

Recommended Electrical Installation Procedure for Warner Electric Clutches and Brakes

P-1390
819-0188

Installation Instructions

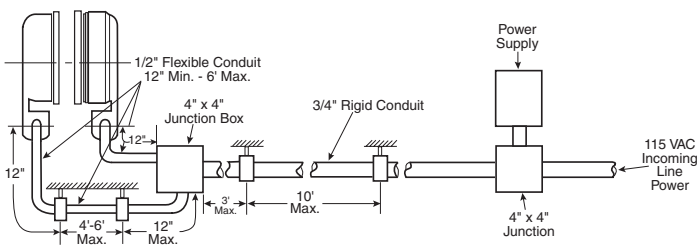
Warner Electric clutches and brakes conform to UL (Underwriters Laboratories) and CSA (Canadian Standards Association) requirements. All packaged products come with conduit boxes or are enclosed in housings with provision for electrical conduit connection. UL Listed/CSA Certified fittings must be used in making connections. All SF clutch fields and brake magnets, in size 400 and larger, accept UL and CSA conforming conduit boxes available from Warner Electric. UL Listed/CSA Certified fittings must be used in making connections.

The National Electrical Code (NEC) requires conductors subject to physical damage be adequately protected. When electrical conduit is used, a minimum of 12" of 1/2" flexible conduit is to be used between each brake and/or clutch and its box. This construction will prevent improper bearing loading in bearing mounted units and ease field and magnet assembly and disassembly. Refer to the information below for proper installation practices and wire sizes.

Notwithstanding the above recommendations, all electrical installations should conform to NEC and/or other governing electrical codes.

Recommended wire size versus maximum distance.

Fractional Horsepower Sizes 170-400				Integral Horsepower Sizes 500-1525		
Wire Size AWG	Distance (feet)			Distance (feet)		
	6 volt	24 volt	90 volt	6 volt	24 volt	90 volt
18	20	280	1000	4	65	700
16	30	430		6	95	
14	50	720		10	160	
12	75	720		10	160	
10	125			25	400	
8	200			40		



General construction wire type MTW or THW recommended. #6 terminal screws (size 400 and smaller) torque to 15 in-lb. #8 terminal screws (size 500 and larger) torque to 20 in-lb.

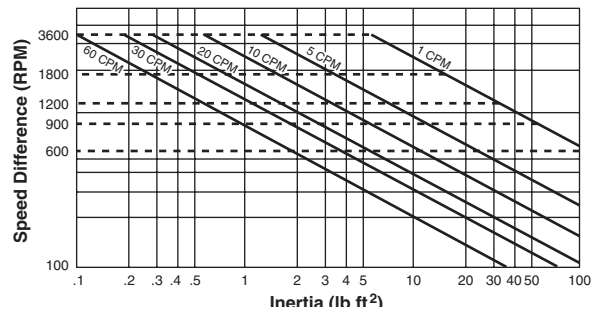
Cycle Rates

The performance curves on this page and the following page meet current UL Listing and Recognition coil temperature limitations, which are class A or 105° C. Consult Warner Electric's Catalog, P-1234 or P-1264, for performance characteristics for applications not subject to UL listings.

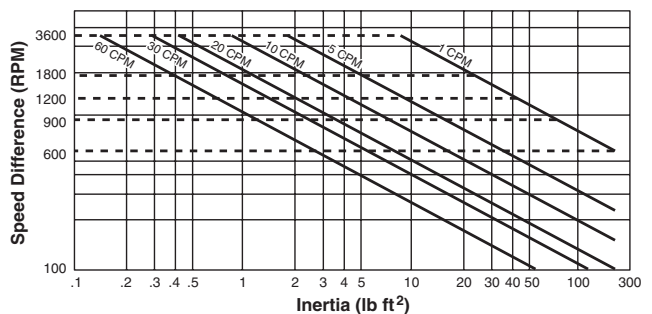
AT Models

Select the chart for the appropriate size AT clutch or brake. The intersection of the reflected inertia (lb. ft.) and speed difference (RPM) lines will indicate the maximum cycle rate for that size unit.

