

SDT Series Standard Day Tank Level Controller

The Standard Day Tank Level Controller (SDT) is a UL-508 listed PLC-based control panel, designed with features and control option flexibility to accommodate basic and advanced fuel control needs.

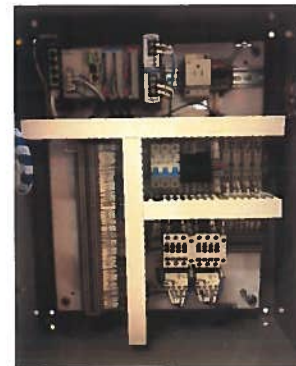
SDT panels are intended for use where day tanks are equipped with local, dedicated supply pumps integral to the assembly. For applications with remote supply pumps, use Networked Day Tank (NDT) panels.

The SDT has been designed for Stand-Alone operation, or for interconnecting and integrating with a TSP via Ethernet LAN. The SDT communicates operational and alarm conditions to the Building Automation System (BAS) via ModBus RTU or ModBus TCP protocol. If integrated to a Tank Selector Panel (TSP), all BAS Integration Points can be accumulated at TSP for a single-point connection or polled at each local device.



Panel Features

| | |
|-----------------|--|
| Cabinet: | 24" Wide x 30" High x 10" Deep |
| Enclosure: | NEMA 4/12, 14 GA. Steel, Continuous Seam Welded |
| Mounting Style: | Wall-Mounted |
| Open Style: | Right to Left |
| Door Hinge: | Formed Steel Hinge w/ Stainless Steel Hinge Pins |
| Assembly: | Mounted, Wired and Labeled per UL on a Removable Sub-Plate |
| Optional: | OSHPD Shake-Table Seismic Certified |
| Finish: | Prime-coated and Painted |
| | Interior: White Baked Enamel |
| | Exterior: Grey Textured Enamel |
| Optional: | Stainless Steel NEMA 4X Construction |



The SDT Level Control Panel is designed to monitor the following Input devices:

- Up to (6) Day Tank Level Switch Points
- Generator Run Contact
- Day Tank Level 4-20mA Transmitter
- Day Tank Fuel Temperature 4-20mA Transmitter
- Inlet Flow Switch
- Day Tank Leak Switch
- Tertiary Containment Leak Switch
- (2) Supply Pump 4-20ma Analog Current Sensors
- Return Pump 4-20mA Analog Current Sensor



The SDT is equipped with the following control features and alarm indicators:

- ◆ Control Power On/Off Switch, Door-mounted
- ◆ Control Power On Indicator Light
- ◆ Supply Pump 1 Hand / Off / Auto Selector Switch, Illuminated Green
- ◆ Supply Pump 2 Hand / Off / Auto Selector Switch, Illuminated Green **optional*
- ◆ Return Pump Hand / Off / Auto Selector Switch, Illuminated Red
- ◆ Alarm Indicator Light
- ◆ Alarm Horn **optional*
- ◆ Horn Silence Push Button **optional*
- ◆ Cooling Fan w/ Thermostat control **optional*
- ◆ Cabinet Heater w/ Thermostat control **optional*
- ◆ Operator Interface Terminal (OIT) Touch-Screen Display
 - ◆ Day Tank Level Switch Status Indicators
 - ◆ Day Tank Level Volume Readout
 - ◆ Day Tank Fuel Temperature Readout
 - ◆ Leak Sensor Status Indicators
 - ◆ Alarm Reset Soft-Key
 - ◆ Pump and Valve Status Indicators
 - ◆ Digital Input / Output Display Screen(s)
 - ◆ Maintenance Screen(s)
 - ◆ System Set-up Screen(s) – *Password Protected*
 - ◆ Alarm Status Screen
 - ◆ Lamp / Horn Test Soft-Button
 - ◆ Event Log Screen – *Password Protected Log Deletion*



Day Tank Refresh Cycle

The SDT panel OIT includes a Maintenance screen for programming a weekly day tank refresh cycle schedule for each day tank. Refresh cycle allows fuel in day tanks to be recirculated back to main tank for filtration/maintenance, as well as performs system automatic testing on a regular basis outside of emergency run conditions. Day Tank Refresh can be initiated on a weekly automatic schedule or on-demand via OIT.

SDT Panel Model String

| MFR | PANEL TYPE | VOLT-AGE | PHASE | SUPPLY PUMPS | HP | RETURN PUMPS | HP | NEMA | OPTIONS |
|---|------------|----------|-------|--------------|------|--------------|----|------|-------------------|
| CSI- | SDT | 115- | 1- | 2- | 1/2- | 1- | 1- | 4- | ES-AL-AH- CF-H |
| <i>Standard Day Tank Panel, 115vAC, 1-Phase, (2) Supply and (1) Return Pump, NEMA 4 Enc. w/ OPTIONS</i> | | | | | | | | | |

Options:

ES – Emergency Stop, Door-mounted
 AL – Alarm Light
 AH – Alarm Horn

CF – Cooling Fan w/ Thermostat
 H – Cabinet Heater w/ Thermostat

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