

Advantages/Benefits

- ▶ Available in standard, fiber optic and intrinsically safe versions
- ▶ Flame retardant, PP enclosure designed for panel mount or 35 mm rail mount installation
- ▶ Selectable 230 / 115 VAC input
- ▶ 12 amp SPDT relay output(s)
- ▶ Switch selectable NO or NC
- ▶ Power fail-safe relay control

Design/Function

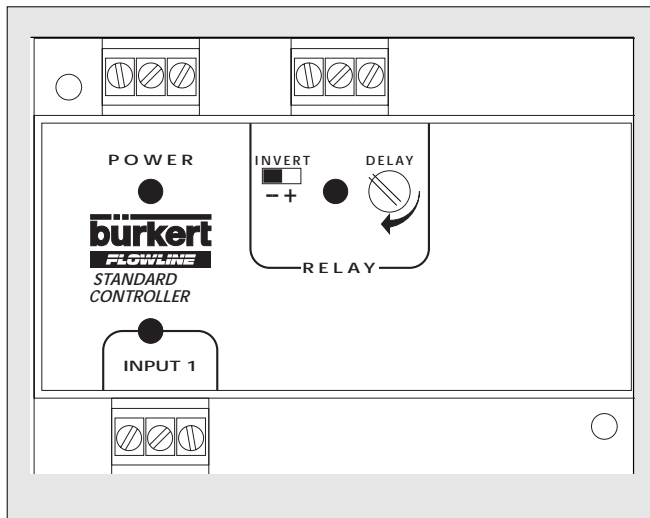
The 12 amp, SPDT relay output(s) provide an isolated level interface with pumps, valves and alarms.

Applications

- High level switch / alarm prevents tank from overfilling
- Low level switch / alarm provides both pump and immersion heater protection
- Leak detection switch / alarm protects against spills and leaks within secondary containment
- Automatic fill or empty operation maintains liquid level between two switch points
- Automatic fill or empty operation with redundant high or low level switch / alarm
- Independent high and low level switch/alarm

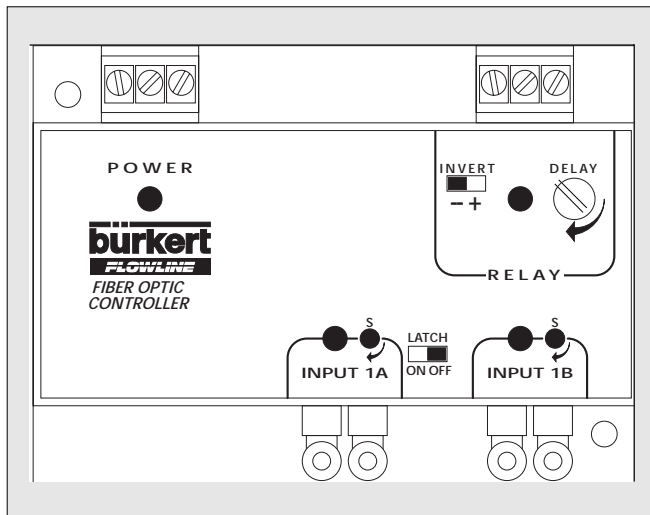


High or Low Level Switch



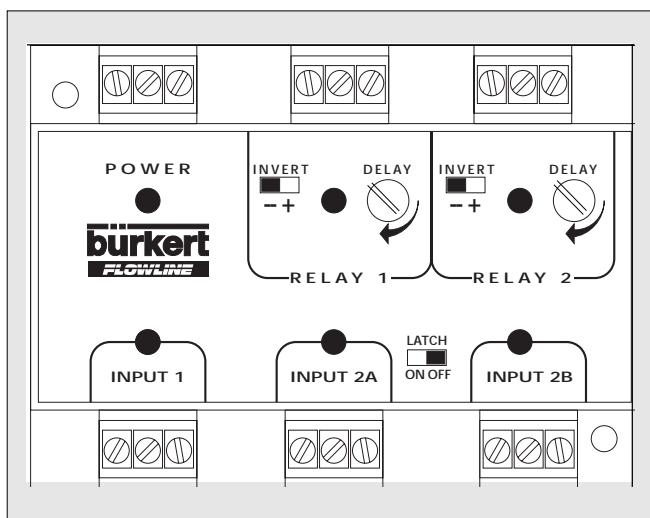
- Available in standard, fiber optic and intrinsically safe configurations
- Flame retardant, PP enclosure designed for panel or 35 mm rail installation
- Selectable, 230 / 115 VAC power input
- 12 amp, SPDT relay output provides isolated level interface with pumps, valves and alarms
- Switch selectable, NO or NC relay outputs
- Power fail-safe relay control
- 0 - 60 second, adjustable time delay dampens out unwanted signal chatter
- LED lights provide user with power, liquid and relay output status
- 13.5 VDC power supply for one level switch

