

# Instantaneous water heater module

## Extension module for Regudis W-HTE



Instantaneous water heater module for electronic reheating of the potable water, which can be installed as an optional extension module to the Regudis W-HTE home station in order to heat the potable water temperature to a higher value than that achievable by the heating water temperature.

The Regudis W-HTE dwelling station heats the potable water depending on the heating water quantity and the heating water temperature. If the heat output transferred to the potable water by the station is not sufficient to reach the desired potable water temperature, the temperature is increased to the set value by the instantaneous water heater module, which is only suitable for reheating.

The electronics of the instantaneous water heater regulate the heating capacity depending on the selected outlet temperature, the respective inlet temperature and the flow rate. The desired outlet temperature can be set by pressing a key and be read on the LCD display.

### Features

- + Efficient operation of heat pumps
- + Easy installation in a two pipe system
- + Compatibility with the existing product range

### Technical data

<b>Rated power</b>	11 / <b>13.5 kW</b>
<b>Rated current</b>	16 / <b>19.5 A</b>
<b>Required min. cable cross-section</b>	1.5 mm <sup>2</sup> / <b>2.5 mm<sup>2</sup></b>
<b>Nominal voltage</b>	3~ / PE 380...415 V AC
<b>Frequency</b>	50 / 60 Hz
<b>Connection</b>	Fixed connection
<b>Energy efficiency class according to UE Regulation No. 812/2013</b>	A
<b>Protection class according to VDE</b>	I
<b>Protection category</b>	IP 24

# Product details

## Technical data

### General data

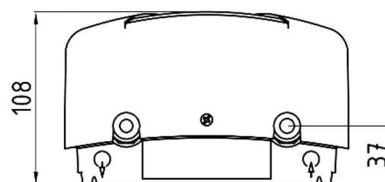
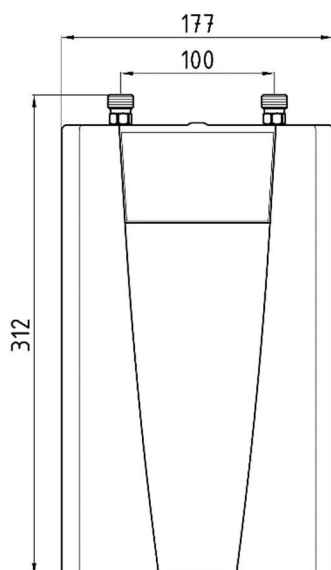
<b>Connection</b>	G 1/2
<b>Dimensions (W x H x D)</b>	177 x 294 x 108 mm
<b>Casing colour</b>	White
<b>Flow limiter</b>	Without
<b>Control range</b>	20 °C to 60 °C
<b>Max. operating temperature</b>	60 °C
<b>Max. ambient temperature</b>	60 °C
<b>Max. storage temperature</b>	60 °C
<b>Max. ambient humidity</b>	<70% not condensing
<b>Max. operating pressure</b>	10 bar
<b>Pressure loss at 11 l/min</b>	1.8 bar
<b>Switch-on water volume</b>	2 l/min
<b>Nominal draw off capacity (potable water heating 35 °C/50 °C)</b>	11 l/min

<b>Draw off capacity for a mixing temp. of 42 °C with potable water heating 35 °C/50 °C with 11 l/min</b>	14 l/min
<b>Max. draw off capacity</b>	15 l/min
<b>Max. Power Regudis W-HTE Performance range 3 with instantaneous water heater module (potable water heating 10 °C/50 °C)</b>	42 kW
<b>Application range electrical conductivity at 15 °C</b>	≤ 1000 µS/cm
<b>Construction</b>	Pressure-resistant
<b>Nominal content</b>	0.3 l
<b>Weight (with water filling)</b>	2.7 kg

## Applications

The instantaneous water heater module is intended as an extension module for the Regudis W-HTE dwelling station performance range 3, without potable water circulation module. It is suitable for wall mounting and, in combination with the enclosed connection and piping set, for mounting in suitable Oventrop cabinets. The instantaneous water heater module serves as an electronic reheater for potable water. Any other use of the product will be considered incorrect use.


