

Product Data



A180277



A180218B

NOTE: Evolution® Connex™ Control compatible with Evolution® rated indoor equipment only.

US Patents: Carrier® U.S. Pat No. 7,243,004, Carrier® U.S. Pat No. 7,775,452, pointSET™ U.S. Pat No. 7,415,102

EVOLUTION® CONNEX™ CONTROL

Bryant® specializes in creating a customized home comfort system tailored to your needs with our broad selection of residential heating and cooling products. The Evolution® Connex™ Control is the ultimate control center for all of your system components. When you add an Evolution® Connex™ Control to a compatible variable speed furnace, fan coil, Evolution® System split or package unit, or small packaged product, you will enjoy longer heating and cooling cycles at lower fan speeds for a more consistent temperature throughout your home. By adding a variable speed, multi-stage, or 2-stage outdoor unit, you will enjoy extra benefits which include better humidity and temperature control as well as a more energy efficient comfort system. When paired with Evolution® Zoning controls, the Evolution® Connex™ Control allows you to create up to 8 zones of customized comfort.

The Evolution® Zoning system does not require a bypass damper, leaving air temperature (LAT) sensor, or field-installed power transformer.

Always install the latest version of software to enable all features of the system.

Over-the-Air software updates for Wi-Fi models connected to the Evolution server are automatically downloaded. Software updates via MicroSD are available on HVACpartners, or at www.MyEvolutionConnex.com.

Wi-Fi® is a registered trademark of Wi-Fi Alliance Corporation.
Amazon Alexa is a trademark of Amazon, Inc. or its affiliates.

INDUSTRY LEADING FEATURES/BENEFITS

Bryant's revolutionary Evolution® Connex™ Control is the smart control of the future. Its unique system self-configuration and diagnostics capabilities make installation and service fast and accurate, helping to avoid costly call-backs. The Evolution® Connex™ Control features a high resolution display, making it easier to read. Intuitive prompts let you program everything from humidity levels to fan speeds, giving you the ultimate control over your home comfort. Other features include:

- 4-wire installation from each major component in the system
- 2-wire connection to Evolution® System two or more-stage outdoor equipment (including geothermal split units)
- Evolution® Zoning System compatibility
- Occupancy sensing to provide comfort when spaces are occupied and energy savings when they're not
- Intuitive on-screen prompts for ease of installation and service
- *Perfect Humidity™ System* settings are the default no longer requiring increased system setup
- Complete integration of the temperature, humidity and ventilation in every season
- For Zoned Systems, auto mode selection to satisfy simultaneous heating and cooling demands in different zones via more aggressive Auto Changeover algorithm--installer must enable
- 7-day programmability with Lifestyle Comfort Profiles and Touch-N-Go® features; complies with California Title 24 programmability requirements
- Easy timed-override schedule
- Simplified vacation schedules
- Day-at-a-glance programming for simplified ease of use
- Programmable fan by period
- TrueSense™ Dirty Filter Detection
- Indoor Air Quality pop up service reminders
- General maintenance reminder messaging
- Wi-Fi® remote access capability
- Upload photo, dealer info, and software updates locally via MicroSD card. Software updates available automatically when connected to the Evolution web server.
- Compatible with home automation through the SYSTXBBRCT01 or SYSTXBBRWF01 system access modules, or via the Côt Home automation app or Amazon™ Alexa™ interface
- Compatible with Evolution® System geothermal products (GC and GZ models). Energy Tracking feature for geothermal systems is available with Entering Water Temperature sensor installed in heat pump.

MODEL NUMBER NOMENCLATURE

1 2 3 4 5 6 7 8 9 10 11 12 13 14
S Y S T X B B E C C 0 1 - B

Product Type
 Evolution® System

Version
 B

Brand / Product
 BB = Bryant
 XX or NN = No Brand

Packaged Quantity
 01

Model Type

ECC – Black Evolution® Connex™ Control with Wi-Fi® capability
 WEC – White Evolution® Connex™ Control with Wi-Fi® capability
 ECF – Black Evolution® Connex™ Control with Wi-Fi® capability (French Literature)
 WEF – White Evolution® Connex™ Control with Wi-Fi® capability (French Literature)

