

Technical dokumentation

# HEATSCOPE

# H=ATSCOPE®

HEATSCOPE® PULSE is a brand new way to heat specific indoor zones or rooms – or even entire buildings - efficiently while saving cost and energy. A focus on high heat radiation and low convection is the key to banishing the cold quickly. The devices can be controlled individually, or grouped together by room or living unit, providing you with the ultimate comfort and convenience wherever you wish. The system can be seamlessly combined with other, existing heating systems, helping you to save energy in the process. What's more, the investment cost and the future maintenance cost is extremely low, since there is no need to route any pipes into the building or transport hot water over long distances – a simple socket is all that is required. As well as being suitable for wall mounting, the devices can also be installed in ceilings for a completely flush finish.

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# Innovation

The latest advancement is the intelligent, digital controller for the HEATSCOPE IR heater. HEATSCOPE has continued to refine the products. As a developer and manufacturer, when we come across new technical possibilities we can react to them and implement them quickly and directly.

Digital energy management records the temperature of the HEATSCOPE IR heater in real time, using the software to make smart predictions. The result is optimal operation of the HEATSCOPE IR heater in terms of heat emission, for a heater that is not just more efficient but safer too.

# **Energy Management System**

The Energy Management System (EMS) is a bit like a multi-speed gearbox in a car. In order to accelerate when joining the motorway, a lot of power is used. As soon as the desired speed is reached, the power is reduced. The result is that the speed is kept constant without a large amount of energy being used. the target. With a loss-minimising design and fast, direct and practically loss-free heat generation, this device is geared up to deliver maximum performance. The entire process happens in fractions of a second, without noise or major heat differences.

The HEATSCOPE IR heater ramps up to the target temperature quickly. As soon as it reaches this temperature, it only inputs as much energy as is needed to maintain this level. During operation, the HEATSCOPE IR heater does not switch off completely. Instead, the software controls the energy intake via a semiconductor relay – a digital energy manager – with great precision, preventing the temperature from overshooting or undershooting

### Start phase:

To see how it works, take a look at the graph of energy intake over the period from start-up until the target temperature is reached. When the target temperature has nearly been reached, the digital controller begins to reduce the power so that the surface temperature does not overshoot the target.

### Maintenance of the target temperature:

No more energy than necessary is used to keep the surface at the selected temperature. This decreases the reaction time of the heat emission to the room while the surface temperature remains stable.



Another advantage of this technology is the continuously variable power controller that does not rely on a mechanical relay. The semiconductor relay is not susceptible to wear during use, and can be controlled precisely by the HEATSCOPE, extending the service life even further.













RP54920 920 W

# Specifications

Front	Low iron oxide, toughened safety glass with special coating and high radiation value. Available in matt white or matt black. Also available as customised image panel heater. All variants have temperature-resistant ceramic screen printing.	Voltage Max. power EMS watts Max. current Protection class	230 VAC, 50 Hz 290 W continuously adjustable 0 to 290 1.4 A IP 44
Back	RAL 9010 (matt white version) RAL 9005 (matt black version) Powder-coated, mineral insulation	Max. temperature of front Max. temperature of back	85ºC 30ºC
Functional scope	– Integrated EMS with electronic surface temperature control – Thermal fuses	Installation	Suitable for ceiling and wall mounting or with accessories Art. no. MHS-RPCI302WT for integrated installation.



# Specifications | RP30290

Dimensions in mm	Weight	Colour	Art. no.
300 x 1200 x 30	8 kg	matt white	MHS-RP30290WT.100
300 x 1200 x 30	8 kg	matt black	MHS-RP30290AB.100

# Delta Dore plug & heat combined unit

Dimensions in mm	Weight	Colour	Art. no.
300 x 1200 x 30	8 kg	matt white	MHS-RCP30290WT.100
300 x 1200 x 30	8 kg	matt black	MHS-RCP30290AB.100

Heat output	Symbol	RP30290
Nominal heat output	Pnom	0.29 kW
Minimum heat output (guide value)	P <sub>min</sub>	0.0 kW
Maximum continuous heat output	P <sub>max,c</sub>	0.29 kW
Infinitely variable power consumption in operation	Poperation	0.0 – 0.29 kW

Auxiliary power consumption	Symbol	RP30290
At nominal heat output	el <sub>max</sub>	0.0 kW
At minimum heat output	el <sub>min</sub>	0.0 kW
In standby mode	el <sub>SB</sub>	0.0 kW

# Type of heat output/room temperature control\*

- Single-stage heat output, no room temperature control
- Two or more manually adjustable stages, no room temperature con
- Room temperature control with mechanical thermostat
- With electronic room temperature control
- Electronic room temperature control and time of day management
- Electronic room temperature control and day of week managemer

# Other control options\*

- Room temperature control with occupancy detection
- Room temperature control with open window detection
- With remote control option
- With adaptive control of heating start
- With operating time limitation
- With black bulb sensor

\*In combination with the control technology recommended by HEATSCOPE.

no
no
по
no
по
yes

optional
optional
yes
yes
yes
no

# Specifications

Front	Low iron oxide, toughened safety glass with special coating and high radiation value. Available in matt white or matt black. Also available as customised image panel heater. All variants have temperature-resistant ceramic screen printing.	Voltage Max. power EMS watts Max. current Protection class	230 VAC, 50 Hz 430 W continuously adjustable 0 to 430 1.9 A IP 44
Back	RAL 9010 (matt white version) RAL 9005 (matt black version) Powder-coated, mineral insulation	Max. temperature of front Max. temperature of back	85⁰C 30ºC
Functional scope	<ul> <li>Integrated EMS with electronic</li> <li>surface temperature control</li> <li>Thermal fuses</li> </ul>	Installation	Suitable for ceiling and wall mounting or with accessories Art. no. MHS-RPCI303WT for integrated installation.



