

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12384947
Catalog # : 00509ST3QIE254TC-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 : 264 lb
Protection degree : IP55	Moment of inertia (J) : 3.41 sq.ft.lb
Design : B	

Output [HP]	5	5	5	5
Poles	8	8	8	8
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	7.58	8.84	8.56	8.48
L. R. Amperes [A]	40.2	38.0	40.2	42.4
LRC [A]	5.3x(Code H)	4.3x(Code F)	4.7x(Code F)	5.0x(Code G)
No load current [A]	4.50	4.45	4.75	4.95
Rated speed [RPM]	880	725	725	730
Slip [%]	2.22	3.33	3.33	2.67
Rated torque [ft.lb]	29.4	35.7	35.7	35.5
Locked rotor torque [%]	190	140	160	180
Breakdown torque [%]	250	190	210	229
Service factor	1.25	1.15	1.15	1.15
Temperature rise	105 K	105 K	105 K	105 K
Locked rotor time	79s (cold) 44s (hot)	59s (cold) 33s (hot)	59s (cold) 33s (hot)	59s (cold) 33s (hot)
Noise level ²	54.0 dB(A)	51.0 dB(A)	51.0 dB(A)	51.0 dB(A)
Efficiency (%)	25%	85.2	85.9	86.1
	50%	85.5	85.5	85.5
	75%	87.5	85.5	86.5
	100%	87.5	84.8	85.5
Power Factor	25%	0.28	0.33	0.30
	50%	0.49	0.56	0.52
	75%	0.62	0.68	0.65
	100%	0.70	0.75	0.73

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6309 C3	6209 C3	Max. traction : 265 lb
Sealing :	Inpro/Seal	Inpro/Seal	Max. compression : 528 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	19/01/2018			

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