

air-only



water heater



electric wire heater



BASIC FEATURES

- Lengths: 1; 1.5; 2; 2.5 m
- **Air flow up to 4313 m³/h** (ISO 27 327-1)
- Universal interface for AirGENIO control module connection (BASIC, COMFORT, SUPERIOR)
- *FACE 2 in 1* – suction grille + filter = 2 in 1
- Low noise
- Easy installation and service
- Standard colour RAL 9016 (any RAL – based colours may be provided on customer´s request)

FINESSE

Discrete and high-performance recessed air curtain for use in **entrance areas of banks, administrative centres, luxury boutiques, shopping centres and airport halls** with a recommended installation height up to 4 m*.

** Maximum recommended installation height – may vary according the particular conditions at the installation site.*

The air curtain shall be installed indoor in a dry area with ambient temperatures ranging from +5 °C up to +40 °C and relative humidity of up to 80 %. It is designed for conveying air free of fine dust, grease, chemical fumes, and other impurities. IP rating of the air curtain is IP 20. The air curtain project shall always be developed by the HVAC designer.



PRIMARY PARAMETERS

Air curtains with electric heater are fitted with automatic heat thermostat and emergency thermostat with manual reset. The air curtains with LPHW coil are designed for the maximum operating water temperature of +100 °C and maximum operating pressure of 1.6 MPa.

Type	Recommended installation height [m]	Air output [m³/h] *1			Acoustic pressure at 3m[dB(A)] *2			Sound power [dB(A)]*3
		Speed 3	Speed 2	Speed 1	Speed 3	Speed 2	Speed 1	
VCF-B-100-E-...	4,0	1778	1217	814	58	50	42	76
VCF-B-150-E-...		2552	1738	1130	60	52	43	78
VCF-B-200-E-...		3444	2307	1485	61	53	44	79
VCF-B-250-E-...		4187	2844	1880	63	55	45	80
VCF-B-100-V-...		1691	1146	758	58	50	41	75
VCF-B-150-V-...		2449	1643	1082	60	52	42	77
VCF-B-200-V-...		3381	2267	1422	61	53	44	79
VCF-B-250-V-...		4061	2765	1825	63	54	45	80
VCF-B-100-S-...		1793	1225	822	58	50	42	76
VCF-B-150-S-...		2591	1770	1193	60	52	43	78
VCF-B-200-S-...		3476	2402	1659	62	54	45	79
VCF-B-250-S-...		4313	2899	1959	63	54	45	80

*1 Airflow volume according ISO27327-1

*2 Acoustic pressure values at 3m distance for maximum speed. Directional factor: Q=2.

*3 Sound power (LWA) measurements according to ISO 27327-2.

Type	Heater power output [kW]		Total power input [kW]*1	Total voltage/ current [V/A]	Motor voltage/ current [V/A]	Temperature increase Δt [°C]	Frequency [Hz]	Weight [kg]*3
	1st level	2st level						
VCF-B-100-E-...	4,6	9,4	10,1	400/16,3	230/2,75	15,7*1	50	39,5
VCF-B-150-E-...	7,6	15	16	400/26,1	230/4,0	17,5*1	50	54,5
VCF-B-200-E-...	9,8	19	20,5	400/32,4	230/5,3	16,4*1	50	71,0
VCF-B-250-E-...	12,5	24,5	26,1	400/42,2	230/6,5	17,4*1	50	85,0
VCF-B-100-V-...	24,8*2		0,63	230/2,75	230/2,75	36,2*2	50	41,0
VCF-B-150-V-...	38,8*2		0,9	230/4,0	230/4,0	38,1*2	50	56,0
VCF-B-200-V-...	52,6*2		1,2	230/5,3	230/5,3	37,6*2	50	73,0
VCF-B-250-V-...	62,3*2		1,5	230/6,5	230/6,5	37,3*2	50	87,0
VCF-B-100-S-...	-	-	0,63	230/2,75	230/2,75	-	50	37,5
VCF-B-150-S-...	-	-	0,9	230/4,0	230/4,0	-	50	51,0
VCF-B-200-S-...	-	-	1,2	230/5,3	230/5,3	-	50	66,0
VCF-B-250-S-...	-	-	1,5	230/6,5	230/6,5	-	50	80,0

*1 At the maximum air flow and maximum heater power

*2 Intake air temperature +18°C, water temperature gradient of 90/70 °C and highest fan speed.

