



VOLCANO

HEATING UNIT



WORLD'S FIRST CHOICE
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Volcano combines innovative technical solutions with a modern and functional design. We precisely engineer each component to achieve „The Function“, and we also strive for „The Form“, a form that is neglected on the segment.

We were capable of conceptualizing a diamond, simplicity, strength, and beauty were the key concepts that we used, allowing us to create a contemporary and functional cover design.

The Volcano is the 1st Engineer/Design Unit heater in the market with the IF design award in 2017

Modernity

- » **ABS** casing is characterized by high mechanical strength
- » durable colour thanks to **anti-UV** pigment mixture
- » resistance to high temperatures
- » unique design awarded with **IF Design award**
- » failure-free proven by **3 year warranty**

High performance

- » Casing design allows the heat exchanger face area to be fully functional
- » Volcanos are equipped with 1R, 2R, or 3R heaters
- » effective work with low temperature medium e.g. heating pump
- » Air louvers can be independently adjusted by hand
- » Air louvers profile provides minimal airflow resistance.

Energy efficiency

- » Our units are equipped with **EC motors**
- » Performance efficiency is guaranteed, even at low speeds
- » Smooth speed regulation
- » Volcano fan design + ECM can save up to 40% of energy



Classics vs Modernity

All VOLCANO devices are available with a three-speed AC motor and electronically commutated drive EC.



VOLCANO AC

High quality and low price

- » mounting bracket included
- » high capacity of the device
- » reliable three-speed motor
- » three step fan speed control
- » quick assembly and intuitive connection
- » competitive price



VOLCANO EC

Convenience and energy savings

- » mounting bracket included
- » highly efficient EC motor
- » smooth fan speed control
- » up to 40% lower operating costs
- » possibility of direct connection to the BMS system
- » quiet running at high speeds
- » advance callendar options
- » up to 8 units connection possibility

Product range



VOLCANO

	VR Mini	VR-D Mini	VR1	VR2	VR3	VR-D
Type	AC/EC	AC/EC	AC/EC	AC/EC	AC/EC	AC/EC
Heating power range	3-20 kW	-	5-30 kW	8-50 kW	13-75 kW	-
Maximum air output	2100 m³/h	2330 m³/h	5300 m³/h	4850 m³/h	5700 m³/h	6500 m³/h
Horizontal range (max.)	14 m	16 m	23 m	22 m	25 m	28 m
Vertical range (max.)	8 m	10 m	12 m	11 m	12 m	15 m
electricity consumption*	13-91 W	13-91 W	41-202 W	45-226 W	55-355 W	55-355 W

* EC motor power for the above specified fan outputs

Technical parameters

Parameter	Unit	VR Mini		VR1		VR2		VR3		VR-D		VR-D Mini	
		AC	EC	AC	EC	AC	EC	AC	EC	AC	EC	AC	EC
VTS article No.		1-4-0101-0445	1-4-0101-0455	1-4-0101-0446	1-4-0101-0442	1-4-0101-0447	1-4-0101-0443	1-4-0101-0448	1-4-0101-0444	1-4-0101-0449	1-4-0101-0450	1-4-0101-0506	1-4-0101-0498
Number of heater rows	-	2		1		2		3		--		--	
Maximum air output	m³/h	2100		5300		4850		5700		6500		2200 2330	
Heating power range	kW	3-20		5-30		8-50		13-75		--		--	
Maximum temperature of the heating medium	°C	130						--		--		--	
Maximum working pressure	MPa	1,6						--		--		--	
Water capacity	dm³	1,12		1,25		2,16		3,1		--		--	
Connection pipes diameter	"	3/4						--		--		--	
Device weight (without water)	kg	13	14	21	21	21,5	21,5	25,5	24,5	18	15,5	10,6	8
Power supply voltage	V/Hz	1 ~ 230/50											
Motor power	kW	0,115	0,095	0,28	0,25	0,28	0,25	0,45	0,37	0,45	0,37	0,115	0,095
Rated current	A	0,53	0,51	1,3		1,95		1,7	1,95	1,7	0,53	0,51	
Rated motor rotational speed	rpm	1450	1200	1380	1430	1380	1430	1380	1400	1380	1400	1450	1200
Motor protection level	IP	54											
Casing color palette		Front: RAL 9016 Traffic White, rear + console: RAL 7036 Platinum Gray, fan (EC): RAL 6038 Green											