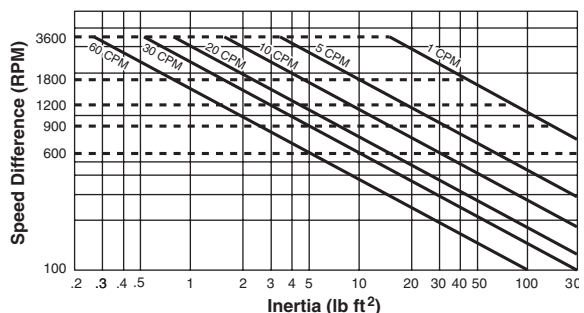
AT 25



AT 55

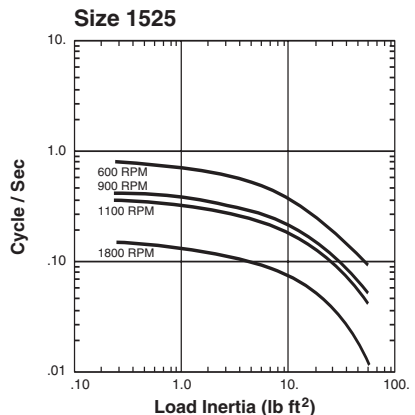
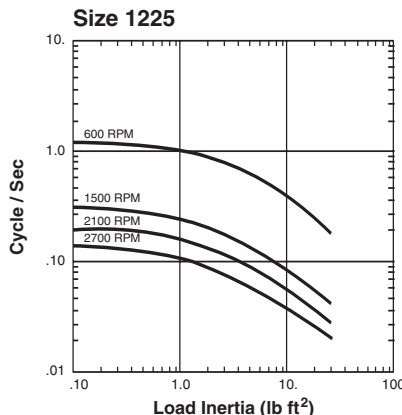
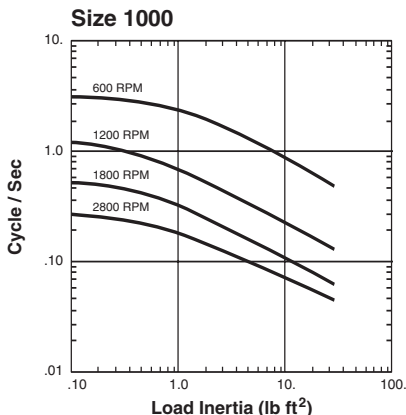
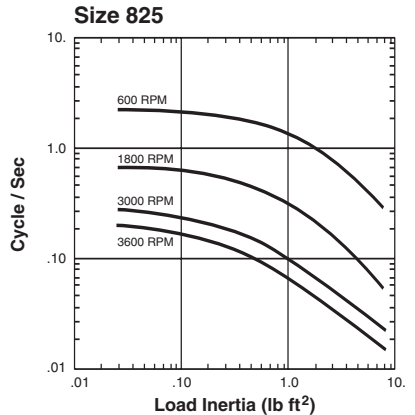
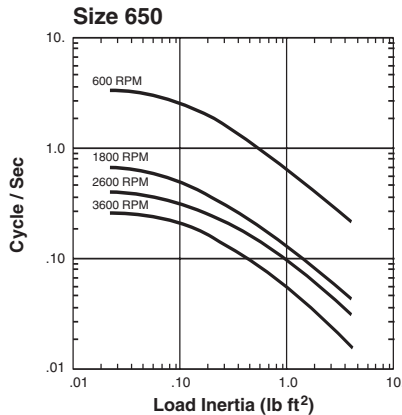
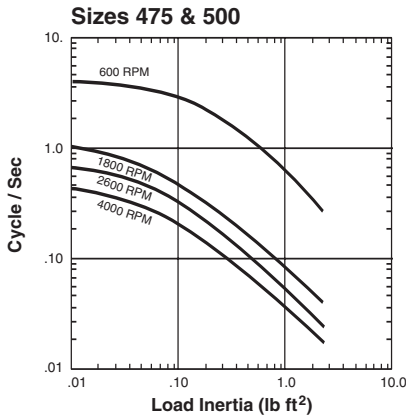
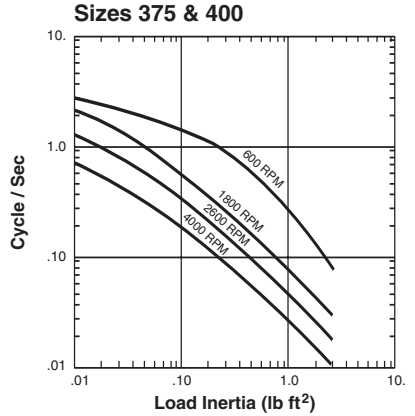
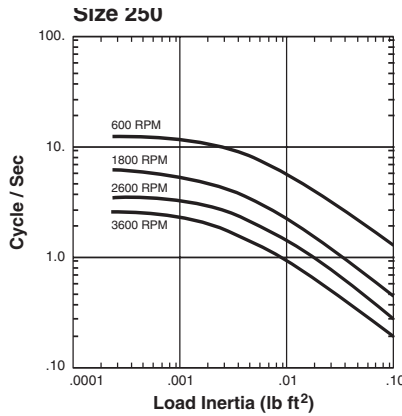
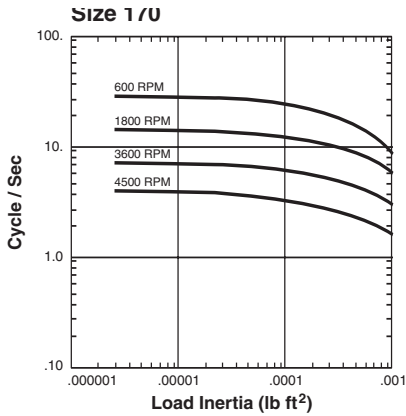
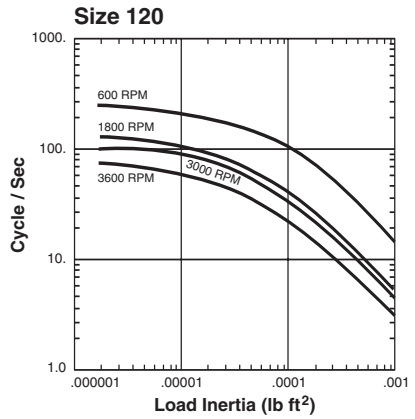


AT 115



Packaged and Basic Products, Sizes 120-1525

To determine maximum allowable cycle rate, select the chart which covers your size clutch or brake, refer to the horizontal "Load Inertia" axis and project vertically until intersecting the applicable RPM line. Then project horizontally to the left to intersect the vertical cycle / second axis. This is the maximum cycle rate allowable for class A operation.



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