

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Multimounting IE3 Three-Phase

Product code : 13983072
Catalog # : 00156ET3EAL90S-W22

Frame	: 90S/L	Locked rotor time	: 27s (cold) 15s (hot)
Output	: 2 HP (1.5 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 380 V	Altitude	: 1000 m.a.s.l.
Rated current	: 3.22 A	Protection degree	: IP55
L. R. Amperes	: 24.5 A	Cooling method	: IC411 - TEFC
LRC	: 7.6	Mounting	: B3L(E)
No load current	: 1.43 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 2870 rpm	Noise level ²	: 62.0 dB(A)
Slip	: 4.33 %	Starting method	: Direct On Line
Rated torque	: 3.66 ft.lb	Approx. weight ³	: 37.6 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0475 sq.ft.lb		
Design	: N		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	81.0	80.5	82.0	81.5	83.5	83.5	84.2	84.2	Max. traction	: 75 lb
	79.4		81.0		84.0		85.5			
Power Factor	0.42	0.33	0.67	0.57	0.78	0.70	0.84	0.78	Max. compression	: 112 lb
	0.36		0.61		0.73		0.80			

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

Losses (%)	P1 (0,9;1,0)	17.1	17.1	15.5
	P2 (0,5;1,0)	13.1	13.1	11.9
	P3 (0,25;1,0)	13.4	13.4	12.1
	P4 (0,9;0,5)	10.4	10.4	9.4
	P5 (0,5;0,5)	6.4	6.4	5.8
	P6 (0,5;0,25)	5.0	5.0	4.5
	P7 (0,25;0,25)	3.4	3.4	3.1

		<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 1 / 1	Revision