

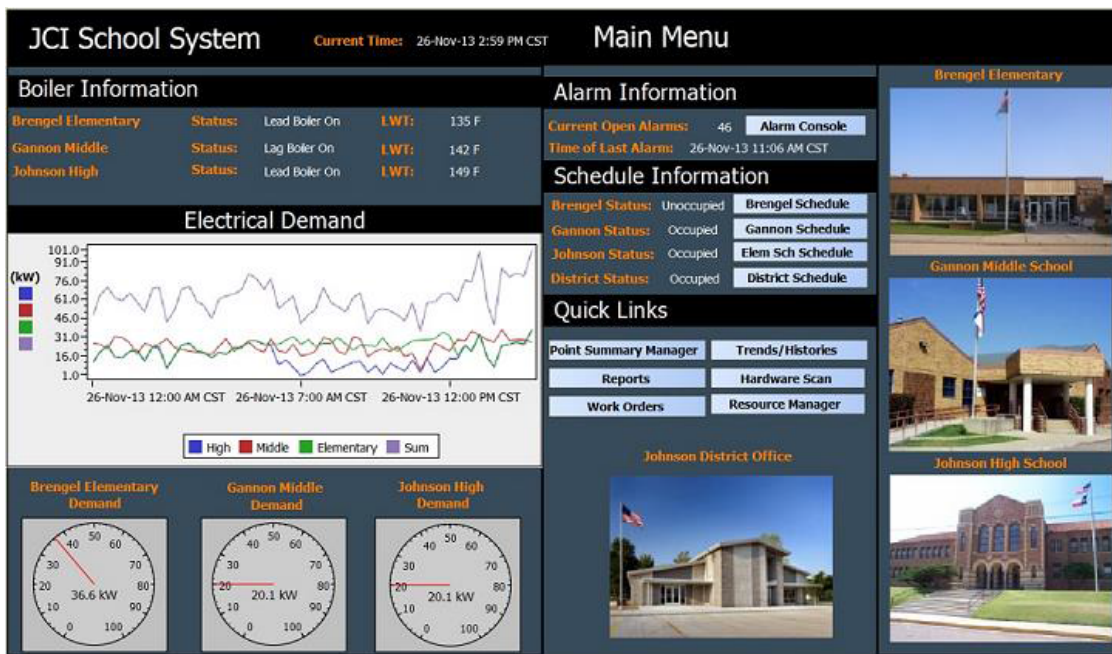
Overview

The Facility Explorer® (FX) Server software expands the capabilities of one or more FX Supervisory Controllers, in addition to managing IP field devices directly. The FX Server collects, stores, and provides access to large amounts of information (such as alarms, events, and histories) sourced from one or more FX Supervisory Controllers. The FX Server also coordinates the integration of multiple FX Supervisory Controllers networked together on a single project by providing network-wide automation and coordination, such as

master scheduling, system-wide database management, and integration with enterprise software applications and from IP field devices.

The FX Server includes a graphical user interface and configuration tool you can access with a web browser. Multiple users can concurrently connect to the FX Server. User security and presentation preferences are managed through user profiles, login IDs, and passwords. Remote access is easily achieved from an intranet, WAN, LAN, and Internet connection.

Figure 1: FX Server



FX Server features and benefits

Web-based user interface

Features a bold and intuitive new interface that is modern and easy to use. An HTML5 profile has been added to provide a more robust web experience.

Powerful security

Provides a defense-in-depth approach to security that requires users to use strong credentials. Provides encrypted data. Easy to configure user permissions.

Centralized enterprise- wide information

Provides a single access point for a project consisting of multiple FX Supervisory Controllers or multiple IP field controllers.

