

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11431316
Catalog # : 00518ST3QIE184T-W22

Frame : 182/4T	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 : 109 lb
Protection degree : IP55	Moment of inertia (J) : 0.4003 sq.ft.lb
Design : B	

Output [HP]	5	4	4	4	5	5	5
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]	6.45	6.42	6.13	6.14	7.74	7.44	7.35
L. R. Amperes [A]	48.4	44.9	47.2	50.4	44.9	47.6	50.7
LRC [A]	7.5x(Code J)	7.0x(Code J)	7.7x(Code K)	8.2x(Code L)	5.8x(Code G)	6.4x(Code H)	6.9x(Code J)
No load current [A]	3.20	3.15	3.45	3.70	3.15	3.45	3.70
Rated speed [RPM]	1755	1455	1455	1460	1440	1445	1450
Slip [%]	2.50	3.00	3.00	2.67	4.00	3.67	3.33
Rated torque [ft.lb]	14.8	14.2	14.2	14.2	18.0	17.9	17.9
Locked rotor torque [%]	229	229	260	290	180	210	229
Breakdown torque [%]	320	300	350	380	240	280	300
Service factor	1.25	1.15	1.15	1.15	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level ²	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%	88.2	87.7	86.4	86.2	89.2	88.1
	50%	88.5	87.5	86.7	86.5	88.5	87.5
	75%	89.5	88.2	88.2	88.2	87.5	88.5
	100%	89.5	87.7	88.2	88.2	86.5	87.5
Power Factor	25%	0.37	0.37	0.33	0.30	0.43	0.36
	50%	0.62	0.61	0.57	0.53	0.69	0.61
	75%	0.74	0.75	0.71	0.67	0.80	0.77
	100%	0.80	0.81	0.79	0.76	0.84	0.80

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6207 C3	6206 C3	Max. traction : 292 lb
Sealing :	Inpro/Seal	Inpro/Seal	Max. compression : 402 lb
Lubrication interval :	20000 h	20000 h	
Lubricant amount :	7 g	5 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		Page 1 / 1		
Checked by				
Date	24/01/2018			
		Revision		