

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 ¹	: Both (CW and CCW)		
Rated speed	: 3480 rpm		Noise level ²	: 68.0 dB(A)		
Slip	: 3.33 %		Starting method	: Direct On Line		
Rated torque	: 2.26 ft.lb		Approx. weight ³	: 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%		
Efficiency (%)	78.0	80.8	78.5	80.0		
	80.9	78.0	80.0	78.5		
Power Factor	0.44	0.50	0.68	0.75		
	0.46	0.43	0.71	0.67		
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		
	P2 (0,5;1,0)	16.2	19.1	19.1		
	P3 (0,25;1,0)	14.6	17.2	17.2		
	P4 (0,9;0,5)	10.6	12.5	12.5		
	P5 (0,5;0,5)	6.3	7.5	7.5		
	P6 (0,5;0,25)	4.3	5.0	5.0		
	P7 (0,25;0,25)	2.8	3.3	3.3		
Drive end						
Bearing type	:	6205 ZZ	Non drive end			
Sealing	:	V'Ring	6204 ZZ V'Ring			
Lubrication interval	:	-	-			
Lubricant amount	:	-	-			
Lubricant type	:	Mobil Polyrex EM				
Notes:						
This revision replaces and cancel the previous one, which must be eliminated.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.			
(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.						
Rev.	Changes Summary			Performed		
				Checked		
Performed by				Page		
Checked by				Revision		
Date	28/03/2024			1 / 1		