

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 13849696

Catalog # : 03009ST3QIE364TC-W22

Frame : 364/5TC
Output : 30 HP (22 kW)
Poles : 8
Frequency : 60 Hz
Rated voltage : 460 V
Rated current : 38.1 A
L. R. Amperes : 236 A
LRC : 6.2x(Code G)
No load current : 16.0 A
Rated speed : 882 rpm
Slip : 2.00 %
Rated torque : 179 ft.lb
Locked rotor torque : 160 %
Breakdown torque : 229 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 23.5 sq.ft.lb
Design : B

Locked rotor time : 45s (cold) 25s (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 : 60.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 822 lb

Output	25%		50%		75%		100%	
Efficiency (%)	91.3	88.7	91.5	89.0	91.7	89.5	91.7	89.5
	90.2	90.3	90.5	90.5	90.6	90.6	90.6	90.6
Power Factor	0.39	0.47	0.62	0.71	0.73	0.79	0.79	0.82
	0.43	0.40	0.67	0.65	0.77	0.75	0.81	0.80

Foundation loads
Max. traction : 1066 lb
Max. compression : 1888 lb

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

Losses (%)	P1 (0,9;1,0)	8.9	8.9	8.9	8.9
	P2 (0,5;1,0)	7.7	7.7	7.7	7.7
	P3 (0,25;1,0)	7.2	7.2	7.2	7.2
	P4 (0,9;0,5)	3.9	3.9	3.9	3.9
	P5 (0,5;0,5)	2.8	2.8	2.8	2.8
	P6 (0,5;0,25)	1.7	1.7	1.7	1.7
	P7 (0,25;0,25)	1.3	1.3	1.3	1.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	20000 h	20000 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	25/03/2024			
		Revision		