# Specifications | RP30430

Dimensions in mm	Weight	Colour	Art. no.
300 x 1700 x 30	12 kg	matt white	MHS-RP30430WT.100
300 x 1700 x 30	12 kg	matt black	MHS-RP30430AB.100

### Delta Dore plug & heat combined unit

Dimensions in mm	Weight	Colour	Art. no.
300 x 1700 x 30	12 kg	matt white	MHS-RCP30430WT.100
300 x 1700 x 30	12 kg	matt black	MHS-RCP30430AB.100

Heat output	Symbol	RP30430
Nominal heat output	Pnom	0.43 kW
Minimum heat output (guide value)	P <sub>min</sub>	0.0 kW
Maximum continuous heat output	P max,c	0.43 kW
Infinitely variable power consumption in operation	Poperation	0.0 – 0.43 kW

Auxiliary power consumption	Symbol	RP30430
At nominal heat output	el <sub>max</sub>	0.0 kW
At minimum heat output	el <sub>min</sub>	0.0 kW
In standby mode	el <sub>SB</sub>	0.0 kW

# Type of heat output/room temperature control\*

51	nσ	IP-STAGE	heat	outnut	nn	rnnm	temne	Prature	control
	115	ic stuge	ncut	output,	110	100111	cemp	ciucuic	CONTRION

- Two or more manually adjustable stages, no room temperature con
- Room temperature control with mechanical thermostat
- With electronic room temperature control
- Electronic room temperature control and time of day managemen
- Electronic room temperature control and day of week managemer

Other control options*
Room temperature control with occupancy detection
Room temperature control with open window detection
With remote control option
With adaptive control of heating start
With operating time limitation

With black bulb sensor

\*In combination with the control technology recommended by HEATSCOPE.

	no
ntrol	no
	no
	no
t	no
nt	yes

optional
optional
yes
yes
yes
no

# Specifications

Front	Low iron oxide, toughened safety glass with special coating and high radiation value. Available in matt white or matt black. Also available as customised image panel heater. All variants have temperature-resistant ceramic screen printing.	Voltage Max. power EMS watts Max. current Protection class	230 VAC, 50 Hz 440 W continuously adjustable 0 to 440 1.9 A IP 44
Back	RAL 9010 (matt white version) RAL 9005 (matt black version) Powder-coated, mineral insulation	Max. temperature of front Max. temperature of back	85⁰C 30ºC
Functional scope	– Integrated EMS with electronic surface temperature control – Thermal fuses	Installation	Suitable for ceiling and wall mounting or with accessories Art. no. MHS-RPCI402WT for integrated installation.



# Specifications | RP40440

Dimensions in mm	Weight	Weight Colour	
400 x 1200 x 30	9.5 kg	matt white	MHS-RP40440WT.100
400 x 1200 x 30	9.5 kg	matt black	MHS-RP40440AB.100

# Delta Dore plug & heat combined unit

Dimensions in mm	Weight	Colour	Art. no.
400 x 1200 x 30	9.5 kg	matt white	MHS-RCP40440WT.100
400 x 1200 x 30	9.5 kg	matt black	MHS-RCP40440AB.100

Heat output	Symbol	RP40440
Nominal heat output	Pnom	0.44 kW
Minimum heat output (guide value)	P <sub>min</sub>	0.0 kW
Maximum continuous heat output	P <sub>max,c</sub>	0.44 kW
Infinitely variable power consumption in operation	Poperation	0.0 - 0.44 kW

Auxiliary power consumption	Symbol	RP40440
At nominal heat output	el <sub>max</sub>	0.0 kW
At minimum heat output	el <sub>min</sub>	0.0 kW
In standby mode	el <sub>SB</sub>	0.0 kW

# Type of heat output/room temperature control\*

- Single-stage heat output, no room temperature control
- Two or more manually adjustable stages, no room temperature con
- Room temperature control with mechanical thermostat
- With electronic room temperature control
- Electronic room temperature control and time of day management
- Electronic room temperature control and day of week managemen

# Other control options\*

Room temperature control with occupancy detection

- Room temperature control with open window detection
- With remote control option
- With adaptive control of heating start
- With operating time limitation

With black bulb sensor

\*In combination with the control technology recommended by HEATSCOPE.

# MHS Munich Home Systems | Kramergasse 32 | D-82054 Sauerlach near Munich Product information pursuant to Regulation (EU) 2015/1188 (Ecodesign Directive)

12

no
no
по
no
по
yes

optional
optional
yes
yes
yes
no

### Specifications

Front	Low iron oxide, toughened safety glass with special coating and high radiation value. Available in matt white or matt black. Also available as customised image panel heater. All variants have temperature-resistant ceramic screen printing.	Voltage Max. power EMS watts Max. current Protection class	230 VAC, 50 Hz 640 W continuously adjustable 0 to 640 2.7 A IP 44
Back	RAL 9010 (matt white version) RAL 9005 (matt black version) Powder-coated, mineral insulation	Max. temperature of front Max. temperature of back	85⁰C 30ºC
Functional scope	<ul> <li>Integrated EMS with electronic</li> <li>surface temperature control</li> <li>Thermal fuses</li> </ul>	Installation	Suitable for ceiling and wall mounting or with accessories Art. no. MHS-RPCI403WT for integrated installation.



