

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11165648

Catalog # : 05012ET3E365T-W22

Frame	: 364/5T	Locked rotor time	: 32s (cold) 18s (hot)
Output	: 50 HP (37 kW)	Temperature rise	: 80 K
Poles	: 6	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	: 115/57.4 A	Protection degree	: IP55
L. R. Amperes	: 735/367 A	Cooling method	: IC411 - TEFC
LRC	: 6.4x(Code G)	Mounting	: F-1
No load current	: 40.0/20.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1183 rpm	Noise level ²	: 66.0 dB(A)
Slip	: 1.42 %	Starting method	: Direct On Line
Rated torque	: 222 ft.lb	Approx. weight ³	: 904 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 32.4 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	93.6 92.7	94.1 92.8	94.1 92.9	Max. traction	: 1657 lb
	92.7 92.6	93.1 93.1	92.9 92.9		
	93.0 93.0	92.4 93.0	91.7 92.4		
	93.0	93.0	92.4		
Power Factor	0.74 0.72	0.83 0.82	0.86 0.85	Max. compression	: 2562 lb
	0.70 0.66	0.80 0.79	0.84 0.84		
	0.77 0.75	0.84 0.83	0.86 0.86		
	0.74	0.82	0.85		

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

Losses (%)	P1 (0,9;1,0)	6.2	6.2	6.2	6.2	6.2	6.2	6.2
	P2 (0,5;1,0)	5.2	5.2	5.2	5.2	5.2	5.2	5.2
	P3 (0,25;1,0)	4.6	4.6	4.6	4.6	4.6	4.6	4.6
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	P5 (0,5;0,5)	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	P6 (0,5;0,25)	1.2	1.2	1.2	1.2	1.2	1.2	1.2
	P7 (0,25;0,25)	0.8	0.8	0.8	0.8	0.8	0.8	0.8

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	17000 h	17000 h
Lubricant amount	:	27 g	27 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	29/03/2024			
			Page	Revision
			1 / 1	