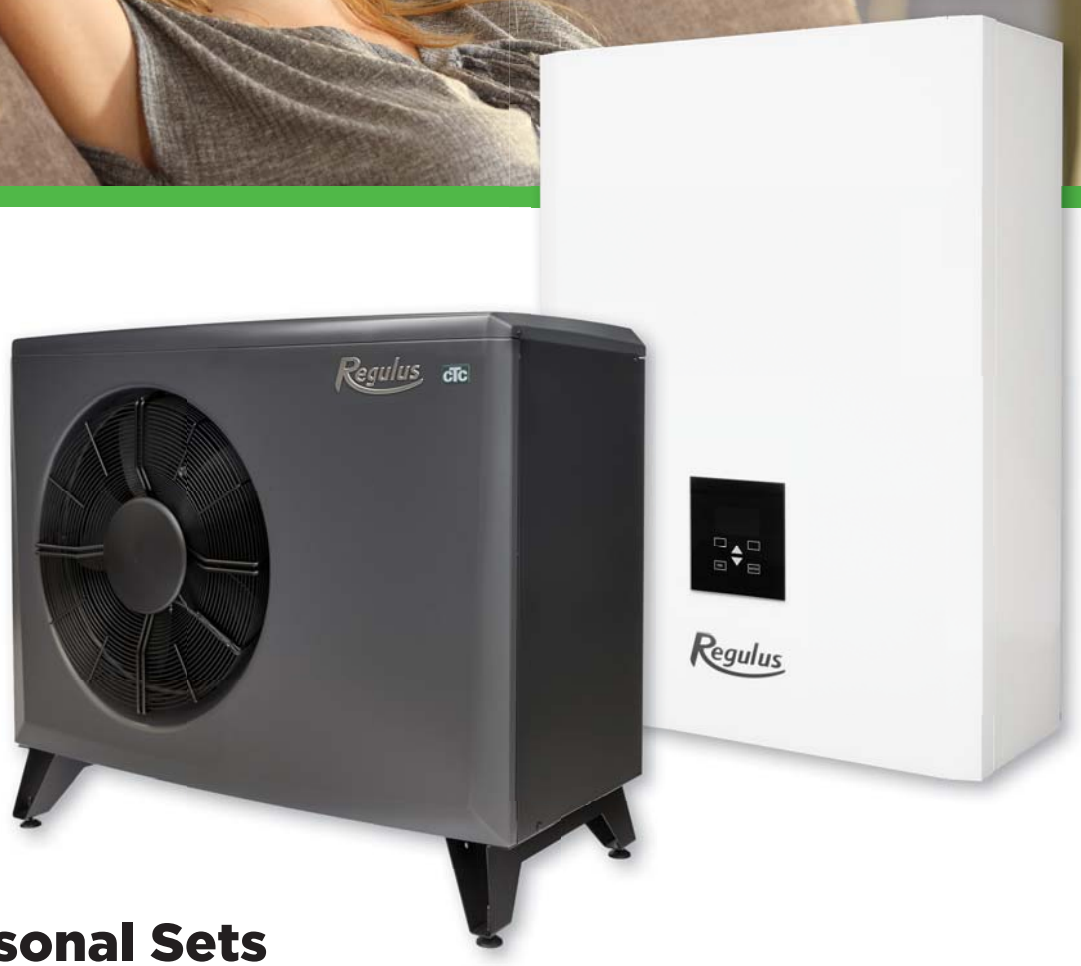
Regulus

HEAT PUMPS
SPECIAL OFFER

SPRING 2023



Seasonal Sets
for heat pumps
for family homes

regulus.eu

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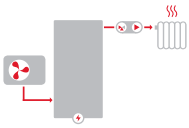

SETS WITH AN ON/OFF HEAT PUMP

for heating, with thermal store, no hot water tank
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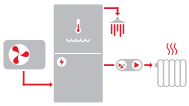

for heating, with combination thermal store, hot water heating
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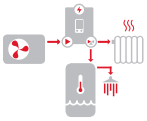
SETS FOR HEAT PUMPS



for heating (cooling), with hot water tank
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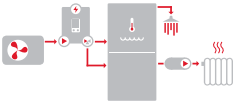

for heating (cooling), with combination thermal store w. DHW heating
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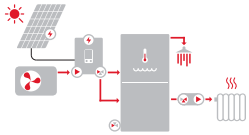

for heating (cooling), with combination thermal store w. DHW heating, for efficient cooperation w. PV system
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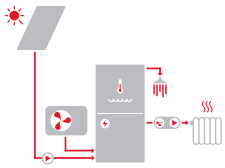

for heating (cooling), with combination thermal store w. DHW heating, w. solar thermal system
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SYSTEMS FOR HEATING, NO HOT WATER TANK