## Dimensions



# Selection


## Item numbers

### Instantaneous water heater module

Description	Item no.
 <p>For electronic reheating of potable water</p>	1344560

## Accessories

### Connection and piping set

Description	Item no.
 <p>For Regudis W-HTE instantaneous water heater module, for fixing and piping in a cabinet</p>	1344561

### Suitable components for cabinet mounting



Product	Item no.
Surface- / Flush mounted cabinet for Regudis W-HTE	1344699 / 1344599
Dwelling station Regudis W-HTE performance range 3	1344032 / 1344052
Connection and shutoff set for Regudis W-HTE	1344680
Instantaneous water heater module for Regudis W-HTE	1344560
Connection and piping set for instantaneous water heater module	1344561
Multidis SF Heating circuit distributor/collector	1406352 - 1406358
Aktor T 2P Actuator	1012452
Electrical connecting block for surface heating	1400983

# Design

When designing the Regudis W-HTE dwelling station in conjunction with the instantaneous water heater module and the connection and piping set, the following points must be observed:

## Electrical connection

- Following DIN 18015-1:2007-09, the cross-section, type and number of main cables must be determined depending on the number and expected simultaneity of the devices.
- The connection requirements are to be coordinated with the energy supply company.
- The instructions in the chapter "Electrical connection", in particular the paragraph "Connection to fixed cable" in the enclosed "Installation instructions for qualified tradespeople" must be observed.
- The connecting cable must have a conductor cross-section of at least 2.5 mm<sup>2</sup> with a rated power of 13.5 kW.

## Potable water

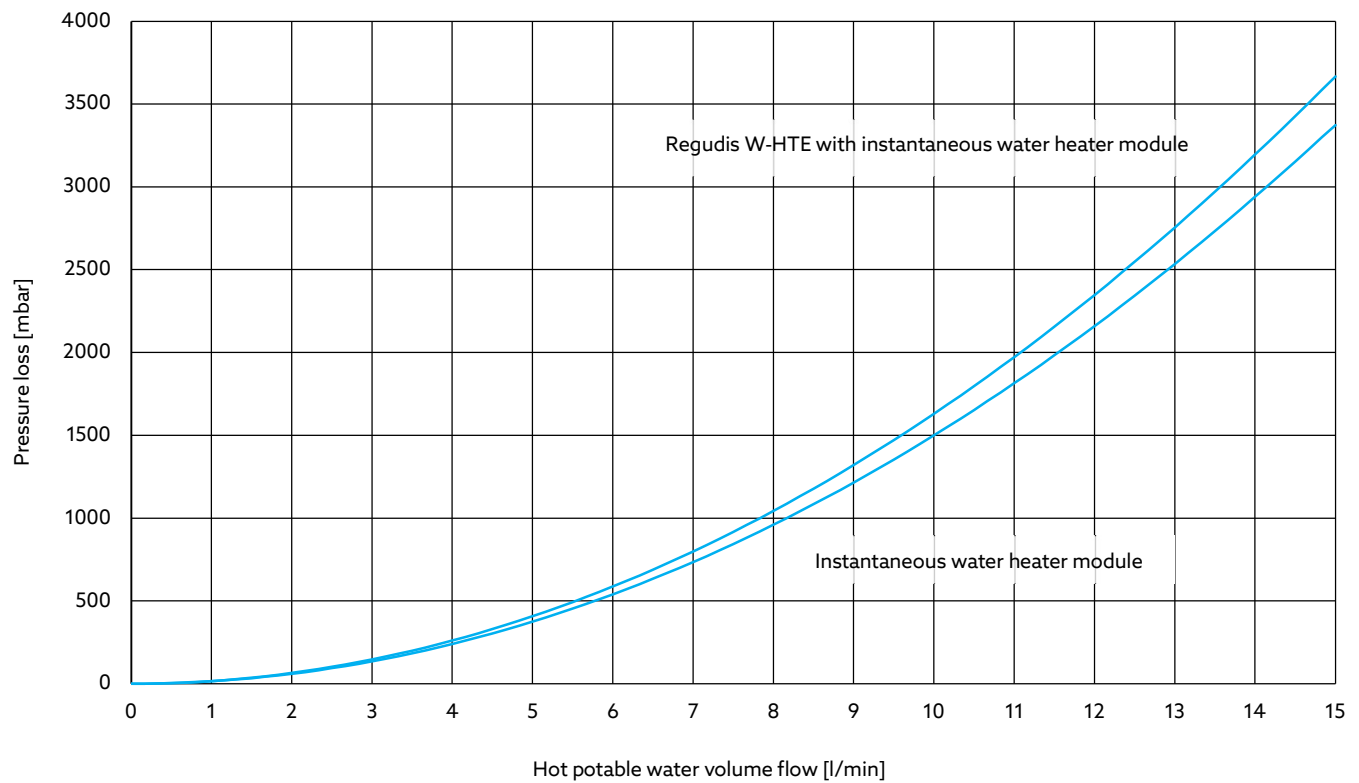
- It is recommended to use the instantaneous water heater module with the Regudis W-HTE dwelling station performance range 3, as the pressure losses and the excess temperature are very low here.
- The instantaneous water heater module is not suitable for circulation operation.
- The instantaneous water heater module is approved for a maximum volume flow of up to approx. 15 l/min. If this value can be exceeded in the system constellation, damage can be caused to the instantaneous water heater module. A flow limiter, item no. 1349981, must be installed.

