



Sistemas de Control  
Edificios inteligentes

## **Universal Controller 33UNIVCTRL-01**



### **Guía de Instalación**

Brindamos soluciones tecnológicas de calidad.  
Contribuimos a desarrollar y mejorar los sistemas para operación de edificios existentes.  
Mejoramos soluciones desarrolladas incorporando nuevas tecnologías y procesos de manera continua.

**EXPERTOS EN CONTROLES**

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**Vidal 4819 PB**  
**C1429AIM - Ciudad Autónoma de Buenos Aires**

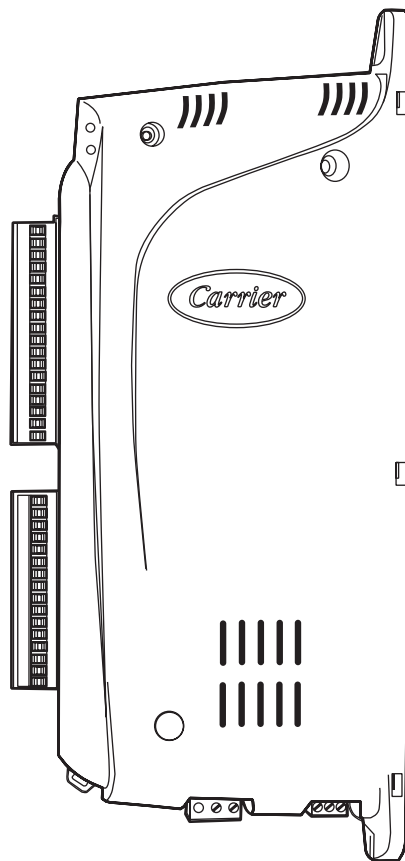
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# Product Specification

# Universal Controller

Part Number: 33UNIVCTRL-01



The Universal Controller (part number 33UNIVCTRL-01) provides auxiliary building control to interface with lighting, fans, pumps and other HVAC equipment in a stand-alone or Carrier-networked environment using closed-loop, direct digital controls. The Universal Controller's pre-engineered algorithms provide simple building integration for small-to-medium commercial applications with 16 field point capability (8 inputs and 8 outputs).

## → Features/Benefits

- Integrates auxiliary building system control.
- Controls non-Carrier equipment and Carrier HVAC equipment not equipped with Product Integrated Controls, using the Carrier communicating network.
- Compatible with all standard Carrier network user interfaces.
- Stand-alone control and monitoring of up to 16 field points, using proven algorithms.
- Two LEDs, conveniently located on the front of the module, indicate processor status (red) and communication bus status (yellow).
- Local connection for Carrier network.
- Three-day backup of clock and data such as Runtime and Consumable.
- Batteries are not required.

## Functions

- Constant Volume (CV) Cooling and Heating Control
- Dehumidification
- CV Mixed Air Damper Optimization
- Fan Control
- Pump Control
- Lighting Control
- Indoor Air Quality

# Features/Benefits (cont)



- Generic PID Control
- Time Scheduling with/without Override
- Analog Temperature Control
- Discrete Interlock
- Discrete Staging Control
- Permissive Interlock
- Nighttime Free Cooling
- Set Point Reset
- Optimal Start/Stop
- Linkage to airside systems

## 8 inputs

- Each input (1 to 8) can be used as a discrete, analog, or temperature input
- Discrete inputs can be dry contact or pulsed dry contact
- Analog inputs can be 4 to 20 mA or 0 to 10 vdc
- Temperature inputs can be 5K or 10K ohm thermistors

## 8 outputs

- Each output (1 to 8) can be discrete or analog
- Discrete outputs are 24 vdc at 80 mA
- Analog outputs are 4 to 20 mA or 0 to 10 vdc (varies with point type)

# Specifications

- Power Requirements. . . . . 60 va at 24 vac ± 15%  
(1.5a at 33 vdc ± 15%)
- Dimensions . . . . . 14-in. H x 6.5-in. W x 2-in. D  
(35.5 cm x 16.5 cm x 5.1 cm)
- Operating Temperature. . . -40 F to 158 F, Outdoor Rated  
(-40 C to 70 C)
- Storage Temperature . . . -40 F to 185 F (-40 C to 85 C)
- Operating Humidity . . . . . 10 to 95%, non-condensing

## → Discrete output specifications

Output Signal. . . . . 24 vdc at 80 mA

## Analog output specifications

4 to 20 mA Type

Load Resistance . . . . . 500 to 600 ohms  
 Resolution . . . . . 0.04 mA  
 Accuracy . . . . . ±2%

0 to 10 vdc Type (varies with point type)

Load Resistance . . . . . 50 ohms  
 Resolution . . . . . 20 mV  
 Accuracy . . . . . ±2%

## Discrete input specifications

Dry Contacts . . . . . Switch Closure  
 Pulsing Dry Contacts  
 Repetition Rate . . . . . 5 Hz max.  
 Minimum Pulse Width . . . . . 100 msec

## Carrier network features

When included in a network with other network controllers, Option Modules, and user interfaces, the following additional capabilities are possible:

- Alarm processing, messages, and annunciation
- Runtime, history, and consumable data collection and report generation
- Demand limiting
- Broadcast of data such as outside-air temperature, outside air humidity, and time of day
- Timed overrides for use with Tenant Billing
- Airside linkage

## → Enclosure and power supply

The Universal Controller is designed so that it can be easily installed in a field-supplied enclosure (not outdoor rated). The Universal Controller uses any standard, Class II, SELV-compatible, field-supplied 24 vac, 60 va transformer.

