

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W50 Three-Phase

Product code : 13299660  
Catalog # : 50012ET3X5809-W50MV

Frame : 5809/10  
Output : 500 HP (370 kW)  
Poles : 6  
Frequency : 60 Hz  
Rated voltage : 2300 V  
Rated current : 124 A  
L. R. Amperes : 744 A  
LRC : 6.0x(Code G)  
No load current : 50.2 A  
Rated speed : 1191 rpm  
Slip : 0.75 %  
Rated torque : 2200 ft.lb  
Locked rotor torque : 150 %  
Breakdown torque : 210 %  
Insulation class : F  
Service factor : 1.00  
Moment of inertia (J) : 384 sq.ft.lb

Locked rotor time : 27s (cold) 15s (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  
Rotation<sup>1</sup> : Both (CW and CCW)  
Noise level<sup>2</sup> : 77.0 dB(A)  
Starting method : Direct On Line

Output	25%	50%	75%	100%
Efficiency (%)	0.000	94.1	94.1	94.5 94.5 95.0 95.0
Power Factor	0.00	0.00	0.63 0.60	0.73 0.71 0.79 0.77

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				
Checked by				
Date	27/03/2024			

Page	Revision
1 /	