EMI Input Filter
Kit No. 225198901 Install Guide
PURPOSE
If it is not possible to follow all of the recommendations in the SubDrive/MonoDrive installation guide, there is a slight possibility of interference and added filtering can be effective. In the case of AM radio internet interference, the input filter is a possible remedy. This is accomplished by installing the input filter on the supply mains side of the SubDrive/MonoDrive. The input filter is intended for use with any SubDrive or MonoDrive Model.

⚠️ WARNING
Serious or fatal electric shock may result from failure to connect the motor, the SubDrive Family Controller, the EMI 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 EMI 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.
TOOLS AND HARDWARE REQUIRED
Installation of the input filter requires a screwdriver, crescent-type wrench, and four fasteners for mounting the filter box.

LOCATION SELECTION
The EMI Input Filter is installed between the SubDrive/MonoDrive Controller and the incoming power. The cable provided with the EMI Input Filter is approximately 60 cm (24 inches) long and should be connected directly to the controller input power terminal block. The EMI 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 EMI Input Filter cover and controller lid.
3. Attach the EMI Input Filter to a flat surface using four fasteners.
4. Route the preinstalled power cable from the EMI Input Filter to the input power terminal block of the controller. The leads should be terminated to the input power terminal block with the green lead connected to the center ground terminal. The black and red 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 EMI Input Filter. The green lead should be connected to the center 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 EMI Input Filter.
6. Reattach the EMI 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
Franklin Electric Submersible Service Hotline
800-348-2420