*3 Weight without controls.

LPHW coil parameters for water temperature gradient of 90/70 °C

Type	Air output	Heat output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCF-B-100-V-...	1691	20,5	54,2	9	0,25
VCF-B-150-V-...	2449	31,3	56,1	22	0,38
VCF-B-200-V-...	3381	42,6	55,6	16	0,52
VCF-B-250-V-...	4061	50,7	55,3	13	0,62

* Temperature of intake air: +18 °C

LPHW coil parameters for water temperature gradient of 80/60 °C

Type	Air output	Heat output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCF-B-100-V-...	1691	16,8	47,7	8	0,2
VCF-B-150-V-...	2449	25,9	49,5	16	0,32
VCF-B-200-V-...	3381	35,1	49	13	0,43
VCF-B-250-V-...	4061	41,8	48,7	10	0,51

* Temperature of intake air: +18 °C

LPHW coil parameters for water temperature gradient of 70/50 °C

Type	Air output	Heat output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCF-B-100-V-...	1691	13,1	41,1	5	0,16
VCF-B-150-V-...	2449	20,4	42,9	11	0,25
VCF-B-200-V-...	3381	27,6	42,4	9	0,33
VCF-B-250-V-...	4061	32,8	42,1	8	0,4

* Temperature of intake air: +18 °C

LPHW coil parameters for water temperature gradient of 60/40 °C

Type	Air output	Heat output	Temperature at exhaust	Pressure loss	Water flow
	[m³/h]	[kW]	[°C]	[kPa]	[l/s]
VCF-B-100-V-...	1691	9,3	34,4	4	0,11
VCF-B-150-V-...	2449	14,9	36,1	8	0,66
VCF-B-200-V-...	3381	20	35,7	6	0,24
VCF-B-250-V-...	4061	23,7	35,4	5	0,28

* Temperature of intake air: +18 °C

Recommended mixing points for LPHW coil

Type	Control module	90/70 °C	80/60 °C	70/50 °C	60/40 °C
		2-way valve			
VCF-B-100-V	VCS-R2-BA	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20
	VCS-R4-CO	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20
	VCS-R4-SU	ZV2-024-08,0-20	ZV2-024-08,0-20	ZV2-024-08,0-20	ZV2-024-08,0-20
VCF-B-150-V	VCS-R2-BA	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20
	VCS-R4-CO	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20
	VCS-R4-SU	ZV2-024-08,0-20	ZV2-024-08,0-20	ZV2-024-08,0-20	ZV2-024-08,0-20
VCF-B-200-V	VCS-R2-BA	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20
	VCS-R4-CO	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20
	VCS-R4-SU	ZV2-024-08,0-20	ZV2-024-08,0-20	ZV2-024-08,0-20	ZV2-024-08,0-20
VCF-B-250-V	VCS-R2-BA	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20
	VCS-R4-CO	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20	ZV2-230-08,0-20
	VCS-R4-SU	ZV2-024-08,0-20	ZV2-024-08,0-20	ZV2-024-08,0-20	ZV2-024-08,0-20