# Specifications | RP40640

Dimensions in mm	Weight	Colour	Art. no.
400 x 1700 x 30	14.5 kg	matt white	MHS-RP40640WT.100
400 x 1700 x 30	14.5 kg	matt black	MHS-RP40640AB.100

### Delta Dore plug & heat combined unit

Dimensions in mm	Weight	Colour	Art. no.
400 x 1700 x 30	14.5 kg	matt white	MHS-RCP40640WT.100
400 x 1700 x 30	14.5 kg	matt black	MHS-RCP40640AB.100

Heat output	Symbol	RP40640
Nominal heat output	Pnom	0.64 kW
Minimum heat output (guide value)	P <sub>min</sub>	0.0 kW
Maximum continuous heat output	P <sub>max,c</sub>	0.64 kW
Infinitely variable power consumption in operation	Poperation	0.0 - 0.64 kW

Auxiliary power consumption	Symbol	RP40640	
At nominal heat output	el <sub>max</sub>	0.0 kW	
At minimum heat output	el <sub>min</sub>	0.0 kW	
In standby mode	el <sub>SB</sub>	0.0 kW	

# Type of heat output/room temperature control\*

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Sirigi	e-slage	liegr	output,	10	111001	terri	perati	ire	COLITO	l

- Two or more manually adjustable stages, no room temperature con
- Room temperature control with mechanical thermostat
- With electronic room temperature control
- Electronic room temperature control and time of day managemen
- Electronic room temperature control and day of week management

Room temperature control with occupancy detection

Room temperature control with open window detection

With remote control option

With adaptive control of heating start

With operating time limitation

With black bulb sensor

\*In combination with the control technology recommended by HEATSCOPE.

no
no
по
no
по
yes

optional
optional
yes
yes
yes
no

# Specifications

Front	Low iron oxide, toughened safety glass with special coating and high radiation value. Available in matt white or matt black. Also available as customised image panel heater. All variants have temperature-resistant ceramic screen printing	Voltage Max. power EMS watts Max. current Protoction class	230 VAC, 50 Hz 254 W continuously adjustable 0 to 254 1.3 A
Back	RAL 9010 (matt white version) RAL 9005 (matt black version) Powder-coated, mineral insulation	Max. temperature of front Max. temperature of back	85ºC 30ºC
Functional scope	– Integrated EMS with electronic surface temperature control – Thermal fuses	Installation	Suitable for ceiling and wall mounting.

Back view	Front view	Side view
Hole pattern RP54254		





# Device depth 30 mm

Rear ventilation 24 or 29 mm Power connection Position behind the device Installation depth 54 or 59 mm



# Specifications | RP54254

Dimensions in mm	Weight	Colour	Art. no.
540 x 540 x 30	8 kg	matt white	MHS-RP54254WT.100
540 x 540 x 30	8 kg	matt black	MHS-RP54254AB.100

# Delta Dore plug & heat combined unit

Dimensions in mm	Weight	Colour	Art. no.
540 x 540 x 30	8 kg	matt white	MHS-RCP54254WT.100
540 x 540 x 30	8 kg	matt black	MHS-RCP54254AB.100

Heat output	Symbol	RP54254
Nominal heat output	Pnom	0.25 kW
Minimum heat output (guide value)	Pmin	0.0 kW
Maximum continuous heat output	P <sub>max,c</sub>	0.25 kW
Infinitely variable power consumption in operation	Poperation	0.0 – 0.25 kW

Auxiliary power consumption	Symbol	RP54254
At nominal heat output	el <sub>max</sub>	0.0 kW
At minimum heat output	el <sub>min</sub>	0.0 kW
In standby mode	el <sub>sb</sub>	0.0 kW

# Type of heat output/room temperature control\*

Cingle stage	hast sutput	no room	tomporature	control
		1101 0010101		1 [ ] ] ] ] [ [ ] ] ]
Single stage	neur ourpur,	110 100111	cemperature	control

- Two or more manually adjustable stages, no room temperature co
- Room temperature control with mechanical thermostat
- With electronic room temperature control
- Electronic room temperature control and time of day management
- Electronic room temperature control and day of week managemer

# Other control options\*

Room	tem	perat	ture	cont	trol	with	occu	panc	y de	etec	tio	n

- Room temperature control with open window detection
- With remote control option
- With adaptive control of heating start
- With operating time limitation
- With black bulb sensor

\*In combination with the control technology recommended by HEATSCOPE.

	no
ntrol	по
	no
	no
t	no
nt	yes

optional
optional
yes
yes
yes
no

# Specifications

Front	Low iron oxide, toughened safety glass with special coating and high radiation value. Available in matt white or matt black. Also available as customised image panel heater. All variants have temperature-resistant ceramic screen printing.	Voltage Max. power EMS watts Max. current Protection class	230 VAC, 50 Hz 554 W continuously adjustable 0 to 554 2.4 A IP 44
Back	RAL 9010 (matt white version) RAL 9005 (matt black version) Powder-coated, mineral insulation	Max. temperature of front Max. temperature of back	85ºC 30ºC
Functional scope	<ul> <li>Integrated EMS with electronic</li> <li>surface temperature control</li> <li>Thermal fuses</li> </ul>	Installation	Suitable for ceiling and wall mounting or with accessories Art. no.MHS-RPCI542WT for integrated installation.



# Specifications | RP54554

Dimensions in mm	Weight	Colour	Art. no.
540 x 1200 x 30	15 kg	matt white	MHS-RP54554WT.100
540 x 1200 x 30	15 kg	matt black	MHS-RP54554AB.100

### Delta Dore plug & heat combined unit

Dimensions in mm	Weight	Colour	Art. no.
540 x 1200 x 30	15 kg	matt white	MHS-RCP54554WT.100
540 x 1200 x 30	15 kg	matt black	MHS-RCP54554AB.100

Heat output		
Nominal heat	output	
Minimum hea	t output (guide value)	
Maximum con	tinuous heat output	
Infinitely varia	ble power consumption in operation	

Auxiliary power consumption	Symbol	RP54554
At nominal heat output	el <sub>max</sub>	0.0 kW
At minimum heat output	el <sub>min</sub>	0.0 kW
In standby mode	el <sub>sb</sub>	0.0 kW

# Type of heat output/room temperature control\*

Single-stage	heat o	output, no	room	temperature	contro

- Two or more manually adjustable stages, no room temperature con
- Room temperature control with mechanical thermostat
- With electronic room temperature control
- Electronic room temperature control and time of day management
- Electronic room temperature control and day of week managemen

### Other control options\*

Room temperature control with occupancy detection

- Room temperature control with open window detection
- With remote control option

With adaptive control of heating start

With operating time limitation

With black bulb sensor

\*In combination with the control technology recommended by HEATSCOPE.