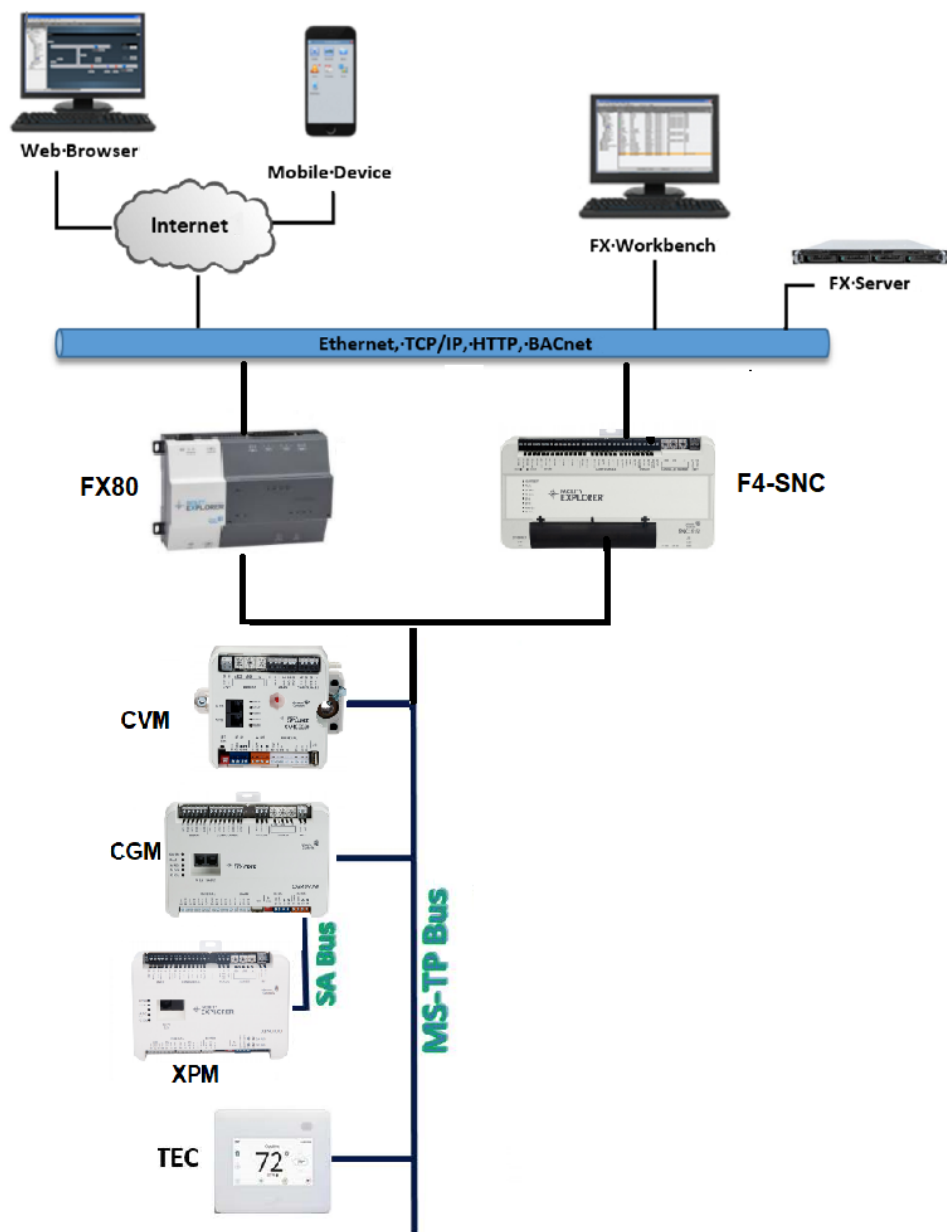
Large storage repository for alarms, events, and histories

Allows large amounts of historical information to be accessed and archived.

Niagara® analytics

Allows you to apply a variety of analytic algorithms and diagnostics to both historical and real-time data.

Figure 2: Example of a Facility Explorer configuration



Ordering codes

New ordering codes for Europe and

Africa

Multiple ordering code sets have been introduced, to allow the tailoring to regional needs. All products on a given order must come from the same set. To determine the correct code for your region, complete the following steps:

1. Use the following table to first determine the proper product code set to use:

Table 1: Product code set

Product Code Set	Notes
Base	The original FX product codes

Table 1: Product code set

Product Code Set	Notes
Base+E	Use this new set of codes only for the region(s) specified in Table .

