

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11972911

Catalog # : 05018ET3ECT326T-W22

Frame	: 324/6T	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-2
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>2</sup>	: 604 lb
Protection degree	: IP55	Moment of inertia (J)	: 9.16 sq.ft.lb
Design	: B		

Output [HP]	50	40	40	40	50	50	50
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]	131-118/59.2	58.7	57.1	56.4	71.1	68.4	66.3
L. R. Amperes [A]	812-734/367	376	400	417	370	397	411
LRC [A]	6.2x(Code G)	6.4x(Code G)	7.0x(Code H)	7.4x(Code J)	5.2x(Code E)	5.8x(Code F)	6.2x(Code G)
No load current [A]	40.5-47.0/23.5	25.7	28.1	30.2	25.7	28.1	30.2
Rated speed [RPM]	1775	1470	1475	1475	1465	1470	1470
Slip [%]	1.39	2.00	1.67	1.67	2.33	2.00	2.00
Rated torque [ft.lb]	146	141	140	140	177	176	176
Locked rotor torque [%]	229	229	250	260	180	200	210
Breakdown torque [%]	270	260	300	330	210	240	260
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	105 K
Locked rotor time	27s (cold) 15s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)
Noise level <sup>2</sup>	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%	92.5	91.9	90.6	90.7	92.8	92.2
	50%	93.0	92.5	91.5	91.5	93.0	92.4
	75%	94.1	93.1	92.8	93.0	93.0	93.0
	100%	94.5	93.6	93.6	93.6	93.0	93.5
Power Factor	25%	0.42	0.40	0.36	0.33	0.47	0.40
	50%	0.66	0.64	0.60	0.57	0.72	0.65
	75%	0.77	0.77	0.73	0.70	0.81	0.79
	100%	0.83	0.83	0.81	0.79	0.85	0.84

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6312	6212	Max. traction	: 1480 lb
	2RS C3	2RS C3		
Sealing	: V'Ring	V'Ring	Max. compression	: 2084 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			
		Page 1 / 2		Revision

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

### Space heater information

Voltage: 110-127/200-240 V

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page 2 / 2		Revision
Checked by					
Date	23/01/2018				