

ZONE VALVES

ZONE VALVE SERIES VRC260

The compact rotary 6-way zone valve with actuator series VRC260 is available in DN 10, and is made of brass, PN10. Available with compression fitting connections. Patented + Registered design.



VRC26x

KEY FEATURES

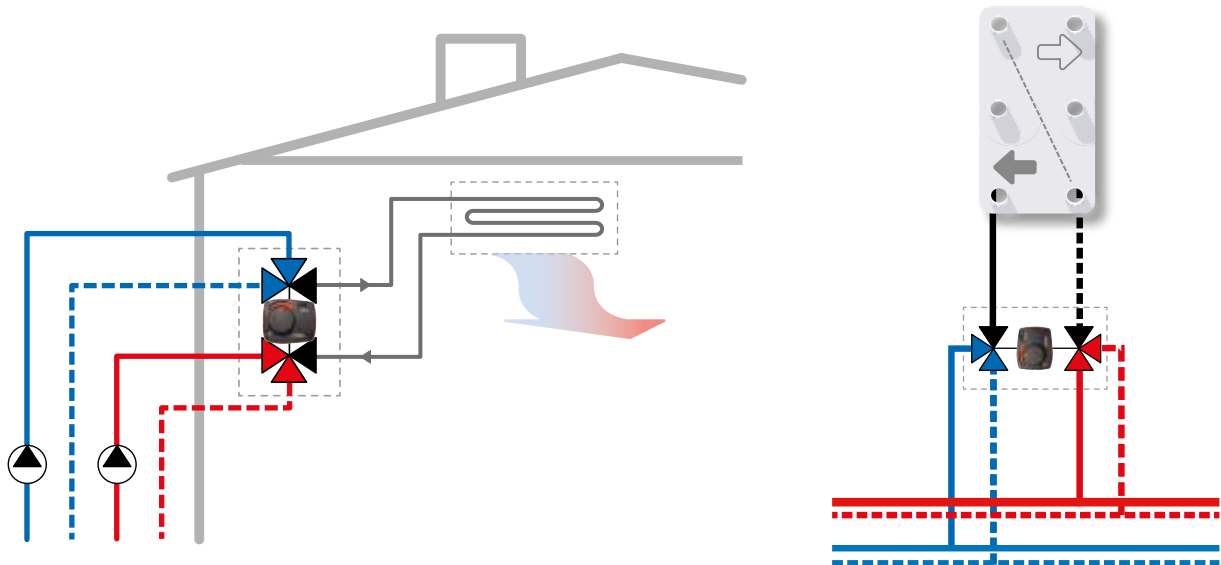
- Ceramic disc as a control element which ensures long life time and less sticking forces than common for control ball valves
- Free of maintenance and ensure reliable operating
- Easy connection with clear, obvious marking
- Flexible and easy Kvs value settings with setting screw
- Real compact / flat design

OPERATION

The ESBE series VRC260 is a 6-way zone valve designed for air handling units with purpose of controlling flow temperature to heating/cooling appliances. The VRC260 design is dedicated for 4-pipes system and one terminal unit but could also be used for small zones. One valve, one actuator and one control sequence revolutionizes the structure of these systems and replaces conventional solutions. The design is made so that heating and cooling could not be run simultaneously.

Easy adjustments of kvs (0,9 – 0,03) value with a setting screw simplifies the selection of valve and provide easy and quick settings on the field. The ceramic discs ensure perfect control and long life time of the valve as well limit the sticking forces in the valve.

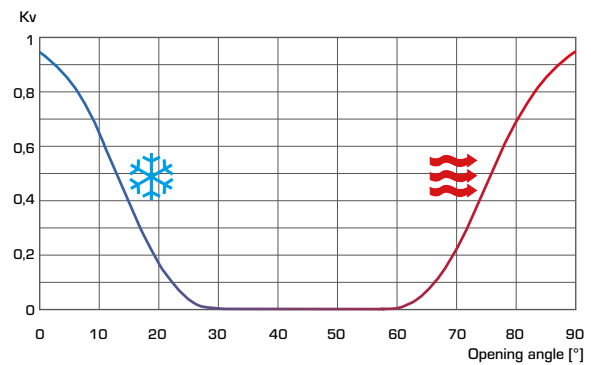
INSTALLATION EXAMPLES



VALVE VRC260 IS DESIGNED FOR

- Heating
- Comfort cooling
- Ventilation
- Zone

FLOW DISTRIBUTION



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TECHNICAL DATA

The Zone valve unit, in general:

Pressure class: _____ PN 10
 Media temperature: _____ max. (continuously) +60°C
 _____ max. (temporarily) +80°C
 _____ min. -10°C
 Ambient temperature: _____ max. +50°C
 _____ min. 0°C
 Media: _____ Heating water (in accordance with VDI2035)
 _____ Water/Glycol mixtures, max. 45%
 Torque (at nominal pressure): _____ < 3 Nm
 Connections: _____ Compression fitting, EN 1254-2

Material
 Valve body: _____ Dezincification resistant brass, DZR
 Slide: _____ Ceramic
 Shaft and bushing: _____ POM PA6
 Cover: _____ Composite
 Reinforced cover: _____ Galvanized steel
 O-rings: _____ EPDM

