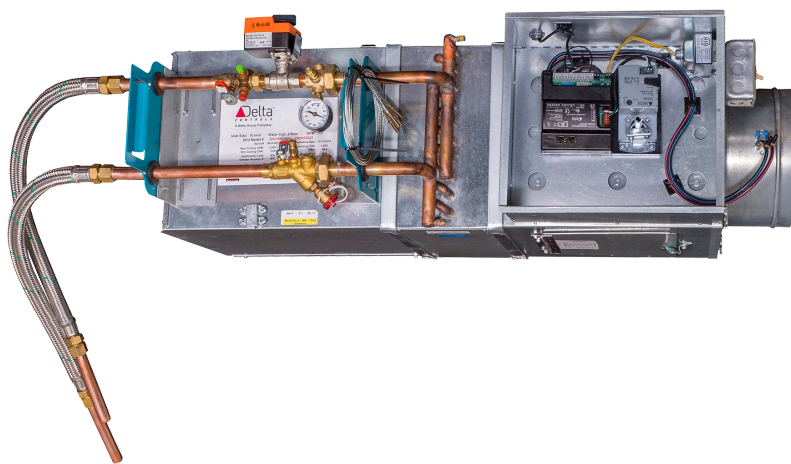


# ZCU

## Delta Zone Control Unit

### Description

The Zone Control Unit (ZCU) is a complete VAV terminal unit with integrated hydronics and a Delta Controls controller. The unit is factory-commissioned and delivered pre-assembled to the job site, ready for immediate installation.



### Application

ZCU is a complete pre-engineered VAV bundled solution delivered at a lower installed cost. Ready for immediate installation and designed for standard VAV applications and seismic-sensitive buildings.

It serves large zone areas in commercial spaces, such as for e.g. office buildings, to provide fresh air and heating or cooling for occupants' comfort and health.

### Features

- ▶ Designed to increase the profitability of projects with VAV boxes by lowering the total construction cost and time. Reduces the overall project risk with a single source of responsibility
- ▶ Includes Delta VAV controller, valves, damper, actuators, coil and piping, integrated shipping supports and handles
- ▶ Pre-fabricated wiring harness, UL/ULC 508A listed
- ▶ Shipped pressurized with gauge attached to ensure a leak-free delivery
- ▶ Made-to-order to meet your site's requirements
- ▶ Delta controllers can be delivered with your own programming, or pre-programmed by Delta's Professional Development Services at an additional cost.

### Specifications

#### Air

##### Approvals

ANSI / ASHRAE Standard 130  
ETL listed to meet requirements of UL 1995 and CSA 236

##### Sound

AHRI 880 Certified

##### Box Liners

Available in fiberglass, foil face, closed cell (EPFI), or metal-lined  
UL 181 and NFPA 90A compliance  
Insulation meets ASHRAE 62.1 requirements for resistance to mold growth and erosion

##### Welding seams

Continuous welded primary inlet duct to minimize leakage with 3 stiffening beads for added rigidity

#### Water

##### Pressure Tests

Coils proof tested at 450 psig and leak tested at 300 psig air pressure under water. Factory pressure tested at 100 psig, shipped with 40-50 psig recharged, includes gauge to indicate that unit is leak free

##### Hydronics

Pre-assembled Y-strainer with PT port, drain and isolation valve, ATC valve, manual air vent, union and balancing valve with PT ports

##### H<sub>2</sub>O Coil

Coil Casing- 20 Ga. galvanized steel  
Coil Tubing- 12.7 mm (0.5 in.) O.D., 0.4 mm copper (0.016 in.) walls  
Coil Fins- 1.14 mm (0.045 in.) aluminum, 10 fins per inch

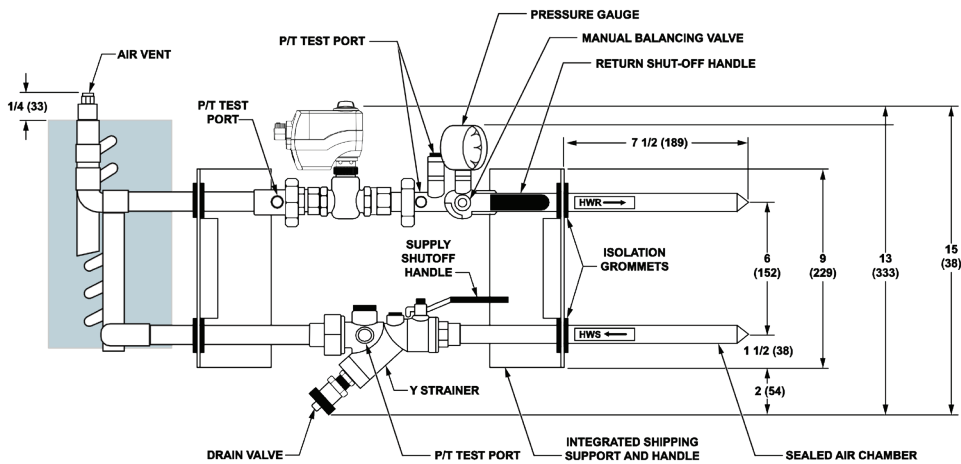
##### Construction

22 Ga. galvanized steel casing, mechanically sealed for low leakage with 14 Ga. rigid support handles  
NEMA 1 (standard) /UL 508A (optional) certified control enclosure

# ZCU

## Typical ZCU Piping Arrangement

Dimensions in inches (mm)



### Ordering

Contact Delta Inside Sales at [insidesales@deltaccontrols.com](mailto:insidesales@deltaccontrols.com) to order the ZCU.