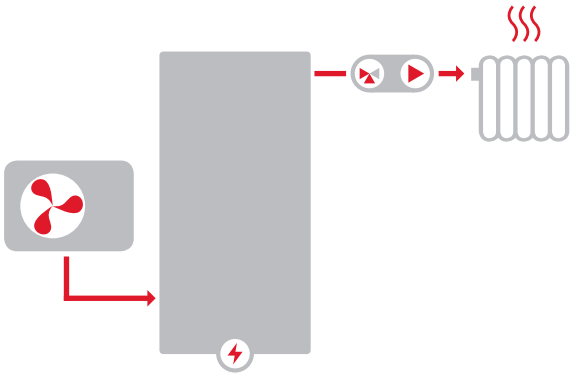
EA PS
Seasonal Set

Air-to-water on/off heat pump for space heating

THE SET INCLUDES:

- **EcoAir heat pump incl. pump station**
- **PS 200 N+ thermal store w. insulation**
- **IR 14 smart controller incl. room sensor**
- **Electric heating elements**
- **Expansion vessel for heating incl. service valve**
- **Insulated pump station with mixing valve for heating system**

A set for heating by a heat pump without DHW heating. The set is intended primarily for replacing solid fuel boilers where DHW heating remains unchanged. However, a suitable hot water storage tank can be added to the system at any time in the future. The smart controller ensures the operation of the heat pump, controls the heating of the building according to the outside temperature and the user's requirements and is able to optimize the heating system and the operation of the heat pump also with respect to other sources (stoves, fireplace inserts). Web access to the controller is an invaluable tool for more complex settings and troubleshooting.



SET	CODE
EA 408 PS	**20085**
EA 410 PS	**20086**
EA 415 PS	**20087**

SYSTEMS FOR SPACE AND DHW HEATING

EA HSK
Seasonal Set

Air-to-water on/off heat pump for space and DHW heating

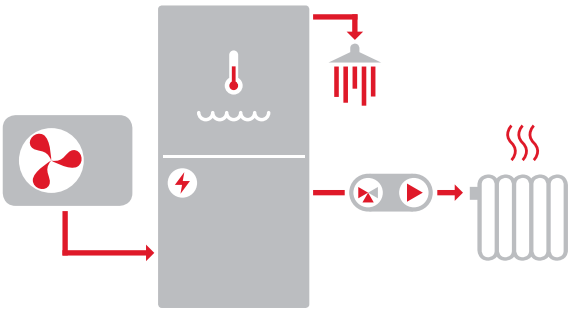
THE SET INCLUDES:

- **EcoAir heat pump incl. pump station**
- **HSK 390 P thermal store with integrated stainless-steel DHW heat exchanger**
- **IR 14 smart controller incl. room sensor**
- **Electric heating elements**
- **Expansion vessel for heating incl. service valve**
- **Insulated pump station with mixing valve for heating system**

The heat pump is connected to a combination thermal store that provides for both space and DHW heating.

The thermal store is divided by the metal plate into two thermally independent spaces. The lower one can be heated up to the temperature needed for heating only. The space above the separating plate is kept at the desired temperature for DHW. This solution is very efficient in systems with heat pumps as the temperature in the lower section may be tens of °C lower than in the upper section.

Space and DHW heating in the integrated hot water tank / heat exchanger is controlled by the smart controller that reacts to the outdoor temperature and to user requirements as well. The controller is equipped with a web server as standard, permitting easy adjustments from anywhere.



SET	CODE
EA 408 HSK	**20088**
EA 410 HSK	**20090**
EA 415 HSK	**20091**

SYSTEMS FOR SPACE HEATING (COOLING) AND DHW HEATING

RGC 170 BOX, NBC 170 BOX Seasonal Sets

The set is intended for inverter heat pumps.
A heat pump is not included in the set.