PIPELINE DIAMETERS*

Number of heaters connected to the main line**	VR Mini		VR1		VR2		VR3	
	Max water flow [m³/h]	Pipeline diameter ["]	Max water flow [m³/h]	Pipeline diameter ["]	Max water flow [m³/h]	Pipeline diameter ["]	Max water flow [m³/h]	Pipeline diameter ["]
1	0,9	3/4	1,3	3/4	2,2	3/4	3,3	3/4
2	1,8	3/4	2,6	3/4	4,4	1	6,6	1 1/4
3	2,7	1	3,9	1	6,6	1 1/4	9,9	1 1/2
4	3,6	1	5,2	1	8,8	1 1/4	13,2	1 1/2
5	4,5	1	6,5	1 1/4	11	1 1/2	16,5	2
6	5,4	1 1/4	7,8	1 1/4	13,2	1 1/2	19,8	2
7	6,3	1 1/4	9,1	1 1/4	15,4	2	23,1	2 1/2
8	7,2	1 1/4	10,4	1 1/2	17,6	2	26,4	2 1/2
9	8,1	1 1/4	11,7	1 1/2	19,8	2	29,7	2 1/2
10	9,0	1 1/4	13	1 1/2	22	2 1/2	33	3

* Pipeline diameters selected for maximum water flow rate up to 2,5 m/s
 ** Heaters connected successively to one main line

Controls



PARAMETERS Model	Wall controller WING/VOLCANO	VR Thermostat	Speed regulator ARW 3.0/2	Speed regulator ARW 0.6	Potentiometer VR EC (0-10V)	Potentiometer with thermostat VR EC (0-10V)	HMI VOLCANO EC controller	
VTS product number	1-4-0101-0438	1-4-0101-0038	1-4-0101-0434	1-4-0101-0167	1-4-0101-0453	1-4-0101-0473	1-4-2801-0157	
Motor support	AC				EC			
Power supply voltage V/ph/Hz	~230/1/50	~230/1/50	~230/1/50	~230/1/50	~230/1/50	~230/1/50	~230/1/50	
Permissible load current A	6(3)	3	3	0,6	0,02 A for 0-10V		1A for 230VAC 0,02A for 0-10V	
Settings range °C	10...30	10...30	10...30	10...30	-	5...30	5...40	
Work mode	---	manual	manual	manual	manual	manual	manual/automatic	
Hourly-weekly calendar	---	No	No	No	No	No	Yes	
Clock	---	No	No	No	No	No	Yes	
Temperature measurement	---	Integrated in the device				-	Integrated in the device	
The possibility of connecting a separate temperature sensor pcs.	---	No				No	1 or 4	1 or 4
Output signal	---	on/off				0-10 V DC		
Protection rate IP		30		54		30	20	

COOPERATION OF CONTROLS AND REGULATORS WITH HEATING UNITS

VR Mini/ VR D mini	pcs.	4	1	4	1	8
VR1/ VR2	pcs.	2	1	1	0	8
VR3 / VR-D	pcs.	1	1	1	0	8

Accessories



Valve with actuator

VTS article No.	1-2-1204-2019	
power supply voltage V/ph/Hz	~230/1/50	
Power consumption electrical W	1	
connection	3/4"	
Coefficient of Volume m³/h	4,5	
opening/ closing time min.	3/3	
protection rating IP	54	



Room NTC sensor (for the HMI VOLCANO EC controller)

VTS article No.	1-2-1205-0007	
resistance measurement element kΩ	NTC 10K	
assembly	---	surface-mounted
max. signal wire length m	100	
ambient °C	-20...+70	
protection rating °C	-20...+70	
stopień ochrony IP	66	



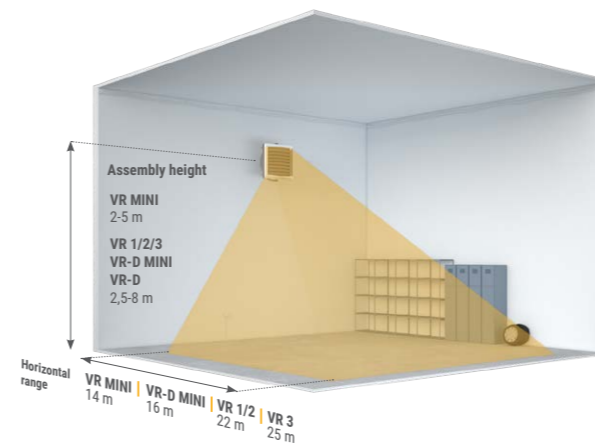
Flex. connecting hoses (set)

VTS article No.	1-2-2702-0076	
length m	0,6-0,9	
connection type GW/GW	3/4"	
max. fluid pressure MPa	1,6	
min. working temperature for water °C	5	
min. working temperature for glycol °C	-20	
max. working temperature °C	130	
set includes	hose (2 pcs) gasket (4 pcs)	

