

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11584354

Catalog # : 02509ST3QIE326T-W22

Frame : 324/6T
Output : 25 HP (18.5 kW)
Poles : 8
Frequency : 60 Hz
Rated voltage : 460 V
Rated current : 35.9 A
L. R. Amperes : 187 A
LRC : 5.2x(Code G)
No load current : 20.0 A
Rated speed : 880 rpm
Slip : 2.22 %
Rated torque : 149 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 229 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 11.9 sq.ft.lb
Design : B

Locked rotor time : 41s (cold) 23s (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 : 56.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 561 lb

Output	50%	75%	100%
Efficiency (%)	89.5 89.3 87.2 86.2 89.5 88.5 87.5	91.0 90.1 89.1 88.6 90.2 89.5 89.5	91.0 89.6 89.6 89.6 88.5 89.5 89.5
Power Factor	0.51 0.51 0.46 0.42 0.58 0.53 0.49	0.64 0.64 0.59 0.55 0.70 0.66 0.62	0.71 0.71 0.67 0.64 0.75 0.72 0.70

Foundation loads
Max. traction : 1238 lb

Max. compression : 1799 lb

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

Losses (%)	P1 (0,9;1,0)	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	P2 (0,5;1,0)	7.4	7.4	7.4	7.4	7.4	7.4	7.4
	P3 (0,25;1,0)	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	P4 (0,9;0,5)	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	P5 (0,5;0,5)	3.9	3.9	3.9	3.9	3.9	3.9	3.9
	P6 (0,5;0,25)	3.1	3.1	3.1	3.1	3.1	3.1	3.1
	P7 (0,25;0,25)	2.2	2.2	2.2	2.2	2.2	2.2	2.2

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type :	6312 C3	6212 C3
Sealing :	Inpro/Seal	Inpro/Seal
Lubrication interval :	20000 h	20000 h
Lubricant amount :	21 g	13 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			