THE SET INCLUDES:

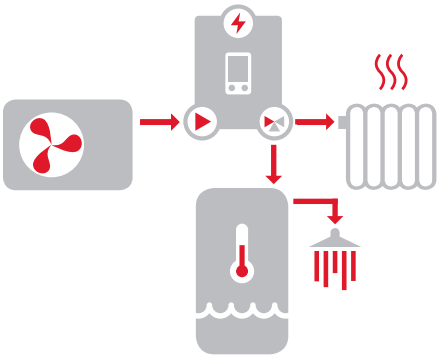
- **RegulusBOX, incl. temperature sensors (inner room temperature sensor not included)**
- **Hot water storage tank, either enamelled RGC or stainless-steel NBC**
- **Safety kit**
- **25l expansion vessel for heating systems incl. equipped bracket**
- **8l expansion vessel for drinking water incl. bracket**
- **Electronic anode rod (only in sets with RGC hot water tank)**

A heat pump is connected directly to a heating system (no thermal store) and to a hot water storage tank.

There are two types of hot water tanks to choose from - an enamelled RGC 170 of 173l volume, or a stainless-steel NBC 170 HP of 171l volume. Both tanks feature upwards outlets, and therefore are suitable for installation under the RegulusBOX indoor unit.

When the heat pump with a hot water tank are connected, the heat pump provides the complete heating (cooling) and hot water needs of the building. It is a very compact solution with minimal space requirements and, above all, highly comfortable hot water heating. The sufficient hot water volume contributes to the fact that the hot water tank does not need to be heated to high temperatures. Under normal conditions, the hot water will only be heated by a heat pump, moreover with a high COP - thus more economically.

Heating, cooling and DHW heating are controlled by the smart controller that reacts to the outdoor temperature and to user requirements as well. The controller is equipped with a web server as standard, permitting easy adjustments from anywhere.



SET	CODE
RGC 170 BOX CTC	**20100**
NBC 170 BOX CTC	**20099**
RGC 170 BOX RTC	**20098**
NBC 170 BOX RTC	**20097**

SYSTEMS FOR SPACE HEATING (COOLING) AND DHW HEATING

HSK 350 BOX
Seasonal Set

The set is intended for inverter or ON/OFF heat pumps.
A heat pump is not included in the set.

THE SET INCLUDES:

- **RegulusBOX, incl. temperature sensors (inner room temperature sensor not included)**
- **HSK 350 K P-B thermal store with integrated stainless-steel DHW heat exchanger, incl. insulation**
- **Thermal store accessory set**
- **Pump station for heating system**
- **60l expansion vessel for heating systems incl. service valve**

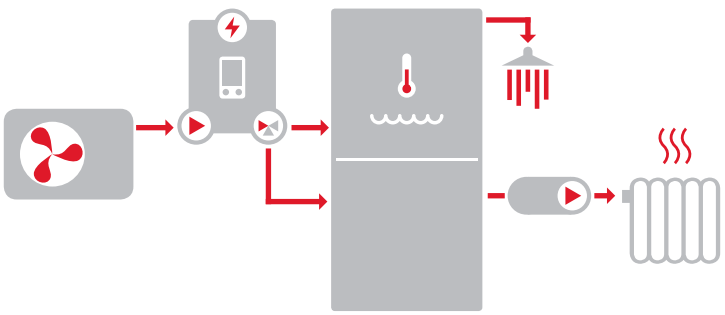
HSK 350 thermal store is specially made for easy installation together with RegulusBOX indoor unit. The thermal store is divided by the tight metal plate into two thermally independent spaces, not permitting spontaneous mixing. Thanks to the tightness of the separating plate, one three-way valve is sufficient for switching between space and DHW heating that is already included in the RegulusBOX indoor unit. The indoor unit contains also electric heating elements with their control in steps of 2 kW, up to 12 kW output. It is not possible to install any further heating elements into the HSK 350 thermal store.

For ON/OFF heat pumps, the lower section acts as a buff er volume for continuous operation of the heat pump. At the same time, it provides sufficient energy for defrosting all our models of air-to-water heat pumps incl. inverter types. The lower section also serves for hydraulic balancing of high heating water flow through the heat pump that could cause noise when significant portion of the shut-off elements in the heating system is closed. Thanks to the hydraulic balancing of the flows from the diff erent circulation pumps, it will be very easy to add additional independent heating circuits in the future (residential extensions, pool heating, etc.).

The space above the separating plate is kept at a higher temperature for comfort DHW heating. The lower one can be heated up by the heat pump just to the temperature needed for heating according to the current outdoor temperature.

This solution is very efficient in systems with heat pumps as the temperature in the lower section may be tens of °C lower than in the upper section. Efficient operation of the heat pump is then reflected in its lower electricity consumption.

