

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency
Three-Phase

Product code : 11431307

Catalog # : 07512ST3QIE405T-W22

Frame : 404/5T
Output : 75 HP (55 kW)
Poles : 6
Frequency : 60 Hz
Rated voltage : 460 V
Rated current : 84.9 A
L. R. Amperes : 544 A
LRC : 6.4x(Code G)
No load current : 28.0 A
Rated speed : 1184 rpm
Slip : 1.33 %
Rated torque : 333 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 229 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 40.2 sq.ft.lb
Design : B

Locked rotor time : 30s (cold) 17s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP56
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 : 1191 lb

Output	50%	75%	100%
Efficiency (%)	94.1 90.6 91.1 91.0 91.8 92.4 92.4	94.5 91.7 92.3 92.3 92.2 92.8 92.8	94.5 93.3 93.3 93.3 92.4 93.0 93.0
Power Factor	0.74 0.66 0.62 0.60 0.79 0.76 0.74	0.83 0.79 0.75 0.74 0.85 0.84 0.83	0.86 0.84 0.83 0.81 0.87 0.86 0.86

Foundation loads
Max. traction : 2053 lb

Max. compression : 3244 lb

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

Losses (%)	P1 (0,9;1,0)	5.6	6.9	6.9	6.9	8.0	7.3	7.3
	P2 (0,5;1,0)	4.7	5.8	5.8	5.8	6.7	6.1	6.1
	P3 (0,25;1,0)	4.6	5.7	5.7	5.7	6.5	5.9	5.9
	P4 (0,9;0,5)	2.5	3.0	3.0	3.0	3.5	3.2	3.2
	P5 (0,5;0,5)	1.7	2.1	2.1	2.1	2.4	2.2	2.2
	P6 (0,5;0,25)	1.0	1.3	1.3	1.3	1.5	1.3	1.3
	P7 (0,25;0,25)	0.7	0.9	0.9	0.9	1.0	0.9	0.9

	Drive end	Non drive end
Bearing type :	6316 C3	6314 C3
Sealing :	Inpro/Seal	Inpro/Seal
Lubrication interval :	16000 h	17000 h
Lubricant amount :	34 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	26/03/2024			
		Revision		