FEBCO IS-F-RFK-FS-825 Cellular Flood Sensor Retrofit Connection Kit





# FEBCO IS-F-RFK-FS-825 Cellular Flood Sensor Retrofit **Connection Kit Instruction Manual**

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FEBCO IS-F-RFK-FS-825 Cellular Flood Sensor Retrofit Connection Kit



### **Product Information**

### **Specifications**

• Product Name: Cellular Flood Sensor Retrofit Connection Kit

• Model Number: IS-F-RFK-FS-825-Cellular

• Components: Activation module, Cellular Gateway, 24V Power adapter

### **Product Usage Instructions**

### **Installation Instructions**

Before using the equipment, read the manual carefully to prevent any risks. Consult local building and plumbing codes before installation.

### **Kit Components**

- A. Activation module with 8' conductor cable and ground wire
- B. Cellular Gateway with mounting tabs and screws
- C.24V Power adapter

#### Install the Flood Sensor and Activation Module:

- 1. Attach the flood sensor to the relief valve body beneath the outlet.
- 2. Secure the sensor in place using the provided screws.
- 3. Connect the activation module to the sensor.
- 4. Ensure a proper seal and electrical contact between the module and sensor.

#### **Custom Flood Sensor Settings:**

Adjust DIP switches on the activation module for specific wet threshold and time delay settings.

#### Set Up the Cellular Gateway:

- Mount the Cellular Gateway away from large metal objects to ensure proper cellular signal reception.
- Connect the activation module cable to transmit signal and power to the module.

#### **FAQs**

#### Q: What should I do if any item is missing from the kit?

• A: Contact your account representative to inquire about ordering the missing item with code 88009428.

#### Q: How can I customize flood sensor settings?

- A: Use the DIP switches on the activation module or scan the provided QR code for more information on customization.
- Read this Manual BEFORE using this equipment. Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment.
- Keep this Manual for future reference.
- You are required to consult the local building and plumbing codes before installation.
- If the information in this manual is not consistent with local building or plumbing codes, the local codes should be followed.
- Inquire with governing authorities for additional local requirements.

#### **NOTICE**

- Use of the SentryPlus Alert® technology does not replace the need to comply with all required instructions, codes, and regulations related to the installation, operation, and maintenance of the backflow preventer to which it is attached, including the need to provide proper drainage in the event of a discharge.
- Watts® is not responsible for the failure of alerts due to connectivity or power issues.
- Monitor relief valve discharge with smart and connected sensor technology to detect flooding and transmit a notification.
- The Cellular Flood Sensor Retrofit Connection Kit upgrades existing installations by integrating and activating the sensor to enable functions for flood detection.
- When excessive relief valve discharge occurs, the sensor energizes a relay signaling flood detection and triggers real-time notification of potential flood conditions through the SynctaSM application.

### **Kit Components**

- The retrofit connection kit for installing and activating the flood sensor includes the items shown below.
- If any item is missing, speak with your account representative about ordering code 88009428.
- A. Activation module with 8' conductor cable and ground wire

• B. Cellular Gateway with mounting tabs and screws



- C. 24V Power adapter
- D. Small sensor for valve sizes 3/4" to 1"; large sensor, valve sizes 11/4" to 2"





#### **NOTICE**

When installing an air gap, attach the air gap brackets directly to the flood sensor.

### Requirements

- #2 Phillips screwdriver
- Wire stripper
- Suitable location within 8 feet of the flood sensor for mounting the Cellular Gateway on a wall or structure
- 120VAC, 60Hz, GFI-protected electrical outlet
- Ground wire running from the Cellular Gateway to the ground point
- Cellular network connection
- · Internet browser

#### Install the Flood Sensor and Activation Module

- The activation module receives a signal from the sensor when a discharge is detected.
- If the discharge meets the conditions of a qualifying event, the normally open contact is closed to provide a signal to the Cellular Gateway input terminal.

