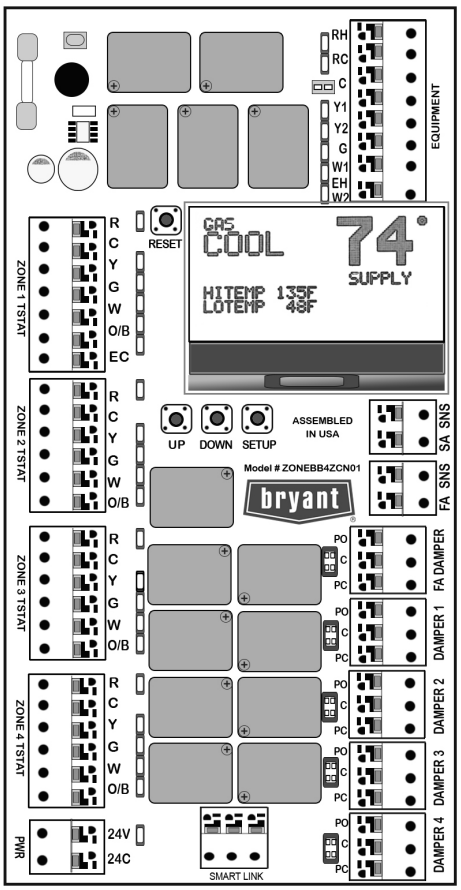
ZONEBB4ZCN01
Preferred™ Zoning System

Product Data



A21099Br

Fig. 1 – Zoning Circuit Board

Introduction

Bryant Preferred™ Four-Zone System is a zoning system capable of providing zone control requirements for one through four living or business areas with available expansion to eight zones with expansion board. This system allows the home or business owner to control the living environment in an individualized and energy efficient way.

General Description

The controller features a state-of-the-art microprocessor for reliable control of four zones from a single forced-air HVAC system. The panel includes a bright, back-lit LCD display with full text for system status monitoring and diagnosis. In addition, each thermostat and equipment terminal have its own color-coded LED allowing for easy monitoring of thermostat and equipment calls. The included supply air temperature sensor allows for constant monitoring of supply air temperature in the plenum. The included return air temperature sensor provides a convenient look at the system's performance.

Electronic Limit Control™ (ELC) technology protects the system's compressor and heat exchanger from potential issues associated with freeze-up and overheating. Intelligent Smart Staging handles equipment staging based on time and temperature, allowing the use of single stage thermostats. Exclusive Economy Mode provides comfort and efficiency control. Supports up to 3-Stage Heating and 2-Stage Cooling equipment.

Features

- Integrated A2L Dissipation Support
- Full-Featured Four-Zone Controller
- Supply Air and Return Air Sensor Included
- Intelligent Staging
- Bright, Back-lit LCD Display
- Plastic Enclosure
- LED Indicates Blown Fuse

Easy Installation

- Mounts with Two Screws
- Quick-Connect Screwless Terminals
- Innovative Enclosure Design with Multiple Wiring and Mounting Options

Easy Configuration

- Simple Step-By-Step System Setup
- Controller Guides You through Each Step
- Back-lit LCD Display is Easy to See
- No Dipswitches – No Confusion – No Guessing

