

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Flameproof Motor NEMA
Premium Efficiency Three-Phase

Product code : 12408375

Catalog # : 10036XT3G405TS

Frame : 404/5TS
Insulation class : F
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Design : B

Cooling method : IC411 - TEFC
Mounting : F-1
Rotation¹ : Both (CW and CCW)
Starting method : Direct On Line
Approx. weight² : 1190 lb
Moment of inertia (J) : 13.2 sq.ft.lb

Output [HP]	100	75	75	75
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	110	98.3	94.4	91.0
L. R. Amperes [A]	715	649	699	728
LRC [A]	6.5x(Code G)	6.6x(Code G)	7.4x(Code H)	8.0x(Code H)
No load current [A]	25.0	26.0	27.0	28.0
Rated speed [RPM]	3550	2955	2960	2965
Slip [%]	1.39	1.50	1.33	1.17
Rated torque [ft.lb]	146	131	131	131
Locked rotor torque [%]	200	200	220	240
Breakdown torque [%]	260	280	310	330
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	37s (cold) 21s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level ²	85.0 dB(A)	82.0 dB(A)	82.0 dB(A)	82.0 dB(A)
Efficiency (%)	25%	93.4	93.0	93.4
	50%	93.6	93.6	93.6
	75%	95.0	94.0	94.5
	100%	95.0	94.5	94.5
Power Factor	25%	0.62	0.59	0.55
	50%	0.85	0.84	0.80
	75%	0.89	0.88	0.87
	100%	0.90	0.90	0.89

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type	: 6314 C3	6314 C3
Sealing	: Oil Seal	Lip Seal
Lubrication interval	: 3604 h	3604 h
Lubricant amount	: 27 g	27 g
Lubricant type	: Mobil Polyrex EM	

Foundation loads
Max. traction : 719 lb
Max. compression : 1909 lb

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.

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Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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