

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium
Efficiency Three-Phase

Product code : 13502585

Catalog # : 10036ET3G405HP-W22

Frame	: 404/5HP	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: W-6
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	: 1086 lb
Protection degree	: IP55	Moment of inertia (J)	: 13.2 sq.ft.lb
Design	: B		

Output [HP]	100	75	75	75	100	100	100
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]	110	97.4	93.5	91.2	135	129	124
L. R. Amperes [A]	715	662	711	748	689	735	769
LRC [A]	6.5x(Code G)	6.8x(Code G)	7.6x(Code H)	8.2x(Code J)	5.1x(Code E)	5.7x(Code F)	6.2x(Code F)
No load current [A]	26.0	25.7	27.5	29.1	25.7	27.5	29.1
Rated speed [RPM]	3545	2945	2950	2955	2930	2935	2940
Slip [%]	1.53	1.83	1.67	1.50	2.33	2.17	2.00
Rated torque [ft.lb]	146	132	132	131	177	177	176
Locked rotor torque [%]	200	210	229	240	160	170	180
Breakdown torque [%]	240	250	280	310	190	210	229
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	80 K	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)
Noise level ²	79.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)
Efficiency (%)	25%	92.8	92.4	92.5	93.1	93.3	92.8
	50%	93.0	93.0	93.1	93.5	93.0	93.0
	75%	94.1	93.8	93.8	94.0	93.6	93.6
	100%	94.1	94.3	94.3	94.3	93.0	93.6
Power Factor	25%	0.62	0.58	0.54	0.52	0.67	0.61
	50%	0.85	0.80	0.78	0.76	0.88	0.85
	75%	0.90	0.89	0.87	0.86	0.90	0.88
	100%	0.91	0.91	0.90	0.89	0.91	0.90

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6316 C3	6314 C3	Max. traction
Sealing	: Lip Seal	Lip Seal	Max. compression
Lubrication interval	: 2000 h	3000 h	
Lubricant amount	: 34 g	27 g	
Lubricant type	: Isoflex NBU-15		

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	27/01/2018			
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