

CE Input Filter

Kit 226205901 Install Guide



Franklin Electric

Declaration of Conformity

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In accordance with the following directives,

2006/95/EC

Low Voltage Directive

2004/108/EC

Electromagnetic Compatibility Directive

Franklin Electric Corp declares that the following products,

Equipment Type

EMI Accessory for Variable Frequency
Drive for SubDrive 1100, 1500, and 2200

Part No.

226205901

Brand Name

Franklin Electric

are in conformity with the applicable requirements based upon the following documents:

EN 61800-5-1:2007, A1:2013

ADJUSTABLE SPEED ELECTRICAL
POWER DRIVE SYSTEMS - Part 5-1:
Safety requirements
Electrical, thermal, and energy

EN 61800-3:2004 A1:2012

Adjustable speed electrical power drives
systems. EMC requirements and specific
test methods

EN 60529:1989/A2: 2013

Degrees of protection provided by
enclosures (IP code).

EN 60938-2:1999/A1:2006

Fixed inductor for electromagnetic
interference suppression

Date of Issue:

Authorized Signature: Robert P. Alfrey

Name: Robert Alfrey

Title: Electronics Certification Engineer

Place: Franklin Electric Co., Inc

Purpose

This filter accessory, when used in conjunction with the SubDrive1100/1500/2200 and recommended installation procedures, will allow the system to meet the requirements to bear the CE mark.

WARNING

Serious or fatal electric shock may result from failure to connect the motor, the SubDrive Family Controller, the CE Input 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 5 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 CE Input 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.

CE Input Filter Specifications

Input / Output Voltage, VAC	230
Input / Output Current, A	23
Power, kW	4.2
Input / Output Frequency, Hz	50 / 60
Input / Output Phase	Single-Phase (3-Wire)
IP Rating	IP23
Overall Height, mm	92
Overall Width, mm	160
Overall Length, mm <i>excludes mounting feet</i>	220
Mass, kg	1.84 kg
Operation and Storage Environments	Temperature (at 230 VAC input): -13 °F to 122 °F (-25 °C to 50 °C) Altitude 2000 m / IP23 Enclosure Pollution Degree 2



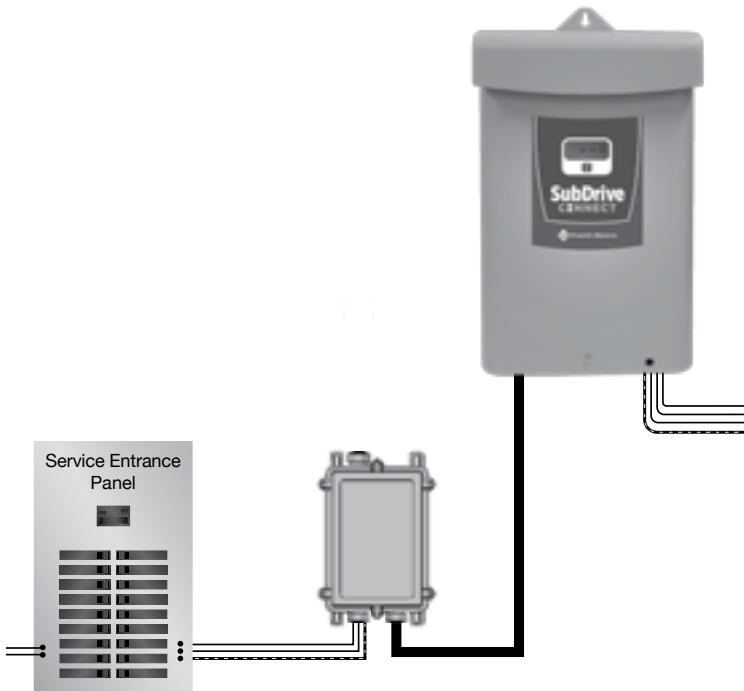
Refer to this Manufacturer's manual for details

Branch Circuit and Motor Protection

For details, refer to the SubDrive Owner's Manual.

EMC

EMC conformance to EN61800-3 was attained with Franklin Electric SubDrive and the GE Input Filter with shielded motor cable. Additional EMC mitigation for other installations may be necessary.



TOOLS AND HARDWARE REQUIRED

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

Installation

Location Selection

The CE Input Filter is installed between the SubDrive Controller and the incoming power.

The cable provided with the CE Input Filter is approximately 60 cm (24 inches) long and should be connected directly to the controller input power terminal block.

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

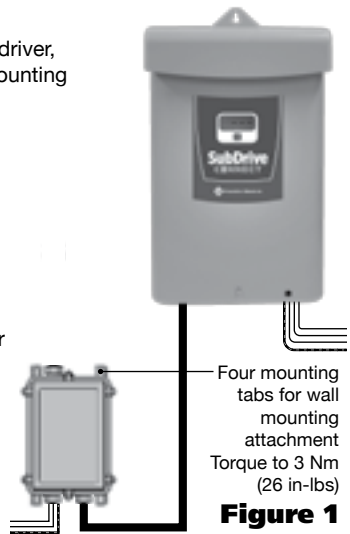


Figure 1

Installation Procedure

1. Disconnect electrical power to the controller at the main breaker. If previously connected to the supply mains, wait five (5) minutes for dangerous internal voltages within the controller to discharge.
2. Remove the CE Input Filter cover and controller lid.
3. Attach the CE Input Filter to a flat surface using four fasteners.
4. Route the preinstalled power cable from the CE Input Filter to the input power terminal block of controller. The leads should be terminated to the input power terminal block with the green/yellow lead connected to the ground terminal. The brown and blue leads are each connected to either L or N.
5. Route supply mains (200-250 V) power leads through the strain relief on the filter unoccupied cable opening. The green/yellow lead should be connected to the ground terminal, while the L1/L and N leads from the supply mains are connected to their respective terminals as labeled on the circuit board of the CE Input Filter.
6. Reattach and secure the CE Input Filter cover and drive controller lid. Torque filter lid screws to 2 Nm (18 in-lbs).
7. Upon completion, refer to the SubDrive Installation Manual for start-up and operation procedures.

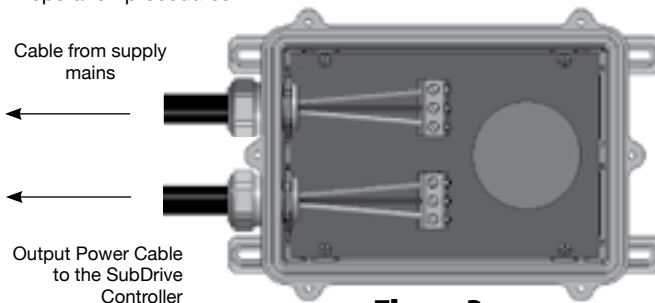


Figure 2

NOTES



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