

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11976412

Catalog # : 05012ET3ECT365T-W22

Frame : 364/5T
Output : 50 HP (37 kW)
Poles : 6
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 115/57.4 A
L. R. Amperes : 735/367 A
LRC : 6.4x(Code G)
No load current : 40.0/20.0 A
Rated speed : 1183 rpm
Slip : 1.42 %
Rated torque : 222 ft.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

Locked rotor time : 32s (cold) 18s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : F-2
Rotation¹ : Both (CW and CCW)
Noise level² : 66.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 887 lb

Output	25%		50%		75%		100%	
Efficiency (%)	93.4	92.5	93.6	92.7	94.1	92.8	94.1	92.9
	92.7	92.6	92.7	92.6	93.1	93.1	92.9	92.9
	93.5	93.4	93.0	93.0	92.4	93.0	91.7	92.4
	93.4		93.0		93.0		92.4	
Power Factor	0.49	0.47	0.74	0.72	0.83	0.82	0.86	0.85
	0.44	0.41	0.70	0.66	0.80	0.79	0.84	0.84
	0.53	0.50	0.77	0.75	0.84	0.83	0.86	0.86
	0.48		0.74		0.82		0.85	

Foundation loads
Max. traction : 1666 lb
Max. compression : 2553 lb

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 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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Checked by				
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Revision

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Customer :

Space heater information

Voltage: 110-127/200-240 V

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