## Surface heating

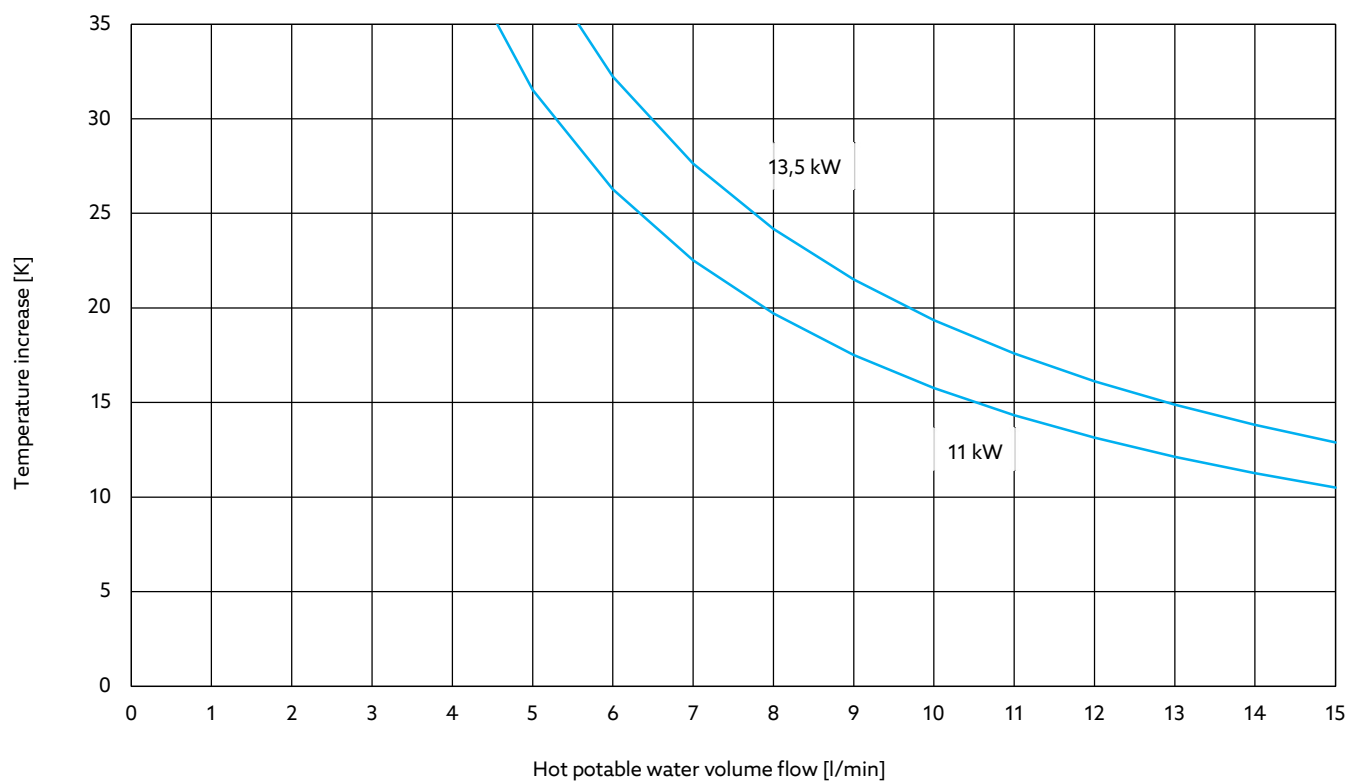
- The flow temperature must be adjusted to the surface heating system.
- The integrated cabinet mounting is only intended in connection with the Oventrop cabinets, item no. 1344599 and 134469. The maximum number of heating circuits here is limited to 8. The compact design with 110 mm installation depth in conjunction with the Regudis W-THE dwelling station is retained. If more than 8 heating circuits are required, the instantaneous water heater module must be mounted outside the cabinet.
- With integrated cabinet mounting, a differential pressure of up to 150 mbar and a volume flow of up to 600 l/h is possible in the heating circuit. This results in approximately 4800 W at a system temperature of 35/28 °C. For a higher differential pressure and volume flow, a flow temperature control module with its own pump, item number 1344550, is required. This expands the Regudis W-HTE dwelling station to include thermostatic flow temperature control. In these cases, too, the instantaneous water heater module must be installed outside the cabinet due to the limited space available.