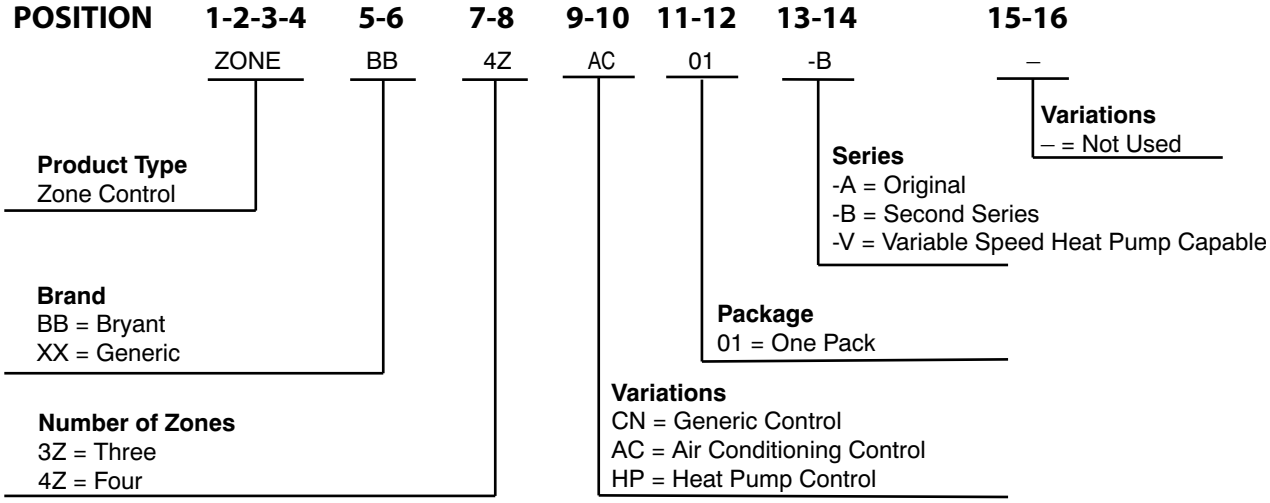
Easy Operation

- Mix & Match Standard Gas/Electric and Heat Pump Thermostats
- TL Series Staging Based on Supply Air Temperature
- Automatic Changeover for Maximum Comfort
- Microprocessor Manages All Complex Decisions
- Adjustable Staging Time and Temperature for Maximum Comfort
- Color-Coded LED Indicators for Each Thermostat Call and Equipment Call
- Two-Color LED Indicators Show Damper PositionRed LED Indicates Blown Fuse

Easy Customer Features

- Customer Never Needs to Use the Control Panel
- Selectable Zone-1 Priority for More Customer Control
- Enable Emergency Heat from Zone 1 Thermostat
- Constant Supply Air Monitoring from ELC™ Ensures Customer Safety
- Zone Specific Ventilation – Energize Fan from Any Thermostat

