

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W22 High Efficiency Three-Phase		Product code : 11856940		
Frame	: 284/6T	Locked rotor time	: 23s (cold) 13s (hot)		
Output	: 15 HP (11 kW)	Temperature rise	: 80 K		
Poles	: 8	Duty cycle	: Cont.(S1)		
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C		
Rated voltage	: 380 V	Altitude	: 1000 m.a.s.l.		
Rated current	: 23.9 A	Protection degree	: IP55		
L. R. Amperes	: 110 A	Cooling method	: IC411 - TEFC		
LRC	: 4.6x(Code E)	Mounting	: F-1		
No load current	: 7.70 A	Rotation <sup>1</sup>	: Both (CW and CCW)		
Rated speed	: 720 rpm	Noise level <sup>2</sup>	: 52.0 dB(A)		
Slip	: 4.00 %	Starting method	: Direct On Line		
Rated torque	: 109 ft.lb	Approx. weight <sup>3</sup>	: 402 lb		
Locked rotor torque	: 160 %				
Breakdown torque	: 180 %				
Insulation class	: F				
Service factor	: 1.25				
Moment of inertia (J)	: 8.18 sq.ft.lb				
Design	: B				
Output	50%	75%	100%		
Efficiency (%)	85.5 87.5	87.5 88.5	86.5 88.5		
Power Factor	0.71 0.65	0.79 0.75	0.81 0.80		
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	14.9	12.4		
	P2 (0,5;1,0)	11.8	9.8		
	P3 (0,25;1,0)	10.2	8.5		
	P4 (0,9;0,5)	7.5	6.3		
	P5 (0,5;0,5)	4.8	4.0		
	P6 (0,5;0,25)	3.3	2.8		
	P7 (0,25;0,25)	2.1	1.7		
		Drive end	Non drive end		
Bearing type	:	6311 C3	6211 C3		
Sealing	:	V'Ring	V'Ring		
Lubrication interval	:	20000 h	20000 h		
Lubricant amount	:	18 g	11 g		
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	Date
Performed by					
Checked by				Page	Revision
Date	28/03/2024			1 / 1	