



VOLCANO

Water heater



THE PERFECT SHAPE OF QUALITY



VOLCANO



**LIFETIME +
WARRANTY
PROGRAM**

**5 years of warranty
for the device
Lifetime warranty
for the housing**



HEAT EXCHANGERS

- 1, 2 and 3-row heaters featuring increased heat exchange surfaces provide optimal match of heating power to the needs of the facility;
- Additional anti-corrosive coating of all louvers increases their durability;
- A helium chamber test of all exchangers guarantees 100% verification of their tightness.

EFFECTIVE MOTORS AND EFFICIENT FANS

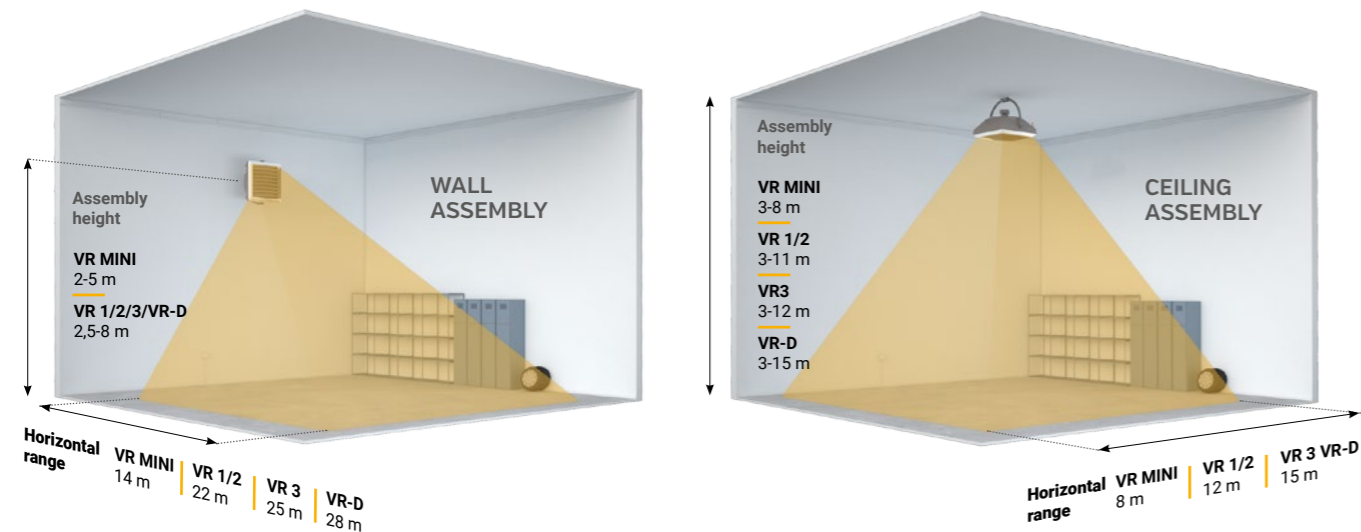
High availability of high-efficiency, three-speed AC motors and **energy-saving EC motors** allows for the optimal adaptation of the working parameters of all devices while maintaining minimum electricity consumption rates. Optimized profile and increased fan blade surfaces guarantee low operation costs and silent work.

HIGH-QUALITY, DURABLE CASING

Made of highest class ABS with anti-UV pigment mixture, the casing is characterized by high mechanical strength and durability, and resistance to high temperatures.



**ENERGY-SAVING
EC MOTORS**



AUTOMATION

Parameters					
Model	-	Wall-mounted controller WING / VOLCANO	Programmable thermostat EH20.1	Potentiometer VR EC (0-10V)	Controller HMI VR (0-10V)
VTS product number	-	1-4-0101-0438	1-4-0101-0039	1-4-0101-0453	1-4-0101-0169
Motor support	-	AC		EC	
Power supply voltage	V/ph/Hz	~230/1/50	2 x 1.5 AA batteries	~230/1/50	~230/1/50
Permissible load current	A	6(3)	3	0,02 A dla 0-10V	1A for 230VAC 0.02A for 0-10V
Setting range	°C	10...30	5...30	-	5...40
Work mode	--	Manual			Manual / automatic
Temperature measurement	--	Integrated in the device		-	Integrated in the device
Output signal	--	on/off		0-10V DC	
Protection rating	IP	30			

