FireBus

FB-FirePAC®
Standard Termination Panel (STP)
1756-STP-08SO 8 Ch. Supervised Output

Overview

FB-FirePAC is a Protected Premesis Control Unit and Combination System that is NRTL tested and approved to meet ANSI / UL-864 10th Edition and various other UL & NFPA codes as required by this standard.

The 1756-STP-08SO is an 8 channel Standard Termination Panel for 24 VDC discrete Supervised Outputs. It supports eight outputs connected to Notification Appliance Circuits (NAC) or Releasing Device circuits. Four of the circuits are designed for NAC's and specifically those requiring reverse polarity supervision. These 4 NAC channels are rated at 3 Amps and can also be wired for either Class-B (2-wire) or Class-A (4-wire) operation.

The other four channels are a passive "pass-through" design and provide the standard features of its companion output module in the Programmable Automation Controller (PAC) and support Class-B wiring only.

STP Field Side Connections

Each of the eight channels has either two or four field terminals and disconnect switches for circuit isolation to facilitate maintenance and troubleshooting.
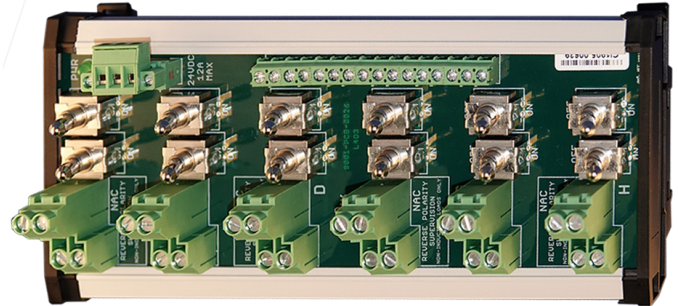
- Field terminals support up to 10 AWG wire
- Per channel disconnect switches

STP System Side Connections

The system side connections are factory wired into the PAC input or output module. There are sixteen "fixed" terminals for the PAC input or output wiring. The injected power for the 4 dedicated NAC channels and their supporting supervision circuitry is provided by a pluggable 24 VDC connector factory wired into the FB-FirePAC power distribution system.

Hardware Compatibility

The 1756-STP-08SO 8 Channel Supervised Output STP is compatible with FB-FirePAC systems using the 1756 ControlLogix® platform from Rockwell Automation. Two 8 channel STP's are paired with a 1756-OB16D 16 channel 24 VDC discrete output module with diagnostics.

Operation

The 1756-STP-08SO supports Notification Appliance Circuits (NAC's) and Releasing Circuits as defined by ANSI / UL-864 and NFPA 72 for use in the fire & gas system and utilizes the PAC's supervised discrete output module to implement these circuits. These modules are software configured for open circuit and short circuit detection.

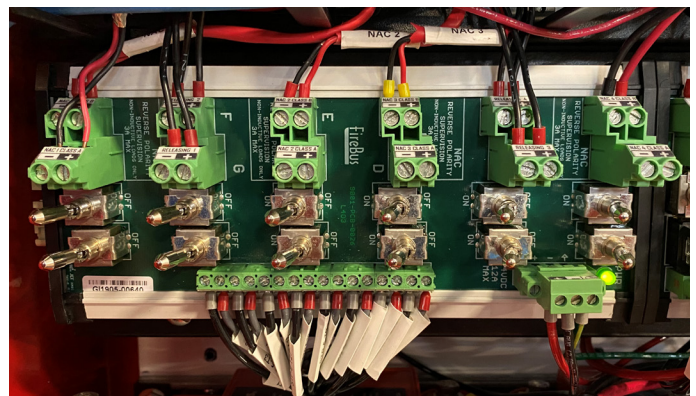The 1756-STP-08SO is designed to support "2-Wire, Class-B", NAC's and Releasing circuits.