Automatic Fill or Empty



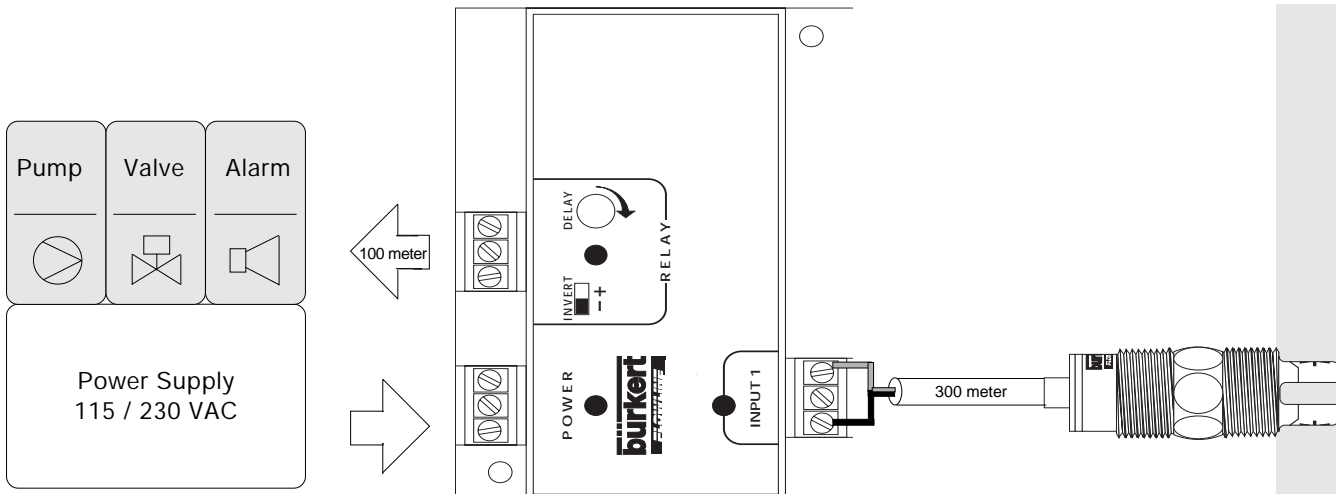
- Available in standard, fiber optic and intrinsically safe configurations
- Flame retardant, PP enclosure designed for panel or 35 mm rail installation
- Selectable, 230 / 115 VAC power input
- Latched 12 amp, SPDT relay output provides isolated level interface with pumps and valves
- Switch selectable, latch on or off relay configurations
- Switch selectable, NO or NC relay outputs
- Power fail-safe relay control
- 0 - 60 second, adjustable time delay dampens out unwanted signal chatter
- LED lights provide user with power, liquid and relay output status
- Fiber optic input and return compression fittings for two level switches

