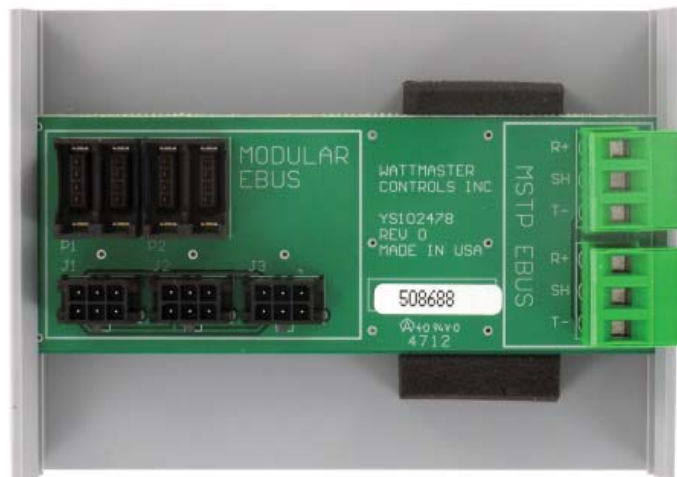


# OE365-15-EBA E-BUS Adapter Board Technical Guide

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PART NUMBER CROSS REFERENCE TABLE	
PART DESCRIPTION	ORION
E-BUS Adapter Board	OE365-15-EBA
VCM-X E-BUS Modular Controller	OE332-23E-VCMX-MOD
VCB-X Controller	OE335-23E-VCBX
RNE Modular Controller	OE332-23E-RNE



[www.orioncontrols.com](http://www.orioncontrols.com)

WattMaster Controls, Inc.  
 8500 NW River Park Drive · Parkville, MO 64152  
 Toll Free Phone: 866-918-1100  
 PH: (816) 505-1100 · FAX: (816) 505-1101 · E-mail: [mail@wattmaster.com](mailto:mail@wattmaster.com)  
 Visit our web site at [www.orioncontrols.com](http://www.orioncontrols.com)  
 Form: OR-EBUS-ADAPTER-TGD-01B  
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 GreenTrol™ is a registered trademark of GreenTrol Automation, Inc. Loris, SC.  
 Paragon MicroTrans EQ Series Air Flow Monitoring Station is a registered trademark of Paragon Controls, Inc., Santa Rosa, CA.  
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### Overview

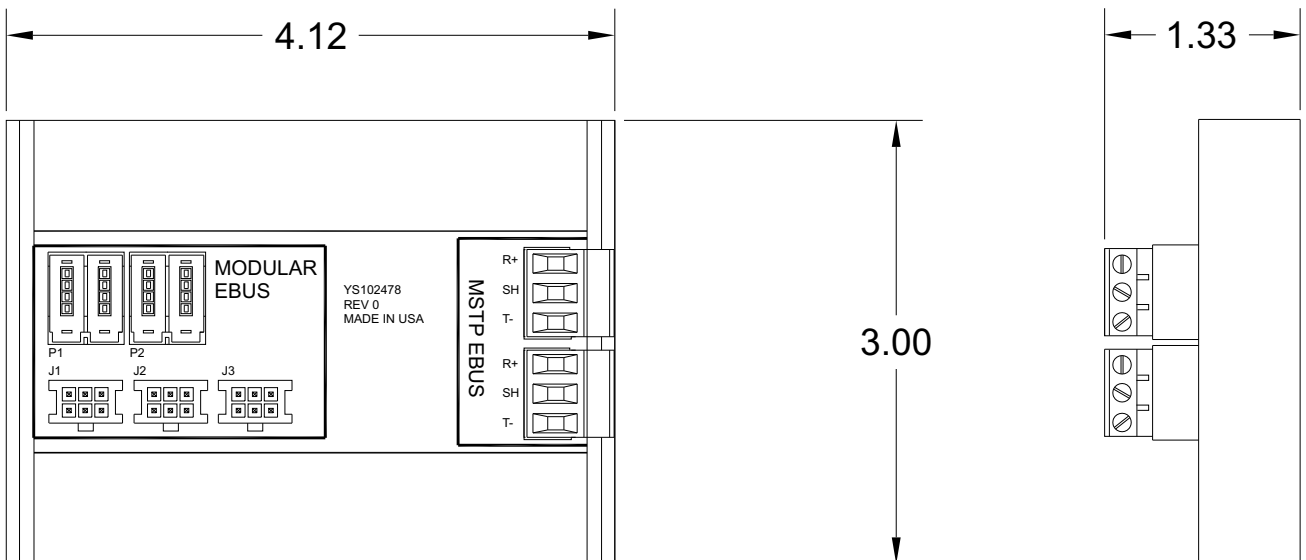
The OE365-15-EBA E-BUS Adapter Board (**Figure 1**) is used to provide a connection point for multiple E-BUS Sensors or Modules when added communication wiring length is needed.