# Charts

## Pressure loss chart



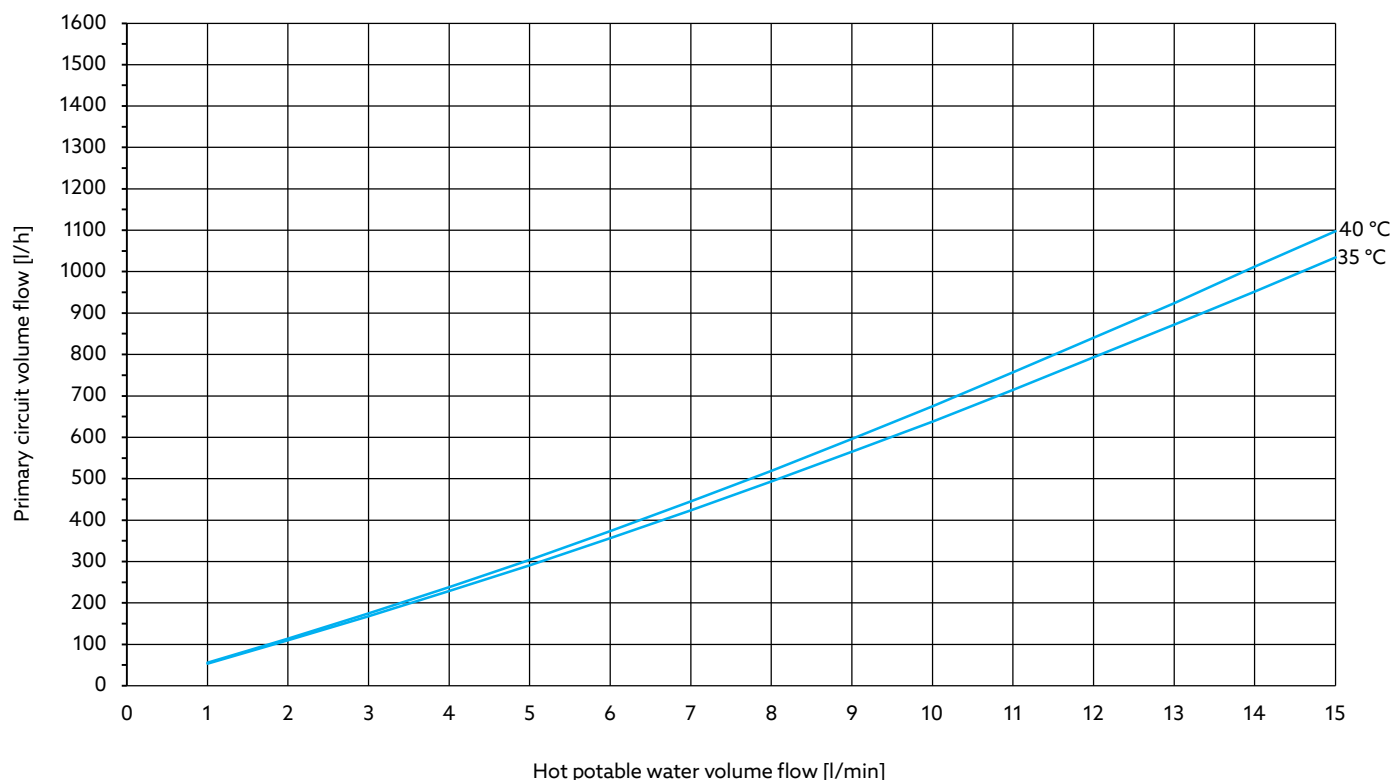
## Performance chart



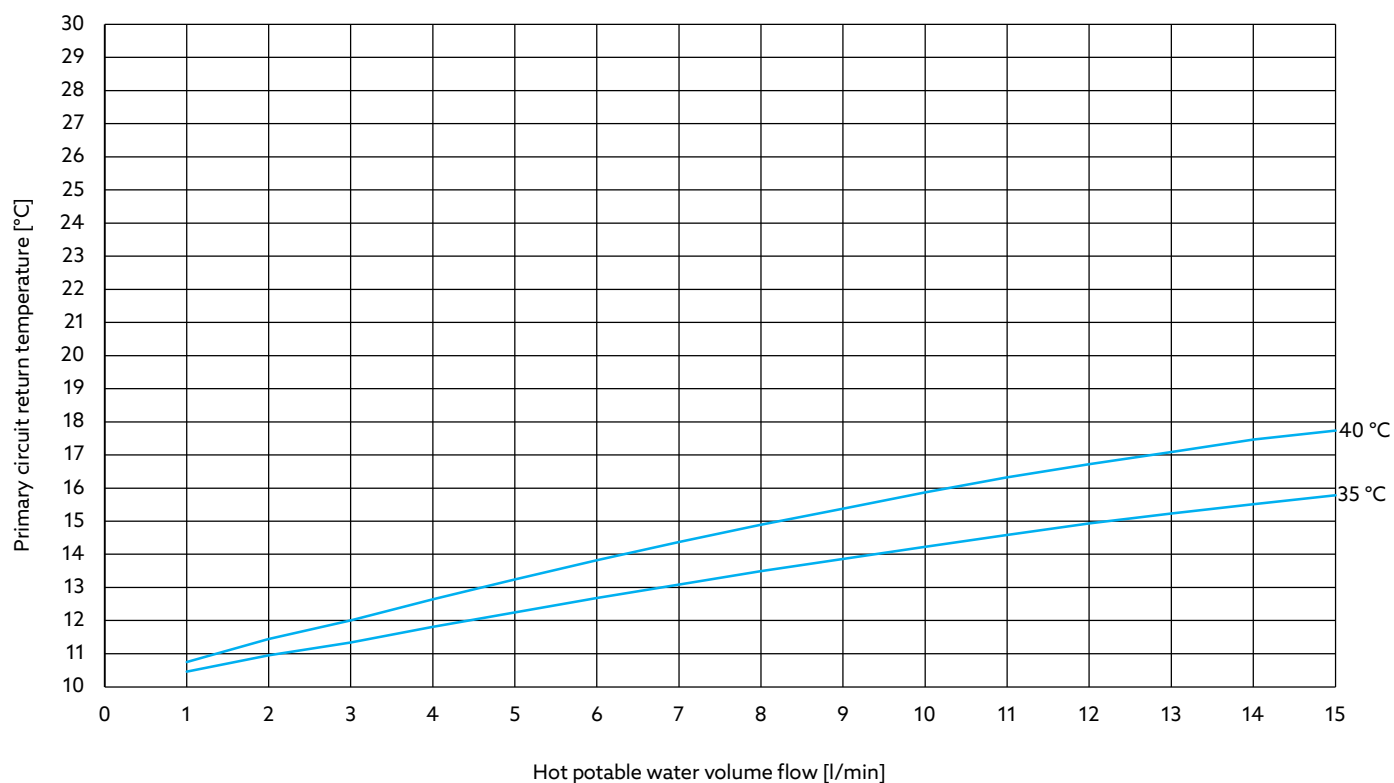
## Regudis W-HTE PR 3 with Instantaneous water heater module (13.5 kW)

Heating of potable water from 10 °C to 45 °C (performance data according to SPF test procedure)

