Input Extension AEI-4UI

The AEI-4UI is an accessory for X2 controllers to extend 4 physical inputs. Each input may be setup through jumpers as input for a passive temperature sensor (NTC10kΩ), a 0…10 VDC or 0…20 mA signal.
The AEI-4UI is connected to the X2 controller through the OP-bus connection. Should an operation terminal be required, it must then be removed from the X2 controller and plugged instead into the AEI-4UI.
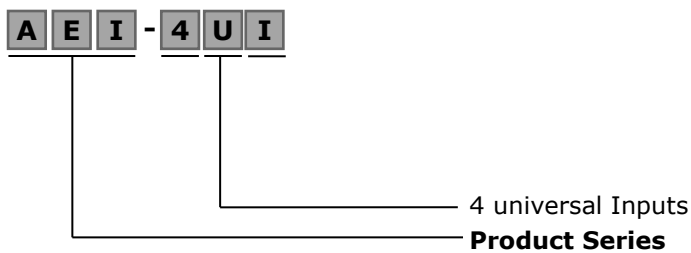
Applications
- Air Handling Unit (AHU)
- Input extension for any X2 controller

Functions
- 4 additional universal inputs
- suitable for devices with X2 operating system
- no additional power supply necessary, as this is provided directly by the controller

Name

| A | E | I | - | 4 | U | I |

———— 4 universal Inputs
———— **Product Series**

Types and Ordering

| Product Name	Product No.	Description
AEI-4UI	40-50-0138	Input extension for X2 operating system

Technical specifications

Important safety instructions

This device serves as an accessory to a universal control device. It's not a safety device! If equipment failure endangers people's lives and/or property, it is the responsibility of the customer, installer and system integrator to add additional safety devices to prevent a system failure caused by such equipment failure. Failure to comply with specifications and local regulations may result in damage to equipment and endanger life and property. Tampering with the device and improper use will void the warranty.

Power supply	Power requirements	Power supplied by X2 controller
	Power consumption	Max.0.35W
	Terminal connectors	For wire 0.34…2.5 mm2 (AWG 24…12)
Signal inputs	Universal input Input signal Resolution Impedance	Input jumper set for voltage or current 0…10 V or 0…20 mA 9.76 mV or 0.019 mA (10 bit) Voltage: 74.8kΩ Current: 158Ω
	Passive input Type & range	Input jumper set to temperature (RT) or digital input (DI) NTC (Sxx-Tn10): -40…140 °C (-40…284 °F)
Environment	Operation Climatic conditions Temperature Humidity Mechanical conditions	To IEC 721-3-3 class 3 K5 0…50 °C (32…122 °F) <95 % RH non-condensing class 2M2
	Transport & storage Climatic conditions Temperature Humidity Mechanical conditions	To IEC 721-3-2 and IEC 721-3-1 class 3 K3 and class 1 K3 -25…70 °C (-13…158 °F) <95 % RH non-condensing class 2M2
Standards	Degree of protection	IP30 to EN 60 529
	Pollution class	II (EN 60 730-1)
	Safety class: local regulations must be observed!	III (IEC 60536)
General	Material	Fire proof ABS plastic (UL94 class V-0)
	Dimensions (H x W x D)	60 x 93 x 115 mm (1.18 x 3.66 x 3.66 inch)
	Weight (including package)	240 g (8.1 oz.)