Model Number Nomenclature



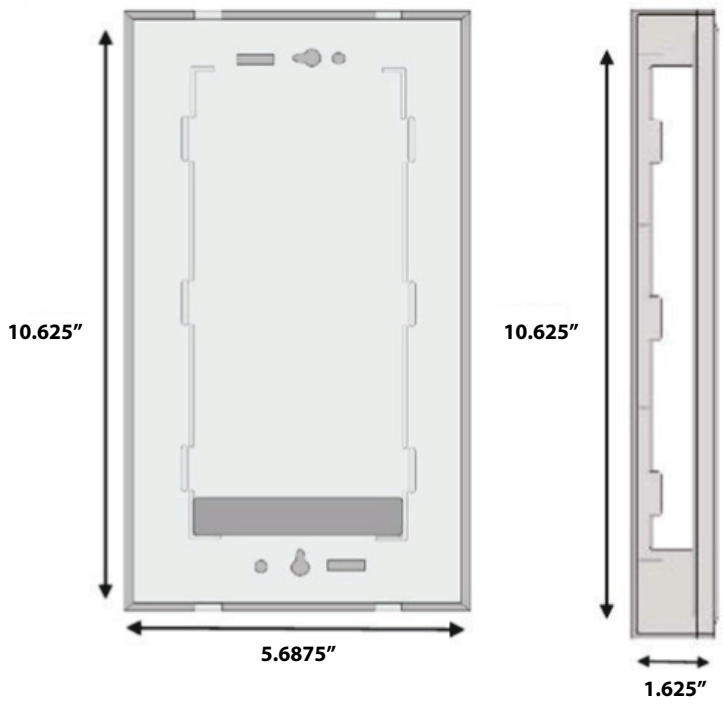
Zone4Bry Nomenclature

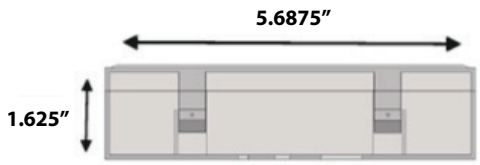
Physical Data

Model	ZONEBB4ZCN01
Color of the Board	Red
Power	8VA Max (24VAC @ 300mA) 8VA + Thermostats (3VA) + Dampers (3 to 10VA) = Total Transformer Size
Equipment (outputs)	10 AMP @ 24VAC Contact Rating RH - 24VAC HOT from Heating Transformer on Equipment (red LED) RC - 24VAC HOT from Cooling Transformer on Equipment (red LED) C - 24VAC COMMON from Transformer on Equipment (no LED) Y1 - 1st Stage Compressor (yellow LED) Y2 - 2nd Stage Compressor (yellow LED) G - Fan (green Led) W1/EH - 1st Stage Heat OR Emergency Heat (red LED) W2 O/B - Reversing Valve OR 2nd Stage Heat (orange LED)
Dampers (outputs)	10 AMP @ 24VAC Contact Rating Power Open/Power Close Dampers (3VA)
Temperature (outputs)	10K Type II Thermistor SA Sensor - 4" Supply Air Temperature Sensor - Stainless Steel Probe w/10ft. Cable and Plug (Provided with each TL Series Controller) FA Sensor - Optional Return Air Sensor or Outdoor Temperature Sensor

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

Dimensions





ADimensions

Table 1 – Accessories

DESCRIPTION*		PART NO.
Round Dampers	6 in.	DAMPRND06INC-*
	8 in.	DAMPRND08INC-*
	10 in.	DAMPRND10INC-*
	12 in.	DAMPRND12INC-*
	14 in.	DAMPRND14INC-*
	16 in.	DAMPRND16INC-*
Rectangular Dampers	8 in. X 10 in.	DAMPREC08X10-*
	8 in. X 14 in.	DAMPREC08X14-*
	8 in. X 18 in.	DAMPREC08X18-*
	8 in. X 24 in.	DAMPREC08X24-*
	10 in. X 10 in.	DAMPREC10X10-*
	10 in. X 14 in.	DAMPREC10X14-*
	10 in. X 18 in.	DAMPREC10X18-*
	10 in. X 24 in.	DAMPREC10X24-*
Round Barometric Bypass	8 in.	DAMPBAR08INC
	10 in.	DAMPBAR10INC
	12 in.	DAMPBAR12INC
	14 in.	DAMPBAR14INC
	16 in.	DAMPBAR16INC
Rectangular Barometric Bypass	8 in. X 14 in.	DAMPBAR08X14
	8 in. X 24 in.	DAMPBAR08X24
Slip-In Dampers	Side mount, 8 X 10	DAMPSLS08X10-*
	Bottom mount, 8 X 10	DAMPSLB08X10-*
	Side mount, 8 X 12	DAMPSLS08X12-*
	Bottom mount, 8 X 12	DAMPSLB08X12-*
	Side mount, 8 X 14	DAMPSLS08X14-*
	Bottom mount, 8 X 14	DAMPSLB08X14-*
	Side mount, 8 X 16	DAMPSLS08X16-*
	Bottom mount, 8 X 16	DAMPSLB08X16-*
	Side mount, 8 X 18	DAMPSLS08X18-*
	Bottom mount, 8 X 18	DAMPSLB08X18-*
	Bottom mount, 8 X 20	DAMPSLB08X20-*
	Bottom mount, 8 X 22	DAMPSLB08X22-*
	Bottom mount, 8 X 24	DAMPSLB08X24-*
	Side mount, 10 X 10	DAMPSLS10X10-*
	Bottom mount, 10 X 10	DAMPSLB10X10-*
	Side mount, 10 X 12	DAMPSLS10X12-*
	Bottom mount, 10 X 12	DAMPSLB10X12-*
	Side mount, 10 X 14	DAMPSLS10X14-*
	Bottom mount, 10 X 14	DAMPSLB10X14-*
	Side mount, 10 X 16	DAMPSLS10X16-*
	Bottom mount, 10 X 16	DAMPSLB10X16-*
	Side mount, 10 X 18	DAMPSLS10X18-*
	Bottom mount, 10 X 18	DAMPSLB10X18-*
	Bottom mount, 10 X 20	DAMPSLB10X20-*
	Bottom mount, 10 X 22	DAMPSLB10X22-*
	Bottom mount, 10 X 24	DAMPSLB10X24-*
	Bottom mount, 14 X 20	DAMPSLB14X20-*
Replacement Actuators	90° for slip-in dampers	HF21KJ008*
	45° for round and rectangular dampers	HF21KJ007*

*. The above dampers are recommended because they use the latest style actuators designed for zoning systems. These actuators are direct-drive and use slightly less power to operate. If using older style dampers with this zoning system (i.e., dampers with a crank arm), it is recommended to upgrade the actuator to DAMPACT45DEG, or DAMPACT90DEG.

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