### Volume flow primary circuit at different flow temperatures



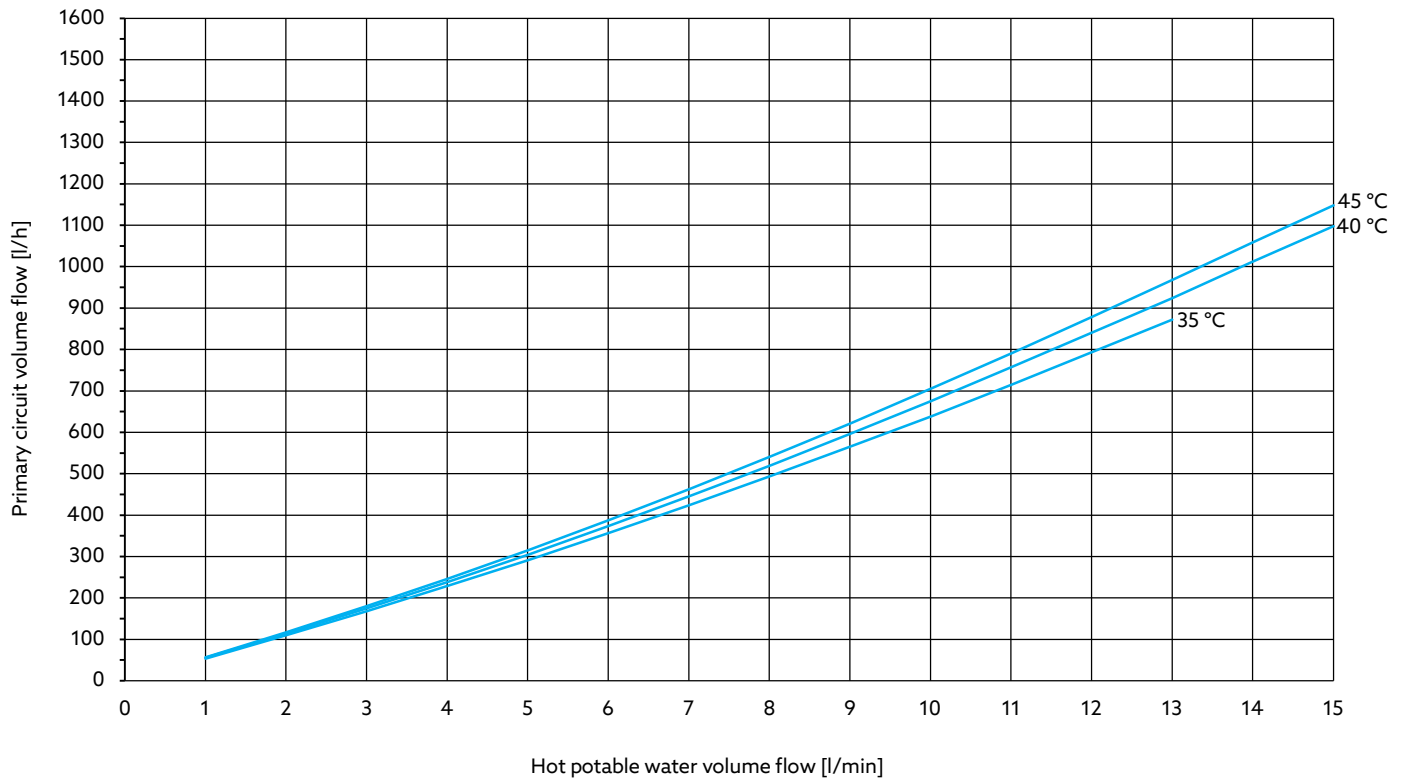
### Return temperature primary circuit