Heater support of controllers and regulators						
Model		Wall-mounted controller WING / VOLCANO	Programmable thermostat EH20.1	Speed regulator ARW3.0/2	Potentiometer VR EC (0-10V)	Controller HMI VR (0-10V)
VTS product number		1-4-0101-0438	1-4-0101-0039	1-4-0101-0434	1-4-0101-0453	1-4-0101-0169
Motor support		AC			EC	
VR Mini	Pcs.	4	1	4	4	4
VR1	Pcs.	2	1	1	4	4
VR2	Pcs.	2	1	1	4	4
VR3	Pcs.	1	1	1	4	4
VR-D	Pcs.	1	1	1	4	4

Parameters		
Valve with actuator (VA-VEH202TA)		
VTS product number	--	1-2-1204-2019
Power supply voltage	V/ph/Hz	~230/1/50
Power consumption	W	1
Connection	"	3/4
Kvs	m³/h	4,5
Opening/closing time	Min.	3/3
Protection rating	IP	54

Parameters		
Speed regulator ARW3.0/2		
VTS product number	--	1-4-0101-0434
Power supply voltage	V/ph/Hz	~230/1/50
Permissible output current	A	3
Regulation method	Manual	
No. of regulation steps	5	
On/off switch	Yes	
Max ambient temperature	°C	35
Protection rating	IP	54

Parameters		
Room NTC sensor (for the HMI VR controller)		
Resistance measurement element	kΩ	NTC 10K
Assembly	--	On-plaster
Maximum length of signal wire	m	100
Ambient temperature	°C	0...40
Temperature measurement range	°C	-20...+70
Protection rating	IP	20

TECHNICAL PARAMETERS

Parameter	Unit	VOLCANO VR MINI	VOLCANO VR1	VOLCANO VR2	VOLCANO VR3	VOLCANO VR-D
Number of heater rows	-	2	1	2	3	---
Maximum air output	m³/h	2100	5300	4850	5700	6500
Heating power range	kW	3-20	5-30	8-50	13-75	---
Maximum temperature of heating medium	°C	130				---
Maximum working pressure	MPa	1,6				---
Maximum horizontal air range	M	14	23	22	25	28
Maximum vertical air range	M	8	12	11	12	15
Water capacity	dm³	1,12	1,25	2,16	3,1	---
Connection stub pipe diameter	"	3/4				---
Device weight (without water)	Kg	17,5	27,5	29	31	22
Power supply voltage	V/Hz	1 ~ 230/50				
Noise level for heaters with AC motors	dB(A)	29-52	40-56	40-56	45-57	45-58
Noise level for heaters with EC motors	dB(A)	27-50	38-54	38-54	43-55	43-56
AC motor power	kW	0,115	0,28		0,41	
AC motor rated current	A	0,53	1,3		1,7	
AC motor rotations	Rpm	1450	1380			
AC motor protection rating	IP	54				
EC motor power	kW	0,095	0,25		0,37	
EC motor rated current	A	0,51	1,3		1,7	
EC motor rotations	Rpm	1450	1430		1400	
EC motor protection rating	IP	44				
Housing color palette		Front: RAL 9016 Traffic White, rear + console: RAL 7036 Platinum Gray, fan: RAL 6038 Green				

PIPELINE DIAMETERS*

Number of heaters connected to the main	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	1	3,3	1
2	1,8	1	2,7	1	4,4	1 1/4	6,6	1 1/2
3	2,8	1 1/4	4	1 1/4	6,6	1 1/2	9,9	1 3/4
4	3,7	1 1/4	5,3	1 1/2	8,8	1 3/4	13,2	2
5	4,6	1 1/4	6,7	1 1/2	11,1	2	16,6	2 1/4
6	5,5	1 1/2	8	1 3/4	13,3	2	19,9	2 1/2
7	6,4	1 1/2	9,3	1 3/4	15,5	2	23,2	2 1/2
8	7,4	1 1/2	10,6	2	17,7	2 1/4	26,5	2 3/4
9	8,3	1 3/4	12	2	19,9	2 1/2	29,8	3
10	9,2	1 3/4	13,3	2	22,1	2 1/2	33,1	3

* Refers to the length of the pipeline not longer than 40 m