2. Use the following table to determine the correct product code set for your region:

Table 2: Regional ordering information

Region	Product Code Set
North America	Base
Latin America, South America	
Asia	
EMEA	
	Base+E

Table 3: FX Server ordering information

Product code number	Description
FX-SL000-0	License enabling FX Server with 0 Niagara network connections. For use with IP.
FX-SL001-0	License enabling FX Server with 1 Niagara network connection.
FX-SL002-0	License enabling FX Server with 2 Niagara network connections.
FX-SL003-0	License enabling FX Server with 3 Niagara network connections.
FX-SL010-0	License enabling FX Server with 10 Niagara network connections.
FX-SL100-0	License enabling FX Server with 100 Niagara network connections.
FX-SLUNL-0	License enabling FX Server with unlimited Niagara network connections.
FX-SL000M1-0	License enabling FX Server with 0 connections. Initial software maintenance for 1 year.
FX-SL001M1-0	License enabling FX Server with 1 connection. Initial software maintenance for 1 year.
FX-SL002M1-0	License enabling FX Server with 2 connections. Initial software maintenance for 1 year.
FX-SL003M1-0	License enabling FX Server with 3 connections. Initial software maintenance for 1 year.
FX-SL010M1-0	License enabling FX Server with 10 connections. Initial software maintenance for 1 year.
FX-SL100M1-0	License enabling FX Server with 100 connections. Initial software maintenance for 1 year.
FX-SLUNLM1-0	License enabling FX Server with unlimited connections. Initial software maintenance for 1 year.
FX-SLDEMO-0	Engineering/demo license for FX Workbench client software. Enables all features needed to engineer and demonstrate FX Supervisory Controllers and FX Server stations. Intended for installing contractors. Requires support fee. Expires yearly.

Table 4: Base+E

Product code number	Description
FX-SL000-0E	License enabling FX Server with 0 Niagara network connections. For use with IP.
FX-SL001-0E	License enabling FX Server with 1 Niagara network connection.
FX-SL010-0E	License enabling FX Server with 10 Niagara network connections.
FX-SL100-0E	License enabling FX Server with 100 Niagara network connections.
FX-SLUNL-0E	License enabling FX Server with unlimited Niagara network connections.
FX-SL000M1-0E	License enabling FX Server with 0 connections. Initial software maintenance for 1 year.
FX-SL001M1-0E	License enabling FX Server with 1 connection. Initial software maintenance for 1 year.
FX-SL010M1-0E	License enabling FX Server with 10 connections. Initial software maintenance for 1 year.
FX-SL100M1-0E	License enabling FX Server with 100 connections. Initial software maintenance for 1 year.
FX-SLUNLM1-0E	License enabling FX Server with unlimited connections. Initial software maintenance for 1 year.
FX-SLDEMO-0E	Engineering/demo license for FX Workbench client software. Enables all features needed to engineer and demonstrate FX Supervisory Controllers and FX Server stations. Intended for installing contractors. Requires support fee. Expires yearly.

Table 5: Obtaining FX Software

Region	Description
North America	Available for download at the HVAC Navigator web page
EMEA	Available for download for FX partners from https://partners.jci.com/sites/202013112163968/SitePages/Home.aspx

FX Server device licensing information

FX Server Release 14.0 and later do not require additional licenses for BACnet, LonWorks, Modbus, oBIX, KNX, or SNMP integrations. FX Server device licenses are now required when the FX Server manages IP field controllers. Select multiple device licenses to total the amount of IP field controllers. For example, if the FX Server manages 58 IP field controllers, select FX-SLDL050-0 and FXSLDL010-0 for a total of 60 IP controllers.

❶ **Note:** Each IP device must be 50 points or less. If a device has 100 points, that counts as 2 IP devices.

Select the FX Server license FX-SL000-M#-0 for systems made up of only IP Field Controllers and do not require an FX Supervisory Controller. FX Server device licenses are not restricted to just that model of FX Server.