Reverse Polarity Supervision

Many NAC's in the fire protection market utilize "reverse polarity" supervision to verify the wiring integrity. The 1756-STP-08SO module has 4 dedicated NAC circuits that utilize this method. If an open or short circuit is detected, the module signals the PAC via the controlling output circuits standard diagnostics and reporting mechanisim.
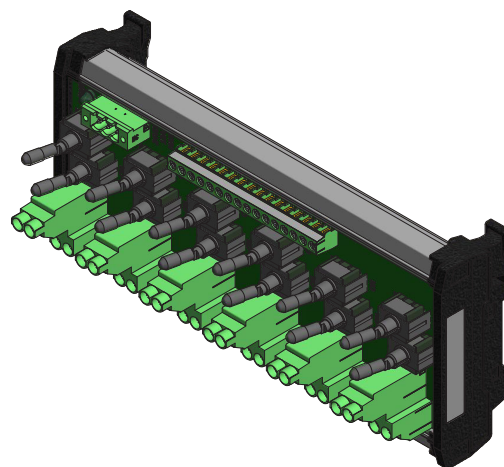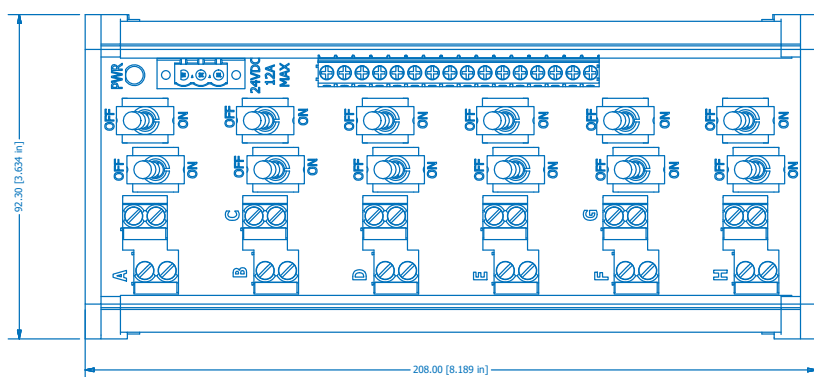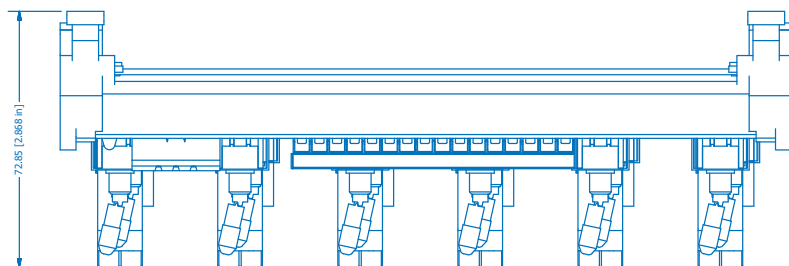
Disconnect Switches

All field wiring circuits have a double pole double throw "disconnect switch" that opens both legs of the circuit between the PAC output module and the field device for commissioning or maintenance.

With the disconnect switch open, the field wiring "loop" can easily be checked for proper circuit resistance as well as for potential earth ground faults without interference from the system electronics.

8 Chan. Supervised Output Standard Termination Panel (STP) Part No 1756-STP-08SO	**Operating voltage:** 18–30 VDC	**EMI/RFI compatibility:** ANSI/UL 864-2014 10th Edition Section 84	**Approvals:** Control Units and Accessories For Fire Alarm Systems [UL 864:2014 Ed. 10]
Control Platform: Designed for use with the ControlLogix 1756-OB16D 24 VDC Output Module with Diagnostics	**Communication protocols:** None **Current (24 vdc):** 3 Amps maximum per dedicated NAC channel. 12 Amps maximum per STP on the four dedicated NAC channels.	**Temperature range:** Max. continuous operating 158°F (70°C) Min. continuous operating -4°F (-20° C) (no condensation/icing) Storage -40°F to +176°F (−40°C to +80°C)	**Location rating:** Class I, Div. 2, Groups B,C,D (Pending) 8.189 in (208 mm) Wide 3.634 in (92.3 mm) High 2.868 in (72.9 mm) (Deep)
Software Compatibility: Studio 5000 Logix Designer Rev. 32 and up.			**Weight:** 8.0 oz (226.8g)
Device Configuration: Studio 5000 Logix Designer FireBus FB-FireLogix® Add On Instructions (AOI) for NAC & Releasing field devices.	The four pass-through NAC and Releasing channels are powered by the ControlLogix output module and are not counted in the 12 Amp STP maximum.	**Humidity:** 5 to 95% relative humidity (no condensation)	Materials: ROHS compliant

Ordering information:

1756-STP-08SO   Standard Term. Panel, 8 Ch. Supervised Output (Discrete)

Note:
The information in this data sheet is given in good faith and considered accurate at the time of printing, however, the company reserves the right to change specifications of products at any time without prior notice.