The E-BUS Adapter Board is also used for connecting an EBTRON® GTC-116 Airflow Measurement Digital Transmitter, a GreenTrol™ GA-200-N Transmitter Module with GF Series Airflow Monitoring Station, or Paragon MicroTrans<sup>EQ</sup> series Airflow Measurement Digital Transmitter to the VCM-X E-BUS Modular Controller\*, RNE Controller\*, or VCB-X Controller.

You must wire the EBTRON®, GreenTrol™, or Paragon\* Airflow Measurement Digital Transmitter to this Adapter Board.

The E-BUS Adapter Board has (4) Modular E-BUS ports, (3) HSSC Connections, and (2) MSTP E-BUS Connections.

NOTE: With custom VCM-X or RNE software, the Paragon® MicroTrans EQ series Air Flow Monitoring Station can be used and would wire into the E-BUS Adapter Board the same way.



**Figure 1: E-BUS Adapter Dimensions**

# E-BUS Adapter Board

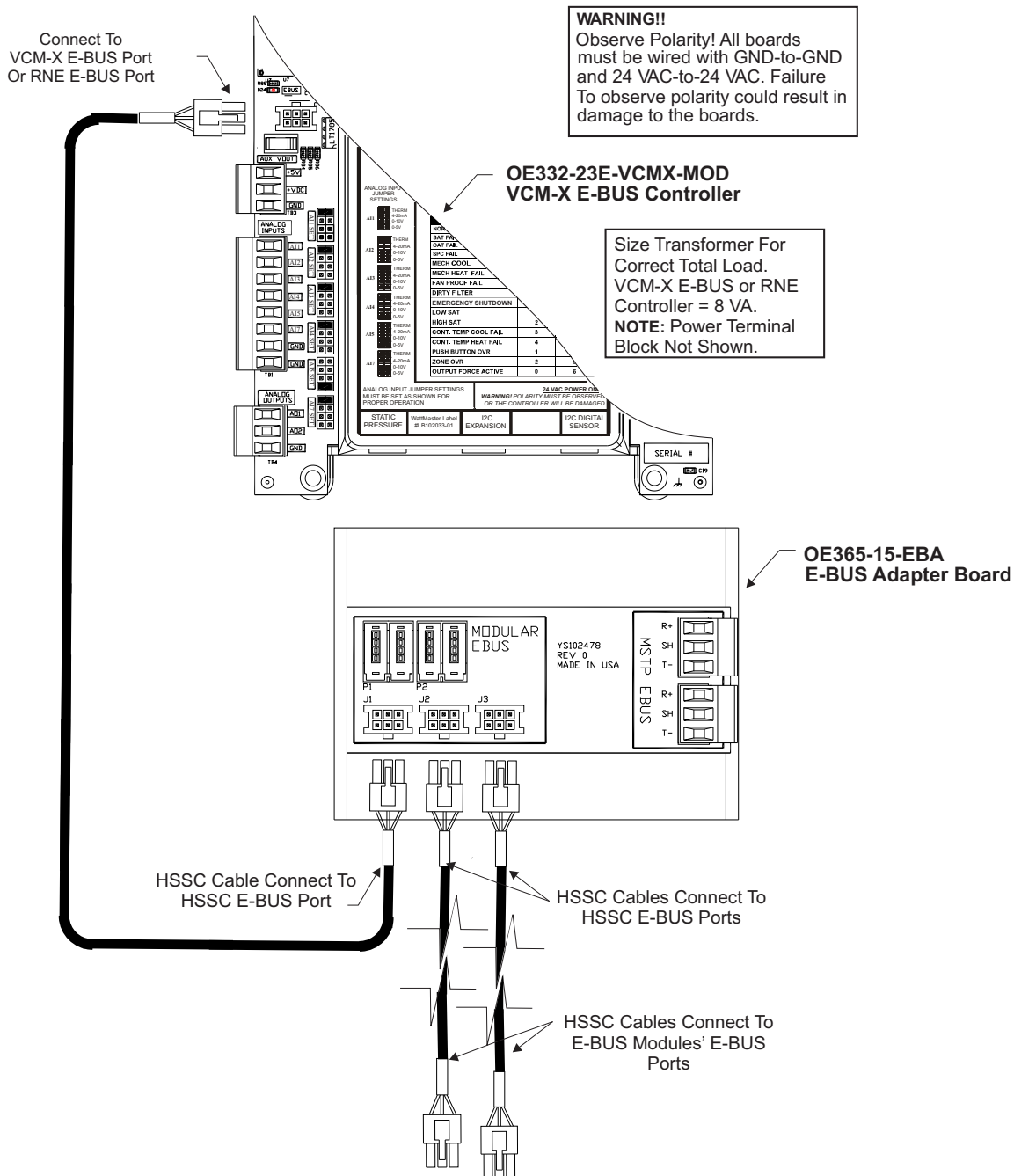
## E-BUS Modules to VCM-X E-BUS or RNE Controller Wiring

