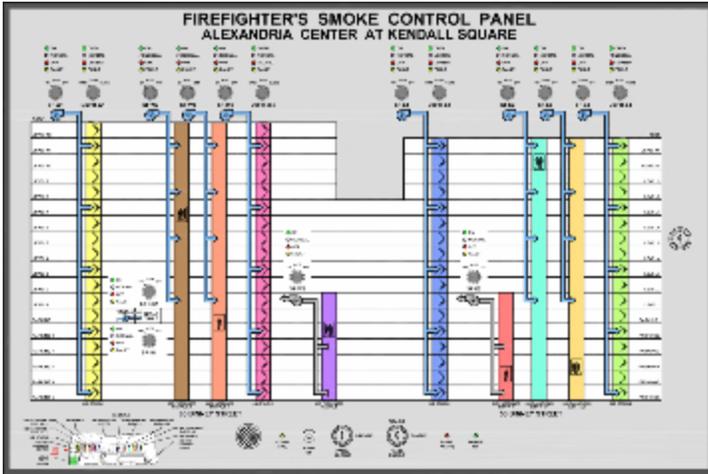


Firefighter's Smoke Control Override Panel

UL® Listed FSCS Panel



FirefightersSmoke Control Override Panel is designed for use with a UL 864 UUKL engineered smoke control system in accordance with NFPA 92. The panel design and equipment connecting to the panel must conform to local or state building codes and be approved by the Authority Having Jurisdiction (AHJ). The panel graphically depicts the physical building, smoke control system equipment, and areas served by the equipment. The panel should provide control over all smoke control system equipment and have the highest priority. The smoke control panel shall be located in a dry indoor environment.

Required UL 864 panel devices include: lamp test pushbutton, panel enable key switch, panel power-on LED, communication fault LED, fault indication audible alarm, alarm silence key switch, and three position toggle switch (standard) for ON-AUTO-OFF fan control and OPEN-AUTO-OFF damper control or four position rotary switch which is standard for PURGE-AUTO-PRESSURIZE-OFF operations on zone control panels. LED quantity and colors are determined by local building or fire codes. Wiring varies per model series (see chart below).

Panel enclosures are available as flush mount or surface mount style. Standard construction is cold rolled steel with baked enamel or powder coat textured finish. Enclosure sizes may be stock or custom sized. All enclosures are constructed in accordance with UL 864 Section 6.

Mechanical Options

- Toggle switches
- Security door with viewing window
- Custom sized panels and enclosures
- Floor mount cabinets
- Flush or surface mount enclosure

Enclosures

- Custom designed to meet your projects specific needs
- We also have the following enclosure sizes available at all times:

24"h x 24"w
24"h x 36"w
36"h x 24"w
36"h x 36"w

Electrical Options

- Mounting and wiring of customer furnished driver assemblies, DC power supply, and transformers
- ADI Z-card Serial Interface-UUKL

Certifications

- UL 864 UUKL Listing

FSCS Panel UL Listed Equipment wiring Requirements

Panels are wired to a Z-Card micro-controller circuit or customer furnished equipment. Rows with "B" require both a Z-Card and customer furnished equipment (CFE).

An RTA module is required in addition to a z-card and the customer furnished module for some applications. If your company is not listed on this chart, contact us for listing options.

UL Model Series	Company	System	Z-Card	Cust. Equipment	RTA
ALR	Alerton	BACtalk	B	B	
ATL	Automated Logic Sys.	WEBCTL	B	B	
CMP	Computrol	ECB and BACnet	B	B	
DLT	Delta Controls Inc.	entel:BUS and DSC		X	
DIS	Distech	ECB and BACnet	B	B	X
EST	Edwards	EST or EST-3x		X	
FCI	Gamewell-FCI-E3 Sys.	FCI and E3 system		X	
HYW	Honeywell Int'l.	Honeywell		X	
JFD	Johnson Controls Inc.	Metasys	B	B	
KMD	KMC Cts/Krueter Eng.	KMD		X	
NFD	Notifier	Notifier		X	
RLB	Reliable Controls	Mach Pro		X	
SCP	Any UL 864 UUKL	Any UL 864 UUKL		X	
AND	Schneider Electric	Andover Continuum Sys.	X		
TAC	Schneider Electric	Xenta and Vista Sys.	X		
INV	Schneider Electric	I/A System			
AND	Schneider Electric	Smart Struxure	B	B	
UFD	Siemens Industries	Apogee System		X	
CRB	Siemens Industries	ALS & MLS System		X	
TYC	Simplex Grinnell	4100 and 4100 U Sys.		X	
TRN	Trane	Tracer SC BACnet	B	B	X



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Engineer / Architect Specifications

1.0 General

This specification defines the basic construction and components for a Firefighter's Smoke Control Override Panel. This panel is designed for use with a UL 864 UUKL engineered smoke control system in accordance with NFPA 92A or 92B. Panel location shall be indoor dry only. The panel design and all equipment connecting to this panel must be approved by the Authority Having Jurisdiction (AHJ).

