

Three Phase Induction Motor - Squirrel Cage



Product line	: Close Coupled Pump High Efficiency Three-Phase	Product code :	10363734
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Frame	: 254JP	Locked rotor time	: 18s (cold) 10s (hot)
Output	: 20 HP (15 kW)	Temperature rise	: 105 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 48.6/24.3 A	Protection degree	: IP23
L. R. Amperes	: 282/141 A	Cooling method	: IC01 - ODP
LRC	: 5.8x(Code G)	Mounting	: W-6
No load current	: 16.4/8.20 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3525 rpm	Noise level ²	: 66.0 dB(A)
Slip	: 2.08 %	Starting method	: Direct On Line
Rated torque	: 29.8 ft.lb	Approx. weight ³	: 208 lb
Locked rotor torque	: 160 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.8028 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	89.3	87.0	89.5	86.5	90.2	87.5	90.2	86.5	Max. traction	: 292 lb
	87.1	87.3	86.5	87.5	87.5	87.5	86.5	87.5		
Power Factor	0.49	0.54	0.74	0.77	0.83	0.85	0.86	0.87	Max. compression	: 501 lb
	0.46	0.41	0.71	0.66	0.81	0.78	0.85	0.83		

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type	6309 Z C3	6209 Z C3
Sealing	Without Bearing Seal	Without Bearing Seal
Lubrication interval	15797 h	18447 h
Lubricant amount	13 g	9 g
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	26/03/2024				