

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11431928

Catalog # : 03036ST3QIE286TS-W22

Frame : 284/6TS
Output : 30 HP (22 kW)
Poles : 2
Frequency : 60 Hz
Rated voltage : 460 V
Rated current : 34.6 A
L. R. Amperes : 218 A
LRC : 6.3x(Code G)
No load current : 9.90 A
Rated speed : 3549 rpm
Slip : 1.42 %
Rated torque : 44.4 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 250 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 3.37 sq.ft.lb
Design : B

Locked rotor time : 27s (cold) 15s (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 : 72.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 402 lb

Output	50%	75%	100%
Efficiency (%)	91.7 91.0 91.1 91.2 89.0 90.0 91.0	91.7 91.5 91.5 91.8 89.5 90.2 91.0	91.7 92.4 92.4 92.4 89.5 90.2 91.0
Power Factor	0.77 0.80 0.76 0.74 0.83 0.80 0.78	0.85 0.86 0.84 0.82 0.88 0.86 0.85	0.87 0.88 0.87 0.86 0.89 0.88 0.88

Foundation loads
Max. traction : 359 lb

Max. compression : 761 lb

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

Losses (%)	P1 (0,9;1,0)	8.5	7.7	7.7	7.7	11.0	10.2	9.3
	P2 (0,5;1,0)	6.7	6.1	6.1	6.1	8.6	8.0	7.3
	P3 (0,25;1,0)	6.4	5.8	5.8	5.8	8.3	7.7	7.0
	P4 (0,9;0,5)	4.2	3.8	3.8	3.8	5.5	5.1	4.6
	P5 (0,5;0,5)	2.5	2.3	2.3	2.3	3.3	3.0	2.8
	P6 (0,5;0,25)	1.6	1.4	1.4	1.4	2.0	1.9	1.7
	P7 (0,25;0,25)	1.0	0.9	0.9	0.9	1.2	1.1	1.0

	Drive end	Non drive end
Bearing type	6311 C3	6211 C3
Sealing	Inpro/Seal	Inpro/Seal
Lubrication interval	14000 h	17000 h
Lubricant amount	18 g	11 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 Revision 1 / 1		
Checked by				
Date	25/03/2024			