Conformities and certificates:

PED 2014/68/EU, article 4.3

CE LVD 2014/35/EU
 EMC 2014/30/EU
 RoHS 2011/65/EU

The integrated Zone valve:

Valve reference: _____ VRC163
 Leakrate*: _____ max. 0,15 l/h
 Working pressure: _____ 1 MPa (10 bar)
 Max. differential pressure drop - Mixing: _____ 100 kPa (1 bar)
 Rangeability Kv/Kv^{min}, A-AB: _____ 100
 Connections: _____ Compression fitting, EN 1254-2

* Differential pressure 100kPa (1 bar)

The integrated Actuator, VRC263:

Actuator reference: _____ ARA663
 Control signal: _____ 3-point
 Power supply: _____ 24 ± 10% V AC, 50 Hz
 Power consumption: _____ 3 VA
 Running time 90°: _____ 120 s
 Enclosure rating: _____ IP41
 Protection class: _____ II
 Torque: _____ 6 Nm

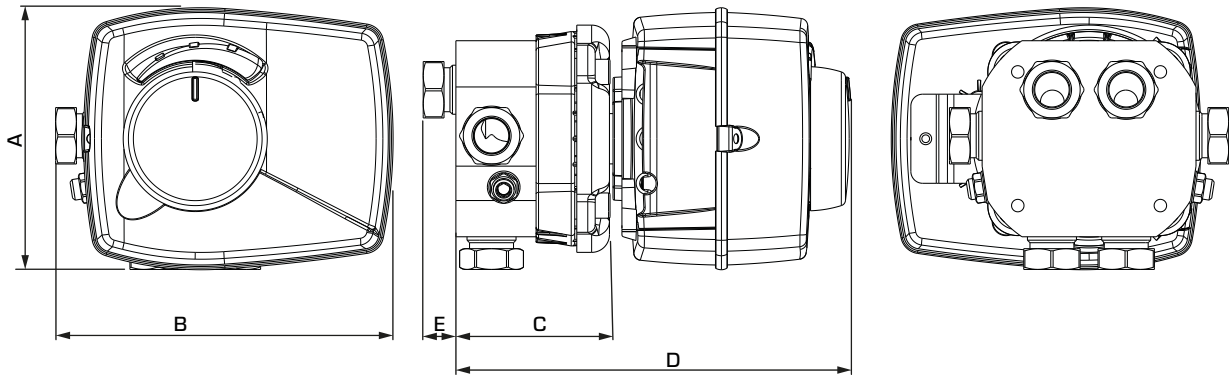
The integrated Actuator, VRC269:

Actuator reference: _____ ARA639
 Control signal: _____ Proportional
 _____ (0..10 V, 2..10 V, 0..20mA, 4..20mA)
 Power supply: _____ 24 ± 10% V AC, 50 Hz
 Power consumption: _____ 3 VA
 Running time 90°: _____ 15/30/60/120 s
 Enclosure rating: _____ IP41
 Protection class: _____ II
 Torque: _____ 6 Nm

The integrated Actuator, VRC264:

Actuator reference: _____ ARA647
 Control signal: _____ 2-point
 Power supply: _____ 24 ± 10% V AC, 50 Hz
 Power consumption: _____ 3 VA
 Running time 90°: _____ 30 s
 Enclosure rating: _____ IP41
 Protection class: _____ II
 Torque: _____ 6 Nm

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SERIES VRC26x

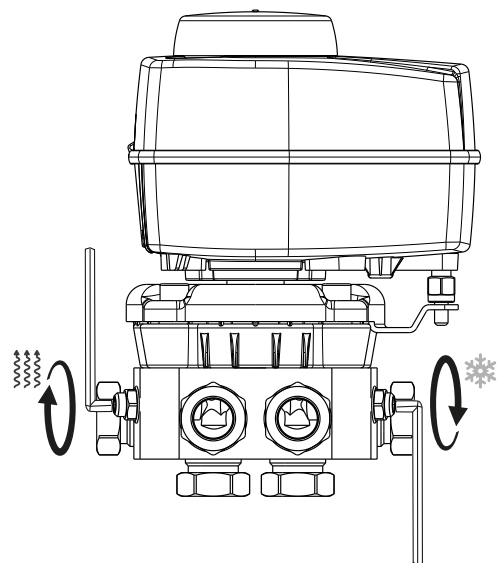
Art. No.	Reference	Control signal	Running time [s]	DN	Connection	A	B	C	D	E	Weight [kg]	Note
11873000	VRC263	3-point	120	10	CPF 12mm	88	110	52	133	11	1,3	
11874000	VRC264	2-point	30								1,3	
11879000	VRC269	Proportionell	15 - 120								1,3	

SETTING OF KV VALUE

Kv values can be set for cooling and heating using separate adjustment screws.

Turn the screw clockwise to its stop position, then open it a number of turns in order to achieve a specific Kv value.

	Number of turns							
	A	B	C	D	E	F	G	H
Turns	½	¾	1	1¼	1½	2	3	4
Kvs [m³/h]	0,042	0,072	0,116	0,171	0,24	0,327	0,6	0,9



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DIMENSIONING

Start with the demand in kW and move vertically to the chosen Δt .

Move horizontally to the right and select Kvs-value.