Space heating and DHW heating in a stainless-steel heat exchanger are controlled by IR RegulusBOX smart controller that reacts to the outdoor temperature and to user requirements as well, and with regard to indoor room temperature. The controller is equipped with a web server as standard, permitting easy control from the IR Client mobile app, or remote management and supervision necessary for an extended warranty for Regulus heat pumps.



SET	CODE
HSK 350 BOX CTC	**20092**
HSK 350 BOX RTC	**20093**

SYSTEMS FOR SPACE HEATING (COOLING) AND DHW HEATING, for efficient cooperation with PV systems

HSK 600 BOX
Seasonal Set

The set is intended for inverter or ON/OFF heat pumps.
A heat pump is not included in the set.

THE SET INCLUDES:

- **RegulusBOX, incl. temperature sensors (inner room temperature sensor not included)**
- **HSK 600 P thermal store with integrated stainless-steel DHW heat exchanger, incl. insulation**
- **Thermal store accessory set**
- **3-way zone valve for DHW heating**
- **Pump station with mixing, for heating system**
- **80l expansion vessel for heating systems incl. service valve**

HSK 600 P thermal store enables many various connections, incl.a combination with the indoor unit for heat pumps, RegulusBOX.

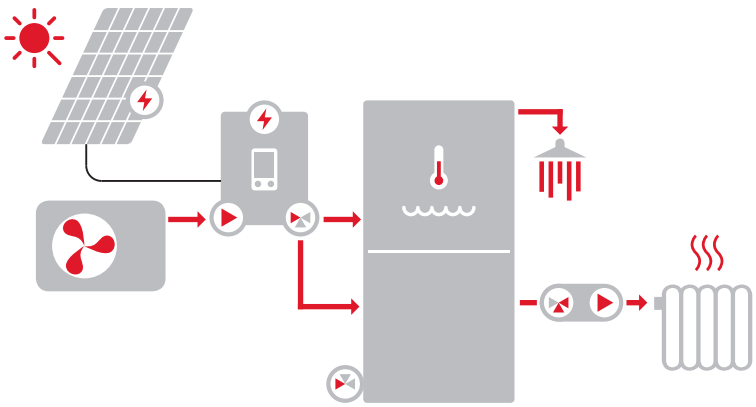
The indoor unit contains also electric heating elements with their control in steps of 2 kW, up to 12 kW output. Other heat sources can also be connected to the thermal store, like e.g. hot-water stoves or solid-fuel boilers, automatic boilers, or e.g. an electric heating element powered by a PV system can be installed inside.

The thermal store is divided by the metal plate into two thermally almost independent spaces, not permitting spontaneous mixing. The space above the separating plate is kept at a higher temperature for DHW heating. Switching between space heating and DHW heating is ensured by a 3-way valve that is already included in the RegulusBOX indoor unit, and an external 3-way valve that is included in this set. Thanks to the small volume of water being heated, continuous hot water heating in the stainless steel exchanger is very hygienic and cost-eff ective.

For ON/OFF heat pumps, the lower section acts as a buff er volume for continuous operation of the heat pump. At the same time, it provides sufficient energy for defrosting all our models of air-to-water heat pumps incl. inverter types. The lower section also serves for hydraulic balancing of high heating water flow through the heat pump that could cause noise when significant portion of the shut-off elements in the heating system is closed. Thanks to the hydraulic balancing of the flows from the diff erent circulation pumps, it will be very easy to add additional independent heating circuits in the future (residential extensions, pool heating, etc.).

Space heating and DHW heating in a stainless-steel heat exchanger are controlled by IR RegulusBOX smart controller that reacts to the outdoor temperature and to user requirements as well, and with regard to indoor room temperature. The controller is equipped with a web server as standard, permitting easy control from the IR Client mobile app, or remote management and supervision necessary for an extended warranty for Regulus heat pumps.

The system can be supplemented with a kit for RegulusBOX which allows the heat pump and the PV system to be connected efficiently and to use the electricity from the PV system for the operation of the heat pump to the maximum extent possible.



SET	CODE
HSK 600 BOX CTC	**20094**
HSK 600 BOX RTC	**20096**

SYSTEMS FOR HEATING (COOLING) AND DHW HEATING, WITH SOLAR THERMAL SYSTEM

SOL HSK 390
Seasonal Set

The Set is intended for inverter- or ON/OFF heat pumps.
No heat pump is included in supply.

