

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11431460
Catalog # : 00218ST3QIE145T-W22

Frame : 143/5T	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 : 60.2 lb
Protection degree : IP55	Moment of inertia (J) : 0.1561 sq.ft.lb
Design : B	

Output [HP]	2	1.5	1.5	1.5	2	2	2
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	2.76	2.54	2.51	2.56	3.25	3.11	3.07
L. R. Amperes [A]	22.1	19.3	20.6	21.5	19.5	20.5	21.5
LRC [A]	8.0x(Code K)	7.6x(Code K)	8.2x(Code L)	8.4x(Code M)	6.0x(Code H)	6.6x(Code J)	7.0x(Code J)
No load current [A]	1.63	1.48	1.63	1.75	1.48	1.63	1.75
Rated speed [RPM]	1755	1460	1465	1465	1435	1440	1450
Slip [%]	2.50	2.67	2.33	2.33	4.33	4.00	3.33
Rated torque [ft.lb]	5.90	5.32	5.30	5.30	7.22	7.20	7.15
Locked rotor torque [%]	270	270	300	330	190	210	229
Breakdown torque [%]	320	320	360	390	220	250	270
Service factor	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	19s (cold) 11s (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 ²	51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%	85.2	83.5	80.9	80.3	86.7	83.7
	50%	85.5	84.0	82.0	81.4	85.5	84.0
	75%	86.5	84.2	83.5	83.1	84.0	84.0
	100%	86.5	84.5	84.5	84.1	82.5	84.0
Power Factor	25%	0.32	0.32	0.28	0.26	0.41	0.35
	50%	0.57	0.55	0.50	0.47	0.69	0.65
	75%	0.70	0.69	0.65	0.61	0.80	0.77
	100%	0.79	0.78	0.75	0.71	0.85	0.81

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6205 C3	6204 C3	Max. traction : 140 lb
Sealing :	Inpro/Seal	Inpro/Seal	Max. compression : 200 lb
Lubrication interval :	20000 h	20000 h	
Lubricant amount :	4 g	4 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	23/01/2018			

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Revision