Symbol	RP54554
P <sub>nom</sub>	0.55 kW
Pmin	0.0 kW
P <sub>max,c</sub>	0.55 kW
Poperation	0.0 – 0.55 kW

	no
ntrol	no
	no
	no
t	no
nt	yes

optional
optional
yes
yes
yes
no

# Specifications

Front	Low iron oxide, toughened safety glass with special coating and high radiation value. Available in matt white or matt black. Also available as customised image panel heater. All variants have temperature-resistant ceramic screen printing.	Voltage Max. power EMS watts Max. current Protection class	230 VAC, 50 Hz 920 W continuously adjustable 0 to 920 3.5 A IP 44
Back	RAL 9010 (matt white version) RAL 9005 (matt black version) Powder-coated, mineral insulation	Max. temperature of front Max. temperature of back	85⁰C 30ºC
Functional scope	<ul> <li>Integrated EMS with electronic</li> <li>surface temperature control</li> <li>Thermal fuses</li> </ul>	Installation	Suitable for ceiling and wall mounting or with accessories Art. no. MHS-RPCI543WT for integrated installation.



# Specifications | RP54920

Dimensions in mm	Weight	Colour	Art. no.
540 x 1700 x 30	19 kg	matt white	MHS-RP54920WT.100
540 x 1700 x 30	19 kg	matt black	MHS-RP54920AB.100

### Delta Dore plug & heat combined unit

Dimensions in mm	Weight	Colour	Art. no.
540 x 1700 x 30	19 kg	matt white	MHS-RCP54920WT.100
540 x 1700 x 30	19 kg	matt black	MHS-RCP54920AB.100

Heat output	
Nominal heat output	
Minimum heat output (guide value)	
Maximum continuous heat output	
Infinitely variable power consumption in operation	

Auxiliary power consumption	Symbol	RP54920
At nominal heat output	el <sub>max</sub>	0.0 kW
At minimum heat output	el <sub>min</sub>	0.0 kW
In standby mode	el <sub>SB</sub>	0.0 kW

Type of heat output/room temperature control*
Single-stage heat output, no room temperature control

2	5		

- Two or more manually adjustable stages, no room temperature co
- Room temperature control with mechanical thermostat
- With electronic room temperature control
- Electronic room temperature control and time of day managemen
- Electronic room temperature control and day of week managemer

Other control options*
Room temperature control with occupancy detection
Room temperature control with open window detection
With remote control option
With adaptive control of heating start
With operating time limitation

With black bulb sensor

\*In combination with the control technology recommended by HEATSCOPE.

Symbol	RP54920
P <sub>nom</sub>	0.92 kW
Pmin	0.0 kW
P <sub>max,c</sub>	0.92 kW
Poperation	0.0 – 0.92 kW

	no
ntrol	no
	no
	no
t	no
nt	yes

optional
optional
yes
yes
yes
no







# H**E**ATSCOPE®



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# Ceiling grid heater | RP62420

### Specifications

Front	Low iron oxide, toughened safety glass with	Voltage	230 VAC, 50 Hz
	special coating and high radiation value.	Max. power	420 W
	All variants come with temperature-resistant	EMS	continuously adjustable 0 to 420
	ceramic screen printing in matt white or	watts	
	matt black.	Max. current	
		Protection class	IP 44
Back	Powder-coated, mineral insulation		
	RAL 9010 (matt white)	Max. temperature of front	96ºC
		Max. temperature of back	36ºC
Functional scope	- Integrated EMS with electronic		
	surface temperature control – Thermal fuses	Installation	Only for installation in ceiling grids with the standard dimensions 62.5 x 62.5 cm (Germany).



open, 3-pole cable

The ceiling grid heaters are designed to fit precisely in a ceiling system. Since the edge region of the glass is not heated directly, the temperature of the T-profile of the ceiling system remains well below the permitted maximum of 60 kelvin higher than the ambient temperature. To secure the unit, it can be suspended from an M8 thread in the centre of the back. The material required for this is not included in the scope of delivery (eyelet, steel cable, etc.).

# Specifications | RP62420

Dimensions in mm	Weight	Colour	Art. no.
618 x 618 x 30	7.2 kg	matt white	MHS-RP62420WT.100
618 x 618 x 30	7.2 kg	matt black	MHS-RP62420AB.100

### Delta Dore plug & heat combined unit

Dimensions in mm	Weight	Colour	Art. no.
618 x 618 x 30	7.2 kg	matt white	MHS-RCP62420WT.100
618 x 618 x 30	7.2 kg	matt black	MHS-RCP62420AB.100

Heat output	Symbol	RP62420
Nominal heat output	Pnom	0.42 kW
Minimum heat output (guide value)	Pmin	0.0 kW
Maximum continuous heat output	P <sub>max,c</sub>	0.42 kW
Infinitely variable power consumption in operation	Poperation	0.0 – 0.42 kW

Auxiliary power consumption	Symbol	RP62420
At nominal heat output	el <sub>max</sub>	0.0 kW
At minimum heat output	el <sub>min</sub>	0.0 kW
In standby mode	el <sub>SB</sub>	0.0 kW

### Type of heat output/room temperature control\*

Single-stage heat output, no room temperature control	no
Two or more manually adjustable stages, no room temperature control	no
Room temperature control with mechanical thermostat	no
With electronic room temperature control	no
Electronic room temperature control and time of day management	no
Electronic room temperature control and day of week management	yes
Room temperature control with mechanical thermostat With electronic room temperature control Electronic room temperature control and time of day management Electronic room temperature control and day of week management	no no no yes

