

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 12822569

Frame	: 145TC	Locked rotor time	: 19s (cold) 11s (hot)
Output	: 2 HP (1.5 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	: 5.98/2.99 A	Protection degree	: IP55
L. R. Amperes	: 41.9/20.9 A	Cooling method	: IC411 - TEFC
LRC	: 7.0x(Code K)	Mounting	: W-6
No load current	: 3.52/1.76 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1745 rpm	Noise level ²	: 51.0 dB(A)
Slip	: 3.06 %	Starting method	: Direct On Line
Rated torque	: 6.02 ft.lb	Approx. weight ³	: 52.6 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.1296 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	82.2	82.2	82.5	82.5	84.0	82.5	84.0	82.5	Max. traction	: 132 lb
	82.2	82.2	82.5	82.5	82.5	82.5	82.5	82.5		
Power Factor	0.30	0.36	0.54	0.61	0.66	0.71	0.75	0.79	Max. compression	: 185 lb
	0.33	0.30	0.57	0.54	0.68	0.66	0.77	0.75		

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

Losses (%)	P1 (0,9;1,0)	18.5	20.6	20.6	20.6
	P2 (0,5;1,0)	16.7	18.6	18.6	18.6
	P3 (0,25;1,0)	16.3	18.1	18.1	18.1
	P4 (0,9;0,5)	10.4	11.6	11.6	11.6
	P5 (0,5;0,5)	7.8	8.7	8.7	8.7
	P6 (0,5;0,25)	6.3	7.0	7.0	7.0
	P7 (0,25;0,25)	4.7	5.3	5.3	5.3

		<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	