# Maintenance & Operating Instructions For FloTech FT295 ALARM INTERFACE

10847PA REV B





The Right Connection®

Dixon Bayco Division Cincinnati, Ohio

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# Technical Support Hotline (877) 582-3569

Contact the FloTech Technical Support Hotline for help:

- Troubleshooting overfill systems.
- Verifying defective components
- To request an RGA for defective FloTech products under warranty.

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#### What's in the Box

	Part	Quantit
•	FT295 Alarm Interface Main Unit	1
•	½"MIP by 1/2" strain relief	2
•	Pipe plug	1
•	Instruction manual	1

#### Introduction

Tank trailers featuring overfill prevention monitors are often restricted to having the monitor installed in select positions on the trailer due to sensor cabling. The limited install locations may not cater to the driver or rack operator and restrict the trailer from use in certain situations. The FT295 serves as a remote view of the onboard monitor's loading permit state, offering greater flexibility and functionality than a standalone monitor.

In addition to offering a secondary location to view the onboard monitor's permit state, the FT295 also features an alarm to notify driver or rack operators when a monitor enters a non permissive state.

It is common that trailer overfill protection systems require the onboard monitor's relay output contacts to control external devices such as lights, motors, or solenoids. The current or voltage rating of the monitor's output relay may not be sufficient to control these devices directly. In these cases the FT295 can be used as a pass through device effectively raising the limitations of the monitor's output relay. The FT295 relay contacts are suitable for switching a heavy load.

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#### **Main Features**

- Designed for use with all onboard overfill prevention monitors featuring relay output contacts.
- Features an audible alert to indicate the permissive state of the onboard monitor.
- LED indicators to reflect the power and permit state of the connected monitor.
- 2 Amp, 120/240VAC, 30VDC Relay outputs to reflect output of monitor relay, making the FT295 serve as a pass-through device.
- Connections available for interfacing external 12V indicators including buzzers and lights.
- Used to further extend monitor output and functionality.
- Water-tight enclosure suitable for outdoor mounting.
- Power switch to enable/disable device.

# **Specifications**

•	Dimensions	. 4.55" x 6.65" x 10.27"
•	Supply voltage	12 VDC
•	Relay coil voltage	6-12 VDC
•	Relay coil current	150 mA
•	Relay contact config	4PDT
•	Relay contact rating	2 A
•	Fuse 1 rating	500 mA
•	Fuse 2 rating	2 A
•	Fuse 3 rating	2 A

#### **Maintenance**

The FT295 is designed for long term outdoor use and requires little maintenance when installed properly. Regularly ensure that the lid screws and cable glands are tight creating a water tight seal. This will help protect the internal circuitry from corrosion and extend the life of the FT295.

Additionally, the FT295 contains a corrosion inhibitor that can be replaced yearly to further protect against corrosion due to moisture within the enclosure.

# **Replacement Parts**

Specified fuses must be used to ensure intrinsically safe operation of the FT295.

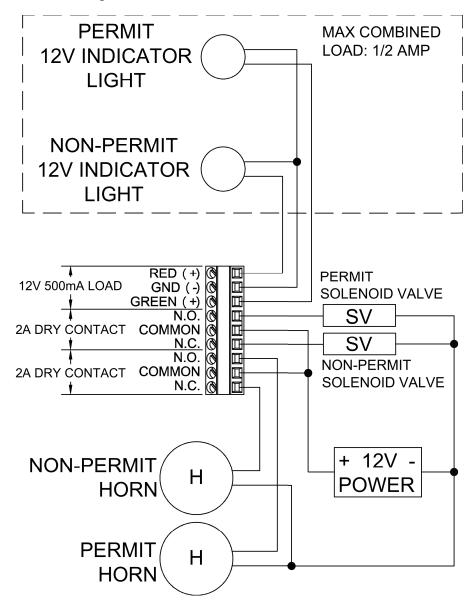
Designation	F1	F2,F3
Dixon P/N	10848	10849
Mfg. P/N	7022.057	23112000029
Manufacturer	SCHURTER	LITTLEFUSE
Rated Current	500mA	2A
Rated Voltage	500VAC	500VAC
Material	Ceramic	Ceramic
Opening Speed	Super Quick Acting	Super Quick Acting
Quenching Mtl.	Sand	Sand

# **Dixon Warranty:**

For warranty Information, please refer to the inside back cover of the latest Dixon catalogue.

