



OE335-26B-VCBX-A VCB-X Controller

Description

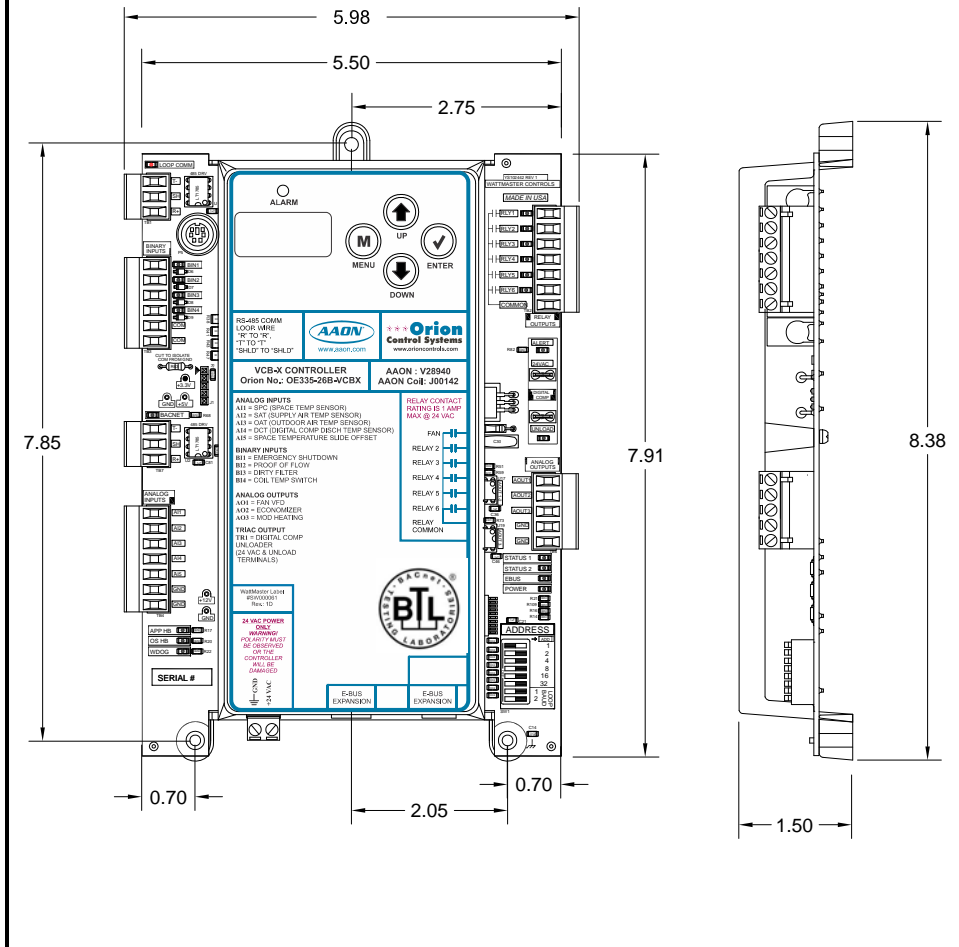
The VCB-X Controller (Orion Part No. OE335-26B-VCBX -A; AAON Part No. V28940) is designed with 5 analog inputs, 3 analog outputs, 4 binary inputs, 6 relay outputs, and 1 triac output.

The VCB-X Controller has an on-board BACnet® port for connection to an MS/TP network.

There are also 2 E-BUS Expansion Ports which allow the connection of communicating sensors and future E-BUS Modules via modular cable assemblies. There are presently 3 communicating sensors available—an E-BUS Digital Space Sensor, a Space E-BUS CO₂ Sensor and a Duct Mounted E-BUS CO₂ Sensor.

The VCB-X Controller contains a 2 x 8 LCD character display and 4 buttons that allow for status and alarm display as well as BACnet configuration.

The VCB-X Controller provides for Constant Volume, VAV, Make-Up Air, and Single Zone VAV applications. Single Zone VAV applications can be configured for VAV Cooling and either CAV or VAV Heating.