### Other control options\*

Room temperature	e control v	vith occup	pancy (	detection
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- Room temperature control with open window detection
- With remote control option
- With adaptive control of heating start
- With operating time limitation
- With black bulb sensor

\*In combination with the control technology recommended by HEATSCOPE.

 optional
optional
yes
yes
yes
no

# Ceiling grid heater | RP60400

### Specifications

Front	Low iron oxide, toughened safety glass with	Voltage	230 VAC, 50 Hz
	special coating and high radiation value.	Max. power	400 W
	All variants come with temperature-resistant	EMS	continuously adjustable 0 to 400
	ceramic screen printing in matt white or	watts	
	matt black.	Max. current	
		Protection class	IP 44
Back	Powder-coated, mineral insulation		
	RAL 9010 (matt white)	Max. temperature of front	96ºC
		Max. temperature of back	36ºC
Functional scope	<ul> <li>Integrated EMS with electronic</li> </ul>		
	surface temperature control – Thermal fuses	Installation	Only for installation in ceiling grids with the standard dimensions 60 x 60 cm (EU + Switzerland).



open, 3-pole cable

The ceiling grid heaters are designed to fit precisely in a ceiling system. Since the edge region of the glass is not heated directly, the temperature of the T-profile of the ceiling system remains well below the permitted maximum of 60 kelvin higher than the ambient temperature. To secure the unit, it can be suspended from an M8 thread in the centre of the back. The material required for this is not included in the scope of delivery (eyelet, steel cable, etc.).

# Specifications | RP60400

Dimensions in mm	Weight	Colour	Art. no.
593 x 593 x 30	7.2 kg	matt white	MHS-RP60400WT.100
593 x 593 x 30	7.2 kg	matt black	MHS-RP60400AB.100

### Delta Dore kombi Plug & Heat

Abmessung in mm	Gewicht	Farbe	ArtNr.
593 x 593 x 30	7.2 kg	matt white	MHS-RCP60400WT.100
593 x 593 x 30	7.2 kg	matt black	MHS-RCP60400AB.100

Heat output
Nominal heat output
Minimum heat output (guide value)
Maximum continuous heat output
Infinitely variable power consumption in operation

Auxiliary power consumption	Symbol	RP60400
At nominal heat output	el <sub>max</sub>	0.0 kW
At minimum heat output	el <sub>min</sub>	0.0 kW
In standby mode	el <sub>SB</sub>	0.0 kW

### Type of heat output/room temperature control\*

Single-stage heat output, no room temperature control

- Two or more manually adjustable stages, no room temperature con
- Room temperature control with mechanical thermostat
- With electronic room temperature control
- Electronic room temperature control and time of day managemen
- Electronic room temperature control and day of week managemer

### Other control options\*

- Room temperature control with occupancy detection
- Room temperature control with open window detection
- With remote control option
- With adaptive control of heating start
- With operating time limitation
- With black bulb sensor

\*In combination with the control technology recommended by HEATSCOPE.

Symbol	RP60400
P <sub>nom</sub>	0.40 kW
P <sub>min</sub>	0.0 kW
P max,c	0.40 kW
Poperation	0.0 – 0.40 kW

	no
ntrol	no
	no
	no
t	no
nt	yes

optional
optional
yes
yes
yes
no

# Ecodesign Directive | Regulation (EU) 2015/1188

# Specifications | Regulation (EU) 2015/1188

When located in an enclosed space, HEATSCOPE infrared heaters transmit heat to the space such that a comfortable temperature for people can be achieved and maintained.

For this type of room temperature control, the environmentally compatible design of the devices used has been governed by Regulation (EU) 2015/1188 (Ecodesign Directive) since 1 January 2018. In order to satisfy the provisions of the Ecodesign Directive, heaters must achieve a specific annual space heating efficiency level.

This efficiency level is calculated from the ratio of the heating requirements covered to the primary energy used. Here, the primary energy is based on the average efficiency of the electricity generated in the EU as a blanket figure.

This generalised approach provides the basic value for the control technology to be used, which is required for use of the HEATSCOPE infrared heaters in compliance with the Ecodesign Directive.

ANNUAL SPACE HEATING EFFICIENCY LEVEL	PORTABLE	FIXED
Basic value (mean efficiency level of the electricity gener- ated in the EU)	30%	30%
Min. requirement	36%	38%
Shortfall in annual efficiency	-6%	-8%

The control technology increases the basic value of the annual efficiency level by the correction factors F(2) and F(3) in order to achieve the required value.

The country-specific calculation methods for determining the overall efficiency of buildings are not affected by this.

In this context, buildings also include garages, attics, cellars, conservatories, unheated conservatories or summerhouses, as well as self-contained annexes.

Heaters that are designed for use outdoors in "covered outdoor areas" are explicitly exempt from Regulation (EU) 2015/1188 (Ecodesign Directive) according to Article 1.

This means that particularly inefficient devices are gradually being excluded from the EU internal market, which is aiding progress towards achieving national and European climate targets.

Information about compliance with the directive for plug & heat devices and the solution from Salus or similar controls.