### **Custom Flood Sensor Settings**

- The default settings on the activation module for detecting discharge are suitable for the assembly series.
- However, the DIP switches can customized for a different wet threshold and time delay. Scan the QR code for more information.



- 1. Set the assembly for attachment of the flood sensor to the rim of the relief valve body, beneath the relief valve outlet.
- 2. Thread the #2 Phillips screwdriver through the sensor adapter to the captive screw and align the sensor with the rim attachment point.





- 3. Tighten the sensor to the relief valve body.
- 4. Remove the dust cover from the sensor.





- 5. Press the activation module onto the sensor.
- 6. Check that the module is fully seated to seal the O-ring and make electrical contact.





#### **NOTICE**

• Retain the dust cover to protect the flood sensor when the activation module needs to be removed or replaced.

### **Set Up the Cellular Gateway**

#### **NOTICE**

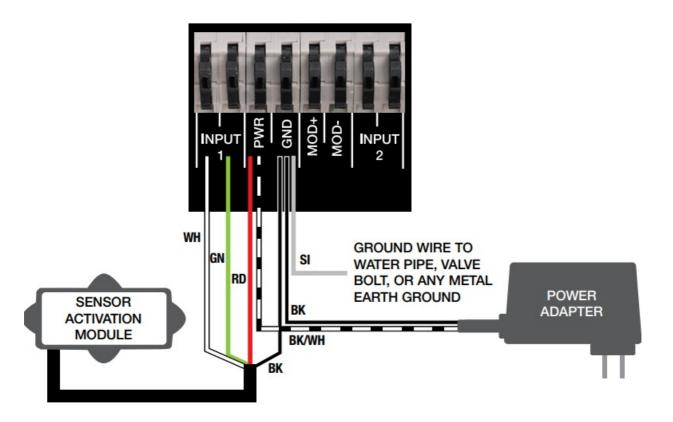
- When identifying a location to mount the Cellular Gateway, choose an area away from large metal objects and structures that can block cellular signals.
- The cellular antenna is placed inside the housing on the upper right side. Ensure that the antenna side is clear of walls, wires, pipes, or other obstructions.
- These instructions cover the connection of the activation module cable to the terminal block of the Cellular Gateway.
- The 4-conductor activation module cable should be attached to the Cellular Gateway to transmit a normally open contact signal and provide power to the activation module.
- The contact signal closes when a discharge is detected.
- When attaching the power adapter to the Cellular Gateway, distinguish the positive wire from the negative one.
- The positive wire has white stripes and must be inserted into the power terminal; the negative wire, into the ground terminal.
- The earth ground must be connected to the Cellular Gateway before the flood sensor is put in operation.
- Attach the activation module cable to the device before or after it is mounted to a nearby wall or structure with the mounting tabs and screws.
- Collect the Cellular Gateway and mounting materials, power adapter, Phillips screwdriver, and wire stripper for this segment of the installation.

#### To connect the module cable to the device

- 1. Remove the transparent cover from the device.
- 2. Use the wire stripper to cut away enough insulation to expose 1 to 2 inches of the conductor wires and feed the cable through the bottom port.
- 3. Insert the white wire and the green wire into the first and second terminals of INPUT 1.
- 4. Feed the power adapter cord through the bottom port.
- 5. Connect the positive (BK/WH) power adapter wire to the red wire of the activation module cable and insert the wires into the PWR terminal.
- 6. Connect the negative (BK) power adapter wire to both the black wire of the activation module cable and the ground wire then insert the wires into the GND terminal.
- 7. Skip MOD+ and MOD-. Reserved.
- 8. Reattach the device cover and plug the power adapter into a 120VAC, 60Hz, GFI-protected electrical outlet.

If adding a second flood sensor to the configuration, insert the white and green wires into the first and second terminals of INPUT 2, the red wire into the PWR terminal, and the black wire into the GND terminal.

