

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12424790

Catalog # : 02518ET3E284T-W22

Frame : 284/6T
Output : 25 HP (18.5 kW)
Poles : 4
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 59.0/29.5 A
L. R. Amperes : 366/183 A
LRC : 6.2x(Code G)
No load current : 22.0/11.0 A
Rated speed : 1770 rpm
Slip : 1.67 %
Rated torque : 74.2 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 270 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 5.11 sq.ft.lb
Design : B

Locked rotor time : 43s (cold) 24s (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 : 63.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 397 lb

Output	50%	75%	100%
Efficiency (%)	92.4 91.3 91.3 91.2 92.4 92.4 92.4	93.0 92.1 92.5 92.5 91.7 92.4 92.4	93.6 92.1 92.6 92.7 91.0 91.7 92.4
Power Factor	0.70 0.69 0.65 0.62 0.76 0.73 0.70	0.80 0.80 0.78 0.75 0.84 0.82 0.80	0.84 0.85 0.83 0.82 0.86 0.85 0.84

Foundation loads
Max. traction : 817 lb

Max. compression : 1215 lb

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

Losses (%)	P1 (0,9;1,0)	6.8	6.8	6.8	6.8	6.8	6.8	6.8
	P2 (0,5;1,0)	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	P3 (0,25;1,0)	5.3	5.3	5.3	5.3	5.3	5.3	5.3
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1	3.1	3.1	3.1
	P5 (0,5;0,5)	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0	1.0	1.0	1.0

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type :	6311 C3	6211 C3
Sealing :	V'Ring	V'Ring
Lubrication interval :	20000 h	20000 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 1 / 1 Revision		
Checked by				
Date	28/03/2024			