

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12447102

Catalog # : 02536ET3E284TS-W22

Frame	: 284/6TS	Locked rotor time	: 30s (cold) 17s (hot)
Output	: 25 HP (18.5 kW)	Temperature rise	: 80 K
Poles	: 2	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	: 57.5/28.8 A	Protection degree	: IP55
L. R. Amperes	: 363/181 A	Cooling method	: IC411 - TEFC
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 16.3/8.15 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3545 rpm	Noise level ²	: 72.0 dB(A)
Slip	: 1.53 %	Starting method	: Direct On Line
Rated torque	: 37.0 ft.lb	Approx. weight ³	: 374 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 2.69 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	0.000	91.0 90.2	91.7 90.7	91.7 91.9	Max. traction	: 280 lb
		90.3 89.8	91.1 91.1	91.9 91.9		
		91.0 91.0	90.2 91.0	89.5 90.2		
		91.0	91.0	91.0		
Power Factor	0.00	0.78 0.79	0.85 0.86	0.88 0.88	Max. compression	: 654 lb
		0.76 0.73	0.84 0.82	0.87 0.86		
		0.83 0.81	0.88 0.87	0.89 0.88		
		0.79	0.85	0.88		

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

Losses (%)	P1 (0,9;1,0)	8.1	7.9	7.9	7.9	10.6	9.8	8.9
	P2 (0,5;1,0)	5.6	5.5	5.5	5.5	7.3	6.7	6.1
	P3 (0,25;1,0)	4.9	4.8	4.8	4.8	6.3	5.9	5.3
	P4 (0,9;0,5)	4.8	4.6	4.6	4.6	6.2	5.7	5.2
	P5 (0,5;0,5)	2.5	2.4	2.4	2.4	3.2	2.9	2.7
	P6 (0,5;0,25)	1.7	1.7	1.7	1.7	2.2	2.1	1.9
	P7 (0,25;0,25)	0.9	0.9	0.9	0.9	1.2	1.1	1.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	14000 h	17000 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				
Checked by				
Date	28/03/2024		Page 1 / 1	Revision