

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12385188
Catalog # : 01536ST3QIE254TC-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 : 269 lb
Protection degree : IP55	Moment of inertia (J) : 1.26 sq.ft.lb
Design : B	

Output [HP]	15	10	10	10	15	15	15
Poles	2	2	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	17.2	14.5	14.0	13.7	20.7	19.6	19.1
L. R. Amperes [A]	115	98.6	105	108	101	108	113
LRC [A]	6.7x(Code G)	6.8x(Code H)	7.5x(Code J)	7.9x(Code J)	4.9x(Code D)	5.5x(Code E)	5.9x(Code F)
No load current [A]	6.00	5.62	6.00	6.30	5.50	5.80	6.10
Rated speed [RPM]	3530	2945	2950	2955	2910	2920	2925
Slip [%]	1.94	1.83	1.67	1.50	3.00	2.67	2.50
Rated torque [ft.lb]	22.0	17.6	17.6	17.5	26.7	26.6	26.6
Locked rotor torque [%]	220	200	229	250	170	190	210
Breakdown torque [%]	270	310	350	380	200	229	240
Service factor	1.25	1.25	1.25	1.25	1.00	1.00	1.15
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	45s (cold) 25s (hot)	55s (cold) 31s (hot)	50s (cold) 28s (hot)	46s (cold) 26s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level ²	72.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)
Efficiency (%)	25%	89.2	90.1	89.9	89.7	89.8	90.7
	50%	89.5	90.3	90.1	89.9	89.5	90.2
	75%	91.0	90.5	90.7	90.8	90.2	91.0
	100%	91.0	90.5	90.7	90.8	89.5	90.2
Power Factor	25%	0.51	0.46	0.43	0.40	0.59	0.53
	50%	0.77	0.73	0.69	0.67	0.83	0.81
	75%	0.85	0.83	0.80	0.78	0.88	0.87
	100%	0.88	0.87	0.85	0.84	0.90	0.89

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6309 C3	6209 C3	Max. traction : 175 lb
Sealing :	Inpro/Seal	Inpro/Seal	Max. compression : 444 lb
Lubrication interval :	19000 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	19/01/2018			

Page 1 / 1
Revision