A. REFER TO SHEET E-001 FOR ELECTRICAL LEGEND, GENERAL NOTES, AND ABBREVIATIONS.

B. THE FIRE ALARM CONTRACTOR SHALL PAINT NEW AND EXISTING FIRE ALARM CONDUIT RED IN COLOR.

C. ALL NEW CONDUITS INSTALLED INSIDE SHALL BE EMT (ELECTRICAL METALLIC TUBING).

D. THE FIRE ALARM CONTRACTOR SHALL PROVIDE CUTTING AND PATCHING ON ALL WALL OR CEILING OPENINGS.

E. THE ROUTING PATH OF FIRE ALARM CIRCUITS AND GROUPING OF FIRE ALARM DEVICES ON EACH FIRE ALARM CIRCUIT ARE DIAGRAMMATIC ONLY. THE CONTRACTOR SHALL ROUTE AND GROUP FIRE ALARM DEVICES IN THE MOST EFFICIENT MANNER, THE CONTRACTOR SHALL SUBMIT FIRE ALARM SHOP DRAWING OF THE FIRE ALARM SYSTEM PRIOR TO BEGINNING CONSTRUCTION.

F. THE FIRE ALARM INSTALLATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, INCLUDING BUT NOT LIMITED TO: NEW FIRE ALARM DEVICES, JUNCTION BOX, CONDUIT, FIRE ALARM CABLING ETC. THE PROGRAMMING OF THE FIRE ALARM SYSTEM SHALL BE BY: NORTHEAST INTEGRATED SYSTEMS.

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1 — EXPLOSION PROOF PULL STATION (NOT TO SCALE)

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671
Email: sales@LarsonElectronics.com
www.LarsonElectronics.com
Fax: 903.498.3364

Explosion Proof Fire Alarm Station - Pull Ring - Class I Div 1 & 2 - Class 2 Div 1 & 2- Single Action

EXP-FAS-PR-A1-M1-1XC

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).

EXP-FAS-PR-A1-1XC Hazardous Area Fire Alarm Station - Pull Ring - Cl. II, III, Div 1 & 2 - 120 V AC

Unit Type: Explosion Proof Fire Alarm Station
Activation Mechanism: Pull Ring
Voltage: 120 V AC @ 60 Hz
Contact Blocks: 1 N.O., 1 N.C.
Contact Block Rating: 10 Amps Continuous, NEMA A600, NEMA P600
Wire Connections: Screw Terminals In/Out Wiring, 18 to 12 AWG Wire
Wiring Range: (2) #12 AWG Through #24 AWG Solid or Stranded
Internal Ground Screw: Standard
Enclosure Material: Copper-free Aluminum Alloy
Paint Finish: Textured Powder Epoxy Paint
Conduit Openings: 3/4" NPT Feed-Through
Dimensions: 6"H x 3"W x 4.5"D
Color: Red

Quick Summary
Class I, Division 1 & 2, Groups C, D
Class I, Division 1 & 2, Groups IIB, IIA
Class II, Division 1 & 2, Groups E, F, G
Class III
NEMA 7 (C, D) 9 (E, F, G)

Special Orders, Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-214-616-6180
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

Made in the USA
The Larson Electronics EXP-FAS-PR-A1-M1-1XC explosion proof single action fire alarm station is suitable for hazardous locations that requires emergency activation of fire alarms or signal circuits. This unit operates on 120 V AC @ 60 Hz and uses a simple, one-step pull ring mechanism for seamless activation. The pull ring measures 12 inches in diameter and the chain is 6 inches in length. It carries the following explosion proof ratings: Class I, II, III, Division 1 & 2. The hazardous location fire alarm station features (1) NO/NC contact blocks, a copper-free aluminum alloy enclosure and bilingual nameplates for compliance. This device may be used in chemical plants, gas stations, grain refineries, storage areas, and other applicable hazardous locations under the classification of this unit.
Features: The EXP-FAS-PR-A1-M1-1XC explosion proof fire alarm station offers manual emergency control in hazardous locations. The enclosure on the 120 V AC @ 60 Hz device is made of copper-free aluminum alloy, while a textured powder epoxy paint finish (red) is applied to the box and cover for high visibility. On the front of the unit, bilingual nameplates can be found for easy operation (in compliance with safety requirements). When activating the alarm station, operators must simply pull down the ring in a one-step process.
The conduit openings in the fire alarm station are 3/4" NPT feed-through. During

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2 — EXPLOSION PROOF SPEAKER STROBE (NOT TO SCALE)

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671
Email: sales@LarsonElectronics.com
www.LarsonElectronics.com
Fax: 903.498.3364

EPL-TL-2X10W-C-PA
Explosion Proof Signal Light w/ Audible Alarm - Class 1 Division 1 Class 2 Division 1
Product ID: 105197