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## **Example External Connections**



#### Installation

#### **Required Tools and Supplies**

- #2 Flat head screwdriver
- #1 Flat head screwdriver
- 3/8" Nut Driver/Socket
- 18 AWG 4 conductor cable
- 3/8" stainless steel Bolt/Lockwasher/Nut set

#### **Procedure:**

- 1. Determine desired install location.
- 2. Verify install location has sufficient room to open lid and run cabling to FT295.
- 3. Drill mounting holes to align with two mounting holes on FT295, referring to Figure 1 for mounting dimensions.
- 4. Mount FT295 using 3/8" bolts, lock-washers, and nuts.
- 5. Open the front panel of the FT295 by loosening the four front screws.
- 6. Disconnect the trailer nose piece and verify that the 12V line is discharged.
- 7. Connect the onboard monitor to the FT295 using four conductor cable, referring to Figure 2 for wiring diagram.
- 8. Tighten the cable gland holding the 4 conductor cable to create a water-tight seal.
- 9. Make external connections to FT295, using TB2 as needed, referring to Figure 2 for wiring diagram.
  - If no external connections are made to TB2 then insert the included pipe plug.
  - Otherwise tighten the cable gland to create a water-tight seal.

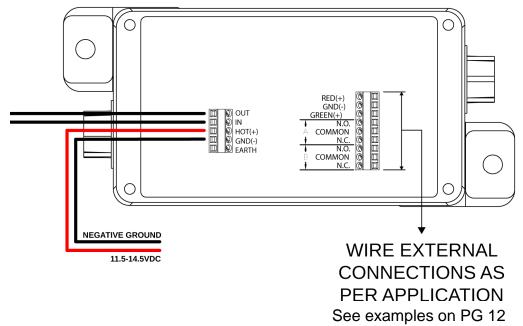
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- 10. Move the 'Cover Power Switch' jumper on the circuit board to enabled or disabled, to enable or disable the front power switch, respectively.
  - Disabling the front power switch will cause the FT295 to be on any time the 12V supply is on.
  - Enabling the front power switch will allow the user to turn the FT295 on and off using the front power switch.
- 11. Close lid and tighten four front screws.
- 12. Reconnect trailer nose piece and verify 12V line voltage.

### **Operation**

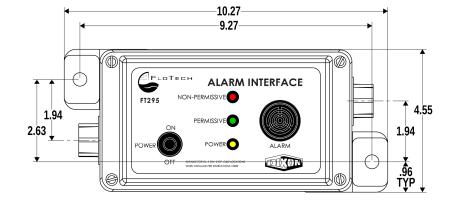
- 1. While onboard monitor is operating, toggle front power switch to ON position.
- 2. LED indicators will match permit and power indicators of onboard monitor.
- 3. The FT295 will make a sound while monitor is non-permissive.
- 4. When finished toggle the front power switch to the off position.

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# **Mounting Dimensions**



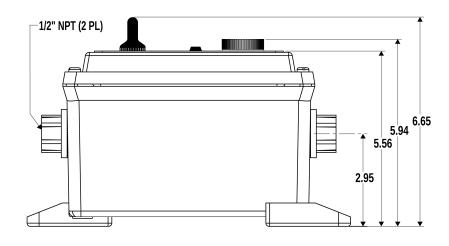
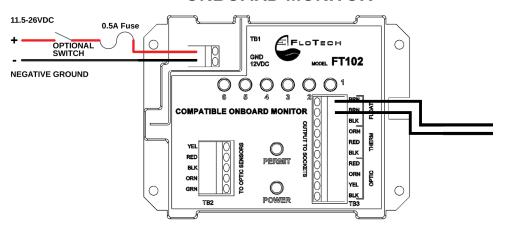


Figure 1: Mounting Dimensions

#### **ONBOARD MONITOR**



NOTE: WIRE MONITOR ACCORDING TO MONITOR INSTRUCTIONS.

Figure 2: Wiring FT295 to onboard monitor with float relay outputs

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# **Wiring Diagram**

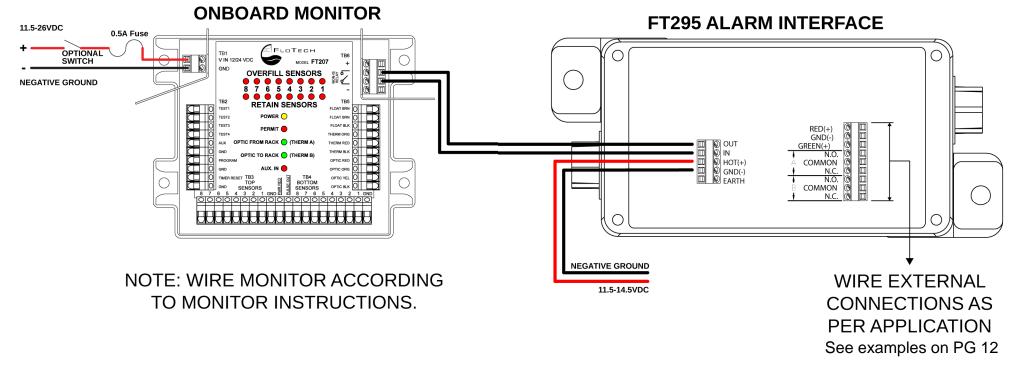


Figure 2: Wiring FT295 to onboard monitor with NON-IS relay outputs

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