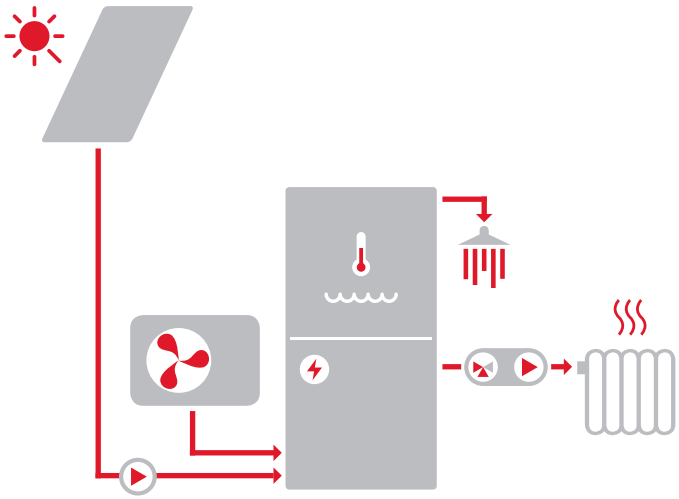
THE SET INCLUDES:

- **KPG1 solar thermal collectors, 3 pcs**
- **HSK 390 PR combination thermal store w. integrated stainless-steel DHW heat exchanger and solar heat exchanger**
- **Electric heating element**
- **CSE SOL W P pump station**
- **IR 14 smart controller incl. room sensor**
- **25 l solar expansion vessel, 60l expansion vessel for heating, incl. bracket&connections**
- **Solarten, 35 l (solar antifreeze fluid)**
- **Anti-scald valve**
- **Insulated pump station for heat pump**
- **Insulated pump station w. mixing valve for heating system**

The solar thermal system is connected to a combination thermal store that provides both heating water for space heating and domestic hot water. The division of the tank into two spaces is particularly suitable for systems with heat pumps, as the temperature in the lower part can be even tens of degrees C lower than in the upper one.

Space and hot water heating are controlled by a smart controller that responds to both outdoor temperature and user requirements. The controller is equipped with a web server as standard, which allows full setting via a connected computer or remotely from anywhere over the Internet.

The system is ready to be connected to heat pumps (RTC or CTC series). The set includes also an electric heating element as an auxiliary heat source. Other heat sources can be also connected to the tank.



SET	CODE
SOL HSK 390 RTC	**20102**
SOL HSK 390 CTC	**20101**

RegulusBOX INDOOR UNIT

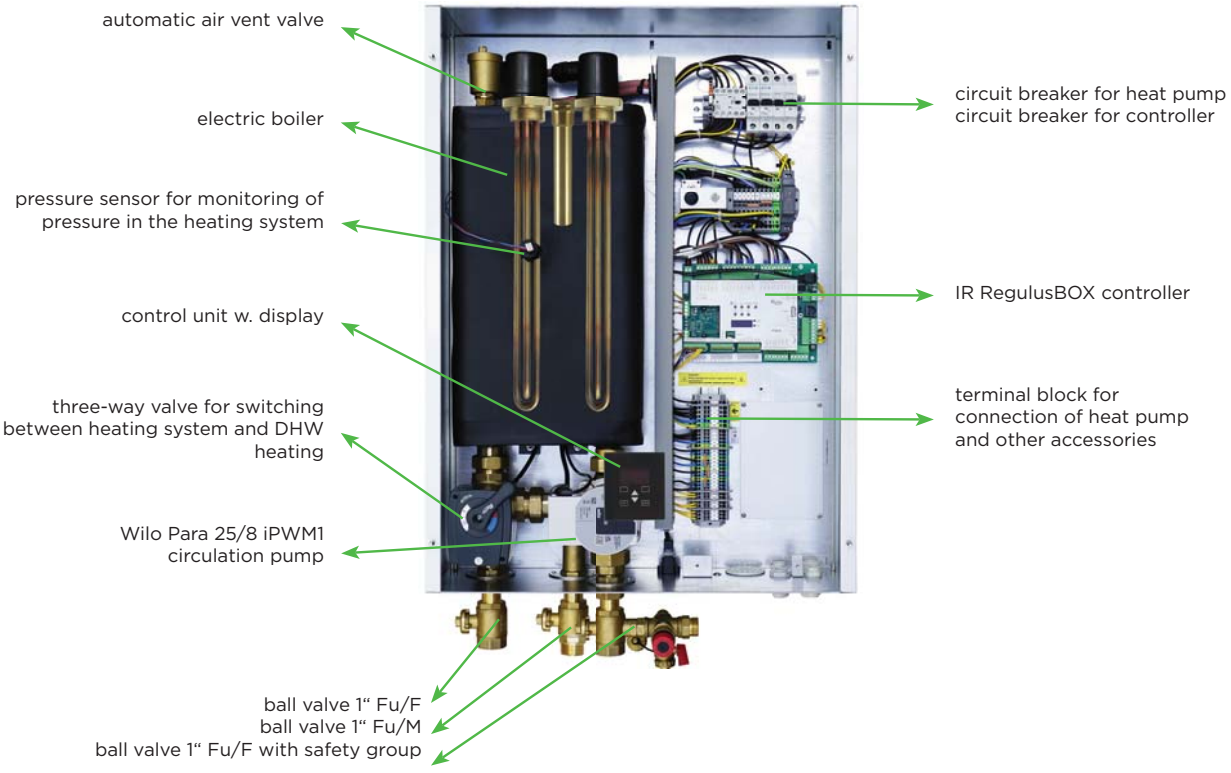
Indoor hydraulic unit for a heat pump.

