

**Proposed Animation** 

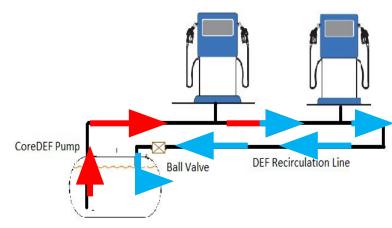
# DEF RECIRCULATION AND TEMPERATURE CONTROL

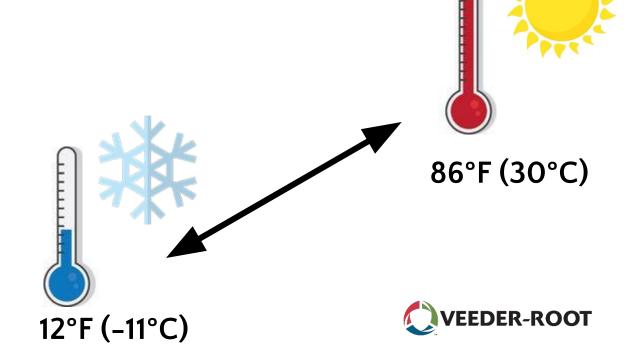
# Introduction

#### Example

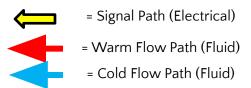
# Purpose: Use the movement of fluid to control the line temperature

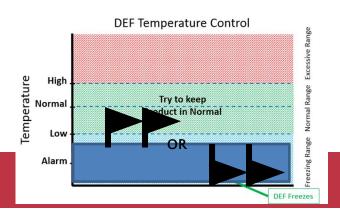
- DEF freezes at 12°F (-11°C)
- Breaks down above 86°F (30°C)





#### Scenario 1

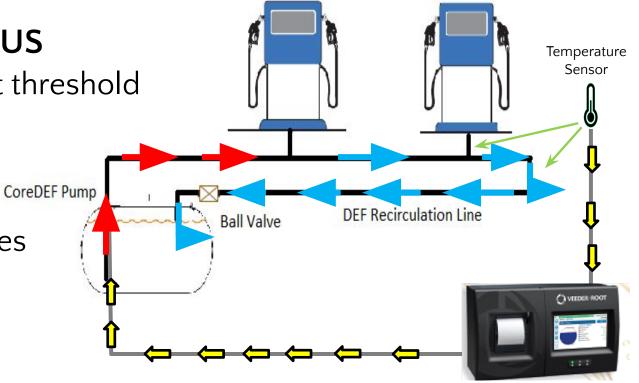




#### Recirculation

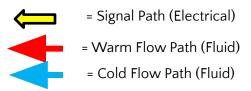
#### **DEF Recirculation with the TLS-450PLUS**

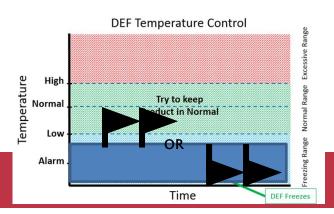
- 1. Temperature drops below the user-set threshold
- 2. ATG Activates DEF Pump (CoreDEF)
- 3. Warm Product in Tank Pushed into Lines
- Cold Product in Lines Pushed into tank (controlled temp environment)





### Scenario 2



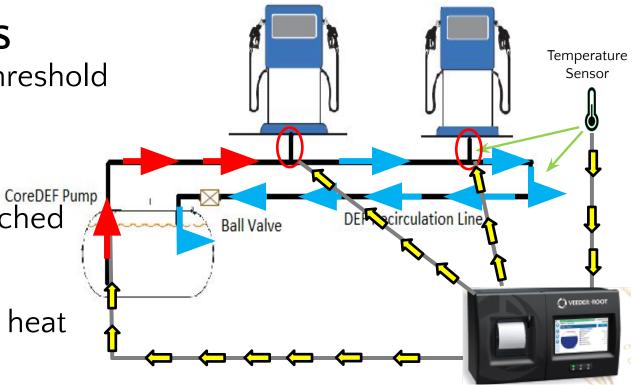


#### Recirculation and Temperature Control

#### **DEF Recirculation with the TLS-450PLUS**

1. Temperature drops below the user-set threshold

- 2. ATG Activates DEF Pump (CoreDEF)
- 3. Recirculation cannot move product branched piping
- 4. ATG Relay Activates Heat-trace piping to heat product in lines





# **DEF** Recirculation



#### System Overview