2.0 Construction

The control panel shall be constructed with a .125-inch aluminum substrate and graphic film overlay. The graphic film overlay shall be protected by a non-glare textured coating, which is non-yellowing, durable, and scratch resistant. LEDs, resistors, diodes, etc. shall be mounted on printed circuit boards (PCBs). All switches shall be securely mounted to the panel.

3.0 Graphic

3.1 Graphic Colors

The graphic film overlay (graphic face) shall be a multi-colored graphic image as shown in the architect's plan. Important areas such as elevator shafts, stairwells, and main air ducts shall be highlighted for easy identification. The panel supplier shall furnish a color chart with a minimum of 40 accent colors for architect selection.

3.2 Graphic Surface

The graphic face shall be bonded to the aluminum substrate with an adhesive that has been proven not to delaminate in similar applications. The adhesive shall achieve 100% bonding without any creases, bumps, or blemishes in the graphic face. The graphic face shall be textured and non-glare. Translucent areas shall be made in the graphic face for back lighted indicators. LEDs shall not protrude through the graphic face. Backlit areas shall be subdued until the LED is illuminated. The illumination of any indicator shall be clearly visible from any viewing angle in front of the graphic face.

4.0 Substrate

The aluminum substrate shall have punched holes for LEDs and switches and drilled and tapped mounting holes for PCBs. To prevent oxidation, the aluminum substrate shall have a clear irridited finish.

5.0 Indicators

The indicators shall be high intensity LEDs, T-1 3/4 in size, and rated for normal operation at a maximum current of 20mA. The LEDs shall have an operating life of a minimum of 170,000 hours of continuous or pulsed operation. The LED lens body shall be constructed of high impact plastic. Blue, green, amber, yellow, red, and white LEDs shall be mounted on .062" PCBs constructed of epoxy glass material, NEMA Type FR-4, Grade 10. Resistors and diodes for current limiting and LED test shall also be mounted on the PCBs. Solder type, pressed in turrets shall be provided for electrical connections to the LEDs. All field wiring shall terminate on modular screw clamp type terminals or other qualified electronic equipment mounted in the rear of the enclosure.

6.0 Switches

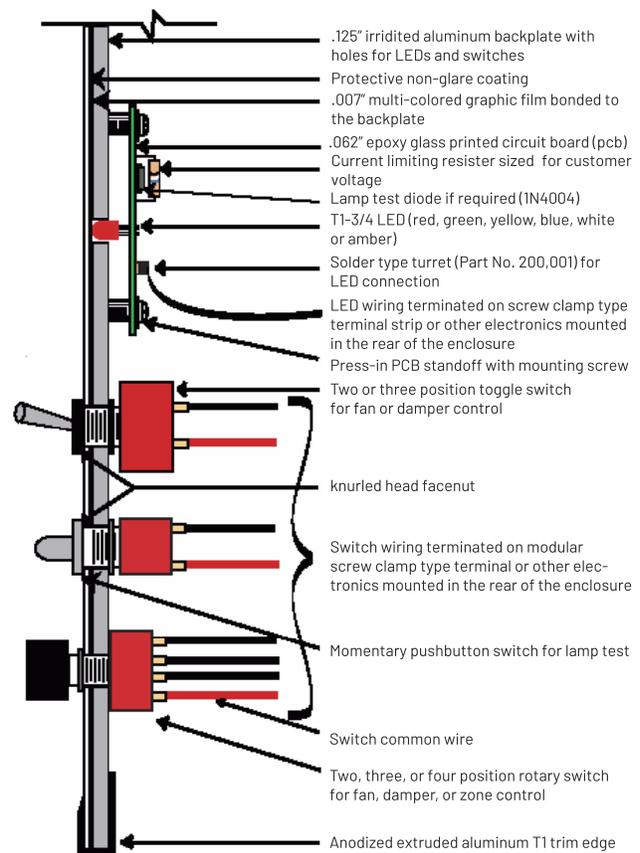
Toggle switches shall be used for smoke control operations unless other switch types are specified. Either a key switch

shall be used for panel enable operation or all switches on the smoke control panel shall be key operated. Switches shall be rated for the load served. A key switch with the key removable in the normal position shall be used to silence a trouble sounding device or a pushbutton switch located in a locked cabinet shall be used to silence a trouble sounding device. A momentary pushbutton shall be provided for simultaneous testing of all LEDs. All switch wiring shall be terminated on modular screw clamp type terminal strips or other qualified electronic equipment mounted in the rear of the enclosure.

