



H E A T E R S   A I R   C U R T A I N S



## SONNIGER'S VISION

SONNIGER is a European dealer who supplies modern, ecological/eco-friendly and optimally selected units for industrial heating market. We are a group of specialists in the field of air heaters and curtains. Products supplied by SONNIGER are the simple choice due to its right range of products that precisely respond to market needs.

SONNIGER consultants are a group of open-minded, competent, dynamic people who are always ready to co-operate. These ties in with the whole HEATING PARTNERS philosophy, whose main objective is to support companies in the field of heating systems.

As well as offering help to make the right choice of devices, we are able to advise how to attract new customers efficiently and effectively, perform sales duties or build and create a reliable image for your company.

### SONNIGER HEATING PARTNERS

- Competitive products
- Simple choice
- Experience and knowledge
- Staff





Water fan heaters

**HEATER** .....

**04**



Standard air curtains

**GUARD** .....

**06**



Industrial air curtains

**GUARDPRO** .....

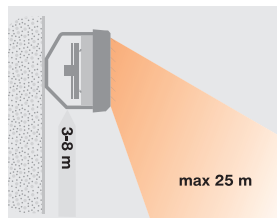
**08**

HEATER water fan heaters are a line of modern and reliable devices designed to heat high capacity buildings. They shall be used/applied as appropriate in spaces where its design combined with properly set parameters is essential.

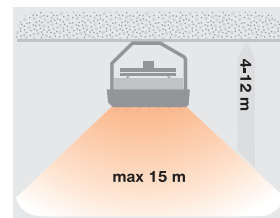
Due to its clear construction and wide range of parameters, HEATER heaters may work with most heating devices available on the market.



## Installing the Unit



Mounting to the wall



Mounting to the roof

## ADVANTAGES OF HEATER

- **Modern design**  
3 colors free of charge
- **High performance parameters**  
Air output 4900 m<sup>3</sup>/h  
Heat output range 10 - 70 kW
- **New possibilities**  
Attractive panel  
Vertical louvers
- **Lifetime warranty**  
on casing

## Automatic Control



Speed controller



Thermostat programmable



Valve and actuator

## TECHNICAL DATA

### HEATER R1

### HEATER R2

### HEATER R3

### HEATER MIX

No of unit rows	-	1	2	3	0
Max air output	[m³/h]	4 900	4 600	4 400	5 500
Heat output range	[kW]	10-30	30-50	50-70	-
Air temperature increase*	[°C]	18	33	48	-
Max working pressure	[Mpa]	1,6	1,6	1,6	-
Max airflow range	[m]	27	25	24	15 **
Diameter of connection nozzles	[inch]	3/4"	3/4"	3/4"	-
Power supply	[V/Hz]	230/50 1,15 A	230/50 1,15 A	230/50 1,15 A	230/50 1,15 A
Motor power	[kW]	0,25	0,25	0,25	0,25
Motor speed	[Umd/Min]	1350	1350	1350	1350
Protection class IP	-	IP54	IP54	IP54	IP54
Sound level	dB (A)***	50	50	50	50
Weight without water/ with water	[kg]	10,8 / 11,9	12,7 / 14,8	14,5 / 16,9	9,2

\* for temperatures of 90/70 and inlet temperature of 0°C

\*\* max installation height for horizontal installation, working area max 380 m²

\*\*\* measured in distance of 5m

## HEATER R1

Air flow 4900 m³/h (speed 3)

Inlet/outlet water temperature	Water 70/50 °C					Water 80/60 °C					Water 90/70 °C				
	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Inlet air temperature [°C]	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Heat output [kW]	19,5	17,6	15,8	14,1	12,3	23,4	21,5	19,6	17,7	15,8	27,5	25,6	23,5	21,4	19,3
Outlet air temperature [°C]	12,5	16,5	20,5	24,5	28,5	15,0	19,0	23,0	27,0	31,0	17,5	21,5	25,5	29,5	33,5
Water flow [m³/h]	0,7	0,6	0,6	0,5	0,5	0,9	0,8	0,8	0,7	0,7	1,1	1,0	1,0	0,9	0,7
Pressure drop [kPa]	0,9	0,8	0,8	0,7	0,6	1,4	1,2	1,0	0,8	0,6	2,0	1,8	1,6	1,4	1,2

