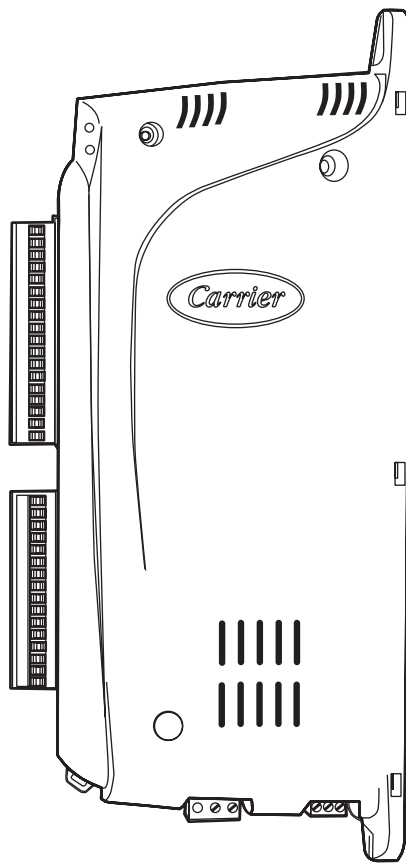




Product Specification

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 \pm 15%
(1.5a at 33 vdc \pm 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 \pm 2%
- 0 to 10 vdc Type (varies with point type)
- Load Resistance 50 ohms
- Resolution 20 mV
- Accuracy \pm 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.

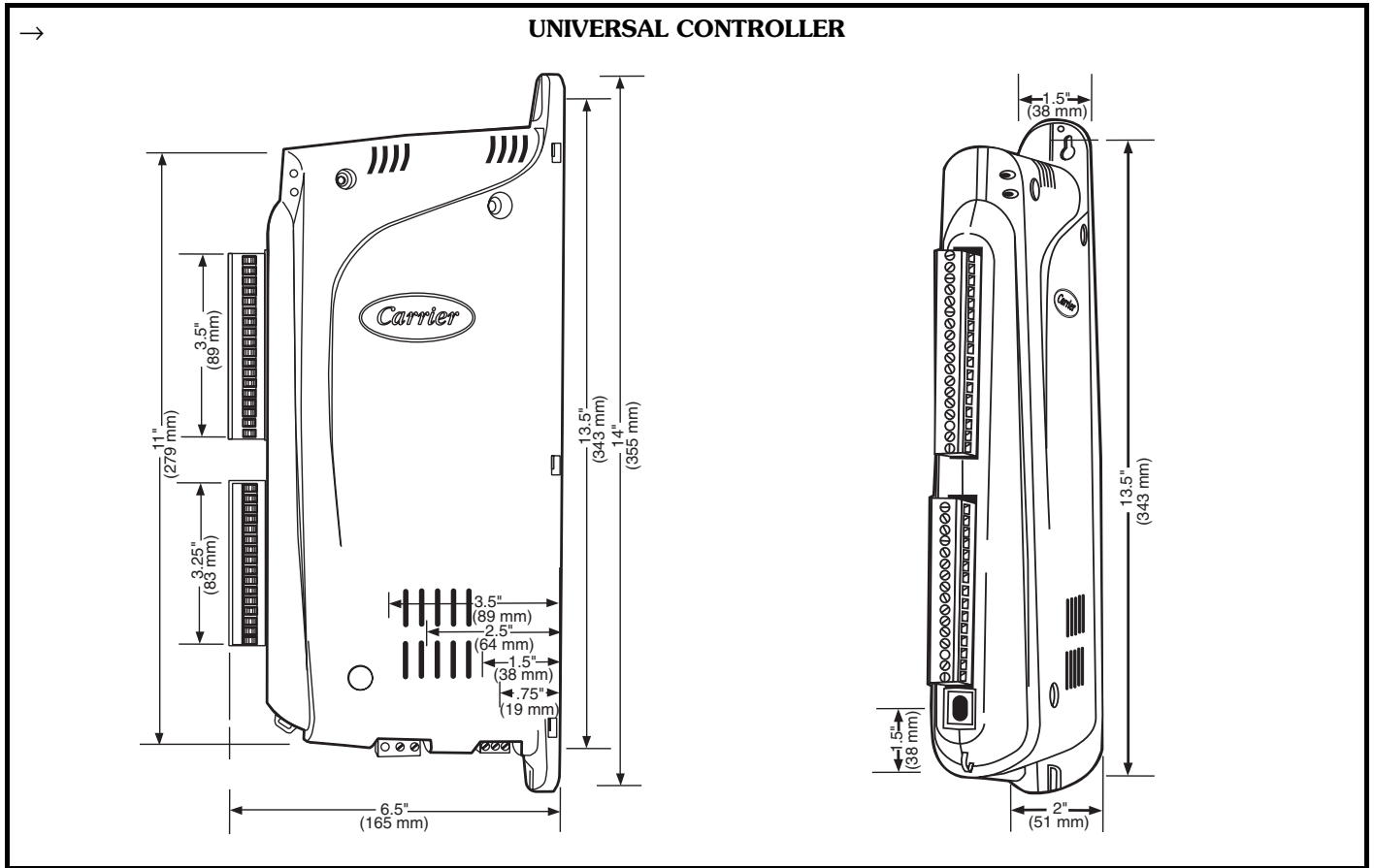
Analog input specifications

- 4 to 20 mA Type
- Wire type. 2-wire
- Resolution 0.025 mA
- Accuracy \pm 1.5%
- 0 to 10 vdc Type
- Resolution 0.0125 V
- Accuracy \pm 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.