Dimensions in mm	Weight	Colour	Art. no.
400 x 1700 x 30	14.5 kg	matt white	MHS-RP40640WT.100
400 x 1700 x 30	14.5 kg	matt black	MHS-RP40640AB.100

Heat output	Symbol	RP40640
Nominal heat output	Pnom	0.64 kW
Minimum heat output (guide value)	P <sub>min</sub>	0.0 kW
Maximum continuous heat output	P <sub>max,c</sub>	0.64 kW
Infinitely variable power consumption in operation	Poperation	0.0 – 0.64 kW
a	Constrat	<b>DD40640</b>

Auxiliary power consumption	Symbol	RP40640
At nominal heat output	el <sub>max</sub>	0.0 kW
At minimum heat output	el <sub>min</sub>	0.0 kW
In standby mode	el <sub>SB</sub>	0.0 kW

Type of heat output/room to	emperature control*
-----------------------------	---------------------

Single-stage heat output, no room temperature control

Two or more manually adjustable stages, no room temperature co

Room temperature control with mechanical thermostat

With electronic room temperature control

Electronic room temperature control and time of day management

Electronic room temperature control and day of week managemen

# Other control options\*

Room temperature control with occupancy detection

Room temperature control with open window detection

With remote control option

With adaptive control of heating start

With operating time limitation

With black bulb sensor

\*In combination with the control technology recommended by HEATSCOPE.

MHS Munich Home Systems | Kramergasse 32 | D-82054 Sauerlach near Munich Product information pursuant to Regulation (EU) 2015/1188 (Ecodesign Directive)

# Correction factor F(2)

Unly one option can be chosen	
по	0%
no	0%
по	+1%
no	+3%
по	+5%
yes	+7%
	Only one opti           no           no           no           no           no           no           yes

# Correction factor F(3)

Multiple options can be chosen	
optional	0%
optional	+1%
yes	+1%
yes	+1%
yes	0%
no	0%
	Multiple optio optional optional yes yes yes no

# **Heatscope Control technology** Overview of all models

# SALUS SMART HOME app

The SALUS Smart Home app can be installed on your smartphone or tablet, or operated from your PC/laptop. It is available for free from the App Store and Google Play. You can use the app to manage multiple homes and monitor your heating and cooling online, as well as the positions of your windows and doors. With the "one touch" function, you can set up simple rules for each device or create user-defined scenarios.





Room temperature control

Quick access to all SALUS Smart Home products.

Expanded functions and settings.

Set up "one-touch" rules quickly and easily.

System notifications via the app.

Free to download, quick to register.



# **HEATSCOPE** | SALUS Smart Home System

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28 mm

	1
UGE600	Article no. MHS-CSA-GW
Internet gateway	
The UGE600 gateway connects all devices o You can use it to control devices directly from PC/laptop.	f the SALUS Smart Home System. m the app, or from your smartphone, tablet or
<ul> <li>LED display (multicolour)</li> <li>Internet connection via LAN cable and WiF</li> <li>5-year warranty</li> </ul>	Download on the App Store
Operating voltage: 5 VDC via micro-US	
Communication protocol: ZigBee 2.4 GHz	Google Play
Maximum ambient temperature: 0 - 50°C	
Dimensions (mm): 90 x 90 x 55.5	amazon alexa
	Router Adapter SV DC UGE600 UGE600 UJ Router Router
<b>SQ610</b> 230 V Quantum room thermostat	<ul> <li>Depth from wall: 9 mm</li> <li>230 V connection in flush-mounted wall part</li> <li>Large LCD display</li> <li>Intuitive initialisation, step-by-step menu guidance</li> <li>Humidity sensor</li> </ul>
Image: Weight of the state	<ul> <li>Programmable - daily, weekly or 5/2</li> <li>Hysteresis ± 0.5 / 0.25</li> <li>Energy class IV</li> <li>Potential-free or 230 V outputs</li> <li>ITLC algorithm</li> <li>Ontimised start /ston function</li> </ul>
Operating voltage: 230 V (AC) 50 Hz	2 multi-functional inputs for external sensors
Communication protocol: ZigBee 2.4 GHz	Integrated relay with max. switching capacity of 3 (1)A
Temperature range: 5 - 35°C	Complies with the Ecodesign Directive
Dimensions (mm): 86 X 86 X 28/9	5-year warranty
Dimensions 9mm	
	SALUS Smart Home System



SQ610RF		
Quantum room the Battery-powered	rmostat	•
Image: Constraint of the second sec	CigBee	•
Operating voltage:	Lithium-ion battery	•
Communication protocol:	ZigBee 2.4 GHz	•
Temperature range:	5 - 35°C	

- Only 11 mm deep
- Humidity sensor
- Programmable daily, weekly or 5/2
- Hysteresis ± 0.5 / 0.25 Energy class IV
  - ITLC algorithm
  - Optimised start/stop function

  - Secured with a PIN code
  - Complies with the Ecodesign Directive • 5-year warranty



86 x 86 x 11

# **SR600** SMART relay

Dimensions

45 mm

 $\square$ 

**SEVENE** 

 $\oplus \oplus \oplus \oplus \oplus \oplus \oplus$ 

45 mm

шШ

÷

< ►

20 mm

Dimensions (mm):

 Multiple infrared heate connected, up to a tota • 2 multi-functional inp



# **MS600**

Presence detector





- any tampering attempts
- Domestic pets up to 36 kg are not detected Angle of detection: 80° (not adjustable) • Detection distance: max. 8 m • Easy installation thanks to removable rear panel Battery-operated (CR123A)

- 5-year warranty

Operating voltage: Communication protocol: Maximum ambient tempera Dimensions (mm):

Ē

GEALUS

86 mm





ers can be	Article no.	MHS-CSA-SR
al power of 16 A		
outs		. 0
protocol		OSALUS
		COM NO L N SI SI 3 3 3 3 3 3 3 1
HEATSCOPE	Operating voltage:	230 VAC 50 Hz
Initiated heating	Max. switching current:	16 A
	Communication protocol:	ZigBee 2.4 GHz
•		

Communication protocol: ZigBee 2.4 GHz
Dimensions (mm): 45 x 45 x 20

Article no. MHS-CSA-PM



• Equipped with a tamper-proof switch that reports

	1 x 3 VDC, CR123A
	ZigBee 2.4 GHz
ture:	0°C - 40°C
	60 x 80 x 43

# **HEATSCOPE** | Delta Dore – wireless thermostat

# TAP X3D

Wireless thermostat, battery-operated

Operating voltage:	230 V (AC) 50 Hz
Communication protocol:	X3D, bidirectional
Radio frequency:	868 MHz
Dimensions (mm):	81 X 135 X 22



