Constant Pressure Water System

IGF Input Filter

226035901 Installation Manual

Franklin Electric
**Purpose**
In applications where the service entrance ground is in close proximity to the well head, especially with soil that has a high conductivity to electrical currents, unwanted current can be coupled to the ground conductor. Some devices can be sensitive to normal ground currents such as landline phones, cattle farm tagging systems, chicken farm lighting systems, etc. The Input Greenwire Filter (IGF) is very effective at addressing these electrical noise disturbances on the ground conductor in these types of applications.

⚠️ **WARNING**
Serious or fatal electric shock may result from failure to connect the motor, the SubDrive Family Controller, the IGF Filter, any metal plumbing, and all other metal near the motor or cable to the power supply ground terminal, using wire no smaller than motor cable wires. To reduce the risk of electrical shock, disconnect power before working on or around the water system. Capacitors inside the SubDrive Family Controller can still hold a lethal voltage even after power has been removed. Do not use motor in swimming areas. **Allow 10 minutes for dangerous internal voltage to discharge.**

⚠️ **CAUTION**
This product should only be used with Franklin Electric SubDrive Series controllers. Do not use power factor correction capacitors with the IGF Filter and SubDrive Family Controller. Damage will result to the motor and SubDrive Family Controller.

⚠️ **ATTENTION**
This equipment is intended for installation only by technically qualified personnel. Failure to install it 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.

**Compatibility**
The IGF Input Filter is suitable for use with SubDrive/MonoDrive models with a maximum input current rating of $40A_{\text{RMS}}$ or less.
TOOLS AND HARDWARE REQUIRED

Installation of the Constant Pressure Water IGF Input Filter requires a screwdriver, a crescent-type wrench, and four fasteners for mounting the filter box.

Installation

Location Selection

The IGF Input Filter is installed between the SubDrive/MonoDrive Controller and the incoming power. The cable provided with the IGF Input Filter is approximately 38 cm (15 inches) long and should be connected directly to the controller input power terminal block.

The IGF Input Filter is mounted to a flat surface using fasteners provided by the installer through each of the exterior mounting tabs. See Figure 1.

Installation Procedure

1. Disconnect electrical power to the controller at the main breaker. If previously connected to the supply mains, wait ten (10) minutes for dangerous internal voltages within the controller to discharge.

2. Remove the IGF Input Filter cover and controller lid.

3. Attach the IGF Input Filter to a flat surface using four fasteners.

4. Route the preinstalled power cable from the IGF Input Filter to the input power terminal block of controller. The leads should be terminated to the input power terminal block with the green lead connected to the ground terminal. The black and white leads are each connected to either L1 or L2.

5. Route the power leads from the supply mains (200-250 V) through the strain relief on the unoccupied cable opening of the IGF Input Filter. The green lead should be connected to the ground terminal, while the L1 and L2 leads from the supply mains are connected to their respective terminals as labeled on the circuit board of the IGF Input Filter.

6. Reattach the IGF Input Filter cover and the controller lid.

7. Upon completion, refer to the SubDrive/MonoDrive Installation Manual for start-up and operation procedures.
TOLL-FREE HELP FROM A FRIEND
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Technical Service Hotline
800-348-2420