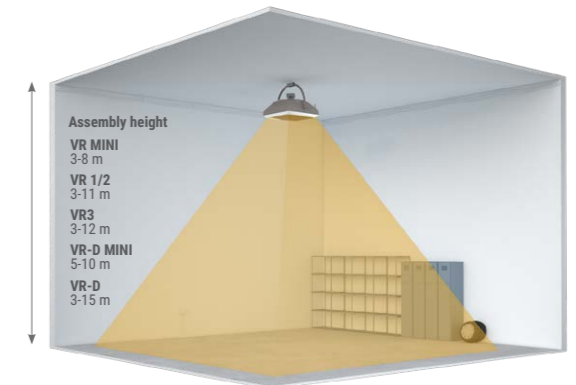


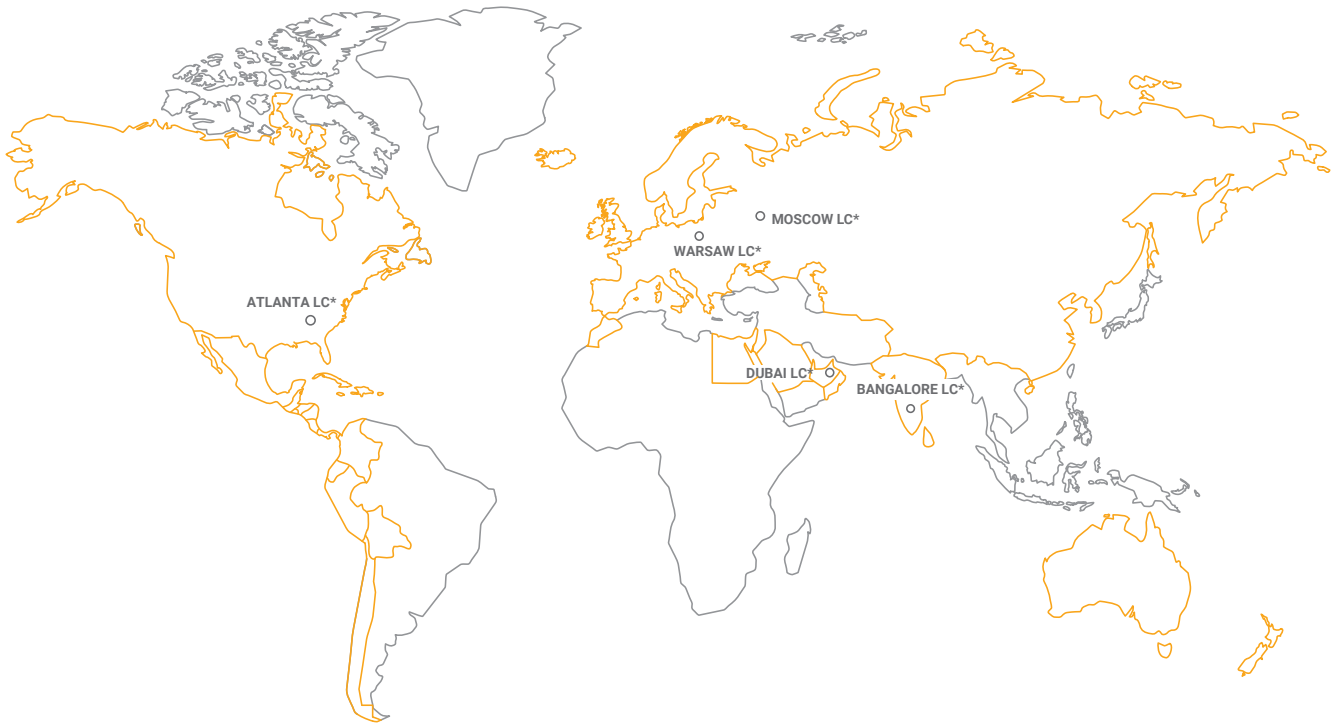
Assembly

ASSEMBLY WALL



ASSEMBLY CEILING





COMPETITIVE
\$ PRICE

 HIGH
QUALITY

OVER
1 000 000
UNITS
SOLD

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EH CAD SELECTION TOOL



VTS Plant Sp z o.o. | Olivia Tower, Al. Grunwaldzka 472A | 80-309 Gdańsk, Poland | Infolinia: 0 800 559 661 | marketing@vtsgroup.com

www.vtsgroup.com

The features mentioned are subject to continuous upgrades and can change any time.
VTS assuring continuous improvement for products and data and reserves the right to change design and specifications without notice.