at different flow temperatures



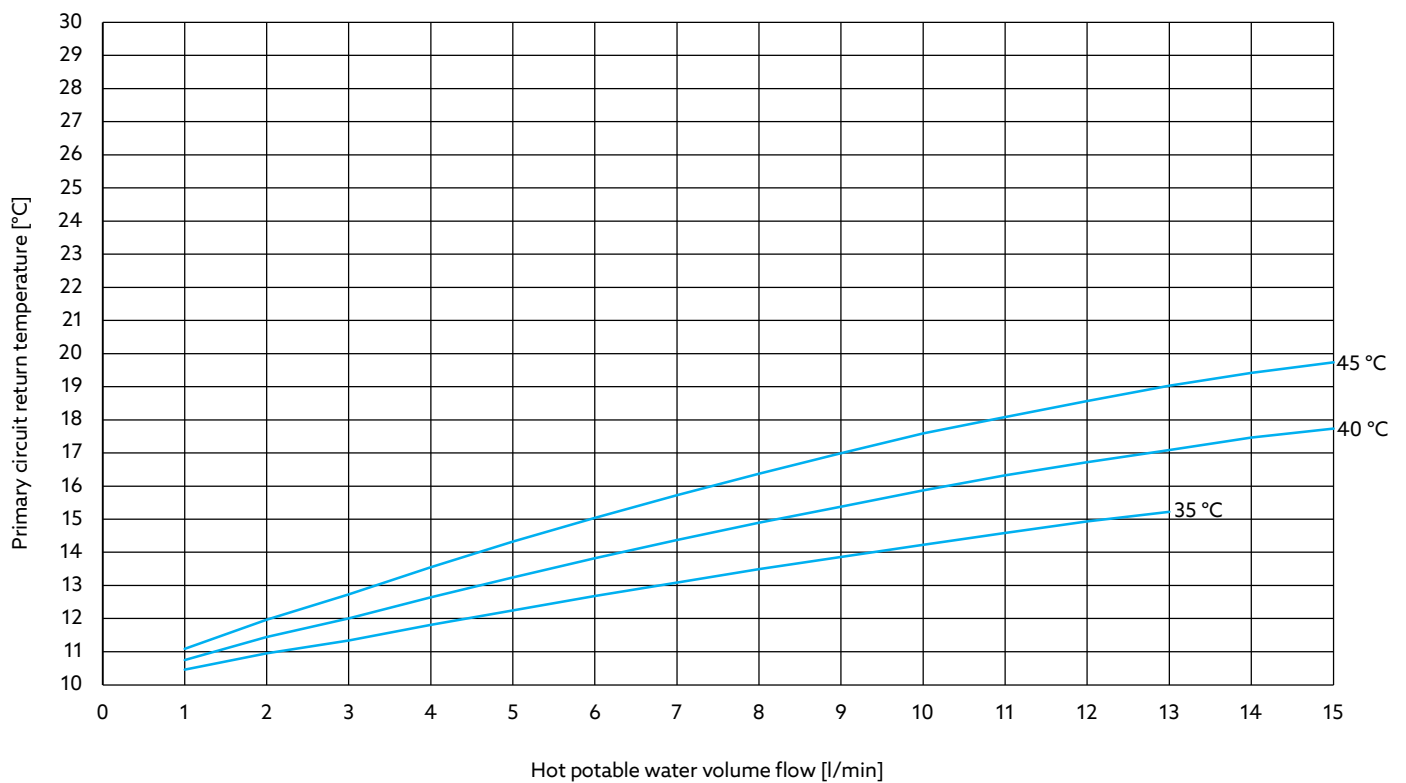
# Regudis W-HTE PR 3 with Instantaneous water heater module (13.5 kW)