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

EPL-TL-2X10W-C-PA Signal Stack Light w/ Alarm
Lamp Type: LED
Colors: Red & Green, Red & White, Red & Blue, Red & Amber, Red & Purple, White & Blue, White & Green, White & Amber, White & Purple, Blue & Green, Blue & Amber, Blue & Purple, Amber & Green, Amber & Purple, Green & Purple
Watts: 20 Watts Lamp
Voltage: 120/240 Volts AC or 24V DC
Lighting Configuration: Steady Burn, Strobe, Custom
Sound Level: Up to 110dbA/W @ 10ft from Horn
Temp Rating: T3
Wiring: 3/4" Hub - Flying Leads
Lamp Life: 50,000+ Hours
Mounting: Predrilled Aluminum Base

Ratings/Approval
UL Listed for United States & Canada

Class 1, Division 1 Groups C and D
Class 2, Division 1 Groups E and F
Class 3, Groups E, F and G
IP67 (water proof)
T3C Temperature Rating
NEMA 4X rated
New York City Department of Buildings approved

Special Orders - Special Requirements
Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-903-498-3364
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

Made in the USA
The EPL-TL-2X10W-C-PA Class 1 Division 1 and Class 2 Division 1 LED Signal Stack Light with Audible Horn from Larson Electronics is approved

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3 — FIRE ALARM ANNUNCIATOR PANEL (FAAN) (NOT TO SCALE)

JCI-7047:A

JNCA-2
Network Control Annunciator

Johnson Controls

JNCA-2 in JABS-2D backbox

General

The JNCA-2 is a second-generation Network Control Annunciator for the NOTI•FIRE•NET™ network, compatible for use with nodes such as the IFC2-3030, IFC-3030, and IFC-640 fire alarm control panels, as well as first-generation JNCA Network Control Annunciators. Additionally, the JNCA-2 may be configured with JDVC Series products (JDVC, JDVC-EM, JDVC-EMF, and JDVC-EMSF) to create one or more Digital Audio Command Centers on NOTI•FIRE•NET. The JNCA-2 provides system control and display capabilities for all, or for selected network nodes.

The JNCA-2 display consists of a 640-character backlit LCD display, and a control interface consisting of "soft" keys used to navigate screen menus, "hard" keys with fixed control functions, and a QWERTY keypad.

When connected to one or more networked panels the JNCA-2 provides network control and status/history display capabilities. It may also be configured as the Primary Display for displayless nodes on the network.

Hardware Features
- Full supervision of all inputs and network integrity.
- Enhanced-format 640-character LCD display with backlighting.
- ACS bus for LED or graphic annunciators (EIA-485).
- Optically isolated printer interface (EIA-232).
- 11 LED status indicators: Power, Controls Active, Fire Alarm, Pre-Alarm, Security, Alert, Supervisory, Trouble, Signal, Silence, CPU Failure, Point Disabled, Other Event.
- Alphanumeric QWERTY rubber keypad.
- Four status relays: Alarm, Trouble, Supervisory, Security (Form-C).
- Nonvolatile real-time clock can be synchronized with network by master node.
- Optional Security Keyswitch enable Keypad functions.
- Optional Security Tamper switch.
- Supports up to 32 remote ACS annunciators and modules.
- Requires 24 VDC, and a network connection.

Function Features
- Individual Enable/Disable or Group Enable/Disable local for networked compatible panels.
- Control ON/OFF networked compatible panel control points.
- Read Status networked compatible panel points and zones.
- Network paging control, HVAC control.
- Network-wide: Acknowledge, Silence, Reset.
- Lamp Test (local to JNCA-2).
- History Buffer (1000 Alarm events; 4000 System events).
- Print JNCA-2 programming and history reports.
- Report status of networked panels and their respective field devices to a central station via a single UDACT.
- One Master level, nine User level passwords. The Master can assign each User access levels (programming, alter status).
- Interactive Summary Event Count display, event handling package.
- Online programming and alter-status programs.
- Intuitive user guidance program including interactive soft keys.

JNCA-2 Indicators and Controls

LED INDICATORS
- **POWER** (green) illuminates when 24 VDC power is applied; LED goes out if power is removed and JNCA-2 is using a battery.
- **CONTROLS ACTIVE** (green) illuminates to indicate that the JNCA-2 control functions are active.
- **FIRE ALARM** (red) illuminates when at least one fire alarm event exists; flashes when any of these events remain unacknowledged.
- **PRE-ALARM** (red) illuminates when at least one pre-alarm event exists; flashes when any of these events remain unacknowledged.
- **SECURITY** (blue) illuminates when at least one security event exists; flashes when any of these events remain unacknowledged.
- **SUPERVISORY** (yellow) illuminates when at least one supervisory event exists (i.e., sprinkler valve off normal, low pressure, fire pump running, guard's tour, etc.); flashes when any of these events remain unacknowledged.
- **SYSTEM TROUBLE** (yellow) illuminates when at least one trouble event exists; flashes when any of these events remain unacknowledged.

- Enhanced Read Status/Alter Status displays.
- New history filters for report displaying and printing: All Events, Only Alarms, Only Troubles, Only Supervisory, Only Security, Time Interval, Point Range.
- Fully programmable node-mapping subsystem.
- Advanced/Basic Walk-Test program.
- Timer control for Auto Silence, AC Fail Delay.
- Meets Canadian ULC display requirements.
- Environmental adjustment controls to maximize LCD legibility.
- Meets NFPA requirements for Firefighter Smoke Control Station (FSCS) and HVAC.