Mounting

The VCB-X Controller is housed in a plastic enclosure. It is designed to be mounted by using the 3 mounting holes in the enclosure base. The VCB-X Controller needs to be installed in an environment which can maintain a temperature range between -30°F and 150°F not to exceed 90% RH levels (Non-Condensing). It is important to mount the controller in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the controller.

Technical Data		OE335-26B-VCBX-A VCB-X Controller	
Operating Power	24 VAC	Power Consumption	8 VA Maximum
Operating Temp	-30°F to 150°F	Operating Humidity	90% RH Non-Condensing
Communications	E-BUS BACnet MS/TP	Weight	1 lb.
Inputs	5 Analog Inputs 4 Binary Inputs	Outputs	3 Analog Outputs 6 Relay Outputs Digital Compressor Triac
Three Year Warranty		WattMaster reserves the right to change specifications without notice	



OE336-23-EM1-A VCB-X EM1 Expansion Module

Description

The VCB-X EM1 Expansion Module (Orion Part No. OE336-23-EM1-A; AAON Part No. V13010) connects to the VCB-X Controller (OE335-26B-VCBX-A) with an EBC E-BUS cable to provide additional inputs and outputs beyond those found on the VCB-X Controller.

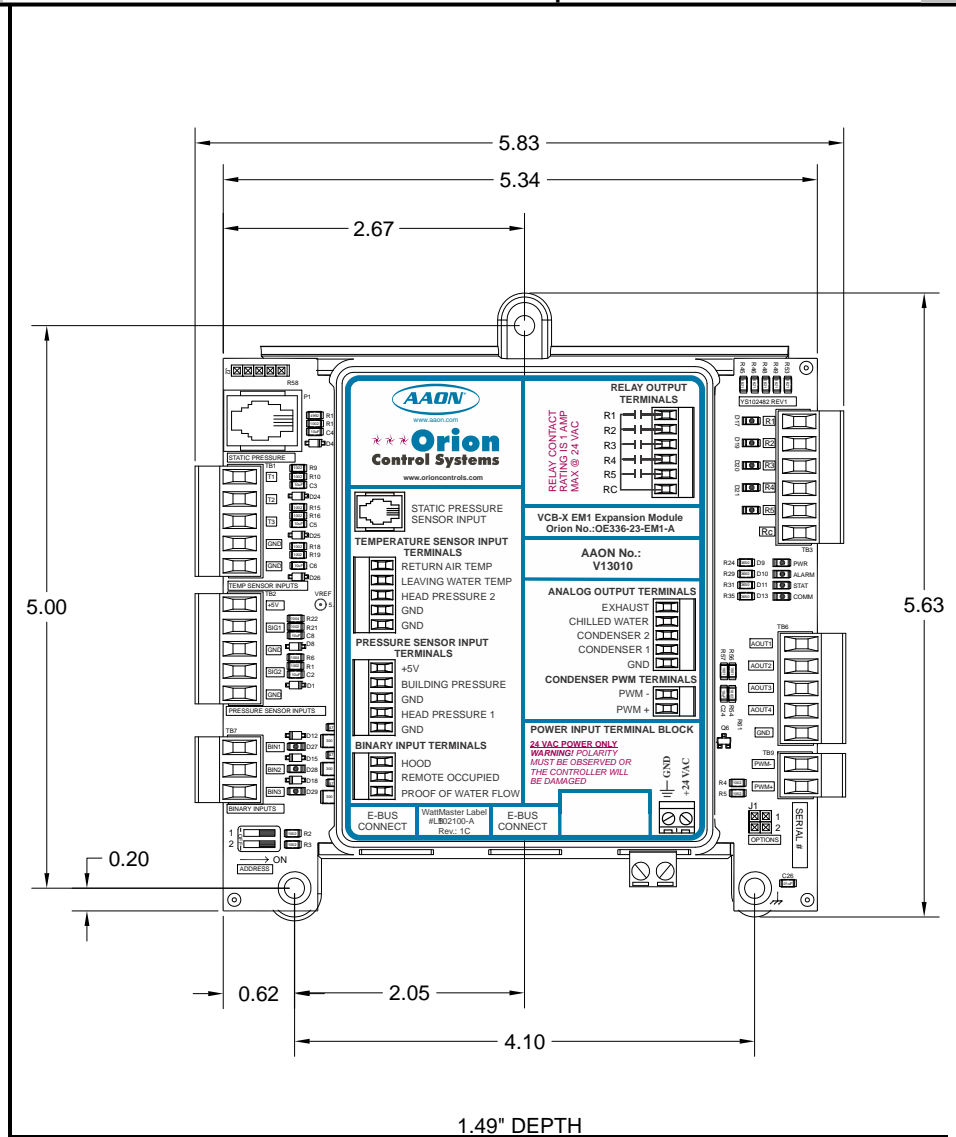
The VCB-X EM1 Expansion Module adds an additional 6 Analog Inputs, 3 Binary Inputs, 5 Relay Outputs, and 4 Analog Outputs.

