

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12822433

Frame	: 145TC	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 1.5 HP (1.1 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 4.50/2.25 A	Protection degree	: IP55
L. R. Amperes	: 40.5/20.3 A	Cooling method	: IC411 - TEFC
LRC	: 9.0x(Code M)	Mounting	: W-6
No load current	: 3.08/1.54 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1765 rpm	Noise level <sup>2</sup>	: 51.0 dB(A)
Slip	: 1.94 %	Starting method	: Direct On Line
Rated torque	: 4.46 ft.lb	Approx. weight <sup>3</sup>	: 50.7 lb
Locked rotor torque	: 250 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1172 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	78.5	83.2	80.0	82.5	82.5	82.5	84.0	81.5	Max. traction	: 101 lb
	81.2	81.2	81.5	81.5	82.5	82.5	82.5	82.5		
Power Factor	0.29	0.34	0.53	0.60	0.65	0.70	0.73	0.77	Max. compression	: 152 lb
	0.31	0.30	0.55	0.55	0.69	0.66	0.75	0.73		

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

Losses (%)	P1 (0,9;1,0)	17.8	21.2	19.8	19.8
	P2 (0,5;1,0)	14.9	17.7	16.6	16.6
	P3 (0,25;1,0)	15.6	18.6	17.3	17.3
	P4 (0,9;0,5)	11.5	13.7	12.8	12.8
	P5 (0,5;0,5)	8.4	10.0	9.4	9.4
	P6 (0,5;0,25)	7.2	8.6	8.0	8.0
	P7 (0,25;0,25)	5.5	6.5	6.1	6.1

		<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		Page 1 / 1		
Checked by				
Date	28/03/2024			
			Revision	