Table 6: FX Server device license ordering information

Product code number	Description
FX-SLDL010-0	License enabling 10 IP device support for FX Server
FX-SLDL025-0	License enabling 25 IP device support for FX Server
FX-SLDL050-0	License enabling 50 IP device support for FX Server

Table 6: FX Server device license ordering information

Product code number	Description
FX-SLDL100-0	License enabling 100 IP device support for FX Server
FX-SLDL200-0	License enabling 200 IP device support for FX Server
FX-SLDL500-0	License enabling 500 IP device support for FX Server
FX-SLDL1000-0	License enabling 1,000 IP device support for FX Server

Table 7: Base+E

Product code number	Description
FX-SLPL500-0E	License enabling 500 point support for FX Server
FX-SLPL01K-0E	License enabling 1250 point support for FX Server
FX-SLPL25K-0E	License enabling 2500 point support for FX Server
FX-SLPL05K-0E	License enabling 5000 point support for FX Server
FX-SLPL10K-0E	License enabling 10000 point support for FX Server
FX-SLPL25K-0E	License enabling 25000 point support for FX Server
FX-SLPL50K-0E	License enabling 50000 point support for FX Server

Table 8: FX Server software accessories ordering information

Product code number	Description
FX-SLMYSQL-0	License enabling MYSQL database support for FX Server
FX-SLSQL-0	License enabling SQL database support for FX Server
FX-SLCSV-0	License enabling CSV support for FX Server
FX-SLORCL-0	License enabling Oracle database support for FX Server
FX-SLOPCCL-0	License enabling OPC client support for FX Server

Table 9: Base+E

Product code number	Description
FX-SLMYSQL-0E	License enabling MYSQL database support for FX Server
FX-SLSQL-0E	License enabling SQL database support for FX Server
FX-SLCSV-0E	License enabling CSV support for FX Server
FX-SLORCL-0E	License enabling Oracle database support for FX Server

FX Server upgrade ordering information

FX Server upgrades are required to increase the number of FX Supervisory Controllers that an existing FX Server can manage.

Table 10: FX Server upgrade ordering information

Product code number	Description
FX-SLU001-6	License enabling 1 additional Niagara network connection for FX Server.
FX-SLU100-6	License enabling 100 additional Niagara network connections for FX Server.
FX-SLUUNL-6	License enabling unlimited additional Niagara network connections for FX Server.

Table 11: Base+E

Product code number	Description
FX-SLU001-6E	License enabling 1 additional Niagara network connection for FX Server.
FX-SLU100-6E	License enabling 100 additional Niagara network connections for FX Server.
FX-SLUUNL-6E	License enabling unlimited additional Niagara network connections for FX Server.

FX Server maintenance ordering information

FX Server Release 14.0 and later requires a software maintenance license that must be purchased in addition to the server software. Additional software maintenance is available for when the original period is set to expire.

We recommend that you keep the FX Server software maintenance up-to-date. However, if the FX Server software maintenance lapses and it is desired after it has lapsed, the software maintenance must cover the lapsed period plus the period you wish to purchase.

Table 12: FX Server software maintenance

Product code number	Description
FX-SL000M1-6	License enabling 1 additional year of software maintenance for FX Server with 0 Niagara network connections.
FX-SL000M3-6	License enabling 3 additional years of software maintenance for FX Server with 0 Niagara network connections.
FX-SL000M5-6	License enabling 5 additional years of software maintenance for FX Server with 0 Niagara network connections.
FX-SL001M1-6	License enabling 1 additional year of software maintenance for FX Server with 1 Niagara network connection.
FX-SL001M3-6	License enabling 3 additional years of software maintenance for FX Server with 1 Niagara network connection.
FX-SL001M5-6	License enabling 5 additional years of software maintenance for FX Server with 1 Niagara network connection.
FX-SL002M1-6	License enabling 1 additional year of software maintenance for FX Server with 2 Niagara network connections.
FX-SL002M3-6	License enabling 3 additional years of software maintenance for FX Server with 2 Niagara network connections.
FX-SL002M5-6	License enabling 5 additional years of software maintenance for FX Server with 2 Niagara network connections.
FX-SL003M1-6	License enabling 1 additional year of software maintenance for FX Server with 3 Niagara network connections.
FX-SL003M3-6	License enabling 3 additional years of software maintenance for FX Server with 3 Niagara network connections.

