



PRODUCT: BCS BASYX RFC

Product Overview

The BASYX RFC controller is a product developed for heat pumps, fan coil units, lighting and other application specific equipment. The RFC may be incorporated into a full direct digital control system with other BASYX controllers through data bus cable connection. An on-board socket allows installation of an optional plug-in module for wireless data bus communications between controllers, eliminating costly installation of hard-wired cables.

The unit provides time-of-day scheduling, temperature control and environmental monitoring along with complete electrical usage control and reporting. The RFC contains all on-board firmware, clock and memory for complete stand-alone operation, and does not rely on a central system controller for operation.

The RFC controller contains five (5) SPDT relay outputs for binary control, each with a Hand-Off-Auto jumper for local control, four (4) universal inputs for analog or binary contact monitoring, and two (2) digital meter inputs. In addition, four (4) on-board analog outputs allow control of 0-10vdc dampers, valves or other analog devices.

An on-board USB connection provides direct interface with the RFC, and allows full system communications when interconnected with additional BASYX controllers through the wireless bus or a twisted pair cable, with a maximum system configuration of 256 controllers.

The BASYX system is maintained and monitored through a Windows based interface program, providing total system interrogation, programming and report generation.



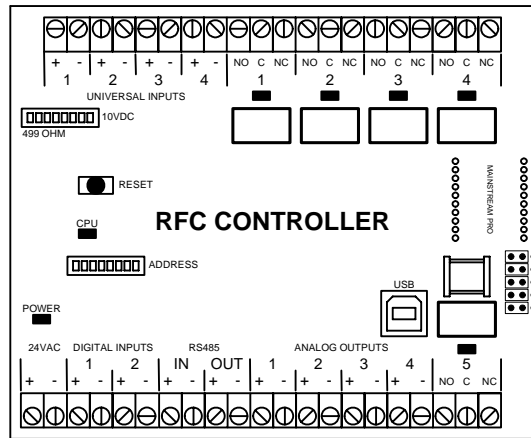
Features

- "Stand-alone" operation requires no central controller for system operation.
- Time-of-day schedules resident in each controller with an on-board clock, implemented through simple setup screens.
- Form C SPDT relays with HOA jumpers allow local control of board outputs for testing or emergency operation.
- Simple programming for heat pumps, rooftop units, lighting and other applications.
- Time schedule control of lighting or additional building systems.
- Monitoring of up to two (2) digital pulse meters, with load management and historical reporting.
- Windows program provides simple system setup and programming.
- Direct connection of laptop through USB port.
- Program integrity through battery backed-up RAM – Retains system programming with power off.
- System total configuration of 256 controllers allows projects exceeding 6,100 points.
- Controller network length of 4000 feet.
- 24vac power reduces installation cost.
- Snap-Track mounting.
- Complete logic and global capabilities.

Options

- IEEE 802.15.4 RF Plug-in module for wireless data bus communications
- IEEE 802.15.4 RF Modem for direct communications through laptop

Controller Details



View of RFC Controller

Specifications

Communication: EIA RS-485 at 57.6K baud on 18AWG shielded, plenum rated cable (Recommended Belden 6300FE or equivalent)
Optional IEEE 802.15.4 Wireless 2.4 Ghz bus up to 300' indoor between controllers

Power Requirements: Voltage: 24VAC (-10% / 5%), 50/60/Hz
Current: 3.2VA
Recommend 7VA transformer sizing for AC power

Universal Inputs: (4) Universal inputs

Thermistor	10,000 ohm type II material
0-10vdc	>/= 100 ohm input impedance
0-20ma	</= 500 ohm input impedance
Resistance	0-10,000 ohms
Dry contact	>/= 50ms timing

Digital Inputs: (2) Meter inputs Dry contact >/= 50ms timing

Digital Outputs: (5) Dry contacts SPDT pilot duty rated 1 amp at 24VAC/24VDC

Analog Outputs: (4) 0-10VDC >/= 1K ohm drive impedance

Ports: RS-485 communications bus
IEEE 802.15.4 Wireless module socket
USB direct connect port

Environmental Limits: Temperature: 32°F to 125°F.
Humidity (non-condensing): 95%

Enclosure/Mounting: 4" Snap-track mounting channel

UL Listing: ANSI/UL 916 Pending

Dimensions: 5.0"W x 4.0"H x 1.25"D

Shipping Weight: Approximately 0.75 lbs.