## HEATER R2

Air flow 4600 m³/h (speed 3)

Inlet/outlet water temperature	Water 70/50 °C					Water 80/60 °C					Water 90/70 °C				
	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Inlet air temperature [°C]	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Heat output [kW]	34,6	31,2	27,8	24,4	21,0	41,5	38,0	34,5	30,9	27,4	48,4	44,9	41,5	38,0	34,6
Outlet air temperature [°C]	24,0	26,9	29,9	33,0	36,1	28,5	31,5	34,4	37,5	40,5	32,5	35,4	38,5	41,5	44,6
Water flow [m³/h]	1,4	1,2	1,1	1,0	0,9	1,8	1,6	1,5	1,4	1,2	1,9	1,8	1,8	1,7	1,5
Pressure drop [kPa]	5,3	4,6	3,7	2,8	1,9	7,6	6,7	5,8	4,9	4,0	10,6	9,7	8,8	7,9	7,0

## HEATER R3

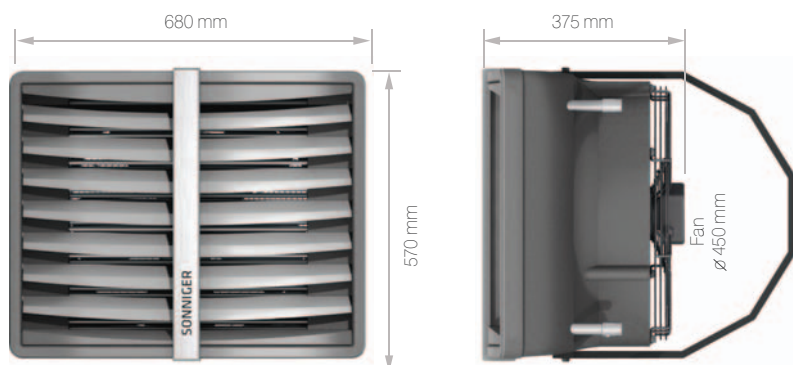
Air flow 4400m³/h (speed 3)

Inlet/outlet water temperature	Water 70/50 °C					Water 80/60 °C					Water 90/70 °C				
	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Inlet air temperature [°C]	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Heat output [kW]	49,2	45,3	41,6	38,3	34,4	58,4	54,2	50,1	46,1	42,3	67,6	63,4	59,3	55,1	51,1
Outlet air temperature [°C]	34,5	37,0	39,0	41,0	43,0	41,5	44,0	46,0	48,0	50,0	47,5	50,0	52,0	54,0	56,0
Water flow [m³/h]	1,9	1,9	1,7	1,5	1,3	1,8	2,4	2,2	1,9	1,8	2,8	2,8	2,6	2,4	2,2
Pressure drop [kPa]	12,3	9,6	7,9	6,4	5,0	16,7	13,6	11,6	9,7	8,1	21,7	18,1	15,8	13,7	11,8

## CASING AND DIMENSIONS

Revolving brackets allow fast, easy and attractive assembly of a device to the wall or ceiling.

A device maybe revolved in the range from 0 to 120 degrees while the application of assembly brackets enables to achieve requested mounting distance between a device and a wall or roof.



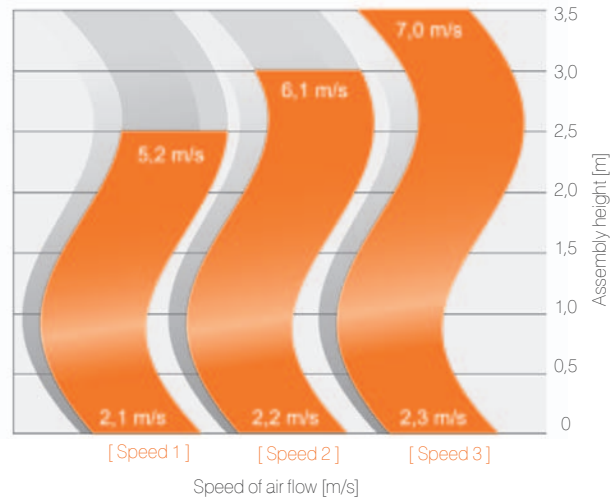
**GUARD** is a professional and attractive air curtain, whose main objective is to maintain protective barrier at the entrance to the building.