### Connecting Multiple E-BUS Modules to the VCM-X E-BUS or RNE Controller

If using multiple E-BUS Modules, the E-BUS Adapter Board can be used when the one HSSC E-BUS port on the VCM-X E-BUS or RNE Controller is not enough.

Up to (2) E-BUS Modules can be connected to the E-BUS Adapter Board's HSSC E-BUS ports. The Unit Controller connects to the third HSSC E-BUS port on the E-BUS Adapter Board.

See **Figure 2** below for details when connecting multiple E-BUS Modules to a VCM-X E-BUS Controller or RNE Controller.



**Figure 2: Multiple E-BUS Modules Wiring to Unit Controller Using the E-BUS Adapter (VCM-X E-BUS Controller Shown)**

## Airflow Monitoring Station to VCM-X E-BUS or RNE Controller Wiring

### Connecting to the VCM-X E-BUS or RNE Controller

NOTE: Only the EBTRON® GTC116 series\* or GreenTrol™ GA-200-N Module (with GF series Airflow Station) of MODBUS transmitters are compatible with the VCM-X E-BUS or RNE Controller. \*\* No other series of EBTRON® or GreenTrol™ transmitters will work for this application.

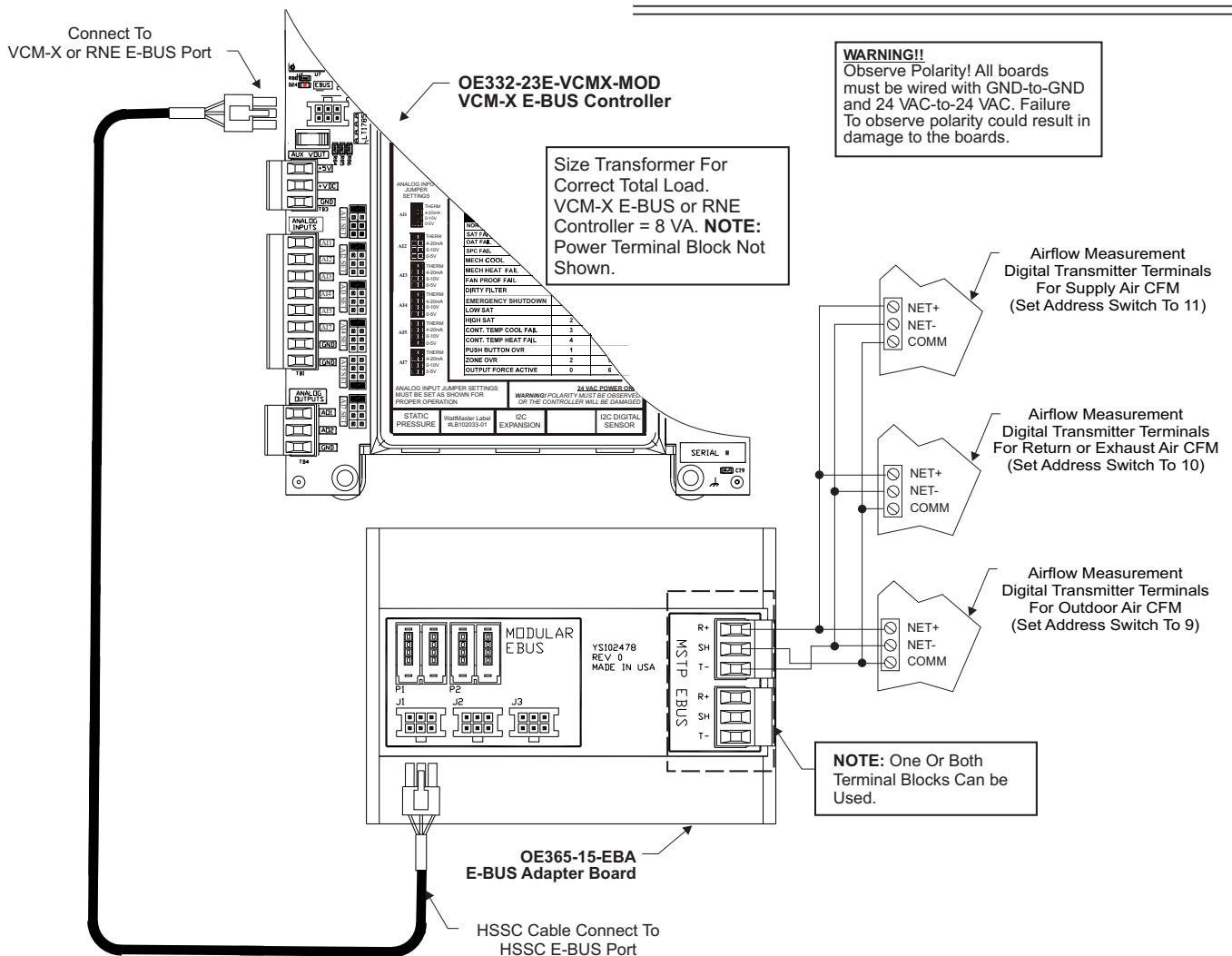
The E-BUS Adapter Board attaches to the VCM-X E-BUS or RNE Controller with an HSSC E-BUS cable (supplied separately). The Adapter Board is used for connecting the EBTRON® or GreenTrol™ Airflow Measurement Digital Transmitter to the VCM-X E-BUS or RNE Controller. You must wire the EBTRON® or GreenTrol™