- Central operating mode selector switch
- Operating modes: off, manual, automatic, target value adjustment, time adjustment, programming mode
- PI control or On/Off
- Set complete daily/weekly heating programmes
- Presence detection Manual programme interruption
- Adjustable target temperature limit (22 30°C)
- Keypad lock
- LCD display with blue backlighting
- Target and room temperature display
- Supply voltage: 2x lithium battery
- LRO3/AAA, 1.5 VDC
- Battery life: 5 to 10 years • Free-standing or wall-mounted
- 5-year warranty



# HEATSCOPE | Delta Dore - receiver

230 V (AC) 50 Hz

X3D or X2D,

switchable

868 MHz

54 X 120 X 25

# X3D

Receiver

Operating voltage:

Radio frequency:

Dimensions (mm):

Communication protocol:

- - PI control or On/Off
  - LED for output status display

  - Output: 230 VAC, 16 A
  - 5-year warranty



The wireless thermostats are the key to quick and easy integration of HEATSCOPE heaters - in your living spaces, hobby room, or wherever you want to use them.

The plug & heat solution is supplied with a pre-assembled radio receiver on the back and with the thermostat connected.

The HEATSCOPE heating systems can be combined with all SMART HOME solutions available on the market. We would be happy to provide you with further advice on request.

# H=ATSCOPE<sup>®</sup>

• Design: surface-mounted • Factory settings: X3D, bidirectional • Electrical connection: screw terminal • Complies with the Ecodesign Directive



# Integration drawings/documents.



Ceiling integration sectional drawing

The clip extends across the width of the HEATSCOPE IR heater. The heating element is screwed to the ceiling through the gap of at least 10 mm. The recess should be at least 50 mm deep. We recommend a depth of 55 mm to compensate for any unevenness in the ceiling. Perfectly flush!





# **HEATSCOPE** | Flush-mounted integration

- Create recess in the ceiling with the gypsum fibreboard according to 1. the size of the heating elements.
- Guide in the electrical connection and/or prepare a hole so that the 2. cables can be routed through.
- Make sure that there is a supporting substructure in the area **3.** where the Heatscope IR heater is to be screwed into the ceiling. This ensures sturdy installation.
- **4.** Fill and plaster the recess and the transition areas.
- Smooth out the recess so that the bare gypsum fibreboard cannot 5. be seen through the 10 mm gap.
- Finally, fasten the Heatscope IR heater in the prepared recess with screws. Make sure that the edge spacing is uniform and the heater is 6. centred in the recess. Use pads to adjust the depth so that the front face of the glass is flush with the ceiling.





HEATSCOPE<sup>®</sup>



# **HEATSCOPE** | Flush-mounted integration

# Overview of integration formats



RP30290

RP30430

RP40440

RP40640

640 W

440 W

430 W

290 W

Model

Power

Model

Power

Model Power













H=ATSCOPE<sup>®</sup>



# HEATSCOPE PULSE installation instructions

# Installation and mounting guidelines

# H**E**ATSCOPE<sup>®</sup>

# Dear Customer,

Thank you for choosing a HEATSCOPE product, designed with the latest technology. Please read the installation instructions carefully to make sure you can enjoy your efficient and elegant infrared heater or infrared towel heater for a long time to come.

### Installation

Installation must be performed by an electrician or a similarly qualified professional. All applicable standards and regulations must be observed during installation. Your electrician will know the regulations and will be happy to advise you.

The infrared heaters and infrared towel heaters rails from HEATSCOPE comply with the electricity standard of the Swiss Electrotechnical Association (SEV), which has tested and certified the devices. These test reports are also checked by the Federal Inspectorate for Heavy Current Installations and comply in full with the standards of the European Union (CE).

### 1. General guidelines

The following general guidelines must be followed. If they are not observed, HEATSCOPE will accept no liability in the event of damage.

The device must not be opened or modified. Opening the device will void the warranty immediately.

The supplied installation materials must be used for installation. This ensures that the device is secured correctly to the wall or ceiling.

The minimum spacing between the side of the device and solid objects such as walls made of masonry, wood, lightweight boards or plasterboard must be at least 5 cm.

Highly flammable materials such as curtains, plastic covers, pictures, etc. must be kept at least 10 cm away from the heater.

The heater must not be completely or partially covered by curtains, sofas or other furniture. A space of at least 1 m must be kept clear in front of the infrared heater. If the heater is installed behind a door, it must be ensured that a fixed doorstop prevents the door from hitting the infrared heater. If the heater is installed behind a door, ensure that the door is closed during operation (to prevent heat accumulation).

The HEATSCOPE devices must not be used in rooms where there are people who cannot leave the room independently, unless these persons have constant supervision.

The devices are not intended for use by persons (including children) with reduced physical, sensory or mental abilities or lack of experience and/or knowledge, unless they are supervised by a person responsible for their safety or have received instruction from them on how to use the device.

# 2. Installation position in wet rooms

A 30 mA residual-current circuit breaker is mandatory for installation in wet rooms. The infrared heater may only be installed in safety zones 2 and 3 (see illustration).

During installation, ensure that the infrared heater or infrared towel rail cannot be operated or controlled from the bath or shower position. The thermostats must therefore be installed so that they cannot be reached from the bath or shower.



If the devices are not fitted with an integrated control system, the regulation must be provided by an external thermostat controller that complies with the Ecodesign Directive.

### 4. Cleaning

Do not use any abrasive or aggressive cleaning agents to clean the infrared heater or infrared heated towel rail. We recommended cleaning with window cleaner or soapy water.

### Caution

The infrared heater must have cooled down fully before cleaning. (Risk of damage due to cold shock)

### 5. Faults

The device does not heat up: Please check the power supply.

