

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12408941

Catalog # : 00158XT3E145TC

Frame	: 145TC	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	: 74.0 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.1303 sq.ft.lb
Design	: B		

Output [HP]	1.5	1.5	1.5	1.5
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	208-230/460	380	400	415
Rated current [A]	4.53-4.10/2.05	2.40	2.33	2.27
L. R. Amperes [A]	40.4-36.5/18.2	15.8	16.8	17.5
LRC [A]	8.9x(Code L)	6.6x(Code H)	7.2x(Code J)	7.7x(Code K)
No load current [A]	2.28-2.64/1.32	1.32	1.43	1.49
Rated speed [RPM]	1760	1440	1450	1450
Slip [%]	2.22	4.00	3.33	3.33
Rated torque [ft.lb]	4.42	5.40	5.36	5.36
Locked rotor torque [%]	270	200	229	250
Breakdown torque [%]	350	260	290	320
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%	80.3	83.7	80.9
	50%	81.5	84.0	82.5
	75%	85.5	84.0	84.0
	100%	86.5	84.0	85.5
Power Factor	25%	0.32	0.38	0.32
	50%	0.58	0.66	0.58
	75%	0.70	0.77	0.71
	100%	0.78	0.83	0.79

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6205 2RS	6204 2RS	Max. traction : 114 lb
Sealing	: Oil Seal	Lip Seal	Max. compression : 188 lb
Lubrication interval	: -	-	
Lubricant amount	: -	-	
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.

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Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	130 °C
2	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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