## Analog input specifications

4 to 20 mA Type

Wire type. . . . . 2-wire  
 Resolution . . . . . 0.025 mA  
 Accuracy . . . . . ± 1.5%

0 to 10 vdc Type

Resolution . . . . . 0.0125 V  
 Accuracy . . . . . ± 1%

5K Thermistor Type

Nominal reading at 5,000 ohms. . . . . 77 F (25 C)  
 Resolution . . . . . 0.2 F  
 Accuracy . . . . . + 1 F

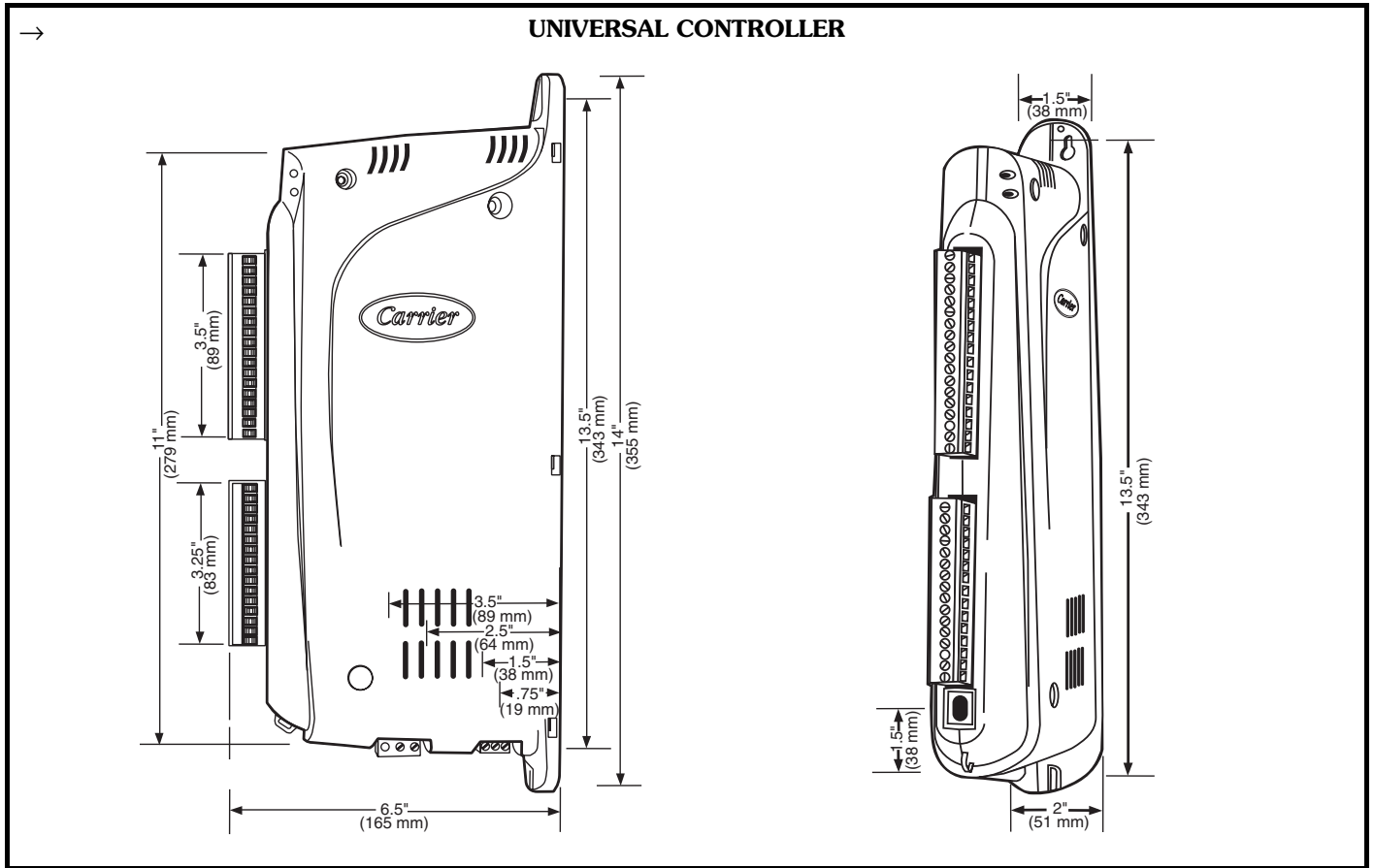
10K Thermistor Type

Nominal reading at 10,000 ohms. . . . . 77 F (25 C)  
 Resolution . . . . . 0.2 F  
 Accuracy . . . . . + 1 F

## Approvals

The Universal Controller is UL 873 and CE Mark Industrial listed.

# Dimensions





Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.



# Anzures

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