Automatic Fill or Empty with Alarm

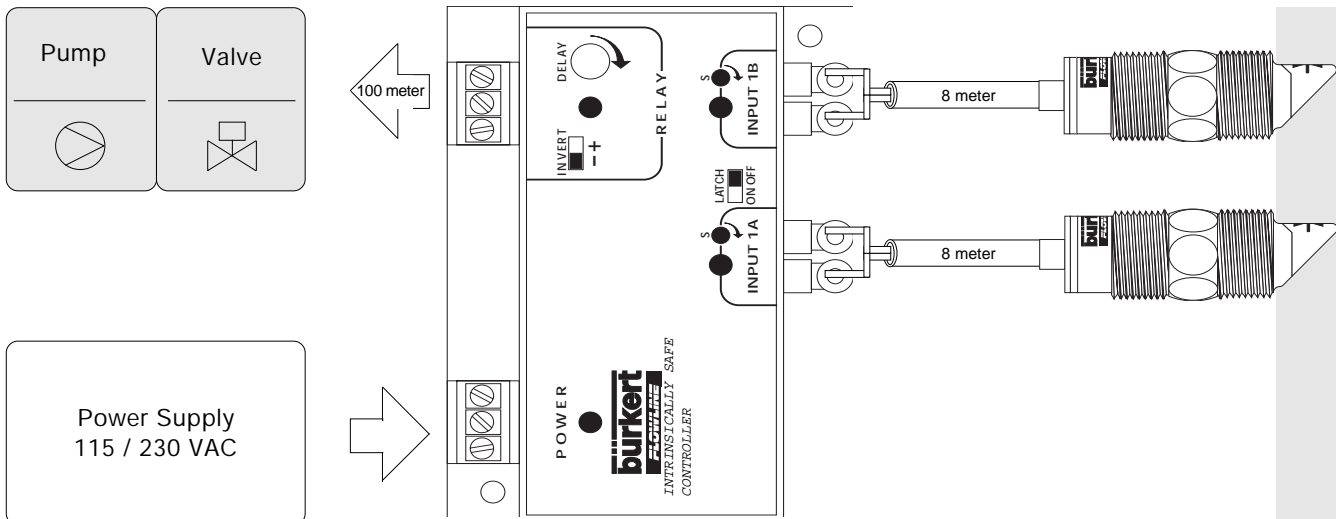


- Available in standard, fiber optic and intrinsically safe configurations
- Flame retardant, PP enclosure designed for panel or 35 mm rail installation
- Selectable, 230 / 115 VAC power input
- 12 amp, SPDT relay output provides isolated level switch / alarm
- Latched 12 amp, SPDT relay output provides isolated level interface with pumps and valves
- Switch selectable, latch on or off relay configurations
- Switch selectable, NO or NC relay outputs
- Power fail-safe relay control
- 0 - 60 second, adjustable time delay dampens out unwanted signal chatter
- LED lights provide user with power, liquid and relay output status
- 13.5 VDC power supply for three level switches

