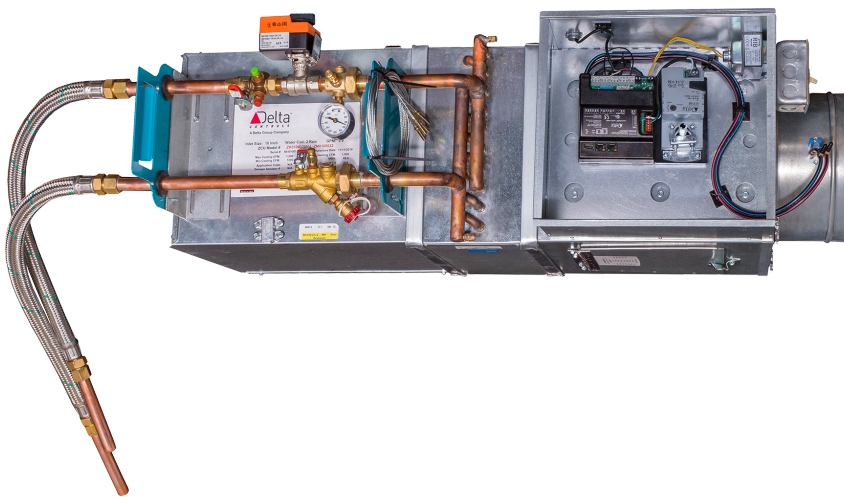


ZCU

Delta Zone Control Unit

Description

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



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

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

H₂O 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

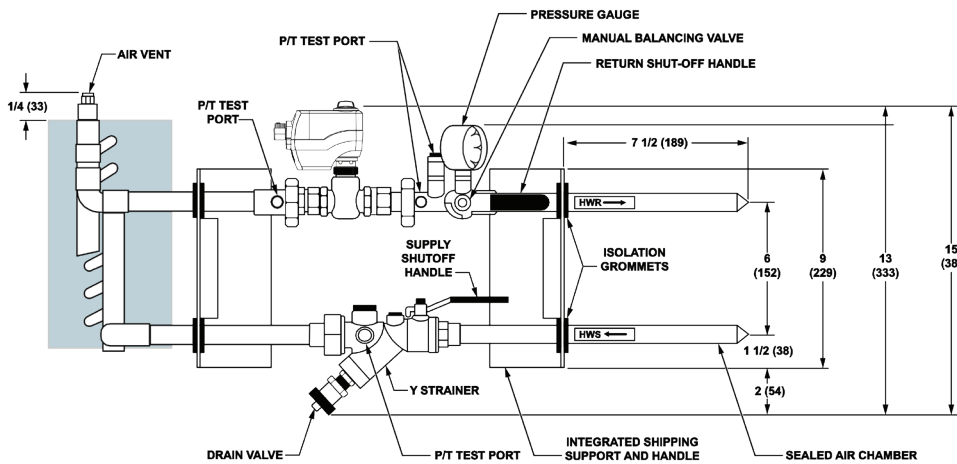
Construction

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 to order the ZCU.

Accessories

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

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

Updated February 13, 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	RR					
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		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.		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		0 = None 2 = 2 4 = 4 6 = 6 1 = 1 3 = 3 5 = 5 7 = 7		0 = None 1 = 1 Row Coil 2 = 2 Row Coils 3 = 3 Row Coils 4 = 4 Row Coils		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		0 = None 3 = Attenuator & Access Door A = Duct Seal - Tape S&D D = Duct Seal w/SA & 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 & Access Door C = Duct Seal w/AD F = Duct Seal w/DE & AD	
RR = Right Hand Controls/ Right Hand Piping* RL = Right Hand Controls/ Left Hand Piping LL = Left Hand Controls/ Left Hand Piping* LR = Left Hand Controls/ Right Hand Piping		* LL or RR must be ordered with sound attenuator (SA) or optional duct extension (DE) options.		Control/piping location is determined by looking at the VAV inlet with the air hitting you in the back of the head									