Airflow Measurement Digital Transmitter to the Adapter Board as shown in **Figure 3**.

NOTE: Up to 3 EBTRON® or GreenTrol™ Airflow Measurement Digital Transmitters can be attached to each Adapter Board.

\*NOTE: When configuring the GTC-116 Series, be sure to set the Parity to "NO PARITY, 1 STOP BIT."

\*\* NOTE: With custom VCM-X/RNE software, Paragon Micro-Trans<sup>EQ</sup> Airflow Stations can be used and would wire into the E-BUS Adapter Board the same way. The Paragon MODBUS ID must be set to 9 and the baud rate must be set to 9600.



**Figure 3: EBTRON® GTC116 Series and GreenTrol™ GA-200-N Series to VCM-X E-BUS or RNE Controller Wiring (VCM-X E-BUS Controller Shown)**

# E-BUS Adapter Board

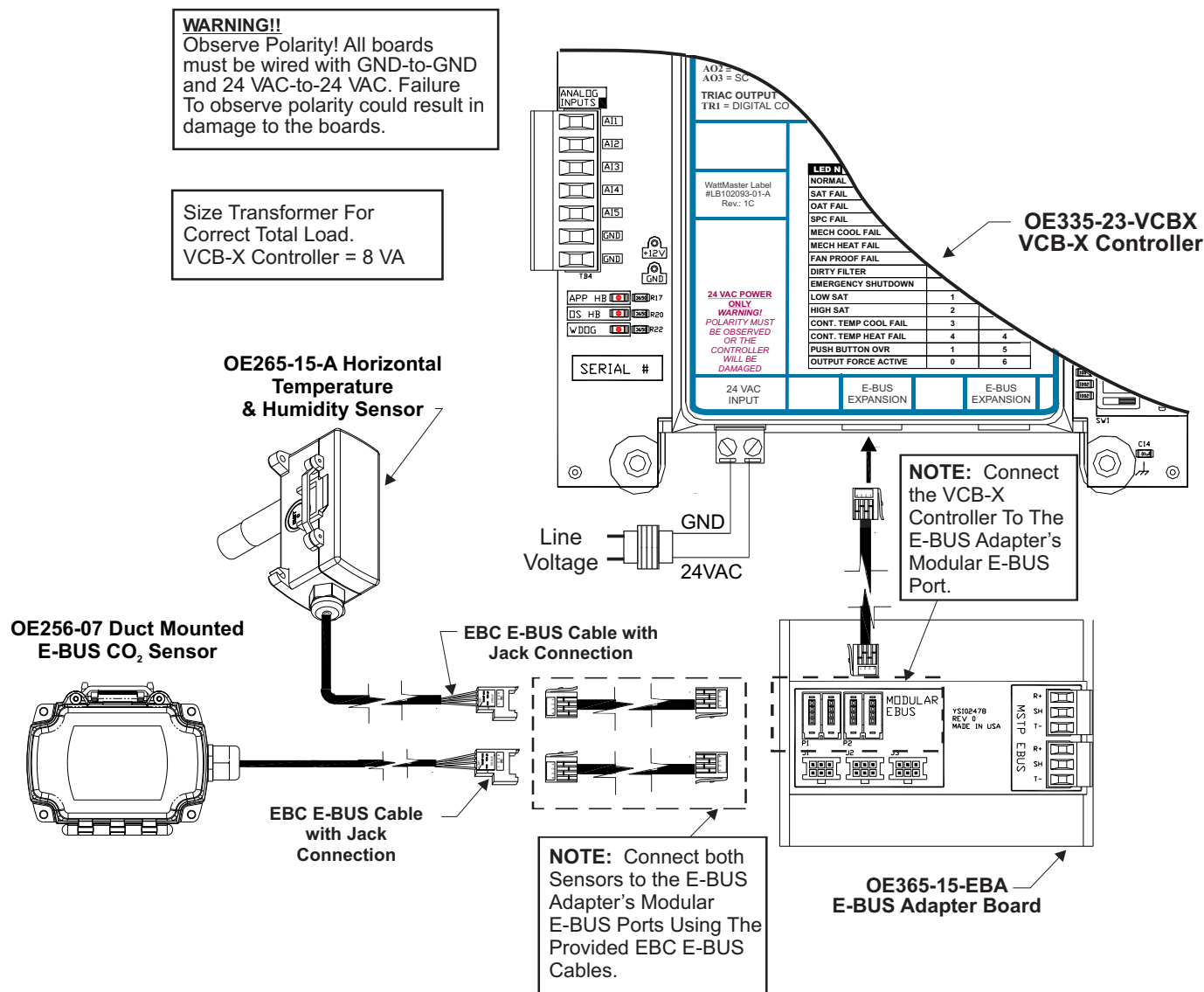
## E-BUS Modules and/or Sensors to VCB-X Controller Wiring

### Connecting Multiple E-BUS Modules and/or Sensors to the VCB-X Controller

If using multiple E-BUS Sensors or Modules, the E-BUS Adapter Board can be used when there are not enough available E-BUS ports on the Unit Controller.

Up to (3) E-BUS Modules or Sensors can be connected to the E-BUS Adapter Board(s) MODBUS E-BUS ports. The VCB-X Controller connects to the fourth MODBUS E-BUS port on the E-BUS Adapter Board.

See **Figure 4** for wiring details when connecting multiple E-BUS modules and/or sensors to the VCB-X Controller.



