

The BAC-7401 and BAC-7401C are native BACnet, fully programmable, controllers designed for heat pump unit applications. Use these versatile controllers in stand-alone environments or networked to other BACnet devices. As part of a complete facilities management system, the BAC-7401 and BAC-7401C controllers provide precise monitoring and control of connected points.

- ◆ BACnet MS/TP compliant
- ◆ Supplied with programming sequences for heat pump units
- ◆ Easy to install, simple to configure, and intuitive to program
- ◆ Controls compressor, fan, reversing valve and optional auxiliary heating



Specifications

Inputs

- ◆ 4 universal inputs each of which is programmable as an analog, binary or accumulator object. Accumulators limited to three in one controller.
- ◆ Standard units of measure
- ◆ Pull-up resistors for switch contacts and other unpowered equipment. Switch select none or 10k Ω
- ◆ Removable screw terminal block, wire size 14–22 AWG
- ◆ 10-bit analog-to-digital conversion
- ◆ Pulse counting to 16 Hz
- ◆ 0–5 volts DC analog input range
- ◆ Overvoltage input protection
- ◆ Compatible with KMD-1161 and KMD-1181 NetSensors

Triac Outputs,

- ◆ 4 Optically isolated triac outputs.
- ◆ Maximum switching 30 volts AC at 1 ampere
- ◆ Removable screw terminal block, wire size 14–22 AWG

Supplied application programs

KMC Controls supplies the BAC-7401 controllers with programming sequences for heat pump units:

- ◆ Setpoints and changeover based on occupancy
- ◆ Compressor, reversing valve and fan operation
- ◆ Auxiliary heat control

Programmable features

- ◆ 10 Control Basic program areas
- ◆ 40 analog and 40 binary value objects
- ◆ 4 PID loop objects
- ◆ Real time clock with power backup for 72 hours (BAC-7401C only)
- ◆ See PIC statement for supported BACnet objects

Schedules

- ◆ 8 Schedule objects
- ◆ 3 Calendar object

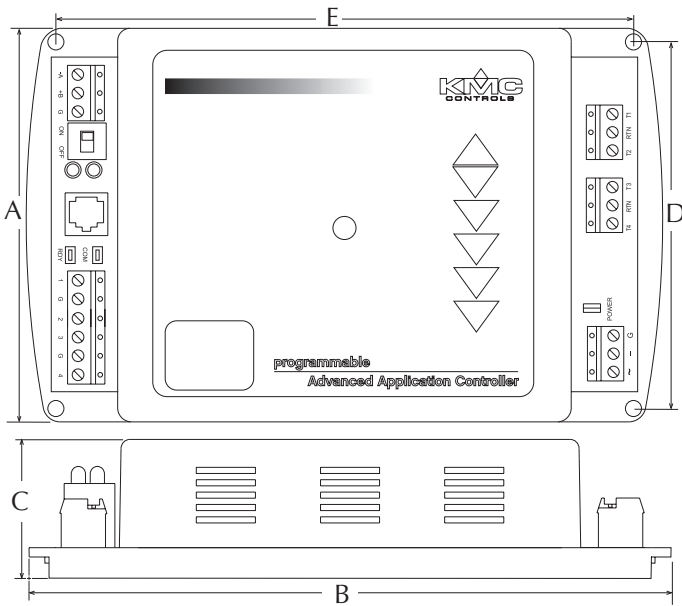
Alarms and events

- ◆ Supports intrinsic reporting
- ◆ 8 Notification class objects

Trends

- ◆ 8 Trend objects

Dimensions



A	B	C	D	E
3.31 in.	6.79 in.	1.42 in.	4.00 in.	6.00 in.
84 mm	172 mm	36 mm	102 mm	152 mm

Specifications (continued)

Memory

- ◆ Programs and program parameters are stored in nonvolatile memory.
- ◆ Auto restart on power failure

Communications

- ◆ EIA-485 operating up to 76.8 kilobaud
- ◆ NetSensor compatible through RJ-12 connector

Installation

Supply voltage	24 VAC, -15%, +20% 25 VA
Weight	3.5 ounces (99 g)
Case material	Black flame retardant polymer, UL94-5V plenum rated

Regulatory

- ◆ UL 916 Energy Management Equipment
- ◆ FCC Class A, Part 15, Subpart B
- ◆ BACnet Testing Laboratory listed

Environmental limits

Operating	32 to 120° F (0 to 49° C)
Shipping	-40 to 140° F (-40 to 60° C)
Humidity	0 to 95% relative humidity (non-condensing)

Software compatibility

Requires BACstage 2.1 or a later version for configuration and programming.

Options and Accessories

Power transformer

XEE-6111-40	Single-hub 120 volt transformer
XEE-6112-40	Dual-hub 120 volt transformer

Models

BAC-7401C	BACnet controller with real-time clock
BAC-7401	BACnet controller without real-time clock

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