**DEF Environmental Management** 

VEEDER-ROOT

Veeder-Root's DEF Environmental
Management is an add-on software
feature for the TLS-450PLUS. It provides a
simple mechanism to automate your DEF
heater tape or recirculation control to
ensure your product remains unaffected
by environmental conditions.

Using currently available TLS-450PLUS modules, readily available temperature sensors and high-power outputs, the TLS-450PLUS offers a complete control system for keeping DEF primed for dispensing.

## **Key Features**

Multi-tiered temperature-based control of recirculation and heating systems.

- Use recirculation first to avoid freezing line
- Add heat tapes only when temperature demands
- Customize the response for your application
- Program alerts for undesired conditions

In cold climates, minimize energy costs by operating freeze prevention only when warranted.

- Temperature-based pump control for recirculation
- Temperature-based relay control for powering heater tapes

In hot climates, utilize recirculation to prevent product from degrading in the lines.



# **Specifications**

#### Functionality:

- Automatic control of DEF relays
- DEF Overview screen with pump usage history
- Manual Override
- Timeout protection for pump

### Operating Temperature:

-40° to 120° F (-40° to 50° C)

#### Low Temperature Recirculation Activation:

User selectable (below 32° F default)

#### Heat Tape Activation:

User selectable (below 19° F default)

#### High Temperature Recirculation Activation:

User selectable (above 86° F default)

#### Approvals:

Intrinsically safe, UL/cUL (pending)

#### Related Modules:

Universal Sensor Module (USM) for temperature sensor Universal Input/Output Module (IOM) for application requiring 2A relay output

10A control module for applications requiring 10A relay output

#### Software Requirements:

placement: P/N 329358-001



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