

Three Phase Induction Motor - Squirrel Cage



Product line : W21 NEMA Premium Efficiency Three-Phase Product code : 10084094

Frame	: 215Y	Locked rotor time	: 46s (cold) 26s (hot)
Output	: 7.5 HP (5.5 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: 40°C to +40°C
Rated voltage	: 208-230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 19.8-17.1/8.57 A	Protection degree	: IP55
L. R. Amperes	: 139-120/60.0 A	Cooling method	: IC418 - TEAO
LRC	: 7.0x(Code H)	Mounting	: F-1
No load current	: 4.31-5.00/2.50 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3510 rpm	Noise level ²	: 72.0 dB(A)
Slip	: 2.50 %	Starting method	: Direct On Line
Rated torque	: 11.2 ft.lb	Approx. weight ³	: 148 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.5766 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	84.3	85.8	85.5	86.5	88.5	87.0	89.5	87.5	Max. traction	: 140 lb
	85.7	85.3	86.5	86.5	88.5	88.5	89.0	89.5		
Power Factor	0.57	0.62	0.81	0.84	0.87	0.89	0.90	0.91	Max. compression	: 288 lb
	0.58	0.55	0.81	0.79	0.88	0.86	0.90	0.89		

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6308 ZZ	6207 ZZ
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

Notes:

- (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	Revision
Checked by					
Date	28/03/2024				