**Figure 4: Multiple E-BUS Sensors Wiring to VCB-X Controller Using the E-BUS Adapter**

## Airflow Monitoring Station to VCB-X Controller Wiring

### Connecting to the VCB-X Controller

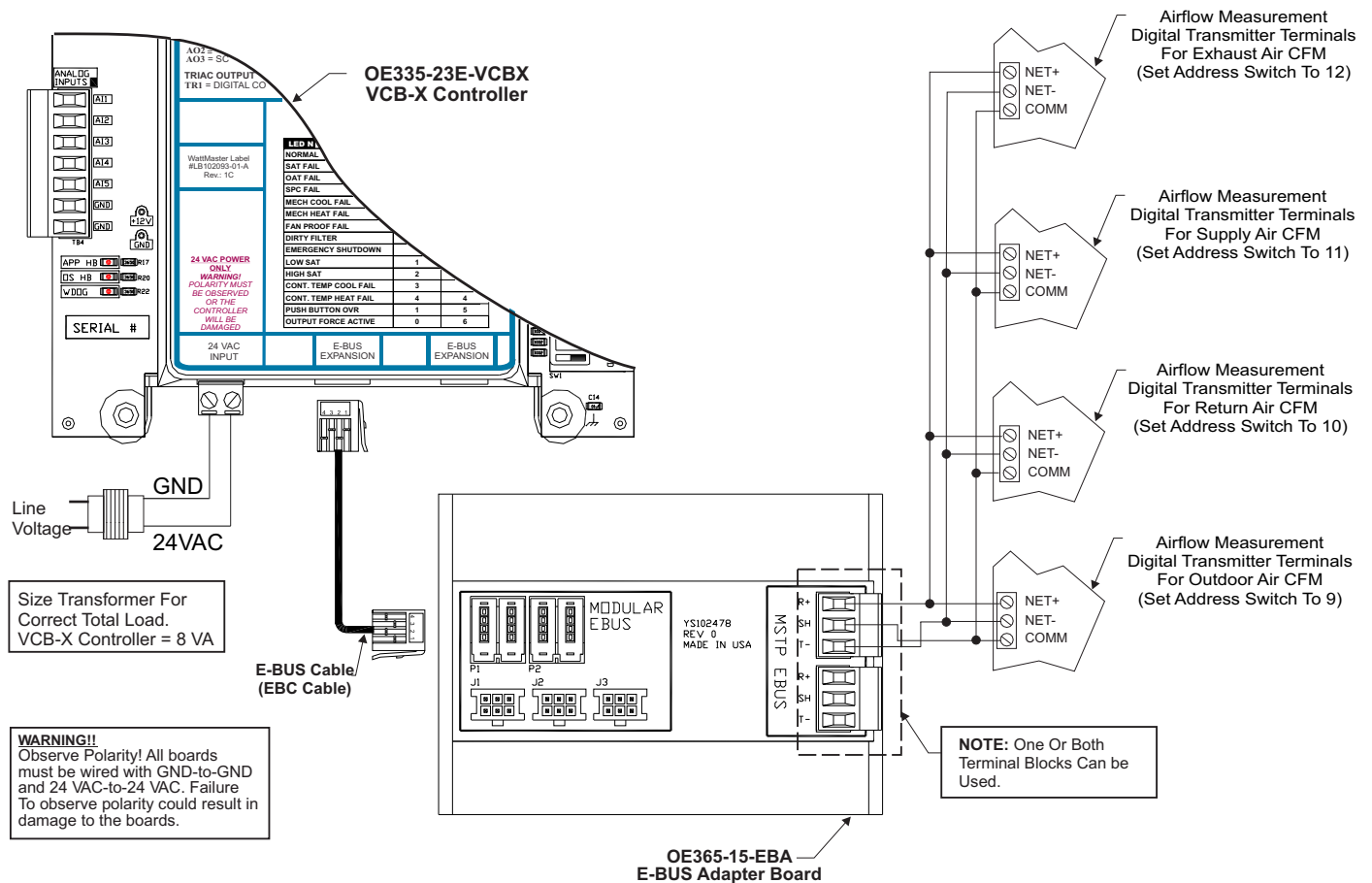
NOTE: Only the EBTRON® GTC116 series, GreenTrol™ GA-200-N Module (with GF series Airflow Station) or Paragon MicroTrans<sup>EQ</sup> series of MODBUS transmitters are compatible with the VCB-X Controller. No other series of EBTRON®, GreenTrol™, or Paragon transmitters will work for this application. **Contact WattMaster Controls for information on other airflow station options.**

The E-BUS Adapter Board attaches to the VCB-X Controller with an EBC E-BUS cable (supplied separately). The Adapter Board is used for connecting the EBTRON® or GreenTrol™, or Paragon Airflow Measurement Digital Transmitter to the VCB-X Control System. You must wire the EBTRON®, GreenTrol™, or Paragon Airflow Measurement Digital Transmitter to the Adapter Board as shown in **Figure 5**.

NOTE: Up to 4 EBTRON®, GreenTrol™, or Paragon Airflow Measurement Digital Transmitters can be attached to each Adapter Board.

NOTE: If using multiple E-BUS Sensors or Modules, the E-BUS Hub (HZ-EBC-248 or MS000248) may be required.

\*NOTE: When configuring the GTC-116 Series, be sure to set the Parity to "NO PARITY, 1 STOP BIT."



**Figure 5: EBTRON® GTC116 Series, GreenTrol™ GA-200-N Series, and Paragon MicroTrans<sup>EQ</sup> Series Wiring**



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WattMaster Controls Inc. • 8500 NW River Park Drive • Parkville, MO • 64152  
Phone: 866-918-1100      [www.orioncontrols.com](http://www.orioncontrols.com)      Fax (816) 505-1101

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