

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11972828

Catalog # : 04018ET3ECT324T-W22

Frame	: 324T	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-2
Duty cycle	: Cont.(S1)	Rotation ¹	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight ²	: 566 lb
Protection degree	: IP55	Moment of inertia (J)	: 9.16 sq.ft.lb
Design	: B		

Output [HP]	40	30	30	30	40	40	40
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	208-230/460	380	400	415	380	400	415
Rated current [A]	104-94.2/47.1	42.8	41.6	41.1	56.7	54.1	52.8
L. R. Amperes [A]	635-575/287	218	241	255	221	243	259
LRC [A]	6.1x(Code G)	5.1x(Code E)	5.8x(Code F)	6.2x(Code G)	3.9x(Code C)	4.5x(Code D)	4.9x(Code E)
No load current [A]	27.6-32.0/16.0	15.7	17.3	18.6	15.7	17.3	18.6
Rated speed [RPM]	1775	1475	1475	1475	1465	1470	1470
Slip [%]	1.39	1.67	1.67	1.67	2.33	2.00	2.00
Rated torque [ft.lb]	117	105	105	105	141	141	141
Locked rotor torque [%]	220	229	250	280	170	190	210
Breakdown torque [%]	240	250	290	310	180	210	229
Service factor	1.25	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	80 K
Locked rotor time	36s (cold) 20s (hot)	25s (cold) 14s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	25s (cold) 14s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	66.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)
Efficiency (%)	25%						
	50%	93.6	92.9	92.4	91.7	93.6	93.0
	75%	94.1	93.1	93.0	92.6	93.0	93.0
	100%	94.1	93.0	93.2	93.1	92.4	93.0
Power Factor	25%						
	50%	0.72	0.68	0.64	0.62	0.78	0.72
	75%	0.80	0.78	0.75	0.73	0.84	0.80
	100%	0.85	0.84	0.82	0.80	0.87	0.85

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6312	6212	Max. traction	: 978 lb
	2RS C3	2RS C3		
Sealing	: V'Ring	V'Ring	Max. compression	: 1544 lb
Lubrication interval	: -	-		
Lubricant amount	: -	-		
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	23/01/2018			
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Customer :

Space heater information

Voltage: 110-127/200-240 V

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Date	23/01/2018				