### Accessories

<b>eZNS-T100</b>	enteliZONE Network Sensor: LINKnet room stat with multiple display, button, and input sensor options
<b>CON-768BT</b>	Delta MS/TP to Bluetooth Network Converter
<b>CON-ENOC-868</b>	Delta Controls EnOcean Zone Gateway, supporting 32 devices, 868 MHz Europe
<b>CON-ENOC-902</b>	Delta Controls EnOcean Zone Gateway, supporting 32 devices, 902 MHz North America

### Specifications (Continued)

#### Controls

Native BACnet application controllers  
Ambient

0°C to 55°C (32°F to 131°F)  
10% to 95% RH (non-condensing)

#### Power

DVC-V304- 24 VAC 50/60 Hz @ 15 VA  
(not including output loading, 52 VA max with fully loaded TRIAC Outputs)

DVC-V304E- 24 VAC @ 15 VA, 60 VA max with fully loaded TRIACS

DVC-V304-PoE- PoE Power In  
802.3at PoE: 53 VDC, 25.5 W max  
802.3af PoE: 48 VDC, 12.95 W max

DVC-V322- 24 VAC 50/60 Hz @ 15 VA (32 VA max with fully loaded TRIAC Outputs)

DVC-V322E- 24 VAC @ 15 VA, 35 VA max with fully loaded TRIACS

DVC-V322-PoE- PoE Power In  
802.3at PoE: 53 VDC, 25.5 W max  
802.3af PoE: 48 VDC, 12.95 W max

eZVP-440 and eZVP-440E- 24 VAC, 50/60 Hz, 85 VA max (11 VA excluding TRIAC loading)

enteliZONE is a registered trademark of Delta Controls Inc.  
BACnet is a registered trademark of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

Updated December 3, 2020

Subject to change without notice.

# ZCU

## ZCU Part Numbers

Use the following part number tables to determine the correct part number you should use to order a ZCU.

### Example ZCU Order

Pre-engineered VAV box with hot water reheat coil, 14 in. inlet size, 1 in. poly armor liner, no fan, 1-row coil, no fan motor, duct extension, with both controls and piping location on the right-hand side, with Delta Controls controller eZVP-440-AFS, without transformer and disconnect, ATC assembly which includes ball brass valve, 1/2 in., 3-way, 1.2 Cv and a 24V non-spring return actuator with modulating control, with sliding controller's enclosure and 24 in. stainless steel hose kit.

The part number for this example is **ZH-3-14-7-0-1-0-4-RR-DC-4-0-19-2-2**.

		VAV Type	Inlet Size	Liner	Fan Case Size	HW Rows	Fan Voltage	Options	LL/RR LR/RL
Example	ZH	3	14	7	0	1	0	4	RR
		<div>Single Duct      Fan Powered Parallel 1 = SH - CO      4 = SVI - CO 2 = n/a          5 = SVI - WC 3 = SH - WC      6 = n/a  Other Options      Fan Powered Series A = Dual Duct / DH      7 = SCI - CO E = Exhaust          8 = SCI - WC L = Low Profile      9 = n/a V = Venturi Air Valve</div>	<div>04 = 4 in.      10 = 10 in.      20 = 20 x 16 in. 05 = 5 in.      12 = 12 in.      24 = 24 x 16 in. 06 = 6 in.      14 = 14 in. 08 = 8 in.      16 = 16 in.</div>	<div>0 = 0.5 in. Fiberglass      4 = 0.5 in. Closed Cell (EPFI)      G = Galvanized 1 = 1 in. Fiberglass      5 = 1 in. Closed Cell (EPFI)      S = Stainless Steel 2 = 0.5 in. Foil Face      6 = Metal w/ 1 in. Fiberglass 3 = 1 in. Foil Face      7 = 1 in. Poly Armor</div>	<div>0 = None      2 = 2      4 = 4      6 = 6 1 = 1      3 = 3      5 = 5      7 = 7</div>	<div>0 = None    1 = 1 Row Coil    2 = 2 Row Coils    3 = 3 Row Coils    4 = 4 Row Coils</div>	<div>0 = None      3 = 120/1 ECM      6 = 208/1 ECM      PSC = Permanent Split Capacitor 1 = 120/1 PSC      4 = 277/1 ECM      7 = 230/1 PSC      ECM = Electronically Commutated Motor 2 = 277/1 PSC      5 = 208/1 PSC      8 = 230/1 ECM</div>	<div>0 = None      3 = Attenuator &amp; Access Door      A = Duct Seal - Tape S&amp;D      D = Duct Seal w/SA &amp; AD 1 = Sound Attenuator (SA)      4 = Duct Extension (DE)      B = Duct Seal w/SA      E = Duct Seal w/DE 2 = Access Door (AD)      5 = Duct Extension &amp; Access Door      C = Duct Seal w/AD      F = Duct Seal w/DE &amp; AD</div>	
</									

# ZCU

	Controller	Power Source	ATC Valve Assy	Encl. Options	Options	
DC	4	0	19	2	2	
						</

**Abbreviations:** ATC = Automatic Temperature Control CO = Cooling Only DH = High Performance Dual Duct Terminal Unit DVC = Delta Variable Air Volume controller eZV = enteliZONE VAV controller SCI = Series Fan-Powered Terminal Unit SH = Single Duct Terminal Unit SS = Stainless Steel SVI = Parallel Fan-Powered Terminal Unit WC = Hot water reheat