

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12822572

Frame : 145TC
 Output : 2 HP (1.5 kW)
 Poles : 2
 Frequency : 60 Hz
 Rated voltage : 230/460 V
 Rated current : 5.28/2.64 A
 L. R. Amperes : 39.1/19.5 A
 LRC : 7.4x(Code J)
 No load current : 2.10/1.05 A
 Rated speed : 3450 rpm
 Slip : 4.17 %
 Rated torque : 3.04 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 300 %
 Insulation class : F
 Service factor : 1.25
 Moment of inertia (J) : 0.0427 sq.ft.lb
 Design : B

Locked rotor time : 28s (cold) 16s (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 : 50.5 lb

Output	25%		50%		75%		100%	
Efficiency (%)	81.0	79.1	81.5	78.5	84.0	81.5	84.0	80.0
	79.5	79.5	80.0	80.0	81.5	81.5	81.5	81.5
Power Factor	0.44	0.50	0.69	0.73	0.80	0.82	0.85	0.87
	0.46	0.43	0.69	0.68	0.79	0.78	0.85	0.85

Foundation loads
 Max. traction : 65 lb
 Max. compression : 115 lb

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

Losses (%)	P1 (0,9;1,0)	18.3	24.0	21.8	21.8
	P2 (0,5;1,0)	15.1	19.8	18.0	18.0
	P3 (0,25;1,0)	13.4	17.6	16.0	16.0
	P4 (0,9;0,5)	9.1	11.9	10.8	10.8
	P5 (0,5;0,5)	5.7	7.4	6.8	6.8
	P6 (0,5;0,25)	3.7	4.8	4.4	4.4
	P7 (0,25;0,25)	2.4	3.2	2.9	2.9

		<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		