

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Multimounting IE3 Three-Phase

Product code : 13984010
Catalog # : 00158ET3WAL90L-W22

Frame	: 90S/L	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 2 HP (1.5 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 220/380 V	Altitude	: 1000 m.a.s.l.
Rated current	: 5.56/3.22 A	Protection degree	: IP55
L. R. Amperes	: 36.2/20.9 A	Cooling method	: IC411 - TEFC
LRC	: 6.5	Mounting	: B3L(E)
No load current	: 2.68/1.55 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1435 rpm	Noise level ²	: 49.0 dB(A)
Slip	: 4.33 %	Starting method	: Direct On Line
Rated torque	: 7.32 ft.lb	Approx. weight ³	: 43.9 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1566 sq.ft.lb		
Design	: N		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	84.7	82.2	85.0	83.1	85.3	85.0	85.3	85.6	Max. traction	: 160 lb
	81.3		82.5		85.5		86.5			
Power Factor	0.38	0.31	0.63	0.54	0.75	0.68	0.83	0.77	Max. compression	: 204 lb
	0.32		0.55		0.68		0.77			

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

Losses (%)	P1 (0,9;1,0)	16.1	15.8	14.6
	P2 (0,5;1,0)	13.3	13.0	12.0
	P3 (0,25;1,0)	13.4	13.1	12.1
	P4 (0,9;0,5)	9.4	9.2	8.5
	P5 (0,5;0,5)	6.6	6.4	5.9
	P6 (0,5;0,25)	5.2	5.0	4.7
	P7 (0,25;0,25)	3.8	3.7	3.4

		<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				
Checked by				
Date	26/03/2024			
			Page	Revision
			1 / 1	