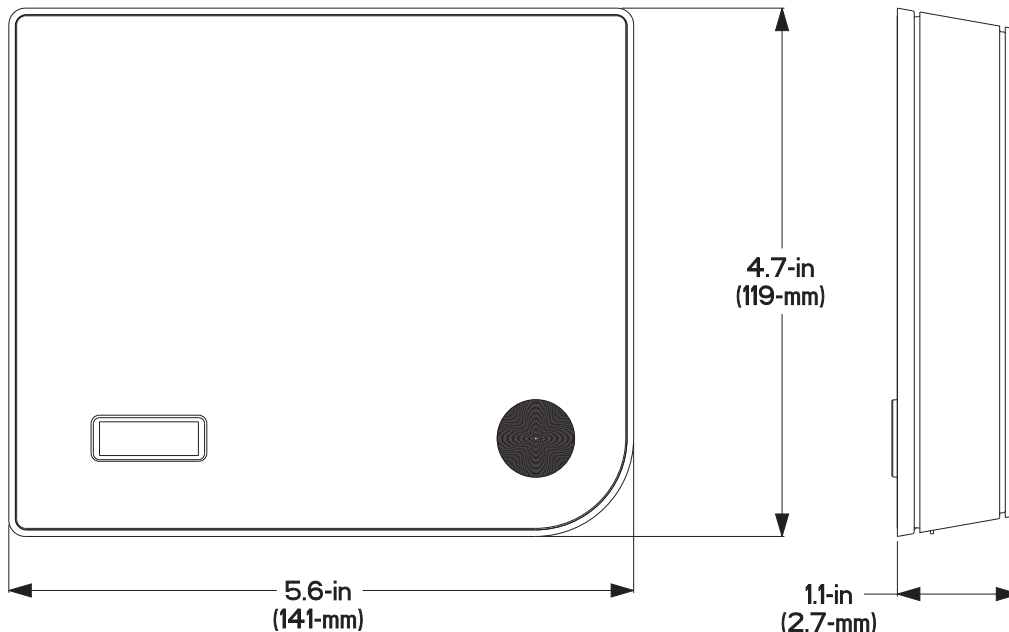


Fig. 1 - Unit Dimensions

A170101

PRODUCT DATA INFORMATION

Compatible Communicating Products

Compatible with most Evolution® System indoor and outdoor equipment built since 2004; see equipment specifications for details.

Home Automation System Interface

A cloud-to-cloud Open API (Application Program Interface) is available for ECC and ECW model Evolution Connex™ Controls. See the Evolution Systems Open API Getting Started Guide available on HVACpartners.com or contact EvolutionOpenAPI@bryant.com for more information.

The Evolution® Connex™ control may also connect to a variety of Home Automation systems. Note that not all Home Automation systems may be compatible. Reference the latest version of the Application Specification titled “SAM Remote Access Application Specification,” available on HVACpartners.com to learn more. Work with the home automation supplier to see if the systems are compatible. If not, you may provide the “Evolution System Open API Getting Started Guide” or the “SAM Remote Access Application Specification” to the home automation supplier to develop an interface with the Evolution® Connex™ system. Always be sure to obtain the latest version of the application specification from HVACpartners, as we continually update and add home automation interfaces.

NOTE: The ability to remotely access and adjust the settings of the Evolution® Connex™ Control with the MyEvolution web and mobile applications or other system interfaces is dependent on the compatibility of the user’s computer, home network, and/or mobile device, the Evolution® Connex™ Control and/or the MyEvolution web server or other system interfaces with, and the availability of, the user’s Internet service provider or mobile device carrier service. Bryant Heating and Cooling Systems makes no representations or warranties, express or implied, including, to the extent permitted by applicable law, any implied, including, to the extent permitted by applicable law, any implied warranty of merchantability or fitness for a particular purpose or use, about the compatibility of the user’s computer, home network, and/or mobile device, with the Evolution® Connex™ Control, and/or the MyEvolution web server or other system interfaces, with, and the availability of the user’s Internet service provider or mobile device carrier service, or that the ability to remotely access and adjust the settings of the Evolution® Connex™ Control will not be negatively affected by the network - related modifications, upgrades, or similar activity of the user’s Internet service provider or mobile device carrier service.

Physical Characteristics

Dimensions: See drawing

Appearance: Black glass front, silver plastic body

Electrical Characteristics/Communication

Input Volt 24VAC

Each device in the Evolution® System has a four-pin connector labeled ABCD. It is recommended that the following color code be used when wiring each device:

- A — Green = Data A+
- B — Yellow = Data B-
- C — White = 24VAC (Com)
- D — Red = 24VAC (Hot)

Always verify that the IDU and ODU are well-grounded, and that there are less than 10 volts AC/DC as measured between the cabinets of the IDU and ODU, while the

equipment is operating at full capacity. If there is a larger voltage difference between the cabinets of the IDU and ODU, recheck the equipment grounding.

