

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12822599

Frame : 145TC
Output : 3 HP (2.2 kW)
Poles : 2
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 7.52/3.76 A
L. R. Amperes : 51.9/25.9 A
LRC : 6.9x(Code H)
No load current : 2.40/1.20 A
Rated speed : 3440 rpm
Slip : 4.44 %
Rated torque : 4.58 ft.lb
Locked rotor torque : 280 %
Breakdown torque : 310 %
Insulation class : F
Service factor : 1.15
Moment of inertia (J) : 0.0610 sq.ft.lb
Design : B

Locked rotor time : 19s (cold) 11s (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 : 68.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 54.5 lb

Output	25%		50%		75%		100%	
Efficiency (%)	85.2	83.5	85.5	84.0	85.5	84.0	85.5	84.0
	86.4	86.5	85.5	85.5	85.5	85.5	84.0	84.0
Power Factor	0.48	0.55	0.71	0.77	0.81	0.85	0.86	0.88
	0.51	0.48	0.74	0.71	0.83	0.81	0.87	0.86

Foundation loads
Max. traction : 108 lb
Max. compression : 162 lb

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

Losses (%)	P1 (0,9;1,0)	16.1	18.1	18.1	18.1
	P2 (0,5;1,0)	13.4	15.1	15.1	15.1
	P3 (0,25;1,0)	12.9	14.4	14.4	14.4
	P4 (0,9;0,5)	7.2	8.1	8.1	8.1
	P5 (0,5;0,5)	4.6	5.2	5.2	5.2
	P6 (0,5;0,25)	2.7	3.0	3.0	3.0
	P7 (0,25;0,25)	1.8	2.0	2.0	2.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6205 ZZ	6204 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	28/03/2024			
		Revision		