The EM1 Expansion Module adds VAV capabilities, Building Pressure, and Head Pressure Control, and Water Source Heat Pump Monitoring.

The EM1 Expansion Module must be connected to a 24 VAC power source. When wiring the VCB-X EM1 Expansion Module, its binary inputs and relay outputs must be wired as wet contacts (connected to 24 VAC).

Mounting

The VCB-X EM1 Expansion Module is housed in a plastic enclosure. It is designed to be mounted by using the 3 mounting holes in the enclosure base. The VCB-X EM1 Expansion Module needs to be installed in an environment which can maintain a temperature range between -30° F and 150° F not to exceed 90% RH levels (Non-Condensing). It is important to mount the module in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the module.



NOTE: The VCB-X EM1 Expansion Module contains no user-serviceable parts. Contact qualified technical personnel if your Module is not operating correctly.

Technical Data		OE336-23-EM1 VCB-X EM1 Expansion Module	
Operating Power	24 VAC	Power Consumption	5 VA Maximum
Operating Temp	-30°F to 150°F	Operating Humidity	90% RH Non-Condensing
Communications	E-BUS	Weight	1 lb.
Inputs	3 Binary Inputs 6 Analog Inputs	Outputs	5 Relay Outputs 4 Analog Outputs
Three Year Warranty		WattMaster reserves the right to change specifications without notice	