Table 12: FX Server software maintenance

Product code number	Description
FX-SL003M5-6	License enabling 5 additional years of software maintenance for FX Server with 3 Niagara network connections.
FX-SL010M1-6	License enabling 1 additional year of software maintenance for FX Server with 10 Niagara network connections.
FX-SL010M3-6	License enabling 3 additional years of software maintenance for FX Server with 10 Niagara network connections.
FX-SL010M5-6	License enabling 5 additional years of software maintenance for FX Server with 10 Niagara network connections.
FX-SL100M1-6	License enabling 1 additional year of software maintenance for FX Server with 100 Niagara network connections.
FX-SL100M3-6	License enabling 3 additional years of software maintenance for FX Server with 100 Niagara network connections.
FX-SL100M5-6	License enabling 5 additional years of software maintenance for FX Server with 100 Niagara network connections.
FX-SLUNLM1-6	License enabling 1 additional year of software maintenance for FX Server with unlimited Niagara network connections.
FX-SLUNLM3-6	License enabling 3 additional years of software maintenance for FX Server with unlimited Niagara network connections.
FX-SLUNLM5-6	License enabling 5 additional years of software maintenance for FX Server with unlimited Niagara network connections.

- ① **Note:** In addition to providing additional software maintenance on FX Servers at or above Release 14.0, some of these parts are required to migrate a legacy FX Server at Release 6.x to Release 14.0 and later. Refer to *Discontinuation of Facility Explorer supervisory hardware models FX30, FX60, and FX70 and Facility Explorer 6.x software (LIT-12001208)* for further information.
- ① **Note:** AX (6.x) to N4 (14.x) migration parts will no longer be offered after July 1, 2023.

Table 13: Base+E

Product code number	Description
FX-SL000M1-6E	License enabling 1 additional year of software maintenance for FX Server with 0 Niagara network connections.
FX-SL000M3-6E	License enabling 3 additional years of software maintenance for FX Server with 0 Niagara network connections.
FX-SL000M5-6E	License enabling 5 additional years of software maintenance for FX Server with 0 Niagara network connections.

Table 13: Base+E

Product code number	Description
FX-SL001M1-6E	License enabling 1 additional year of software maintenance for FX Server with 1 Niagara network connection.
FX-SL001M3-6E	License enabling 3 additional years of software maintenance for FX Server with 1 Niagara network connection.
FX-SL001M5-6E	License enabling 5 additional years of software maintenance for FX Server with 1 Niagara network connection.
FX-SL010M1-6E	License enabling 1 additional year of software maintenance for FX Server with 10 Niagara network connections.
FX-SL010M3-6E	License enabling 3 additional years of software maintenance for FX Server with 10 Niagara network connections.
FX-SL010M5-6E	License enabling 5 additional years of software maintenance for FX Server with 10 Niagara network connections.
FX-SL100M1-6E	License enabling 1 additional year of software maintenance for FX Server with 100 Niagara network connections.
FX-SL100M3-6E	License enabling 3 additional years of software maintenance for FX Server with 100 Niagara network connections.
FX-SL100M5-6E	License enabling 5 additional years of software maintenance for FX Server with 100 Niagara network connections.
FX-SLUNLM1-6E	License enabling 1 additional year of software maintenance for FX Server with unlimited Niagara network connections.
FX-SLUNLM3-6E	License enabling 3 additional years of software maintenance for FX Server with unlimited Niagara network connections.
FX-SLUNLM5-6E	License enabling 5 additional years of software maintenance for FX Server with unlimited Niagara network connections.

❶ **Note:** In addition to providing additional software maintenance on FX Servers at or above Release 14.0, some of these parts are required to migrate a legacy FX Server at Release 6.x to Release 14.0 and later. Refer to *Discontinuation of Facility Explorer supervisory hardware models FX30, FX60, and FX70 and Facility Explorer 6.x software (LIT-12001208)* for further information.

