Field Controllers

FX VMA

FX06

FX07

FX14

FX15

FX16

The Facility Explorer Field Controllers provide you with a comprehensive controls solution for a wide variety of HVAC and refrigeration applications. These controllers are designed to provide direct, closed loop control over mechanical HVAC and refrigeration equipment, either as standalone devices or as part of a larger, networked control system. These controllers include a rich set of embedded and optional features which enable you to see more and do more.

Applications:

· Packaged Rooftop Units

· Fan Coil Units

· Unit Ventilators

· Heat Pumps

· Variable Air Volume Boxes

· Air Handling Units

· Chilled Water & Hot Water Systems

· Refrigeration Equipment

· Chilled & Heated Ceiling Beam Installations

FACILITY EXPLORER

BY JOHNSON CONTROLS

Rich Set of Embedded and Optional Features

Facility Explorer Field Controllers are a family of products, consisting of several devices, each with various embedded and optional features. This allows you to choose the device and feature set most appropriate for your specific application. Examples of some of these features include:

- Various Input/Output Complements

- Fully Programmable or Configurable

- Integral or Remote User Interface
    - 2x4 LCD
    - Medium User Interface (MUI),
      (4 line x 26 characters)

- Multiple Networking Communications
    - N2
    - LON® FT/TP-10
    - BACnet® MS/TP

- Onboard Real Time Clock for localized:
    - Scheduling
    - Alarming
    - Trending

- Choice of Room Sensor:
    - TM-2100 Room Command Module
    - Network Room Module (NRM) with
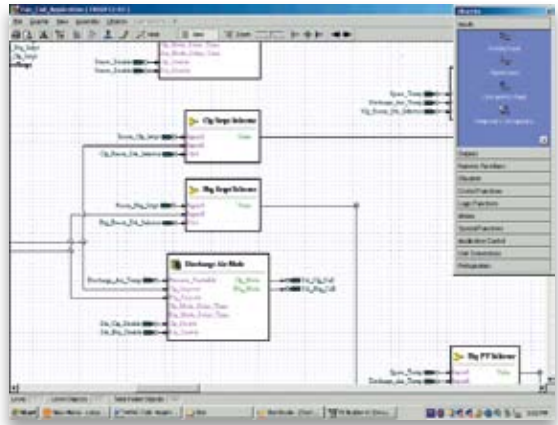   LCD display

Single Programming Tool

FX Builder is a powerful and flexible software tool used to create control applications for all Facility Explorer Field Controllers, regardless of your choice of device type, user interface, networking protocol, or other option. FX Builder provides you with two methods to create the control application software: fully programmable and configurable.

Full programmability allows you to create your own customized control sequences. FX Builder provides a graphical, function-block programming environment for you to create your control algorithms. The FX Simulator allows you to test your design before loading it into the target controller. FX Builder provides intuitive wizards to help you design the user interface pages and navigation, activate point features such as scheduling, trending, and alarming, and define the desired network profile (N2 points, LON variables, or BACnet objects).
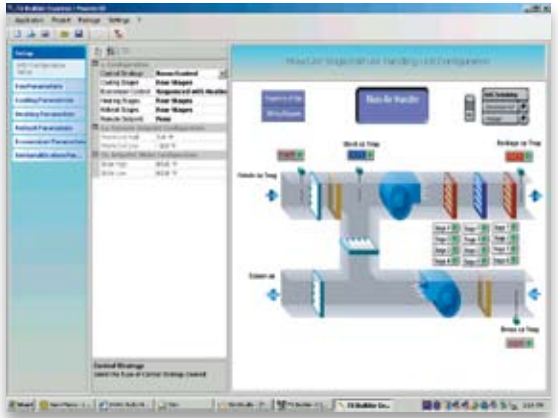
Fully Programmable Application Canvas

Application Wizard

FX Builder also features an Application Wizard, which allows you to select from a library of standard applications for controlling the most common types of mechanical HVAC equipment. The Application Wizard allows you to quickly and easily:

· select the application type

· choose configuration options

· set default setpoints and parameters

· select the type of user interface

· choose the type of network protocol

· select the target device

all from factory-developed and -tested application templates. This ensures that the choices you make results in control application software that is validated to operate properly.

FX FIELD CONTROLLERS

Feature	FXVMA	FX06	FX07	FX14	FX15	FX16
Picture						
Mounting Style	On VAV box	Front Panel	DIN Rail	DIN Rail	DIN Rail	DIN Rail
Inputs	1 Universal	· 4 Analog · 5 Binary	· 4 Analog · 5 Binary	· 6 Analog · 12 Binary	· 6 Analog · 8 Binary	· 6 Analog · 8 Binary

Outputs	· 3 Binary
	· 2 Configurable
		· 2 Analog
		· 6 Binary
		  (all relays, or 4
		  relays/2 triacs)
			· 2 Analog
			· 6 Binary
			  (all relays, or 4
			  relays/2 triacs)
				· 2 Analog
				· 6 Binary
				  (all relays, or 4
				  relays/2 triacs)
					· 4 Analog
					· 6 Binary
					  (all relays, or 4
					  relays/2 triacs)
						· 4 Analog
						· 6 Binary
						  (all relays, or 4
						  relays/2 triacs)

Expandable I/O	–	–	–	–	✓	✓
Real Time Clock	–	✓	✓	✓	✓	✓
Local Scheduling	–	✓	✓	✓	✓	✓
Local Alarming	–	✓	✓	✓	✓	✓
Local Trending	–	✓	✓	✓	–	✓

User Interface	· Optional remote MUI	· Embedded 2x4 LCD
		· Optional remote MUI
			· Optional embedded
			  2x4 LCD
			· Optional remote MUI
				· Optional integral
				  2x4 LCD
				· Optional remote MUI
					· Optional remote MUI
					· Optional embedded
					  MUI
						· Optional remote MUI
						· Optional embedded
						  MUI

Network Communications Options	· N2 · BACnet MS/TP	· Standalone · RS-232 · N2 · LON FT/TP-10 · BACnet MS/TP	· Standalone · RS-232 · N2 · LON FT/TP-10 · BACnet MS/TP	· Standalone · RS-232 · N2 · LON FT/TP-10 · BACnet MS/TP	· Standalone · N2 · LON FT/TP-10	· Standalone · RS-232 · N2 · LON FT/TP-10 · BACnet MS/TP
Supported Room Sensors	· NRM	· TM-2100 · NRM	· TM-2100 · NRM	· TM-2100 · NRM	· TM-2100	· TM-2100
Certifications	· UL 916 · Pending BTL ASC	· UL 916 · BTL AAC	· UL 916 · BTL AAC	· UL 916 · BTL AAC	· UL 916	· UL 916 · BTL AAC

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Johnson Controls