**GUARD** air curtain protects the entrance to the building from either cold or warm air as well as dust or insects. Its application allows to minimize the loss of heat, which both influences operating costs of the building and comfort of work.

**GUARD** air curtains is designed/ purposed for facilities where height of installation of devices does not exceed 3,5m.



## Speed Control



## ADVANTAGES OF GUARD

- Modern design
- Air throw up to 3,5 m
- Length of 100, 150,200
- Water, electrical, cold air curtain
- Automatic control included in the price

## Advantages of System:



Speed control allows adjustment of air curtain's efficiency and heat output in electrical air curtain

## TECHNICAL DATA

		Curtain with water heater			Curtain with electric heater			Curtain without heater		
		GUARD 100W	GUARD 150W	GUARD 200W	GUARD 100E	GUARD 150E	GUARD 200E	GUARD 100C	GUARD 150C	GUARD 200C
Length of unit	[m]	1	1,5	2	1	1,5	2	1	1,5	2
max installation height	[m]	3,5	3,5	3,5	3,5	3,5	3,5	3,5	3,5	3,5
Heat output *	[kW]	6-10	10-18	15-25	3-6	6-9	9-12	–	–	–
Max air output	[m³/h]	1050	1550	2100	1250	1800	2550	1300	1800	2650
Max working pressure	[MPa]	1,6	1,6	1,6	–	–	–	–	–	–
Diameter of connection nozzles	[inch]	1/2	1/2	1/2	–	–	–	–	–	–
Power supply	[V/Hz]	230 / 50	230 / 50	230 / 50	400 / 50	400 / 50	400 / 50	230 / 50	230 / 50	230 / 50
Motor power	[kW]	0,21	0,21	0,21	0,21	0,21	0,21	0,21	0,21	0,21
Power consumption	[A]	0,5	0,6	0,6	9,2	13,2	17,5	0,6	0,6	0,7
Weight filled with water / without water	[kg]	16	21	27	16	19	25	15	18	24
Volume level	[dB (A)]	44	44,5	46	47	48	48,5	44	44,5	46
Protection class IP		IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20

\* Heat output range for parameters of water 90/70°C and temperature of inlet air +10°C

## WATER CURTAINS

### GUARD 100W

Inlet/outlet water temperature		Water 60/40 °C					Water 70/50 °C					Water 90/70 °C				
		0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Inlet Air Temperature	[°C]	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Heat Output	[kW]	6,3	5,6	4,8	4,2	3,5	7,7	6,9	6,2	5,4	4,7	10,5	9,7	8,8	8,1	7,3
Outlet Air Temperature	[°C]	21,4	24,0	26,8	29,5	32,3	26,4	29,0	31,6	34,3	37,0	37,1	39,5	41,9	44,4	46,9
Water Flow	[m³/h]	0,3	0,3	0,2	0,2	0,1	0,3	0,3	0,3	0,2	0,2	0,4	0,4	0,4	0,4	0,3
Hydraulic Resistance	[kPa]	1,2	0,9	0,7	0,5	0,3	1,8	1,6	1,3	1,1	0,9	3,0	2,7	2,4	2,1	1,9