Environmental Requirements:

Operating Temperature/Relative Humidity:

User interface and all sensors: 32°F to 104°F / 0°C to 40°C, 95% RH non-condensing

Storage Temperature/Relative Humidity:

User interface: - 40°F to 134°F / -40°C to 56.7°C, 95% RH non-condensing

Feature Specifications:

- Temperature set point range: 50°F to 90°F / 10.0°C to 32.0°C
- Separate heat and cool setpoints
- Programming days: 7 day
- Programming periods: Up to 5 periods per day
 - Advanced Smart Setback (with programming)
 - Touch-N-Go® feature
- Occupancy sensing
- Non-Programmable (installer selectable)
- Auto Changeover* (may be disabled)
- Simultaneous Heat Cool Demand Algorithm for zoned systems
- Programmable fan (installer selectable)
- Humidity Sensor Offsets
- Auto Changeover Timer (installer adjustable)
- Smart Recovery (in heating and cooling)
- Hold function
- Copy functions: copy day of week; copy zones
- Permanent memory
- Humidity display and control
- Temperature sensor offsets (indoor and outdoor)
- TrueSense™ Dirty Filter Detection with compatible indoor equipment

* See Installation Instructions for details on Auto Changeover and Simultaneous Heat/Cool Demand Algorithm operation.

Wiring Requirements:

Power supply: 24VAC, 40 VA (minimum), 60 Hz, via indoor equipment ABCD Connector. Zoning systems with a large number of dampers, especially multiple dampers per zone, may require a separate, dedicated, field-installed 24VAC power supply. The SAM module requires an independent, isolated, field-supplied 24VAC power supply.

Wiring material: Standard thermostat wire 18 to 22 gauge. Use 18 AWG wiring for wire lengths over 25 feet. Shielded, twisted pair cable for the ABCD communication bus is optional, and may be helpful in electrically noisy environments, or for zoning systems with Smart Sensors.

NIM Requirements:

IDU	NON-COMMUNICATING ODU	NIM REQUIRED?
Furnace	1-stage A/C	No
Furnace	2-stage A/C	Yes
Furnace	1-stage HP	Yes
Furnace	2-stage HP	Yes
Fan Coil	1-stage A/C	No
Fan Coil	2-stage A/C	Yes
Fan Coil	1-stage HP	No
Fan Coil	2-stage HP	Yes

CONTROLS

DESCRIPTION	PART NO.
Evolution® Connex™ Control with Wi-Fi® Remote Access Capability (Black)	SYSTXBBECC01-B
Evolution® Connex™ Control with Wi-Fi® Remote Access Capability (White)	SYSTXBBWEC01-B
Evolution® Connex™ Control with Wi-Fi® Remote Access Capability (Black with French Literature)	SYSTXBBECF01-B
Evolution® Connex™ Control with Wi-Fi® Remote Access Capability (White with French Literature)	SYSTXBBWEF01-B
Evolution® Network Interface Module (NIM)	SYSTXBBNIM01*

- * Required for ventilator control
- * Required for Hybrid Heat applications with non-communicating heat pumps
- * Required for use with 2-stage (non-communicating) AC or HP

ZONING CONTROLS

DESCRIPTION	PART NO.
Evolution® Damper Control Module (4 Zone)	SYSTXBB4ZC01†
Evolution® Smart Sensor**	SYSTXBBSMS01-E

NOTE: Each piece of the zoning equipment is purchased separately allowing for customization of the zoning application.

**Smart Sensor dimensions are 3.375 in. (85mm) side x 4 in. (101 mm) high

† One Damper Control Module for up to 4 zones. A second Damper Control Module is required for zones 5-8.

OPTIONAL ACCESSORIES

DESCRIPTION	PART NO.
Evolution® Remote Room Sensor – Wired (RRS)	SYSTXBBRRS01*
ABCD Equipment Communication Connector (Green Plug; 10 pack)	SYSTXGRPLG10
Decorative Trim Plate – Silver (six pack)	SYSTXNNSBP06
Decorative Trim Plate – White (six pack)	SYSTXNNWBP06
Decorative Trim Plate – Black (six pack)	SYSTXNNBBP06
Decorative Trim Plate – Gray (six pack)	SYSTXNNGBP06
ABCD Equipment Communication Connector (Green Plug; 10 pack)	SYSTXGRPLG10
Outdoor Air Temperature Sensor	TSTATXXSEN01-B
Energy Tracking Kit (EWT) for GC and GZ Geothermal Heat Pumps	KHAGT0101KIT**
Evolution® Remote Access Module, Broadband Cat-5 Wired	SYSTXBBRCT01
Evolution® Remote Access Module, Broadband Wi-Fi® Wireless	SYSTXBBRWF01
Accessory Power Transformer for SAM Modules**	SYSTXNNXFM01**

* Not required, but may be used to remote sense indoor room temperature.

