Constant Pressure Water System

Surge Capacitor

Installation Manual

MODEL CA 302-R
DELTA SURGE CAPACITOR
125/250 volt three wire single phase system
60 Hz
FACILITY EMI FILTER

INSTRUCTIONS:
Connect the Black Wires to a Delta Breakers. Connect the White Wire to the Neutral and/or Ground.

Franklin Electric
**Purpose**

If it is not possible to follow all the recommendations in the SubDrive/Mono-Drive Installation Guide, there is a slight possibility of interference and added filtering can be effective. In the case of flickering dimmer controlled lighting, the Surge Capacitor is a possible remedy as a result of conditioning the incoming AC line. This is accomplished by installing the Surge Capacitor on the load-side of any double-pole breaker within the service entrance panel.

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**WARNING**

To reduce the risk of electrical shock, DISCONNECT POWER before working on or around any electrical panel. Follow all local and national codes for safety and installation guidelines.

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**ATTENTION**

This equipment is intended for installation by approved personnel recognized by national and local agencies to work with the electrical wiring. Failure to install the Surge Capacitor in compliance with national and local electrical codes and within Franklin Electric’s recommendations may result in electrical shock or fire hazard, unsatisfactory performance and equipment failure.

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**CAUTION**

This product should be installed by approved personnel recognized by national and local agencies to work within the electrical panel and associated electrical wiring.

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**TOOLS AND HARDWARE REQUIRED**

Installation of the Surge Capacitor requires a screwdriver and crescent-type wrench.

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**Installation**

**Location Selection**

The Surge Capacitor should be located within the panel at the main service entrance. The main service entrance is generally the panel nearest the service entrance ground rod and is the panel that has the bus connection between the neutral and safety ground terminal strips.

The Surge Capacitor is mounted to the panel through any available 1” knock-out. A coupling nut is provided with the Surge Capacitor to attach it to the panel. The Surge Capacitor has 60 cm (24 inch) long leads and should be located to reach a double-pole breaker with the 2 black leads and the neutral terminal strip with the white lead.
Installation Procedure

1. Identify the location of the service entrance panel. The main service entrance is the panel nearest the service entrance ground rod, and is the panel that has the bus connection between the neutral and safety ground terminal strips. See Figure 1.

2. Turn Main Power Off. Install lockout device as required by code.

3. Remove the service entrance panel cover.

4. Verify that the Main Power is off.

5. Mount the Surge Capacitor into the panel using a vacant 1” knock-out location. Remove the knock-out. Insert the Surge Capacitor leads through the knock-out. Tighten the coupling nut. See Figure 2.

6. Attach the Surge Capacitor white lead to the neutral terminal strip.

7. Attach the Surge Capacitor black leads (2) to the load side of a double-pole breaker.

8. Reattach the service entrance panel cover.

9. Restore Main Power.

10. Turn on the double-pole breaker.