

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Multimounting High Efficiency Three-Phase Product code : 13958123
Catalog # : .3712EP3EAL80-W22

Frame	: 80	Locked rotor time	: 28s (cold) 16s (hot)
Output	: 0.5 HP (0.37 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: S1
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 2.14/1.07 A	Protection degree	: IP55
L. R. Amperes	: 10.7/5.35 A	Cooling method	: IC411 - TEFC
LRC	: 5.0	Mounting	: B3L(E)
No load current	: 1.52/0.760 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1145 rpm	Noise level ²	: 47.0 dB(A)
Slip	: 4.58 %	Starting method	: Direct On Line
Rated torque	: 2.29 ft.lb	Approx. weight ³	: 24.3 lb
Locked rotor torque	: 270 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0570 sq.ft.lb		
Design	: N		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	0.000	57.0	64.0	63.0	68.5	64.0	70.0	Max. traction	: 55 lb	
	0.000	61.0	67.0	70.0						
	0.000									
Power Factor	0.00	0.00	0.48	0.48	0.60	0.63	0.68	0.69	Max. compression	: 80 lb
	0.00	0.40	0.58	0.62						

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

Losses (%)	P1 (0,9;1,0)	51.0	38.9	38.9
	P2 (0,5;1,0)	43.4	33.0	33.0
	P3 (0,25;1,0)	51.4	39.1	39.1
	P4 (0,9;0,5)	36.9	28.1	28.1
	P5 (0,5;0,5)	28.1	21.4	21.4
	P6 (0,5;0,25)	25.8	19.7	19.7
	P7 (0,25;0,25)	19.3	14.7	14.7

		Drive end	Non drive end
Bearing type	:	6204 ZZ	6203 ZZ
Sealing	:	Oil Seal	Oil Seal
Lubrication interval	:	0 h	0 h
Lubricant amount	:	0 g	0 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				
Checked by				
Date	26/03/2024			
			Page	Revision
			1 / 1	