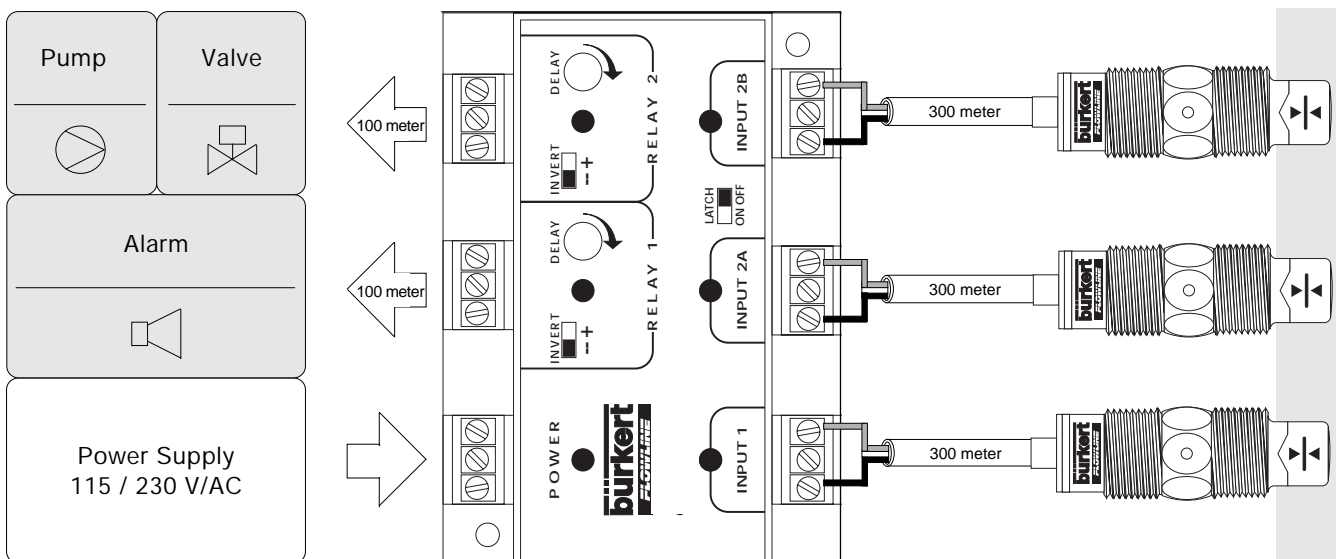
High or Low Level Switch



Automatic Fill or Empty



Automatic Fill or Empty with Alarm

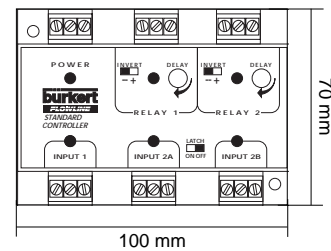


Controller Technical Data

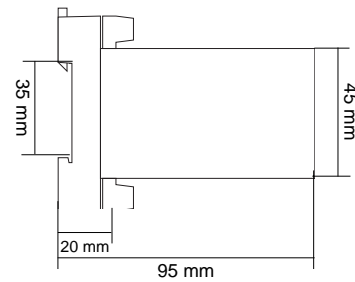
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|-----------------------|--|
| Voltage input | Selectable, 230/115 VAC, 50-60 Hz |
| Current consumption | .25 amp maximum |
| Switch supply voltage | 13.5 VDC (standard and intrinsically safe configurations only) |
| Relay type | Isolated, SPDT (form C) |
| Switching voltage | 380 VAC / 150 VDC maximum |
| Switching current | 12 amp, non-inductive loads |
| Contact material | Silver cadmium oxide |
| Contact resistance | 30 milli-ohms initially (at maximum current and voltage ratings) |
| Relay mode | Switch selectable, normally open or normally closed states |
| Relay time delay | Adjustable from 0.15 - 60 seconds |
| LED display | Lights for liquid, power and relay output status |
| Temperature rating | 70 degrees C. maximum |
| Enclosure rating | EN 50 022 |
| Enclosure material | PP flame retardent (U.L. 94VO) |
| Enclosure mounting | Panel mount or 35 mm DIN rail |

Controller Dimensions

SL31
Top View



SL31
Side View



Ordering Chart (Other Versions on Request)

| Version | Supply Voltage | Output | Input Terminals | Output Terminals | Specification | Order-No. |
|---------------|----------------|--------|-----------------|------------------|---------------|-----------|
| Standard | 230 / 115 V/AC | 12 AMP | 1 | 1 | SL31-S1 | 417021 C |
| | 230 / 115 V/AC | 12 AMP | 2 | 1 | SL31-S2 | 417022 D |
| | 230 / 115 V/AC | 12 AMP | 3 | 2 | SL31-S3 | 417023 E |
| Fibre optic | 230 / 115 V/AC | 12 AMP | 1 | 1 | SL31-F1 | 417174 J |
| | 230 / 115 V/AC | 12 AMP | 2 | 1 | SL31-F2 | 417175 K |
| | 230 / 115 V/AC | 12 AMP | 3 | 2 | SL31-F3 | 417176 L |
| Intrinsically | 230 / 115 V/AC | 12 AMP | 1 | 1 | SL31-I1 | 417177 M |
| Safe | 230 / 115 V/AC | 12 AMP | 2 | 1 | SL31-I2 | 417178 W |
| | 230 / 115 V/AC | 12 AMP | 3 | 2 | SL31-I3 | 417179 X |