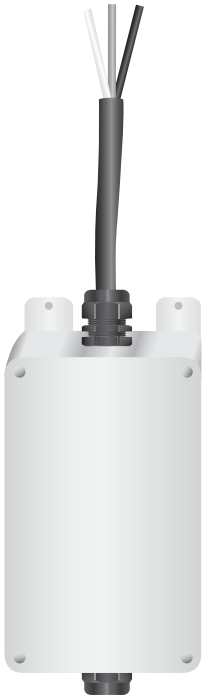


# AMR Input Filter

Kit 226030901 Install Guide



Franklin Electric

## Purpose

Newer electronic products and utility providers sometimes use power line communication technology to transmit data over power lines. The Automated Meter Reader (AMR) Input Filter is effective at remedying electrical noise disturbances from the SubDrive/MonoDrive that can impact Automated Meter Readers used by utility companies along with other related devices which communicate over power lines.

### WARNING

Serious or fatal electric shock may result from failure to connect the motor, the SubDrive Family Controller, the AMR 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 AMR 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 AMR Input Filter is suitable for use with SubDrive/MonoDrive models with a maximum input current rating of  $20A_{RMS}$  or less. This includes:

Enclosure	SubDrive		MonoDrive	
	Order Number	Model Description	Order Number	Model Description
NEMA 1	5870203380 5870204100	SubDrive75 SubDrive100	5870203110 5870204110	MonoDrive MonoDriveXT
NEMA 3R	5870205103 5870205103C 5870205303 5870205303C 5870203223 5870300553 5870301113 5870205153C 5870205353C	SubDrive15 SubDrive15 Connect SubDrive20 SubDrive20 Connect SubDrive2W SubDrive Solar 0.55kW SubDrive Solar 1.1kW SubDrive1100 Connect IP23 (CE) SubDrive1500 Connect IP23 (CE)	5870205003 5870205003C 5870205203 5870205203C	MonoDrive MonoDrive Connect MonoDriveXT MonoDriveXT Connect
NEMA 4	5870203384 5870204104	SubDrive75 SubDrive100	5870203114 5870204114	MonoDrive MonoDrive

## TOOLS AND HARDWARE REQUIRED

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

## Installation

### Location Selection

The AMR Input Filter is installed between the SubDrive/MonoDrive Controller and the incoming power.

The cable provided with the AMR Input Filter is approximately 38 cm (15 inches) long and should be connected directly to the controller input power terminal block.

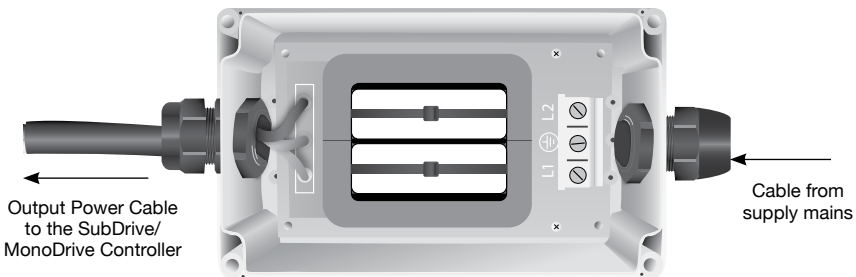
The AMR Input Filter is mounted to a flat surface using fasteners provided by the installer through each of the exterior mounting tabs.

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 AMR Input Filter cover and controller lid.
3. Attach the AMR Input Filter to a flat surface using four fasteners.
4. Route the preinstalled power cable from the AMR 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 AMR 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 AMR Input Filter.
6. Reattach the AMR Input Filter cover and the controller lid.
7. Upon completion, refer to the SubDrive/MonoDrive Installation Manual for start-up and operation procedures.



**Figure 2**

**TOLL-FREE HELP FROM A FRIEND**  
**Franklin Electric**  
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**800-348-2420**



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