Recommended mixing points for LPHW coil 3-way valve

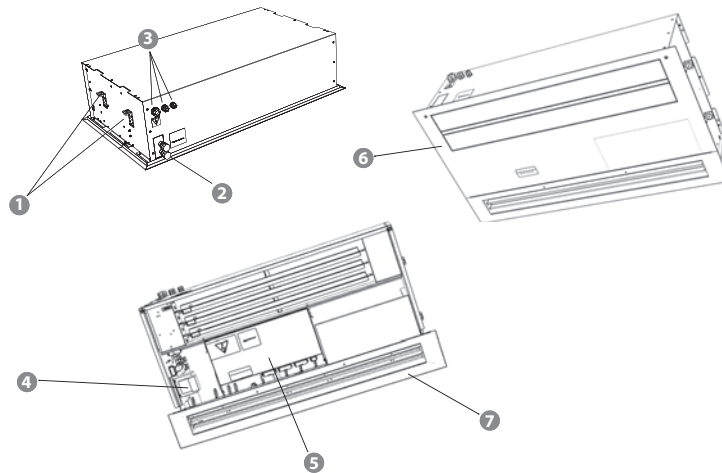
Type	Control module	90/70 °C	80/60 °C	70/50 °C	60/40 °C
		3-way valve			
VCF-B-100-V	VCS-R2-BA	ZV3-230-04,0-20	ZV3-230-04,0-20	ZV3-230-04,0-20	ZV3-230-04,0-20
		RT-3-07	RT-3-07	RT-3-07	RT-3-07
	VCS-R4-CO	ZV3-230-04,0-20	ZV3-230-04,0-20	ZV3-230-04,0-20	ZV3-230-04,0-20
		RT-3-07	RT-3-07	RT-3-07	RT-3-07
VCS-R4-SU	ZV3-024-04,0-20	ZV3-024-04,0-20	ZV3-024-04,0-20	ZV3-024-04,0-20	
VCF-B-150-V	VCS-R2-BA	ZV3-230-04,0-20	ZV3-230-04,0-20	ZV3-230-04,0-20	ZV3-230-04,0-20
		RT-3-07	RT-3-07	RT-3-07	RT-3-07
	VCS-R4-CO	ZV3-230-04,0-20	ZV3-230-04,0-20	ZV3-230-04,0-20	ZV3-230-04,0-20
		RT-3-07	RT-3-07	RT-3-07	RT-3-07
VCS-R4-SU	ZV3-024-04,0-20	ZV3-024-04,0-20	ZV3-024-04,0-20	ZV3-024-04,0-20	
VCF-B-200-V	VCS-R2-BA	ZV3-230-21,0-20	ZV3-230-21,0-20	ZV3-230-21,0-20	ZV3-230-21,0-20
		RT-3-07	RT-3-07	RT-3-07	RT-3-07
	VCS-R4-CO	ZV3-230-21,0-20	ZV3-230-21,0-20	ZV3-230-21,0-20	ZV3-230-21,0-20
		RT-3-07	RT-3-07	RT-3-07	RT-3-07
VCS-R4-SU	ZV3-024-06,3-20	ZV3-024-06,3-20	ZV3-024-06,3-20	ZV3-024-06,3-20	
VCF-B-250-V	VCS-R2-BA	ZV3-230-21,0-20	ZV3-230-21,0-20	ZV3-230-21,0-20	ZV3-230-21,0-20
		RT-3-07	RT-3-07	RT-3-07	RT-3-07
	VCS-R4-CO	ZV3-230-21,0-20	ZV3-230-21,0-20	ZV3-230-21,0-20	ZV3-230-21,0-20
		RT-3-07	RT-3-07	RT-3-07	RT-3-07
VCS-R4-SU	ZV3-024-06,3-20	ZV3-024-06,3-20	ZV3-024-06,3-20	ZV3-024-06,3-20	