JCI-7047:A • 11/30/07 — Page 1 of 2

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4 — FIRE ALARM CONTROL PANEL (FACP) (NOT TO SCALE)

JCI-7111:D

IFC2-640
Fire Alarm Control Panel

Johnson Controls

IFC2-640 with DVC Audio Option

General

In stand-alone or network configurations, the IFC2-640 meets virtually every application requirement.

Designed with modularity and for ease of system planning, the IFC2-640 can be configured with just a few devices for small building applications, or for a large campus or high-rise application. Simply add additional peripheral equipment to suit the application.

The FireWatch Series internet monitoring modules IPDACT-2 and IPDACT-2UD permit monitoring of alarm signals over the Internet, saving the monthly cost of two dedicated business telephone lines. Although not required, the secondary telephone line may be retained providing backup communication over the public switched telephone line.

NOTE: Unless called out with a version-specific "E" at the end of the part number, "IFC2-640" refers to models IFC2-640 and IFC2-640E; similarly, "JCPU2-640" refers to models JCPU2-640 and JCPU2-640E.

Features
- **Listed to UL Standard 864, 9th edition.**
- One, expandable to two, isolated Intelligent Signaling Line Circuit (SLC) Style 4, 6 or 7.
- Up to 159 detectors (any mix of ion, photo, thermal, or multi-sensor) and 159 modules (Addressable pull stations, normally open contact devices, two-wire smoke, notification, or relay) per SLC. 318 devices per loop/636 per FACP or network node.
- Standard 80-character display, 640-character large display, or display-less (a node on a network).
- Network options:
  - High-speed network for up to 200 nodes (IFC2-3030, IFC2-640, IFC-320, JNCA-2, JDVC, IFI, IFW, IFC-3030, IFC-640, and JNCA).
  - Standard network for up to 103 nodes (IFC-640, IFC2-640, IFC-320, IFC-3030, IFC2-3030, IFC-200, IFC-300/400, IFC-1010, IFC-2020, JDVC-EM, IFI, IFW, JNCA or JNCA-2 Network Annunciators). Up to 54 nodes when DVC is used in network paging.
- 6.0 amp switch mode power supply with four Class A/B built-in Notification Appliance Circuits (NAC). Selectable System Sensor, Wheelock, or Gentex strobe synchronization.
- Built-in Alarm, Trouble, Security, and Supervisory relays.
- VeriFire® Tools online or offline programming utility. Upload/Download, save, store, check, compare, and simulate panel databases. Upgrade panel firmware.
- Autoprogramming and Walk Test reports.
- Optional universal 636-point DACT.
- 80-character remote annunciators (up to 32).
- EIA-485 annunciators, including custom graphics.
- Printer interface (80-column and 40-column printers).
- History file with 800-event capacity in nonvolatile memory, plus separate 200-event alarm-only file.
- Alarm Verification selection per point, with tally.
- Autoprogramming and Walk Test reports.

- Presignal/Positive Alarm Sequence (PAS).
- Silence inhibit and Auto Silence timer options.
- March time/temporal/California two-stage coding/strobe synchronization.
- Field-programmable on panel or on PC, with VeriFire Tools program check, compare, simulate.
- Full QWERTY keypad.
- Battery charger supports 18 – 200 amp hour batteries.
- Non-alarm points for lower priority functions.
- Remote ACK/Signal Silence/System Reset/Drill via monitor modules.
- Automatic time control functions, with holiday exceptions.
- Surface Mount Technology (SMT) electronics.
- Extensive, built-in transient protection.
- Powerful Boolean logic equations.
- Support for SCS Series smoke control system in HVAC mode.

JNCA-2 AS PRIMARY DISPLAY
- Backlit, 640-character display.
- Supports SCS Series smoke control system in FSCS mode when SCS is connected to the JNCA-2 used as primary display.
- Printer and CRT EIA-232 ports.
- EIA-485 annunciator and terminal mode ports.
- Alarm, Trouble, Supervisory, and Security relays.

FLASHSCAN® INTELLIGENT FEATURES
- Poll up to 318 devices in less than two seconds.
- Activate up to 159 outputs in less than five seconds.
- Multicolor LEDs blink device address during Walk Test.
- Fully digital, high-precision protocol (U.S. Patent 5,539,389).
- Manual sensitivity adjustment — nine levels.
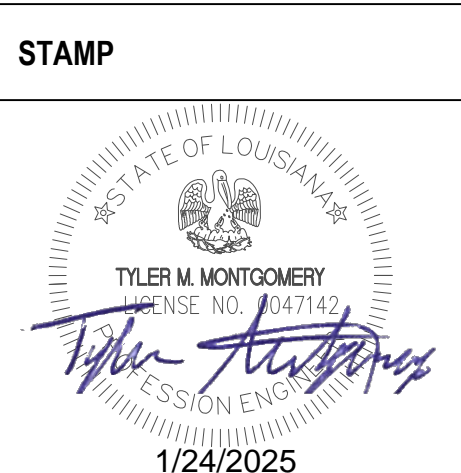- Pre-alarm intelligent sensing — nine levels.

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