7.0 Enclosure

The enclosure shall be made from cold rolled steel and be assembled using all welded and formed steel construction. The enclosure shall be primed and painted baked enamel with a textured finish or powder coated with a textured finish. A security door with viewing window may be supplied to prevent unauthorized operation of the control panel switches. All enclosures shall be constructed according to UL[®] 864 Section 6 specifications.

Construction Detail



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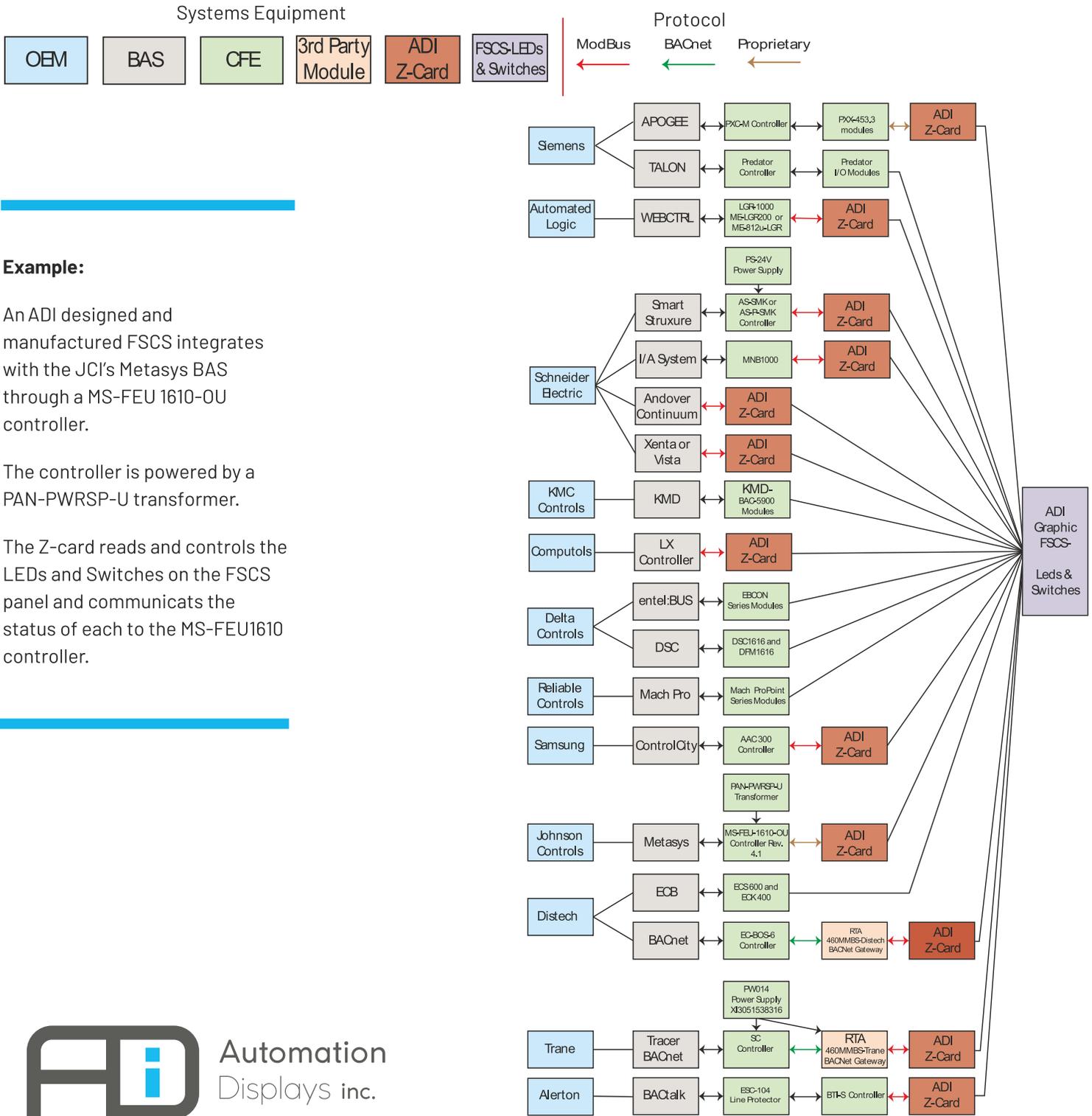
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Integration of ADI UL 864 UUKL

Firefighters Smoke Control Panel

ADI works closely with major OEMs to develop UL 864 UUKL listed FSCS panels which integrate seamlessly with OEM proprietary building automation systems (BAS). The graphic on this page highlights those relationships and key components to making the connection between an FSCS and a propriety BAS seamless.



Example:

An ADI designed and manufactured FSCS integrates with the JCI's Metasy BAS through a MS-FEU 1610-OU controller.

The controller is powered by a PAN-PWRSP-U transformer.

The Z-card reads and controls the LEDs and Switches on the FSCS panel and communicates the status of each to the MS-FEU1610 controller.



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