Product testing and certification

CE Declaration of conformity
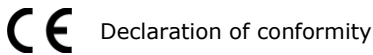
Information about the conformity of our products can be found on our website www.vectorcontrols.com on the corresponding product page under "Downloads".
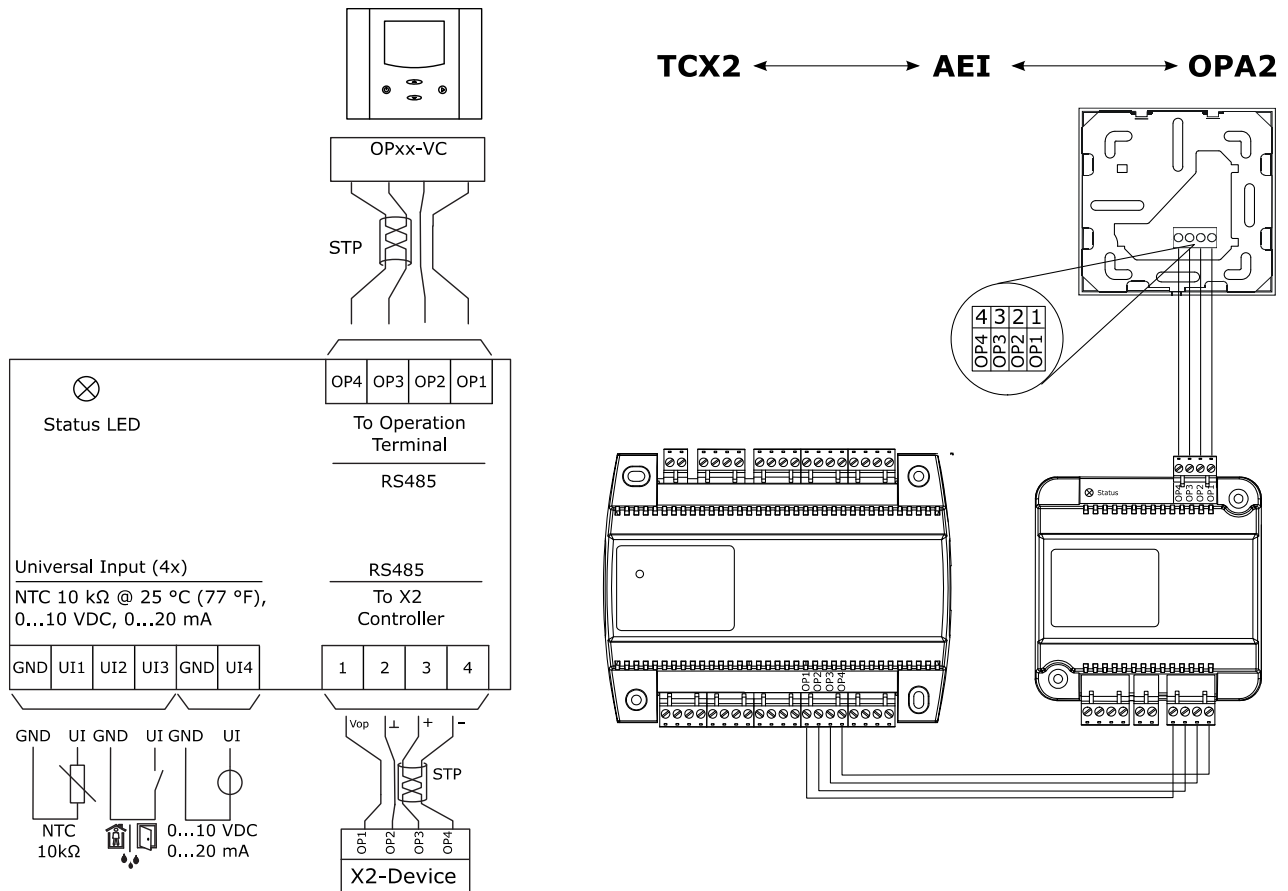
Dimension, mm (inch)
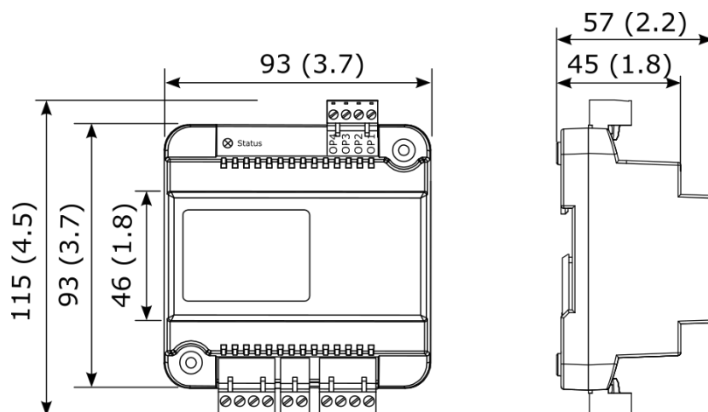
Installation

See installation sheet no. 70-000724 (www.vectorcontrols.com).

Connection diagram

TCX2 ⟷ AEI ⟷ OPA2

Configuration of inputs

The inputs and outputs are configured with jumpers. Jumpers are located underneath the controller.

UI: Selection of universal input type

Left position: voltage input (0…10 V)
factory default

Middle position: current input (0…20 mA)

Right position: RT or dry contact

UI1		
0...10V	0...20mA	RT / DI
∎		

UI: Configuration of Virtual Input (VI) of the X2 Controller

The physical inputs of the AEI are accessed through the virtual inputs of the X2 device. The first virtual input of the X2 device is mapped to the UI1 of the AEI-4UI. The 4th virtual input maps to the UI4 of the AEI-4UI.

The AEI-4UI can only be accessed by X2 devices running firmware version V1.5 and up.

The "signal type" of the virtual input has to be set to:

- 0xu0 = 4: AEI-4UI

The type of the virtual input has to be set to:

- 0xu5 = 1: 0-10V / 0-20mA
- 0xu5 = 2: 2-10V / 4-20mA
- 0xu5 = 3: NTC

LED-indicators

A status LED is located on the upper left side of the housing. During normal operation the LED blinks briefly once every 5 seconds. If there is an alarm or fault condition it will blink every second.

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