

# Introducing New Facility Explorer Next-Generation Equipment Controllers



Johnson Controls is pleased to announce new models of the next-generation equipment controllers for the Facility Explorer system. With this release, we are expanding the next-generation equipment controller family to include equipment controllers that communicate on BACnet®/IP networks, to provide more flexibility in choosing the devices for your site's network.

The following are the new Ethernet equipment controllers that use the BACnet/IP communications protocol:

- **F4-CGE09090-0 model:** 18 Input/Output (I/O), General Purpose Application Ethernet Controller.
- **F4-CGE04060-0 model:** 10 I/O, General Purpose Application Ethernet Controller.
- **F4-CVE03050-0P model:** 8 I/O VAV Box Ethernet Controller with an integrated potentiometer to provide feedback of the VAV Box damper's actual position. This model also features a set of 14 preloaded standard VAV box control applications, selectable using the Mobile Access Portal (MAP) Gateway, which make this controller fully operational without the need to create and download an application.

The new equipment controllers are BTL-listed at Protocol Revision 18 as BACnet Advanced Application Controllers (B-AAC). Embedded software in the CGE and CVE controllers provides secure boot operation, firmware protection and secure communications, and secure firmware updates comply with cyber security best practices. These models feature removable screw terminal blocks for easy installation, three rotary switches to set the controller number, and a real-time clock. The real-time clock enables these controllers to monitor and control local schedules, calendars, alarms, and trends, and operate for extended periods of time as standalone controllers when offline from a Facility Explorer system network.

In addition, these new models feature background transfer, generic Sensor/Actuator (SA) bus object, SA bus provisioning, and more. Ethernet equipment controllers support star, daisy chain, and Media Redundancy Protocol (MRP) ring network topologies.

This release also includes updated field controller packages to support the new hardware. These package files are available for download from the Johnson Controls [License Portal](#).

Table 1 provides ordering information for the new equipment controllers and accessories that are available globally.



**Table 1: New equipment controllers and accessories**

| Product code number | Description  |
|---------------------|--|
| F4-CGE09090-0       | 18-point General Purpose Application Ethernet Controller<br>Includes: BACnet/IP communication; 18 I/O points (7 universal inputs [UI], 2 binary inputs [BI], 4 configurable outputs [CO], 2 analog outputs [AO], 3 binary outputs [BO])  |
| F4-CGE04060-0       | 10-point General Purpose Application Ethernet Controller<br>Includes: BACnet/IP communication; 10 I/O points (3 UIs, 1 BI, 4 COs, 2 BOs)   |
| F4-CVE03050-0P      | 8-point VAV Box Ethernet Controller with an integral potentiometer to sense actual VAV box damper position<br>Includes: BACnet/IP communication; 8 I/O points (3 UIs, 2 COs, 3 BOs); integrated actuator and Differential Pressure Transducer (DPT) sensor; 14 preloaded standard VAV box control applications<br><b>Note:</b> This model is available in bulk packaging under the product code number F4-CVE03050-0PD. With bulk packaging, 10 controllers are shipped in a single box. |
| F4-CVACT-OR         | Actuator Assembly Replacement Kit for F4-CVM03050-0x and F4-CVE03050-0P VAV box controllers  |

## Ordering information

To place your order, contact:  
 Johnson Controls Product Sales Operations  
 Phone: 1-800-275-5676  
 Email: [jciorder@jci.com](mailto:jciorder@jci.com)  
 Fax: 1-800-356-1191

Sales and Technical Documentation available on [Knowledge Exchange](#).