

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM
NEMA Premium Efficiency Three-Phase

Product code : 11587597

Catalog # : 02018ET3E256JM-W22

Frame : 254/6JM
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 : 363 lb
Moment of inertia (J) : 3.10 sq.ft.lb

Output [HP]	20	15	15	15	20	20	20
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	208-230/460	380	400	415	380	400	415
Rated current [A]	53.3-48.2/24.1	21.8	21.2	20.6	29.4	28.0	27.1
L. R. Amperes [A]	368-333/166	161	167	173	168	174	179
LRC [A]	6.9x(Code H)	7.4x(Code H)	7.9x(Code J)	8.4x(Code K)	5.7x(Code F)	6.2x(Code G)	6.6x(Code H)
No load current [A]	17.2-20.0/10.0	9.90	10.5	11.0	9.90	10.5	11.0
Rated speed [RPM]	1765	1465	1470	1470	1450	1460	1460
Slip [%]	1.94	2.33	2.00	2.00	3.33	2.67	2.67
Rated torque [ft.lb]	58.7	53.0	52.9	52.9	71.5	71.0	71.0
Locked rotor torque [%]	229	229	270	280	170	200	210
Breakdown torque [%]	270	280	310	340	210	229	250
Service factor	1.25	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time	27s (cold) 15s (hot)	21s (cold) 12s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	21s (cold) 12s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²	64.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)
Efficiency (%)	25%	91.0	90.9	89.2	89.2	92.2	90.8
	50%	91.7	91.0	89.8	89.8	91.7	91.0
	75%	92.4	91.5	91.0	91.3	91.0	91.7
	100%	93.0	91.4	91.4	91.7	90.2	91.7
Power Factor	25%	0.43	0.40	0.37	0.35	0.49	0.44
	50%	0.68	0.65	0.62	0.60	0.75	0.72
	75%	0.79	0.78	0.75	0.73	0.83	0.81
	100%	0.84	0.84	0.82	0.81	0.86	0.85

Bearing type : Drive end 6309 C3 Non drive end 6209 C3
Sealing : V'Ring V'Ring
Lubrication interval : 20000 h 20000 h
Lubricant amount : 13 g 9 g
Lubricant type : Mobil Polyrex EM

Foundation loads
Max. traction : 681 lb
Max. compression : 1044 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page Revision 1 / 1		
Checked by				
Date	22/01/2018			