ZCU

	Controller	Power Source	ATC Valve Assy	Encl. Options	Options																																					
DC	4	0	19	2	2																																					
						<p>0 = None 1 = 18 in. SS Hose Kit 2 = 24 in. SS Hose Kit 3 = 36 in. SS Hose Kit 4 = 48 in. SS Hose Kit 5 = Auto Flow Cartridge</p> <p>6 = 18 in. SS Hose & Auto Flow 7 = 24 in. SS Hose & Auto Flow 8 = 36 in. SS Hose & Auto Flow 9 = 48 in. SS Hose & Auto Flow</p> <p>0 = None 1 = Standard Enclosure 2 = Sliding Enclosure 3 = Lab Enclosure</p> <p>ATC valve assemblies include non-spring return modulating brass valves and 24V actuators. See footnote below for complete list of order options.</p> <p>0 = Power Trunk (no transformer or disconnect) 1 = 120V XFMR 2 = 277V XFMR 3 = 208V XFMR 4 = 230V XFMR 5 = 480V XFMR</p> <p>0 = None 1 = eZVP-440-AB 2 = eZVP-440-AFB 3 = eZVP-440-AS 4 = eZVP-440-AFS 5 = eZVP-440E-AB 6 = eZVP-440E-AFB 7 = eZVP-440E-AS 8 = eZVP-440E-AFS 9 = eZVP-440-AAFB 10 = eZVP-440E-AAFB 11 = DVC-V304A 12 = DVC-V304AF 13 = DVC-V304A-B 14 = DVC-V304AF-B 15 = DVC-V304E-AFB 16 = DVC-V304E-AF 17 = DVC-V304E-A 18 = DVC-V304E-AB 19 = DVC-V304-PoE-AB 20 = DVC-V304-PoE-AFB 21 = DVC-V322A 22 = DVC-V322AF 23 = DVC-V322E-A 24 = DVC-V322E-AF 25 = DVC-V322E-AB 26 = DVC-V322A-B 27 = DVC-V322AF-B 28 = DVC-V322E-AFB 29 = DVC-V322-PoE-AFB 30 = DVC-V322-PoE-AB 31 = DVC-V322AF-BO 32 = DVC-V322E-AFH</p>																																				
<p>FOOTNOTE: LIST OF ATC VALVE ASSEMBLY OPTIONS</p> <table border="0"> <tr> <td>2-way Ball NC Belimo</td> <td>2-way Globe NV Siemens</td> <td>3-way Ball Belimo</td> <td>3-way Globe Siemens</td> </tr> <tr> <td>1 = B208B+TR24-SR US</td> <td>9 = 261-02000</td> <td>17 = B308B+TR24-SR US</td> <td>25 = 261-02064</td> </tr> <tr> <td>2 = B209B+TR24-SR US</td> <td>10 = 261-02002</td> <td>18 = B309B+TR24-SR US</td> <td>26 = 261-02065</td> </tr> <tr> <td>3 = B210B+TR24-SR US</td> <td>11 = 261-02004</td> <td>19 = B310B+TR24-SR US</td> <td>27 = 261-02066</td> </tr> <tr> <td>4 = B210B+TR24-SR US</td> <td>12 = 261-02006</td> <td>20 = B311B+TR24-SR US</td> <td>28 = 261-02067</td> </tr> <tr> <td>5 = B212B+TR24-SR US</td> <td>13 = 261-02008</td> <td>21 = B312B+TR24-SR US</td> <td>29 = 261-02068</td> </tr> <tr> <td>6 = B213B+TR24-SR US</td> <td>14 = 261-02010</td> <td>22 = B313B+TR24-SR US</td> <td>30 = 261-02069</td> </tr> <tr> <td>7 = B214B+TR24-SR US</td> <td>15 = 261-02012</td> <td>23 = B314B+TR24-SR US</td> <td>31 = 261-02070</td> </tr> <tr> <td>8 = B215B+TR24-SR US</td> <td>16 = 261-02014</td> <td>24 = B315B+TR24-SR US</td> <td>32 = 261-02071</td> </tr> </table>							2-way Ball NC Belimo	2-way Globe NV Siemens	3-way Ball Belimo	3-way Globe Siemens	1 = B208B+TR24-SR US	9 = 261-02000	17 = B308B+TR24-SR US	25 = 261-02064	2 = B209B+TR24-SR US	10 = 261-02002	18 = B309B+TR24-SR US	26 = 261-02065	3 = B210B+TR24-SR US	11 = 261-02004	19 = B310B+TR24-SR US	27 = 261-02066	4 = B210B+TR24-SR US	12 = 261-02006	20 = B311B+TR24-SR US	28 = 261-02067	5 = B212B+TR24-SR US	13 = 261-02008	21 = B312B+TR24-SR US	29 = 261-02068	6 = B213B+TR24-SR US	14 = 261-02010	22 = B313B+TR24-SR US	30 = 261-02069	7 = B214B+TR24-SR US	15 = 261-02012	23 = B314B+TR24-SR US	31 = 261-02070	8 = B215B+TR24-SR US	16 = 261-02014	24 = B315B+TR24-SR US	32 = 261-02071
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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