

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11569386

Catalog # : 10018ET3E405TS-W22

Frame	: 404/5TS	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 100 HP (75 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	: 226/113 A	Protection degree	: IP55
L. R. Amperes	: 1650/825 A	Cooling method	: IC411 - TEFC
LRC	: 7.3x(Code H)	Mounting	: F-1
No load current	: 76.0/38.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 295 ft.lb	Approx. weight ³	: 1169 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 29.9 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads				
Efficiency (%)	0.000	95.0	94.0	95.0	94.4	95.4	95.0	Max. traction : 2087 lb	
	0.000	93.9	93.6	94.5	94.5	95.0	95.0		
		94.5	94.5	94.1	94.5	93.6	94.1		
		94.5		94.5		94.5			
Power Factor	0.00	0.00	0.77	0.72	0.84	0.83	0.87	Max. compression : 3256 lb	
			0.69	0.66	0.81	0.79	0.85		0.84
			0.82	0.79	0.86	0.85	0.88		0.88
			0.77		0.84		0.87		

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

Losses (%)	P1 (0,9;1,0)	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	P2 (0,5;1,0)	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	P3 (0,25;1,0)	3.7	3.7	3.7	3.7	3.7	3.7	3.7
	P4 (0,9;0,5)	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9	0.9	0.9	0.9
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6	0.6	0.6	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	12000 h	12000 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	28/03/2024			
			Page	Revision
			1 / 1	