PRIMARY PARAMETERS

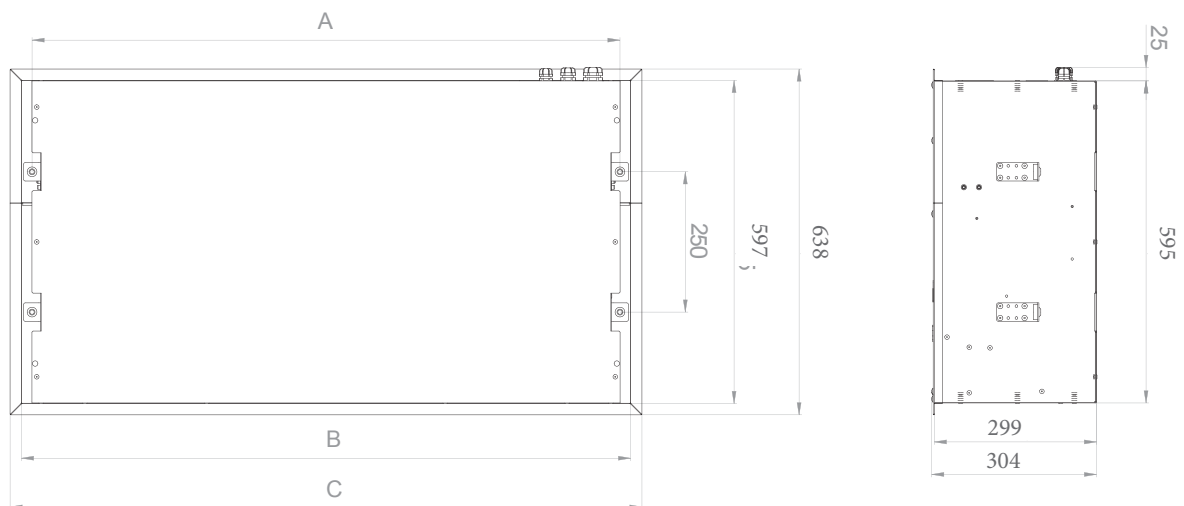
MAIN PARTS

- ① Suspension holders
- ② Water coil connection 3/4"
- ③ Power supply cable plug
- ④ Power supply connectors and fuse location
- ⑤ Control modul socket
- ⑥ Inlet face cover
- ⑦ Outlet grid



PRIMARY PARAMETERS

Air curtain dimensions



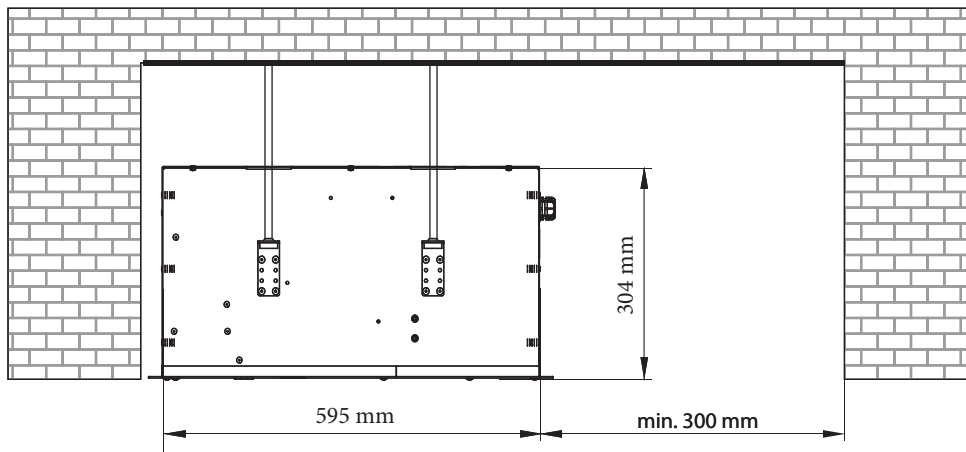
Type	A	B	C
VCF-x-100-x-...	1085	1124	1166
VCF-x-150-x-...	1585	1624	1666
VCF-x-200-x-...	2085	2124	2166
VCF-x-250-x-...	2465	2504	2546

The tube diameters for connecting the LPHW coil are G3/4".



INSTALLATION AND ASSEMBLY

- The air curtain shall be installed in a horizontal position only.
- The air curtain shall be located as close to the top edge of the doorway as possible, see figure.
- To ensure a correct function it is recommended that the air curtain overlaps the doorway by 100 mm on both sides.
- Correct operation of the air curtain requires that specified distances from the surrounding objects are observed, see figure.
- Position of the heating water and power supply connections and service access shall be taken into consideration during installation.
- Suspension holders are used for installing the air curtains see ACCESSORIES.
- The air curtain shall be installed separated from flammable materials and safe operation has to be kept.



CONTROL

The **FINESSE** air curtains are produced with universal interface for AirGENIO control module connection. There are three types of control modules available (BASIC, COMFORT and SUPERIOR). Control module is a required accessory for each air curtain. Additional change of control system is available. Control module is connected with air curtain by quick connection sockets. The basic differences among individual control module types are given in table underneath.