Table 14: FX Server - Niagara analytics

Product code number	Description
FX-ASL0250-0	License enabling 250 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater
FX-ASL1000-0	License enabling 1,000 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater
FX-ASL2500-0	License enabling 2,500 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater

Table 14: FX Server - Niagara analytics

Product code number	Description
FX-ASL010K-0	License enabling 10,000 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater
FX-ASL050K-0	License enabling 50,000 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater.
FX-ASL100K-0	License enabling 100,000 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater.
FX-ASLUNL-0	License enabling unlimited analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater.

Table 15: Base+E

Product code number	Description
FX-ASL0250-0E	License enabling 250 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater
FX-ASL1000-0E	License enabling 1,000 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater
FX-ASL2500-0E	License enabling 2,500 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater
FX-ASL010K-0E	License enabling 10,000 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater
FX-ASL050K-0E	License enabling 50,000 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater.
FX-ASL100K-0E	License enabling 100,000 analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater.
FX-ASLUNL-0E	License enabling unlimited analytics points for Niagara Analytics on an FX Server at FX Supervisory Family Software Release 14.2 or greater.

Table 16: FX Server - ESIGN and FIPS 140-2 accessories

Product code number	Description
FX-SLFIPS-0	Provides FIPS 140-2 Level 1 conformance that uses the integrated FIPS certified BouncyCastle module for a FX Server. Compatible with FX version 14.6 and later.
FX-SLES1000-0	License enabling e-signature application with 1,000 points for FX Server
FX-SLESUNL-0	License enabling e-signature application with unlimited points for FX Server
FX-SLESUP1K-0	License adding 1,000 e-signature points for FX Server
FX-TSES-0	E-signature technical support - up to 8 hours in 90-day period following order placement.

❶ **Note:** FX-TSES-0 is required with the first ESIGN order.

Table 17: FX Server - ESIGN E-codes

Product code number	Description
FX-SLES1000-0E	License enabling e-signature application with 1,000 points for FX Server
FX-SLESUNL-0E	License enabling e-signature application with unlimited points for FX Server
FX-SLESUP1K-0E	License adding 1,000 e-signature points for FX Server
FX-TSES-0E	E-signature technical support - up to 8 hours in 90-day period following order placement
FX-ESIGNELRN-0E	FX Niagara 4 E-signature Certification (E-learning)

① **Note:** FX-TSES-0E is required with the first ESIGN order.

Table 18: FX Server - JSON E-codes EMEA only

Product code number	Description
FX-SLJSON-0E	License enabling JSON Toolkit for FX Server (Valid Software Maintenance required).

① **Note:** FX JSON Toolkit is only available in EMEA.

Technical specifications

Table 19: FX Server

Processor	Intel® Xeon® CPU E5-2640, 64-bit (or better), compatible with dual and quad core processors
Operating System	64-bit: Windows® 10, Windows Server 2016, Windows Server 2019
Web Browser	Windows Internet Explorer®, Mozilla® Firefox®, Google Chrome™, or Microsoft Edge®
Memory	6 GB minimum; 8 GB or more recommended for larger systems
Hard Drive	4 GB minimum, more recommended depending on archiving requirements
Display	Video card and monitor capable of displaying 1024 x 768 pixel resolution or greater
Network Support	Ethernet adaptor (10/100 MB with RJ-45 connector)
Connectivity	Always on, high-speed Internet Service Provider (ISP) connection recommended for remote site access (DSL, T1, or cable modem) and IPv6 compliant

Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

Single point of contact

APAC	Europe	NA/SA
JOHNSON CONTROLS C/O CONTROLS PRODUCT MANAGEMENT NO. 32 CHANGJIANG RD NEW DISTRICT WUXI JIANGSU PROVINCE 214028 CHINA	JOHNSON CONTROLS VOLTAWEG 20 6101 XK ECHT THE NETHERLANDS	JOHNSON CONTROLS 507 E MICHIGAN ST MILWAUKEE WI 53202 USA

Contact information

Contact your local branch office:
www.johnsoncontrols.com/locations

Contact Johnson Controls:
www.johnsoncontrols.com/contact-us