

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11904012

Catalog # : 10018ET3E405JP-W22

Frame : 404/5JP
Output : 100 HP (75 kW)
Poles : 4
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 226/113 A
L. R. Amperes : 1650/825 A
LRC : 7.3x(Code H)
No load current : 76.0/38.0 A
Rated speed : 1780 rpm
Slip : 1.11 %
Rated torque : 295 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 260 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 29.9 sq.ft.lb
Design : B

Locked rotor time : 23s (cold) 13s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : F-1
Rotation¹ : Both (CW and CCW)
Noise level² : 68.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 1176 lb

Output	25%		50%		75%		100%	
Efficiency (%)	94.6	93.4	95.0	94.0	95.0	94.4	95.4	95.0
	93.3	93.0	93.9	93.6	94.5	94.5	95.0	95.0
	94.8	94.7	94.5	94.5	94.1	94.5	93.6	94.1
	94.4		94.5		94.5		94.5	
Power Factor	0.51	0.47	0.77	0.72	0.84	0.83	0.87	0.86
	0.44	0.41	0.69	0.66	0.81	0.79	0.85	0.84
	0.57	0.53	0.82	0.79	0.86	0.85	0.88	0.88
	0.51		0.77		0.84		0.87	

Foundation loads
Max. traction : 2084 lb
Max. compression : 3260 lb

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	P2 (0,5;1,0)	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	P3 (0,25;1,0)	3.7	3.7	3.7	3.7	3.7	3.7	3.7
	P4 (0,9;0,5)	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9	0.9	0.9	0.9
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6	0.6	0.6	0.6

	Drive end	Non drive end
Bearing type :	6314 C3	6314 C3
Sealing :	Lip Seal	Lip Seal
Lubrication interval :	12000 h	12000 h
Lubricant amount :	27 g	27 g
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		Page 1 / 1		
Checked by				
Date	29/03/2024			