

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12822267

Catalog # : 00536ET3ER184TC-W22

Frame : 184TC
 Output : 5 HP (3.7 kW)
 Poles : 2
 Frequency : 60 Hz
 Rated voltage : 230/460 V
 Rated current : 11.8/5.90 A
 L. R. Amperes : 89.7/44.8 A
 LRC : 7.6x(Code J)
 No load current : 4.00/2.00 A
 Rated speed : 3500 rpm
 Slip : 2.78 %
 Rated torque : 7.50 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 350 %
 Insulation class : F
 Service factor : 1.25
 Moment of inertia (J) : 0.2233 sq.ft.lb
 Design : B

Locked rotor time : 32s (cold) 18s (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 : W-6
 Rotation¹ : Both (CW and CCW)
 Noise level² : 66.0 dB(A)
 Starting method : Direct On Line
 Approx. weight³ : 95.7 lb

Output	25%	50%	75%	100%
Efficiency (%)	86.1	86.5	88.5	88.5
	85.9	86.3	88.2	88.3
	88.0	87.5	87.5	86.5
	88.0	87.5	88.5	87.5
Power Factor	0.51	0.76	0.85	0.89
	0.46	0.71	0.83	0.88
	0.56	0.81	0.88	0.91
	0.50	0.76	0.85	0.89

Foundation loads
 Max. traction : 126 lb
 Max. compression : 222 lb

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

Losses (%)	P1 (0,9;1,0)	12.2	13.4	12.4	12.4	14.7	13.4	13.4
	P2 (0,5;1,0)	10.1	11.1	10.3	10.3	12.1	11.1	11.1
	P3 (0,25;1,0)	9.7	10.7	9.9	9.9	11.7	10.7	10.7
	P4 (0,9;0,5)	5.9	6.5	6.1	6.1	7.1	6.5	6.5
	P5 (0,5;0,5)	3.7	4.0	3.7	3.7	4.4	4.0	4.0
	P6 (0,5;0,25)	2.3	2.5	2.3	2.3	2.7	2.5	2.5
	P7 (0,25;0,25)	1.5	1.6	1.5	1.5	1.8	1.6	1.6

	Drive end	Non drive end
Bearing type :	6207 ZZ	6206 ZZ
Sealing :	V'Ring	V'Ring
Lubrication interval :	-	-
Lubricant amount :	-	-
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	28/03/2024			