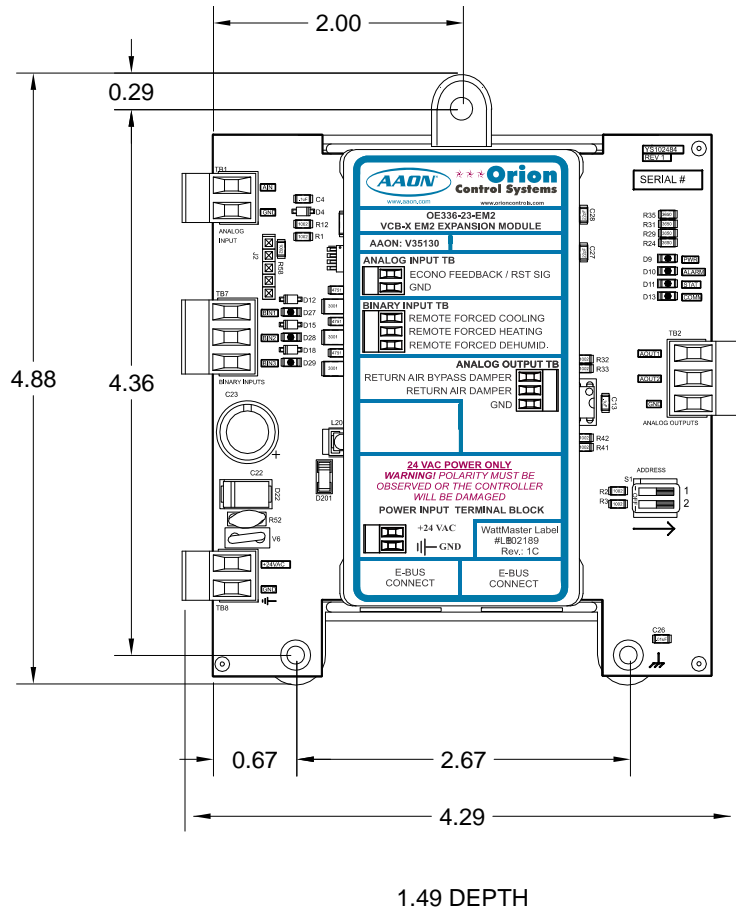
OE336-23-EM2 VCB-X EM2 Expansion Module

Description

The VCB-X EM2 Expansion Module (Orion Part No. OE336-23-EM2; AAON Part No. V35130) connects to the VCB-X Controller (OE335-26B-VCBX-A) with an EBC E-BUS cable to provide additional inputs and outputs beyond those found on the VCB-X Controller.

The VCB-X EM2 Expansion Module adds remote forced heating, cooling, and dehumidification using 3 additional Binary Inputs. It provides 2 Analog Outputs for controlling a Return Air Bypass Damper and a Return Air Damper in Return Air Bypass applications. It also allows for Title 24 Economizer Feedback or a remote voltage input that can be used to reset the Supply Air Setpoint.

The EM2 Expansion Module must be connected to a 24 VAC power source. When wiring the EM2 Expansion Module, its binary inputs must be wired as wet contacts (connected to 24 VAC).



Mounting

The VCB-X EM2 Expansion Module is housed in a plastic enclosure. It is designed to be mounted by using the 3 mounting holes in the enclosure base. The VCB-X EM2 Expansion Module needs to be installed in an environment which can maintain a temperature range between -30°F and 150°F not to exceed 90% RH levels (Non-Condensing). It is important to mount the module in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the module.

NOTE: The VCB-X EM2 Expansion Module contains no user-serviceable parts. Contact qualified technical personnel if your Module is not operating correctly.

Technical Data		OE336-23-EM2 VCB-X EM2 Expansion Module	
Operating Power	24 VAC	Power Consumption	5 VA Maximum
Operating Temp	-30°F to 150°F	Operating Humidity	90% RH Non-Condensing
Communications	E-BUS	Weight	1 lb.
Inputs	1 Analog Input 3 Binary Inputs	Outputs	2 Analog Outputs
Three Year Warranty		WattMaster reserves the right to change specifications without notice	