- Intended primarily for connecting inverter heat pumps directly into a heating system.
- Connection to a hot water tank is possible, 3-way valve inside.
- Electric boiler 2-12 kW, pressure sensor, circulation pump.
- Smart controller with internet connectivity and a control display that can be moved to the living area of the house where it can also act as a room temperature and humidity sensor.
- With RTC heat pumps it enables cooling into the floor, walls or ceiling.

RegulusBOX CTC is designed for installation with CTC EcoAir heat pumps and CTC EcoPart heat pump models 406 to 414 and models 612M, 616M. With inverter heat pumps it can be connected directly to a heating system; with ON/OFF models or for multiple heating circuits it shall be installed with a (combination) thermal store and with a pump station for each heating circuit.
RegulusBOX RTC is available in two variants, different for single-phase and three-phase RTC heat pumps.

Code: 18928 - RegulusBOX CTC 3/3 for EcoAir and EcoPart heat pumps
Code: 18930 - RegulusBOX RTC 3/1S for RTC 6i and 13e heat pumps
Code: 20025 - RegulusBOX RTC 3/3S for RTC 20e heat pumps

TECHNICAL DATA			RegulusBOX
Dimensions	Width	[mm]	560
	Height	[mm]	905
	Depth	[mm]	235
Weight		[kg]	34
Heating water volume		[l]	10
Output of electric heating elements		[kW]	12



ACCESSORIES

		CODE
Room unit		**18540**
Room temperature sensor		**16167**
Room temperature and humidity sensor - wireless, WiFi		**18474**
Heating Cable for EcoAir	3.5 m	**16168**
	5 m	**18104**
Heating Cable for RTC	5 m	**18491**
Wall support bracket for heat pump		**17458** **18406**
Expansion vessel for drinking water - 8l for DUO, HSK thermal stores		**13755**
Bracket with 3/4" connection valve		**7766**
Electronic anode rod for DUO thermal store / NBC hot water tank		**13793**
2 kW auxiliary electric heating element, w. wall plug		**15167**
Pump station for hot water recirculation		**15181**
Three-way zone valve for sets with DUO, HSK thermal stores		**11285**
Union for connecting a zone valve *(for controlled DHW heating, 2 valves are needed)*		**12699**
Compensator for increased protection of heat exchanger against freezing, DN25, 1" Fu/M, incl. gaskets	1" Fu/M	**16757**
	5/4" Fu/M	**19754**
Braided hose, 2x 1" F	300 mm	**18621**
	500 mm	**15493**
	700 mm	**15494**
	1000 mm	**15495**
Braided hose, 1" F x 1" M	300 mm	**18622**
	500 mm	**15496**
	700 mm	**15497**
	1000 mm	**15498**
Braided hose, 2x 5/4" F	300 mm	**19752**
	500 mm	**16896**
	700 mm	**16897**
	1000 mm	**16898**
Braided hose, 5/4" F x 5/4" M	300 mm	**19753**
	500 mm	**16899**
	700 mm	**16900**
	1000 mm	**16901**

ACCESSORIES TO BOX

	CODE
Display blanking kit including frame, for display installation into a room	**18248**
Kit for expanding IR RegulusBOX with 4 outputs (relays)	**19401**

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