# VOLCANO

HYDRONIC UNIT HEATER



STAY WARM



#### VOLCANO

**WORLDS FIRST CHOICE HYDRONIC UNIT HEATER** 

















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

VOLCANO

- » **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
- » failure-free proven by **3 year warranty**

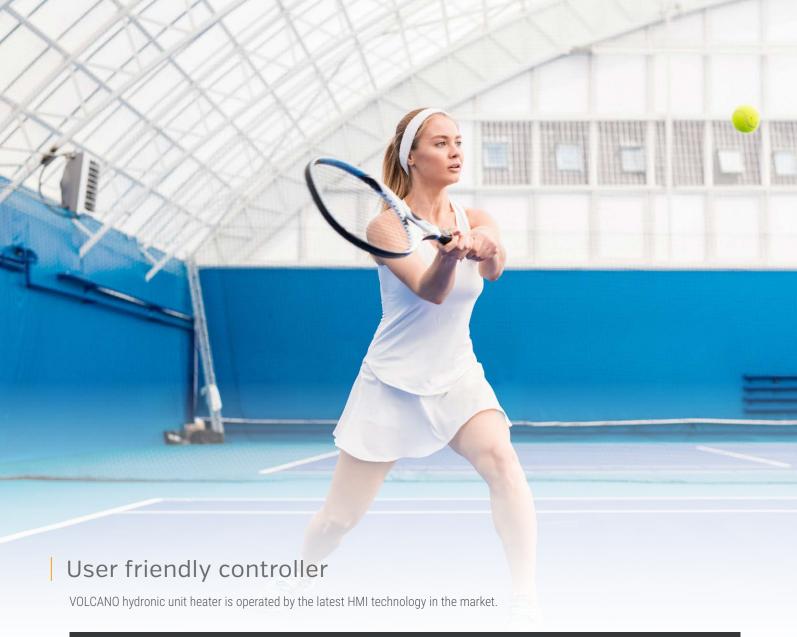
#### High performance

- » Casing design allows the Hydronic Coil face area to be fully functional
- » Volcanos are equipped with 1R, 2R, or 3R hydronic coils
- » effective work with low temparature medium ex. heating pomp
- » Louvers can be independently adjusted by hand
- » Louvers profile provides minimal airflow resistance.

#### Energy efficiency

VOLCANO

- » All of 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





### Product range







VOLCANO	VR Mini	VR-D Mini	VR1	VR2	VR3	VR-D
Heating power range	10-71 MBH	-	17-106 MBH	27-175 MBH	44-261 MBH	-
Maximum air output	1236 CFM	1371 CFM	3119 CFM	2855 CFM	3355 CFM	3826 CFM
Horizontal range (max.)	46 ft	52 ft	75 ft	72 ft	82 ft	92 ft
Vertical range (max.)	26 ft	32 ft	39 ft	36 ft	39 ft	49 ft

The above parameters refer to 240V/1pH/60Hz power supply

### Technical parameters

MODEL	VTS arcticle No.	Power supply (V/ph/Hz)	Heating power range (MBH)*	Air volume (CFM)	Maximum horizontal air range (ft)	Maximum vertical air range (ft)	Motor power (hp)	Rated current (A)	Rated motor rotation speed (RPM)
VOLCANO VR Mini	1-4-0101-0481	240/1/60 115/1/60	10-71 8-63	1236 978	46 35	26 20	0.12	0.6	1200
VOLCANO VR 1	1-4-0101-0488	240/1/60 115/1/60	17-106 8-78	3119 1827	75 48	39 25	0.34	1.3	1430
VOLCANO VR 2	1-4-0101-0489	240/1/60 115/1/60	27-175 19-131	2855 1795	72 48	36 24	0.34	1.3	1430
VOLCANO VR 3	1-4-0101-0484	240/1/60 115/1/60	44-261 33-214	3355 2391	82 55	39 26	0.5	1.6	1400
VOLCANO VR-D Mini	1-4-0101-0546	240/1/60 115/1/60		1371 1085	52 35	32 21	0.12	0.6	1200
VOLCANO VR-D	1-4-0101-0485	240/1/60 115/1/60		3826 2727	92 61	49 33	0.5	1.6	1400

<sup>\*</sup>The upper heating capacity range is specified for the following conditions: Heating medium temperature EWT = 200°F, LWT = 160°F and for air temperature EAT = 32°F

PIPELINE DIAMETE	RS* VR	Mini	VI	R1	V	R2	V	R3
Number of heaters connected to the main line**	Max water flow [GPM]	Pipeline diamete ["]	Max water flow [GPM]	Pipeline diamete [*]	Max water flow [GPM]	Pipeline diamete ["]	Max water flow [GPM]	Pipeline diamete ["]
1	0.5	3/4	0.8	3/4	1.3	3/4	1.9	3/4
2	1.1	3/4	2,6	3/4	2.6	1	3.9	11/4
3	1.6	1	3.6	1	3.6	11/4	5.8	1½
4	2.2	1	5.2	1	5.2	11/4	7.8	1½
5	2.7	1	6.5	11/4	6.5	1½	9.8	2
6	3.2	11/4	7.8	11/4	7.8	1½	11.7	2
7	3.8	11/4	9.1	11/4	9.1	2	13.7	2½
8	4.4	11/4	10.4	1½	10.4	2	15.6	2½
9	4.9	11/4	11.7	1½	11.7	2	17.5	2½
10	5.4	11/4	13	1½	13	2½	19.5	3

\* Pipeline diameters selected for maximum water flow rate up to 8 ft/s

 $\ensuremath{^{**}}$  Heaters connected successively to one main linee

### Controls

#### HMI VOLCANO controller



#### Parameters Model

Model		
VTS product number		1-4-2801-0222
Motor support		EC
Power supply voltage	V/ph/Hz	115-240/1/60
Permissible load current	А	1A for 240 V AC 0,02A for 0-10V
Settings range	°F	41104
Work mode		manual/automatic
Hourly-weekly calendar		Yes
Clock		Yes
Temperature measurement	°F	32122
The possibility of connecting a separate temperature sensor	pcs.	1 or 4
BMS		Modbus RTU RS485
Protection rate	IP	20

## Accessories



#### Valve with actuator

VTS article No.		1-2-1204-2019
power supply voltage	V/ph/ Hz	240/1/60
Power consumption electrical	W	1
connection	и	3/4
Coefficient of Volume	-	4,5
opening/ closing time	min.	3/3
protection rating	IP	54



## Room NTC sensor (for the VOLCANO controller)

VTS article No.		1-2-1205-0007
resistance measurement element	kΩ	NTC 10K
assembly		wall-mounted
max. signal wire length	yd	100
ambient	°F	-4+150
protection rating	IP	66



# Flex. connectiong hoses (set)

VTS article No.		1-2-2702-0076
lenght	ft	2-3
connectrion type	GW/GW	3/4"
max. fluid pressure	psi	232
min. working temperature for water	°F	41
min. working temperature for glycol	°F	-4
max. working temperature	°F	200
set includes		hose (2 pcs)



