

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12823189

Frame : 213TC
Output : 7.5 HP (5.5 kW)
Poles : 2
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 17.5/8.76 A
L. R. Amperes : 123/61.3 A
LRC : 7.0x(Code H)
No load current : 5.40/2.70 A
Rated speed : 3530 rpm
Slip : 1.94 %
Rated torque : 11.2 ft.lb
Locked rotor torque : 210 %
Breakdown torque : 290 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 0.3842 sq.ft.lb
Design : B

Locked rotor time : 39s (cold) 22s (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 : 72.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 143 lb

Output	25%		50%		75%		100%	
Efficiency (%)	85.3	87.6	86.0	87.0	88.0	87.5	88.5	86.5
	88.7	88.7	88.0	88.0	88.5	88.5	87.5	87.5
Power Factor	0.54	0.60	0.79	0.83	0.86	0.89	0.89	0.90
	0.56	0.54	0.80	0.79	0.87	0.86	0.89	0.89

Foundation loads
Max. traction : 126 lb
Max. compression : 268 lb

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

Losses (%)	P1 (0,9;1,0)	12.1	14.6	13.3	13.3
	P2 (0,5;1,0)	9.0	10.8	9.9	9.9
	P3 (0,25;1,0)	7.9	9.5	8.7	8.7
	P4 (0,9;0,5)	6.7	8.0	7.3	7.3
	P5 (0,5;0,5)	3.6	4.3	3.9	3.9
	P6 (0,5;0,25)	2.4	2.9	2.6	2.6
	P7 (0,25;0,25)	1.3	1.6	1.5	1.5

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6308 ZZ	6207 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 1 / 1		
Checked by				
Date	29/03/2024			
			Revision	