### GUARD 150W

Inlet/outlet water temperature		Water 60/40 °C					Water 70/50 °C					Water 90/70 °C				
		0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Inlet Air Temperature	[°C]	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Heat Output	[kW]	10,6	9,4	8,2	7,0	5,9	12,9	11,6	10,4	9,2	8,0	17,7	16,3	14,9	13,6	12,4
Outlet Air Temperature	[°C]	23,3	25,7	28,3	30,8	33,4	28,7	31,1	33,5	35,9	38,4	40,3	42,4	44,7	46,9	49,2
Water Flow	[m³/h]	0,5	0,4	0,4	0,3	0,3	0,5	0,5	0,4	0,4	0,3	0,8	0,7	0,6	0,6	0,5
Hydraulic Resistance	[kPa]	2,6	2,3	2,1	1,9	1,7	3,3	3,1	2,8	2,4	2,2	4,1	3,7	3,5	3,3	3,0

### GUARD 200W

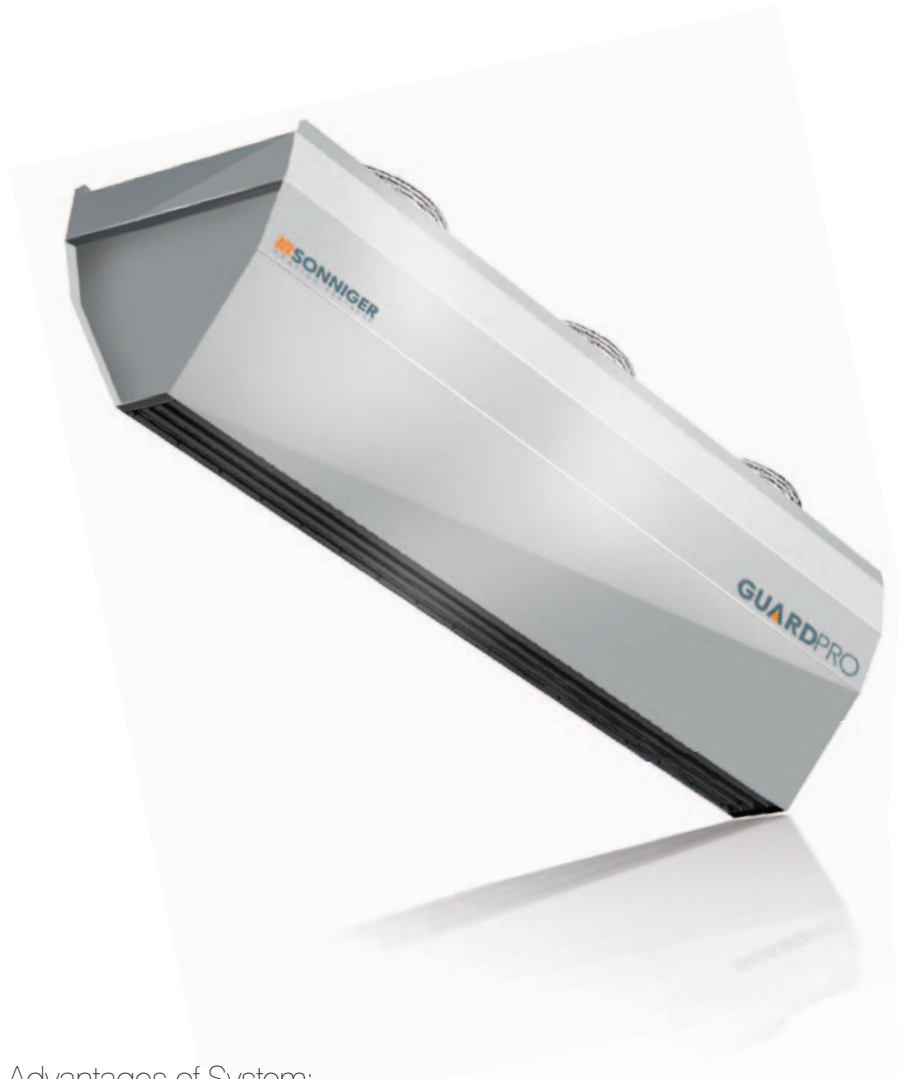
Inlet/outlet water temperature		Water 60/40 °C					Water 70/50 °C					Water 90/70 °C				
		0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Inlet Air Temperature	[°C]	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Heat Output	[kW]	15,3	13,5	11,8	10,1	8,5	18,6	16,7	15,0	13,2	11,5	25,4	23,4	21,5	19,6	17,8
Outlet Air Temperature	[°C]	24,7	27,0	29,4	31,8	34,2	30,4	32,6	34,9	37,2	39,6	42,6	44,6	46,7	48,8	51,0
Water Flow	[m³/h]	0,6	0,6	0,5	0,4	0,4	0,8	0,7	0,6	0,6	0,5	1,1	1,0	0,9	0,8	0,8
Hydraulic Resistance	[kPa]	2,4	2,0	1,8	1,4	1,2	3,0	2,6	2,2	1,9	1,7	5,5	5,1	4,8	4,4	3,9