### **GATEWAY TERMINAL BLOCK**



LETTER CODE	WIRE COLOR
WH	White
GN	Green
RD	Red
ВК	Black
BK/WH	Black with white stripe
SI	Silver

### **Verify the Connections**

### **NOTICE**

- A cellular network signal is required for successful installation.
- Upon initialization, the Cellular Gateway begins the start sequence automatically.
- The process may take up to 10 minutes to reach a steady state.
- · Check the status of the LED indicators to confirm connectivity.
- To validate the connections, press the TEST button on the Cellular Gateway to send a test message through the Syncta app.
- To restore the factory state of the Cellular Gateway and restart the startup sequence, press the RESET button.
- This causes all ongoing operations to cease.
- Call customer service if you need assistance with technical details.

LED	INDICATOR	STATUS
POWER	Steady green	Unit is powered
CELL	Steady blue	Connection to the cellular network is good
	Blinking blue	Searching for a cellular network connection
	Blinking blue with short OF F pulses	Connection to the cellular network is poor
loT	Steady blue	Internet connection is established
	Blinking blue	Internet connection is lost or not established  (The gateway attempts an internet connection indefinitely.)
FLOOD/INPUT1	Unlit	No relief water discharge is occurring
	Steady orange	Relief water discharge is occurring  (This state remains for the duration of the discharge.)
INPUT2	Unlit	No relief water discharge is occurring
	Steady orange	Relief water discharge is occurring  (This state remains for the duration of the discharge.)

## **Configure the Syncta App**

### **NOTICE**

- These instructions cover the minimum user input needed to install and configure the Syncta app for use with the flood sensor.
- An internet connection is required for a laptop or mobile device.
- Information on the Cellular Gateway ID label is needed to configure the Syncta app for sending flood alerts by email, phone, or text.
- Do not remove the label.

### To log in or create an account

1. Scan the QR code on the ID label or open a web browser and go to <a href="https://connected.syncta.com">https://connected.syncta.com</a>.



- 2. Enter the device ID, make sure Connected is selected, and tap Next. Syncta checks for the installation of a valid device. (Connected applies to devices requiring internet access; Nonconnected, to manual devices.)
- 3. Tap login to access an existing account.



### NOTICE

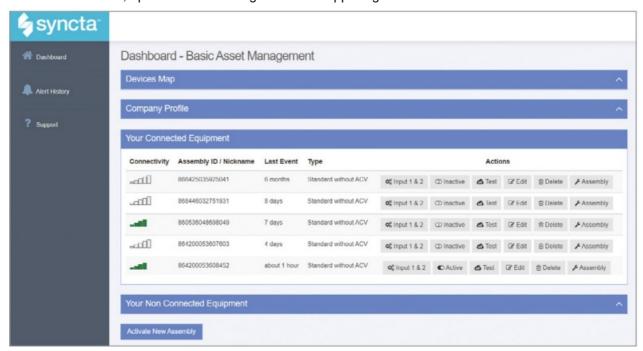
- For first-time users, create an account before attempting to sign in. Tap Sign Up and complete all fields. Tap the check box to agree to the Terms & Conditions.
- After your review, select both check boxes at the bottom of the window then select Close.
- Follow through with the remaining screen prompts to complete the setup of your account, profile, and first assembly.

#### The Syncta Dashboard

- Start at the dashboard to take action on all or specific assemblies, such as view alerts, and change settings to receive notifications and test notifications.
- The location of menu navigation is the only difference between desktop and mobile versions. On the desktop

version, the menu is on the left and the user pull-down list (upper right) includes profile settings link and logoff.

• On the mobile version, open the menu navigation is the upper right and include all the function links.