OE358-23E-12R-A E-BUS 12 Relay Expansion Module

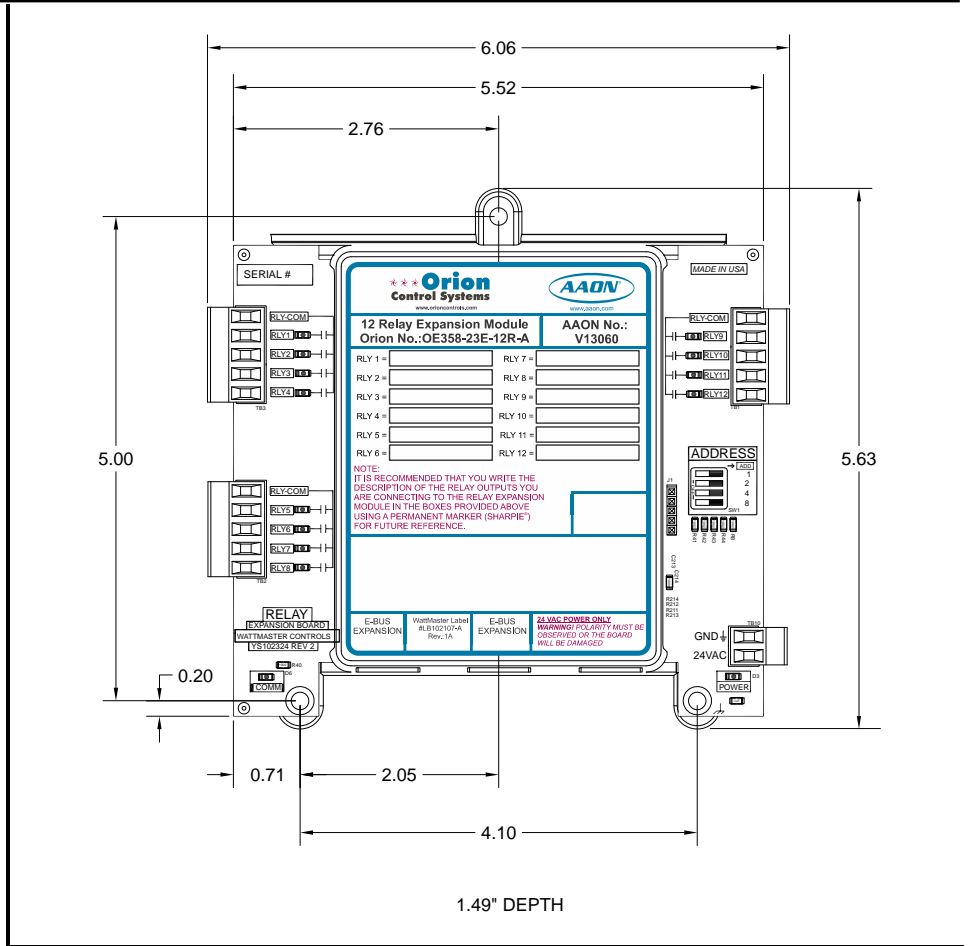
Description

The E-BUS 12 Relay Expansion Module (Orion Part No. OE358-23E-12R-A; AAON Tulsa Part No. V13060) connects to the VCB-X Controller (OE335-26B-VCBX-A) or VCC-X Controller (OE338-26B-VCCX-A) to provide additional relay outputs beyond those found on the VCB-X or VCC-X Controller.

The E-BUS 12 Relay Expansion Module provides for up to 12 Configurable Relay Outputs.

The E-BUS 12 Relay Expansion Module can be used in conjunction with the OE336-23-EM1-A, VCB-X EM1 Expansion Module and/or the OE336-23-EM2, VCB-X EM2 Expansion Module to provide the required inputs and outputs for your specific application.

The E-BUS 12 Relay Expansion Module can also be used in conjunction with the OE336-23-VCCXEM1-A, VCC-X EM1 Expansion Module and/or the OE370-26-RSMV, OE370-26-RSMD, and the OE370-26-RSMV-HP Refrigeration Modules to provide the required inputs and outputs for your specific application.



The E-BUS 12 Relay Expansion Module must be connected to a 24 VAC power source. All Relay groups being used must have the relay common associated with its group connected to a power source not greater than 24 VAC to supply power to each relay.

Mounting

The E-BUS 12 Relay Expansion Module is housed in a plastic enclosure. It is designed to be mounted by using the 3 mounting holes in the enclosure base. The E-BUS 12 Relay Expansion Module needs to be installed in an environment which can maintain a temperature range between -30°F and 150°F not to exceed 90% RH levels (Non-Condensing). It is important to mount the module in a location that is free from extreme high or low temperatures, moisture, dust, and dirt. Be careful not to damage the electronic components when mounting the module.

NOTE: The E-BUS 12 Relay Expansion Module contains no user-serviceable parts. Contact qualified technical personnel if your Module is not operating correctly.

Technical Data		OE358-23E-12R-A E-BUS 12 Relay Expansion Module	
Operating Power	24 VAC	Power Consumption	15 VA Maximum
Operating Temp	-30°F to 150°F	Operating Humidity	90% RH Non-Condensing
Communications	E-BUS	Weight	1 lb.
Output	12 Relays @ 1 Amp Max		
Three Year Warranty		WattMaster reserves the right to change specifications without notice	