

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12822484

Frame : 254TC
Output : 15 HP (11 kW)
Poles : 4
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 36.1/18.1 A
L. R. Amperes : 217/108 A
LRC : 6.0x(Code G)
No load current : 14.2/7.10 A
Rated speed : 1770 rpm
Slip : 1.67 %
Rated torque : 44.5 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 240 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 2.38 sq.ft.lb
Design : B

Locked rotor time : 25s (cold) 14s (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 : 64.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 257 lb

Output	25%		50%		75%		100%	
Efficiency (%)	90.0	87.0	90.2	87.3	91.0	87.5	91.0	87.5
	88.1	89.1	88.3	89.3	88.5	89.5	88.5	89.5
Power Factor	0.44	0.51	0.68	0.74	0.80	0.84	0.84	0.87
	0.47	0.44	0.71	0.68	0.82	0.80	0.85	0.84

Foundation loads
Max. traction : 439 lb
Max. compression : 696 lb

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

Losses (%)	P1 (0,9;1,0)	9.6	13.9	12.7	11.4
	P2 (0,5;1,0)	8.5	12.3	11.2	10.1
	P3 (0,25;1,0)	8.3	12.0	11.0	9.9
	P4 (0,9;0,5)	4.6	6.7	6.1	5.5
	P5 (0,5;0,5)	3.3	4.7	4.3	3.9
	P6 (0,5;0,25)	2.1	3.1	2.8	2.5
	P7 (0,25;0,25)	1.5	2.2	2.0	1.8

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	18000 h	19000 h
Lubricant amount	:	13 g	9 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		
Checked by				
Date	28/03/2024			
			Revision	