## ELECTRIC AIR CURTAINS

### GUARD 100E, 150E, 200E

Parameters of Heating Medium		GUARD 100E					GUARD 150E					GUARD 200E				
		0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Inlet/outlet water temperature	[°C]	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
Heat output [kW]	[kW]	6,2	6,2	6,2	6,2	6,2	9,1	9,1	9,1	9,1	9,1	12,2	12,2	12,2	12,2	12,2
Outlet air temperature [°C]	[°C]	15,9	20,9	25,9	30,9	35,9	15,9	20,9	25,9	30,9	35,9	14,8	19,8	24,8	29,8	34,8

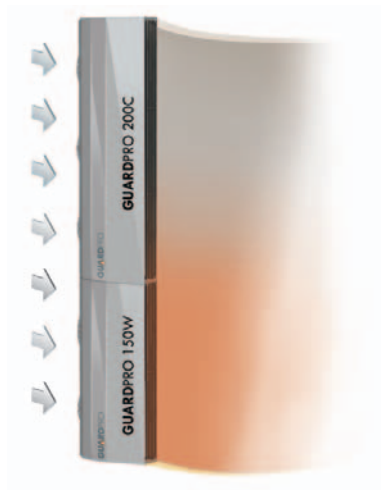
**GUARDPRO** is a line of professional and effective devices/products purposed for protecting industrial premises from the loss of heat energy through gateway (vehicle) ranging from 3-7 m thanks to high efficiency and applying modular construction.



## ADVANTAGES OF **GUARDPRO**

- Air throw up to 7m
- Modular system based on length of air curtains 1,5m and 2m
- Vertical or horizontal assembly
- ACTIVE PROTECTION System

### Advantages of System:



**ACTIVE PROTECTION** system improves effectivity of air bareer which protects entrance doors. If you decide on **ACTIVE PROTECTION** system, which is the assembly of curtains with water exchanger and without one, you have to mount air curtains with water exchangers on the bottom. Hot air leaving bottom curtain will move into upper side and will create temperature comfort for users.

### Automatic Control



Doorstop



SPEEDER



CONTROLBOX



## TECHNICAL DATA

		Curtain with water heater		Curtain without heater	
		GUARDPRO 150W	GUARDPRO 200W	GUARDPRO 150C	GUARDPRO 200C
Lenght of unit	[m]	1,5	2	1,5	2
Max airflow range	[m]	7,5	7,5	7,5	7,5
Heat output*	[kW]	33	47	-	-
Max air output	[m³/h]	6 500	9 000	6 800	9 200
Max working pressure	[MPa]	1,6	1,6	-	-
Diameter of connection nozzles	[inch]	3/4"	3/4"	-	-
Power supply	[V/Hz]	230/50	230/50	230/50	230/50
Motor power	[kW]	0,5	0,75	0,5	0,75
Power consumption	[A]	2,4	3,6	2,4	3,6
Weight filled with water / without water	[kg]	46/44	62/60	37	51
Volume level	dB (A)	58	60	58	60
Protection class IP		IP 54	IP 54	IP 54	IP 54