Heating of potable water from 10 °C to 50 °C (performance data according to SPF test procedure)

## Volume flow primary circuit at different flow temperatures



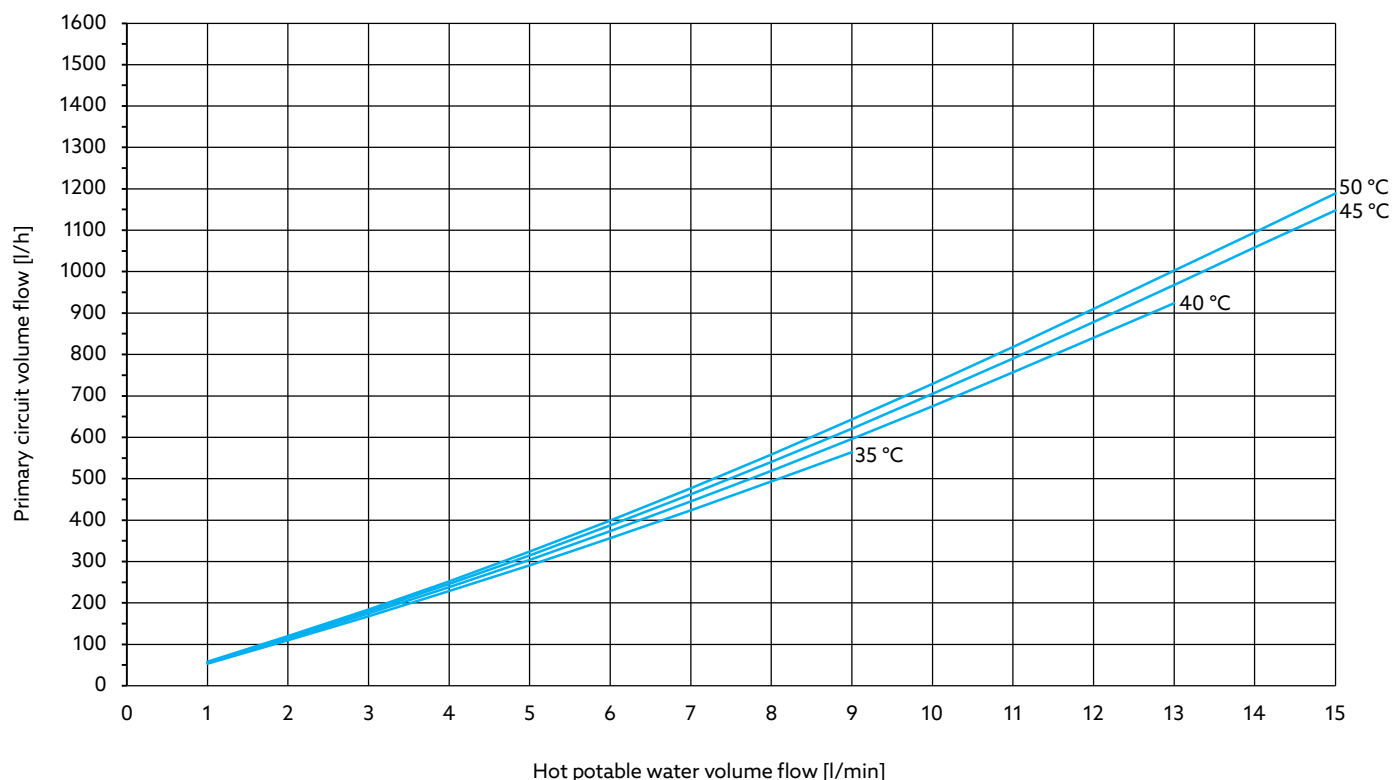
## Return temperature primary circuit at different flow temperatures



