 59.3 ft.lb	Approx. weight ³	: 332 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 3.10 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.7 91.0	92.4 91.5	93.0 91.4	Max. traction	: 728 lb
	89.8 89.8	91.0 91.3	91.4 91.7		
	91.7 91.0	91.0 91.0	90.2 91.0		
	91.0	91.7	91.7		
Power Factor	0.68 0.65	0.79 0.78	0.84 0.84	Max. compression	: 1060 lb
	0.62 0.60	0.75 0.73	0.82 0.81		
	0.75 0.72	0.83 0.81	0.86 0.85		
	0.70	0.80	0.84		

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

Losses (%)	P1 (0,9;1,0)	7.5	7.5	7.5	7.5	7.5	7.5	7.5
	P2 (0,5;1,0)	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	P3 (0,25;1,0)	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	P4 (0,9;0,5)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	P5 (0,5;0,5)	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	P6 (0,5;0,25)	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	P7 (0,25;0,25)	1.1	1.1	1.1	1.1	1.1	1.1	1.1

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	13 g	9 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				
Checked by				
Date	28/03/2024			
			Page	Revision
			1 / 1	