

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 12822435

Frame	: 143TC	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 1.5 HP (1.1 kW)	Temperature rise	: 80 K
Poles	: 2	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	: 3.98/1.99 A	Protection degree	: IP55
L. R. Amperes	: 27.1/13.5 A	Cooling method	: IC411 - TEFC
LRC	: 6.8x(Code J)	Mounting	: W-6
No load current	: 1.60/0.800 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3480 rpm	Noise level <sup>2</sup>	: 68.0 dB(A)
Slip	: 3.33 %	Starting method	: Direct On Line
Rated torque	: 2.26 ft.lb	Approx. weight <sup>3</sup>	: 43.8 lb
Locked rotor torque	: 250 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0370 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	78.0	80.8	78.5	80.0	82.5	81.5	82.5	80.0	Max. traction	: 40 lb
	80.9	78.0	80.0	78.5	81.5	81.5	80.0	81.5		
Power Factor	0.44	0.50	0.68	0.75	0.78	0.83	0.84	0.88	Max. compression	: 84 lb
	0.46	0.43	0.71	0.67	0.80	0.78	0.86	0.85		

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

Losses (%)	P1 (0,9;1,0)	20.1	23.7	23.7	21.5
	P2 (0,5;1,0)	16.2	19.1	19.1	17.3
	P3 (0,25;1,0)	14.6	17.2	17.2	15.6
	P4 (0,9;0,5)	10.6	12.5	12.5	11.4
	P5 (0,5;0,5)	6.3	7.5	7.5	6.8
	P6 (0,5;0,25)	4.3	5.0	5.0	4.6
	P7 (0,25;0,25)	2.8	3.3	3.3	3.0

		<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	28/03/2024			
			Page	Revision
			1 / 1	