

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W50 Three-Phase

Product code : 13299659
Catalog # : 50036ET3X5809-W50MV

Frame : 5809/10
Output : 500 HP (370 kW)
Poles : 2
Frequency : 60 Hz
Rated voltage : 2300 V
Rated current : 109 A
L. R. Amperes : 709 A
LRC : 6.5x(Code G)
No load current : 24.0 A
Rated speed : 3571 rpm
Slip : 0.81 %
Rated torque : 735 ft.lb
Locked rotor torque : 120 %
Breakdown torque : 240 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 142 sq.ft.lb
Design : A

Locked rotor time : 36s (cold) 20s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : F-1
Rotation¹ : CW
Noise level² : 82.0 dB(A)
Starting method : Direct On Line

Output	25%	50%	75%	100%
Efficiency (%)	0.000	94.5	94.5	95.0 95.0 95.4 95.4
	0.000			
Power Factor	0.00	0.00	0.85 0.84	0.89 0.89 0.89 0.89

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).
(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 Revision 1 /		
Checked by				
Date	27/03/2024			