\* for water parameters 90/70°C, inlet air temperature 0°C

### GUARDPRO 150W

Water 60/40 °C

Water 70/50 °C

Water 90/70 °C

Air flow - 6500 m³/h

	[°C]	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
inlet air temperature	[°C]															
heat output	[kW]	19,1	17,0	14,9	12,8	10,7	23,9	21,5	19,2	17,0	14,7	33,0	30,8	28,5	26,2	23,9
outlet air temperature	[°C]	8,8	12,7	16,7	20,6	24,5	10,5	14,5	18,6	22,6	26,5	14,3	18,2	22,2	26,2	30,2
water flow	[m³/h]	0,7	0,7	0,7	0,4	0,4	1,1	0,7	0,7	0,7	0,7	1,4	0,7	0,7	0,7	0,7
pressure drop	[kPa]	2,4	1,8	1,3	0,9	0,5	3,7	3,1	2,5	2,0	1,5	6,7	5,9	5,2	4,4	3,8

### GUARDPRO 200W

Water 60/40 °C

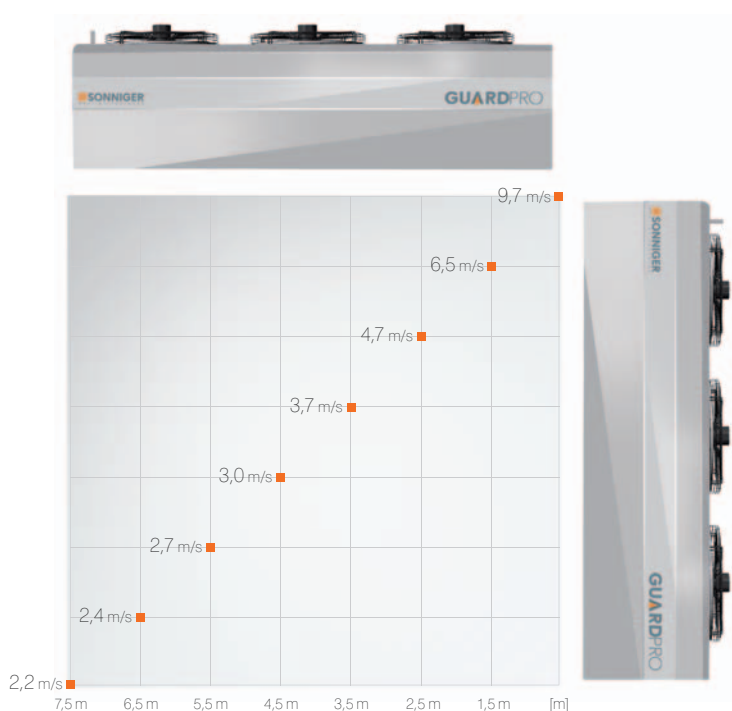
Water 70/50 °C

Water 90/70 °C

Air flow - 9000 m³/h

	[°C]	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
inlet air temperature	[°C]															
heat output	[kW]	29,1	25,5	22,1	18,9	15,8	35,1	31,8	28,6	25,4	22,3	47,0	43,4	39,9	36,5	33,2
outlet air temperature	[°C]	8,7	12,7	16,6	20,6	24,6	10,4	14,4	18,4	22,4	26,4	14,1	18,1	22,1	26,1	30,1
water flow	[m³/h]	1,1	1,1	0,7	0,7	0,7	1,4	0,7	0,7	0,7	0,4	1,8	1,8	1,4	1,4	1,4
pressure drop	[kPa]	5,6	4,4	6,1	2,5	1,7	8,5	7,1	5,8	4,7	3,7	15,0	13,0	12,0	9,9	8,5

## Speed of air flow





**New  
Standard**

INDUSTRIAL AIR CURTAIN  
**GUARDPRO**

- Competitive price
- Modern design
- Strong technical parameters, up to 7,5 installation height
- Innovative connection system of curtain modules

 **SONNIGER**  
HEATING PARTNERS

# HEATER NUMBER 1 IN EUROPE



Modern  
design

3 colors free of charge

High  
performance  
parameters

Air output 4900 m<sup>3</sup>/h  
Heat output range 10 - 70 kW

New  
possibilities

Attractive panel  
Vertical louvers

Lifetime  
warranty

on casing

