

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Cooling Tower NEMA Premium  
Efficiency Three-Phase

Product code : 11976560

Catalog # : 10018ET3ECT405T-W22

Frame	: 404/5T	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-2
No load current	: 76.0/38.0 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level <sup>2</sup>	: 68.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 295 ft.lb	Approx. weight <sup>3</sup>	: 1189 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 (%)	94.6	93.4	95.0	94.0	95.0	94.4	95.4	95.0	Max. traction	: 2077 lb
	93.3	93.0	93.9	93.6	94.5	94.5	95.0	95.0		
	94.8	94.7	94.5	94.5	94.1	94.5	93.6	94.1		
	94.4		94.5		94.5		94.5			
Power Factor	0.51	0.47	0.77	0.72	0.84	0.83	0.87	0.86	Max. compression	: 3266 lb
	0.44	0.41	0.69	0.66	0.81	0.79	0.85	0.84		
	0.57	0.53	0.82	0.79	0.86	0.85	0.88	0.88		
	0.51		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	:	6316 2RS C3	6314 2RS C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	POLYREA ESTER OIL (WT/ ENS)	

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.

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Customer :

### Space heater information

Voltage: 110-127/200-240 V

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