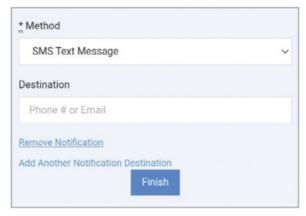
- From the dashboard, access the map for locations of assemblies, user-company profile, connected and nonconnected equipment, and the function to activate an assembly.
- **Device Map** View the location of assemblies in an area.
- Company Profile Enter or update basic user information about the user and organization maintaining the assembly.
- This is also a page accessed through the My Profile link.
- Connected Equipment View internet connectivity of assembly, assembly ID, last event, and setup type, and take an action on an assembly such as entering notification settings, enabling or disabling the assembly for actions with a toggle switch, testing notification settings, editing assembly information, delete an assembly, and update assembly details.
- Non-Connected Equipment For record keeping, also log equipment requiring maintenance but not connectivity.
- Activate New Assembly Use this function button to add an assembly or restore a previously deleted one.

#### To activate an assembly

- 1. On the dashboard, select Activate New Assembly.
- Enter the assembly ID, select Connected, and tap Next. Syncta checks for the installation of a valid device (Connected applies to devices requiring internet access; Nonconnected to manual devices.)



3. Choose notification type from the Method drop-down list: Email Message, SMS Text Message, or Voice Call.



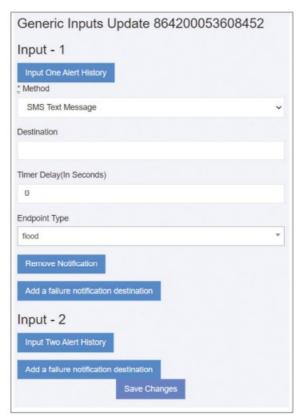
- 4. Depending on the notification method selected, enter a phone number or an email address in the Destination field.
- 5. Tap Finish.

#### **NOTICE**

- If the Cellular Gateway is wired for two flood sensors, configure alerts for both sensors.
- Configure Input 1 for the first or only flood sensor; configure Input 2 for a second sensor.

#### To set a notification alert

- 1. In the Actions field, select Input 1 & 2 to set up alerts.
- 2. Choose notification type from the Method drop-down list: Email Message, SMS Text Message, or Voice Call.



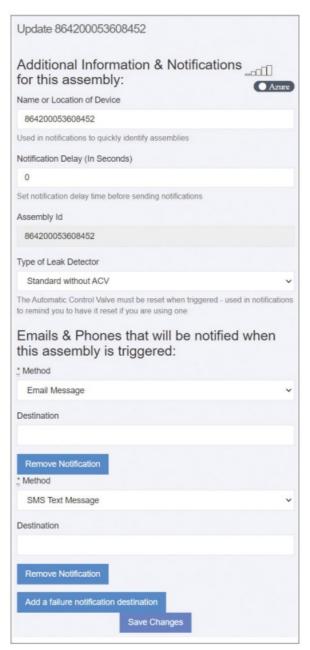
- 3. Depending on the notification type selected, enter phone number or email address in the Destination field.
- 4. Skip the Timer Delay field. For use with SentryPlus Alert Control Box only.
- 5. For the endpoint type, select 'Flood' for the flood sensor from the drop-down list. This value indicates the type of event the connected device is reporting.
- 6. To set up the same alert for another notification method, select Add a failure notification destination and repeat steps 2 to 5 for that method.
- 7. Configure Input 2 in the same manner, if a second sensor is in use.
- 8. Select Save Changes.
- 9. Return to the dashboard, locate the device, and select TEST to verify the connections.
- 10. Check for the test notification in your email inbox or mobile device, depending on the configuration entered.

#### NOTICE

- In general, fill in all the fields on the Syncta app pages to create complete and accurate records of devices deployed, users, and alerts history. Edit the entries as required to maintain up-to-date records.
- Start at the dashboard to add equipment or to take action on specific equipment, such as view alerts, and change settings to receive notifications and test notifications.