† Backplate dimensions 6.83 in. (173.5 mm) wide X 5.97 in. (151.7 mm) high

** Available from RC/Totaline

DAMPER ACCESSORIES & REPLACEMENT PARTS

DESCRIPTION	PART NO.
45° Actuator for round dampers	DAMPACT45DEG-R
90° Actuator for rectangular dampers	DAMPACT90DEG-R
Damper Control Module 1-amp Fuse	ATO1*

*Available from RC.

ROUND & RECTANGULAR DAMPERS

DESCRIPTION	PART NO.	
Round Dampers	6 in.	DAMPRND06INC-B
	8 in.	DAMPRND08INC-B
	10 in.	DAMPRND10INC-B
	12 in.	DAMPRND12INC-B
	14 in.	DAMPRND14INC-B
	16 in.	DAMPRND16INC-B

Rectangular Dampers	8 in. X 10 in.	DAMPREC08X10-B
	8 in. X 14 in.	DAMPREC08X14-B
	8 in. X 18 in.	DAMPREC08X18-B
	8 in. X 24 in.	DAMPREC08X24-B
	10 in. X 10 in.	DAMPREC10X10-B
	10 in. X 14 in.	DAMPREC10X14-B
	10 in. X 18 in.	DAMPREC10X18-B
	10 in. X 24 in.	DAMPREC10X24-B

SLIP-IN DAMPERS

DESCRIPTION	PART NO.
Side mount, 8 X 8	DAMP SLS08X08-B
Bottom mount, 8 X 8	DAMP SLB08X08-B
Side mount, 8 X 10	DAMP SLS08X10-B
Bottom mount, 8 X 10	DAMP SLB08X10-B
Side mount, 8 X 12	DAMP SLS08X12-B
Bottom mount, 8 X 12	DAMP SLB08X12-B
Side mount, 8 X 14	DAMP SLS08X14-B
Bottom mount, 8 X 14	DAMP SLB08X14-B
Side mount, 8 X 16	DAMP SLS08X16-B
Bottom mount, 8 X 16	DAMP SLB08X16-B
Side mount, 8 X 18	DAMP SLS08x18-B
Bottom mount, 8 X 18	DAMP SLB08X18-B
Side mount, 8 X 20	DAMP SLS08X20-B
Bottom mount, 8 X 20	DAMP SLB08X20-B
Side mount, 8 X 22	DAMP SLS08X22-B
Bottom mount, 8 X 22	DAMP SLB08X22-B
Side mount, 8 X 24	DAMP SLS08X24-B
Bottom mount, 8 X 24	DAMP SLB08X24-B
Side mount, 10 X 10	DAMP SLS10X10-B
Bottom mount, 10 X 10	DAMP SLB10X10-B
Side mount, 10 X 12	DAMP SLS10X12-B
Bottom mount, 10 X 12	DAMP SLB10X12-B
Side mount, 10 X 14	DAMP SLS10X14-B
Bottom mount, 10 X 14	DAMP SLB10X14-B
Side mount, 10 X 16	DAMP SLS10X16-B
Bottom mount, 10 X 16	DAMP SLB10X16-B
Side mount, 10 X 18	DAMP SLS10X18-B
Bottom mount, 10 X18	DAMP SLB10X18-B
Side mount, 10 X 20	DAMP SLS10X20-B
Bottom mount, 10 X 20	DAMP SLB10X20-B
Side mount, 10 X 22	DAMP SLS10X22-B
Bottom mount, 10 X 22	DAMP SLB10X22-B
Side mount, 10 X 24	DAMP SLS10X24-B
Bottom mount, 10 X 24	DAMP SLB10X24-B
Side mount, 12 X 12	DAMP SLS12X12-B
Bottom mount, 12 X 12	DAMP SLB12X12-B
Side mount, 12 X 14	DAMP SLS12X14-B
Bottom mount, 12 X 14	DAMP SLB12X14-B
Side mount, 12 X 16	DAMP SLS12X16-B
Bottom mount, 12 X 16	DAMP SLB12X16-B
Side mount, 12 X 18	DAMP SLS12X18-B
Bottom mount, 12 X 18	DAMP SLB12X18-B
Side mount, 12 X 20	DAMP SLS12X20-B
Bottom mount, 12 X 20	DAMP SLB12X20-B
Side mount, 14 X 14	DAMP SLS14X14-B
Bottom mount, 14 X 14	DAMP SLB14X14-B
Side mount, 14 X 16	DAMP SLS14X16-B
Bottom mount, 14 X 16	DAMP SLB14X16-B
Side mount, 14 X 20	DAMP SLS14X20-B
Bottom mount, 14 X 20	DAMP SLB14X20-B
Side mount, 16 X 16	DAMP SLS16X16-B
Bottom mount, 16 X 16	DAMP SLB16X16-B
Bottom mount, 16 X 20	DAMP SLB16X20-B

Slip-In Dampers

