

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11440444
Catalog # : 02018ET3E256TC-W22

Frame : 254/6TC	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : F-1
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 : 364 lb
Protection degree : IP55	Moment of inertia (J) : 3.10 sq.ft.lb
Design : B	

Output [HP]	20	15	15	15	20	20	20
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]	53.3-48.2/24.1	21.8	21.2	20.6	29.4	28.0	27.1
L. R. Amperes [A]	368-333/166	161	167	173	168	174	179
LRC [A]	6.9x(Code H)	7.4x(Code H)	7.9x(Code J)	8.4x(Code K)	5.7x(Code F)	6.2x(Code G)	6.6x(Code H)
No load current [A]	17.2-20.0/10.0	9.90	10.5	11.0	9.90	10.5	11.0
Rated speed [RPM]	1765	1465	1470	1470	1450	1460	1460
Slip [%]	1.94	2.33	2.00	2.00	3.33	2.67	2.67
Rated torque [ft.lb]	58.7	53.0	52.9	52.9	71.5	71.0	71.0
Locked rotor torque [%]	229	229	270	280	170	200	210
Breakdown torque [%]	270	280	310	340	210	229	250
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)	21s (cold) 12s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	21s (cold) 12s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²	64.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)
Efficiency (%)	25%	91.0	90.9	89.2	89.2	92.2	90.8
	50%	91.7	91.0	89.8	89.8	91.7	91.0
	75%	92.4	91.5	91.0	91.3	91.0	91.0
	100%	93.0	91.4	91.4	91.7	90.2	91.0
Power Factor	25%	0.43	0.40	0.37	0.35	0.49	0.46
	50%	0.68	0.65	0.62	0.60	0.75	0.72
	75%	0.79	0.78	0.75	0.73	0.83	0.81
	100%	0.84	0.84	0.82	0.81	0.86	0.85

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6309 C3	6209 C3	Max. traction : 681 lb
Sealing :	V'Ring	V'Ring	Max. compression : 1045 lb
Lubrication interval :	20000 h	20000 h	
Lubricant amount :	13 g	9 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	24/01/2018			

Page 1 / 1
Revision