### To update assembly info and notification settings

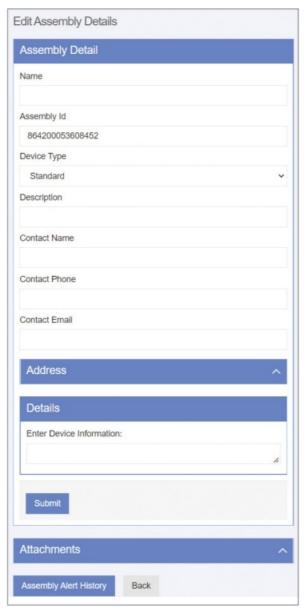
- 1. Access the Update Assembly Information page by the Edit function in the Connected Equipment section of the dashboard, or through the map locator.
- 2. Enter or modify additional information on the assembly.



- 3. Enter the notification method and destination.
- 4. Remove or add a notification entry, if necessary.
- 5. Tap Save Changes.

### To edit assembly details

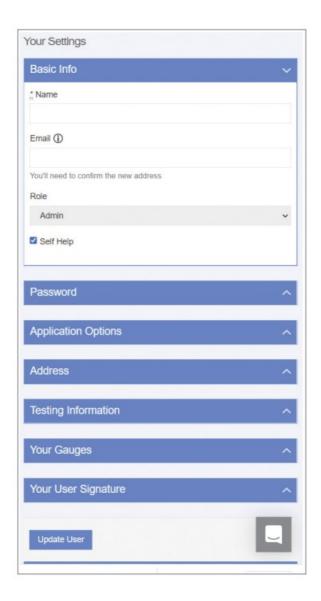
- 1. Input assembly details including assembly information and contact information.
- 2. Fill in the address fields to specify the exact location of the assembly.



- 3. Enter any other relevant information about the assembly in the free-form comment field.
- 4. Tap Submit.
- 5. Upload files such as photos and maintenance records.
- 6. Tap Assembly Alert History to view the message log or Back to return to the dashboard.

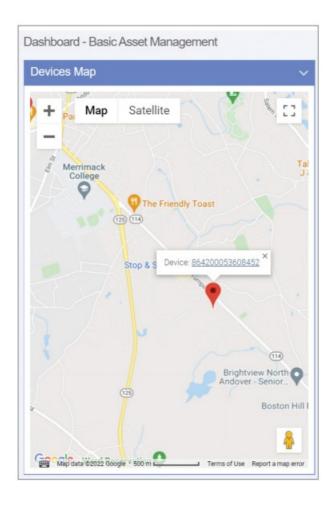
### To update the profile

- 1. Start with the User Profile link or Company Profile on the dashboard.
- 2. Update the profile settings, as needed, for these categories:
  - · Basic user information
  - Password
  - Text size options for mobile devices
  - · Address where an assembly is located
  - Testing/certification information
  - Gauge information
  - User signature (To make an entry, use a mouse or other input device; for touchscreen devices, use a stylus or your finger.)
- 3. Tap Update User to finish.



### To use the map locator

• Tap a marker to see the assembly ID. Tap the ID link to modify assembly information and notification settings on the Update Assembly Information page.



### To view alert history

- Open the Alert History page from the navigation menu or the Edit Assembly Details page.
- Each entry in the Alert History log is a record of the assembly ID, alert message, and date of alert.
- The delete action occurs without confirmation.
- Limited Warranty: FEBCO (the "Company") warrants each product to be free from defects in material and workmanship under normal usage for one year from the date of original shipment.
- In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge.
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#### **Documents / Resources**



FEBCO IS-F-RFK-FS-825 Cellular Flood Sensor Retrofit Connection Kit [pdf] Instruction Manual

IS-F-RFK-FS-825 Cellular Flood Sensor Retrofit Connection Kit, IS-F-RFK-FS-825, Cellular Flood Sensor Retrofit Connection Kit, Flood Sensor Retrofit Connection Kit, Retrofit Connection Kit, Connection Kit

#### References

- © FEBCO | Watts Brands
- S FEBCO | Watts Brands
- Data Entry App | Backflow Testing App | Syncta
- \$ connected.syncta.com
- User Manual

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