

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12408939

Catalog # : 00156XT3E143TC

Frame	: 143TC	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	: 68.8 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.0413 sq.ft.lb
Design	: B		

Output [HP]	1.5	1.5	1.5	1.5
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	208-230/460	380	400	415
Rated current [A]	4.53-4.10/2.05	2.36	2.32	2.29
L. R. Amperes [A]	41.7-37.7/18.9	18.9	19.5	19.9
LRC [A]	9.2x(Code M)	8.0x(Code K)	8.4x(Code L)	8.7x(Code L)
No load current [A]	1.90-2.20/1.10	0.900	1.00	1.10
Rated speed [RPM]	3500	2875	2885	2895
Slip [%]	2.78	4.17	3.83	3.50
Rated torque [ft.lb]	2.22	2.70	2.69	2.68
Locked rotor torque [%]	300	280	320	360
Breakdown torque [%]	400	300	330	360
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	36s (cold) 20s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)
Noise level ²	68.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)
Efficiency (%)	25%	76.9	79.0	79.6
	50%	78.5	79.5	80.0
	75%	82.5	82.5	82.5
	100%	84.0	82.5	82.5
Power Factor	25%	0.37	0.46	0.42
	50%	0.62	0.70	0.66
	75%	0.73	0.81	0.77
	100%	0.80	0.86	0.83

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6205 2RS	6204 2RS	Max. traction	: 51 lb
Sealing	: Oil Seal	Lip Seal	Max. compression	: 119 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	23/01/2018			
			Page	Revision
			1 / 2	

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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

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				2 / 2	
Date	23/01/2018				