If the device does not heat up but the power supply is in working order: Please send the device to your HEATSCOPE dealer for inspection.

Faulty or damaged power cable: Faulty power cables must be replaced by the device manufacturer.

### Caution

If the glass panel is damaged, stop using the heater and immediately disconnect it from the power.



HEATSCOPE

# Warranty

# HEATSCOPE<sup>®</sup>

# Scope of delivery

### **Dear Customer**,

In addition to the purchaser's entitlement to make statutory warranty claims against the seller, and without limiting this entitlement, HEATSCOPE grants the purchaser the right to make claims in accordance with the following warranty conditions for new devices:

### I. Duration and start of the warranty

- 1. The warranty is granted for the following period:
- a) 10 years for infrared heaters and infrared towel heater, when used as intended.
- b) 2 years for products such as electronic controllers, thermostats and relays, when used as intended.
- 2. The warranty period starts from the date stated on the purchase invoice for the device. Warranty services and replace- 7. Non-compliance with maintenance and cleaning work as ment parts provided under the warranty shall not prolong the warranty period.

### II. Warranty conditions

- 1. The device was purchased through the authorised dealer or directly from HEATSCOPE in an EU country, Switzerland or Norway.
- 2. The proof of warranty (purchase invoice) is provided on request.

### III. Content and scope of the warranty

- 1. Device defects are to be rectified free of charge within a reasonable period, with either repair or replacement of the relevant parts. HEATSCOPE will not cover the expenses associated with this, such as transport, travel, disassembly and installation costs. Parts or devices removed during replacement shall become the property of HEATSCOPE.
- 2. The warranty does not cover any other claims for damages against HEATSCOPE, unless there is wilful intent or gross negligence on the part of the approved customer service provider commissioned by HEATSCOPE.

### IV. Limitations of warranty

The warranty does not cover defects or faults that are caused by:

- 1. Improper installation, e.g. failure to observe the applicable safety regulations or the written instructions for use, installation and mounting
- 2. Improper use or inappropriate operation or loads
- 3. External factors, such as transport damage, damage due to shock or impact, damage caused by weather or other natural phenomena
- 4. Repairs or modifications performed by customer service staff who have not been trained and approved for this service work by HEATSCOPE
- 5. Glass breakage
- 6. Current and voltage fluctuations that exceed or fall below the tolerance limits specified by the manufacturer
- specified in the instructions for use

### V. Data protection

Personal data is used only for the purposes of order processing and to deal with any matters relating to the warranty, and in compliance with general data protection regulations.

### Packaging contents for:

- HEATSCOPE PULSE
- HEATSCOPE TUNE

### **Documents:**

- Warranty
- Installation and mounting guidelines

### Depending on the number of mounting holes:

Contents for 4-hole mounting         Quantity Description		Conte	
		Quant	
1	Infrared heater or infrared towel heater	1	
1	Cardboard drilling template	1	
4	Multi-purpose plug MD8	6	
4	Neoprene washer M5	6	
4	Hexagon head wood screw 5 x 50 mm	6	

### Materials required for installation:

(not included in delivery)

- Spirit level
- Metre stick
- Pencil
- Hammer drill
- Concrete/masonry drill Ø 8 mm or wood drill Ø 4 mm
- Hammer (to drive in the plugs)
- Open-end or ratchet wrench, size 8 mm

### TIP: Laser range finders and cross-line laser levels are useful when installing larger projects.

### **Plug applications**

The supplied plugs are multi-purpose plugs and can be used for the following materials: concrete, solid blocks, brick, limestone, sandstone, autoclaved aerated concrete.





### ents for 6-hole mounting

tity Description

Infrared heater or infrared towel heater Cardboard drilling template Multi-purpose plug MD8 Neoprene washer M5 Hexagon head wood screw 5 x 50 mm



# Installation instructions for mounting on walls or ceilings



- Check the contents of the packaging.
- Select the installation location (please read the installation and mounting guidelines carefully first).
- Use a spirit level or a metre stick to line up the cardboard drilling template on a level and clean surface.

# TIP: Stick the cardboard drilling template to the wall with masking tape.

- The supplied cardboard drilling template is used for installing the HEATSCOPE devices.
- For installation on concrete, solid blocks, brick, limestone, sandstone or autoclaved aerated concrete, use a drill and the relevant 8 mm drill bit to drill a hole approx. 50 mm deep. Blow any residue out of the holes and insert the four (or six) supplied dowels into the holes.
- For safe attachment, above all on plasterboard walls and ceilings, it must be ensured that special connection technology is used and installed correctly in accordance with the load data. If necessary, consult an expert to ensure a professional solution.
- Please ensure that you have a level installation surface.

# TIP: You can use a smaller drill bit to pre-drill the hole and make the drilling position more accurate.

- For installation on wood, use a drill and the relevant 4 mm drill bit to drill a hole approx. 50 mm deep.
- Put the Neoprene seals on the hexagon head wood screws
  5 x 50 mm and screw these into the wall or ceiling until approx.
  5 mm remains.
- Carefully mount the heating element.
- To secure the device during ceiling installation, now use pliers to rotate one pair of installation brackets by 180°.
- Use the 8 mm open-end or ratchet wrench to tighten the hexagon head screws.

TIP: Be sure to route the power cable according to the location of the socket or power connection.

# **Guide to symbols**



International Commission on the Rules for the Approval of Electrical Equipment.



The safety mark S+ is a Swiss seal that manufacturers use to inform consumers that they comply with the Ordinance for Electrical Low-Voltage Products (NEV) and the legal regulations on electrical safety and electromagnetic compatibility.



Swiss Electrotechnical Association (SEV) mark for Swiss testing and certification body.



Warning icon for 'do not cover'. To prevent the heater from overheating, it must remain uncovered.

Μ

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