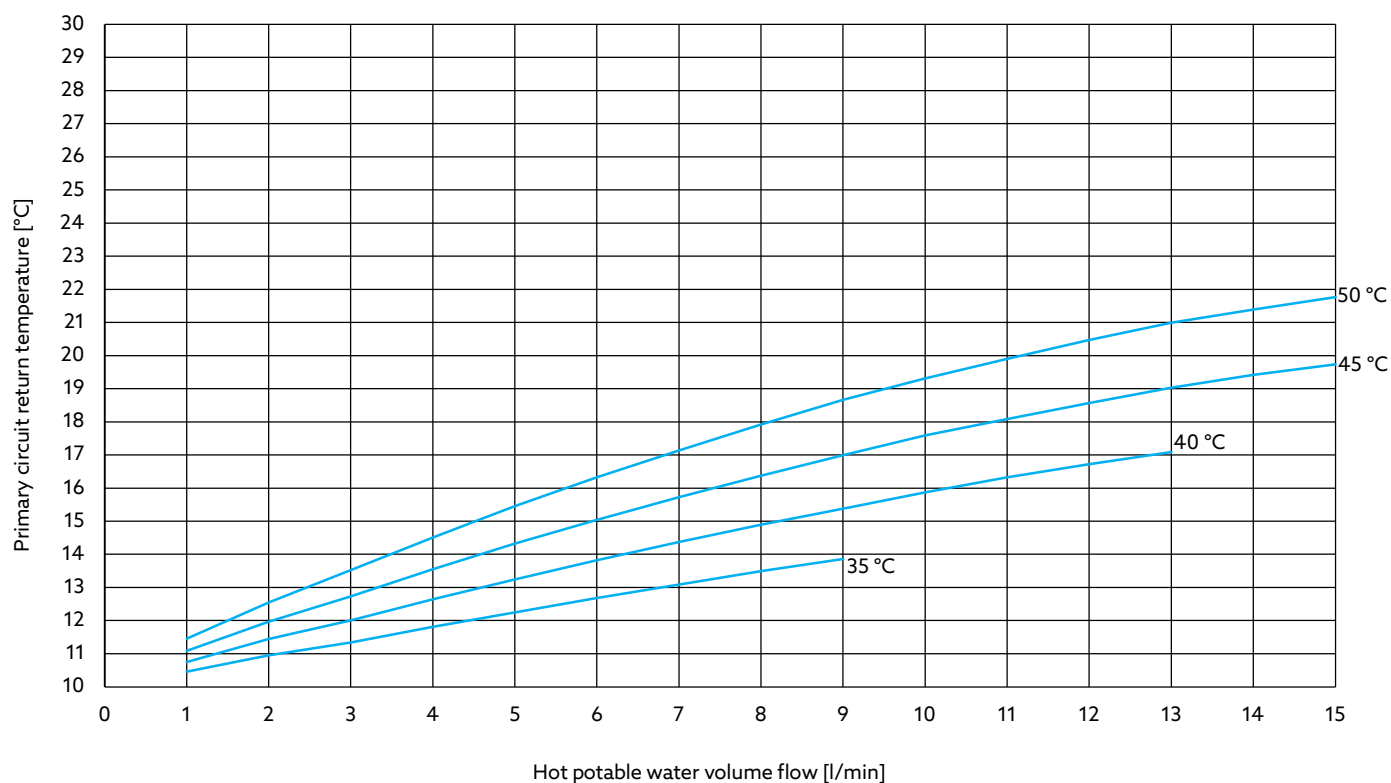
# Regudis W-HTE PR 3 with Instantaneous water heater module (13.5 kW)

Heating of potable water from 10 °C to 55 °C (performance data according to SPF test procedure)

## Volume flow primary circuit at different flow temperatures



## Return temperature primary circuit at different flow temperatures

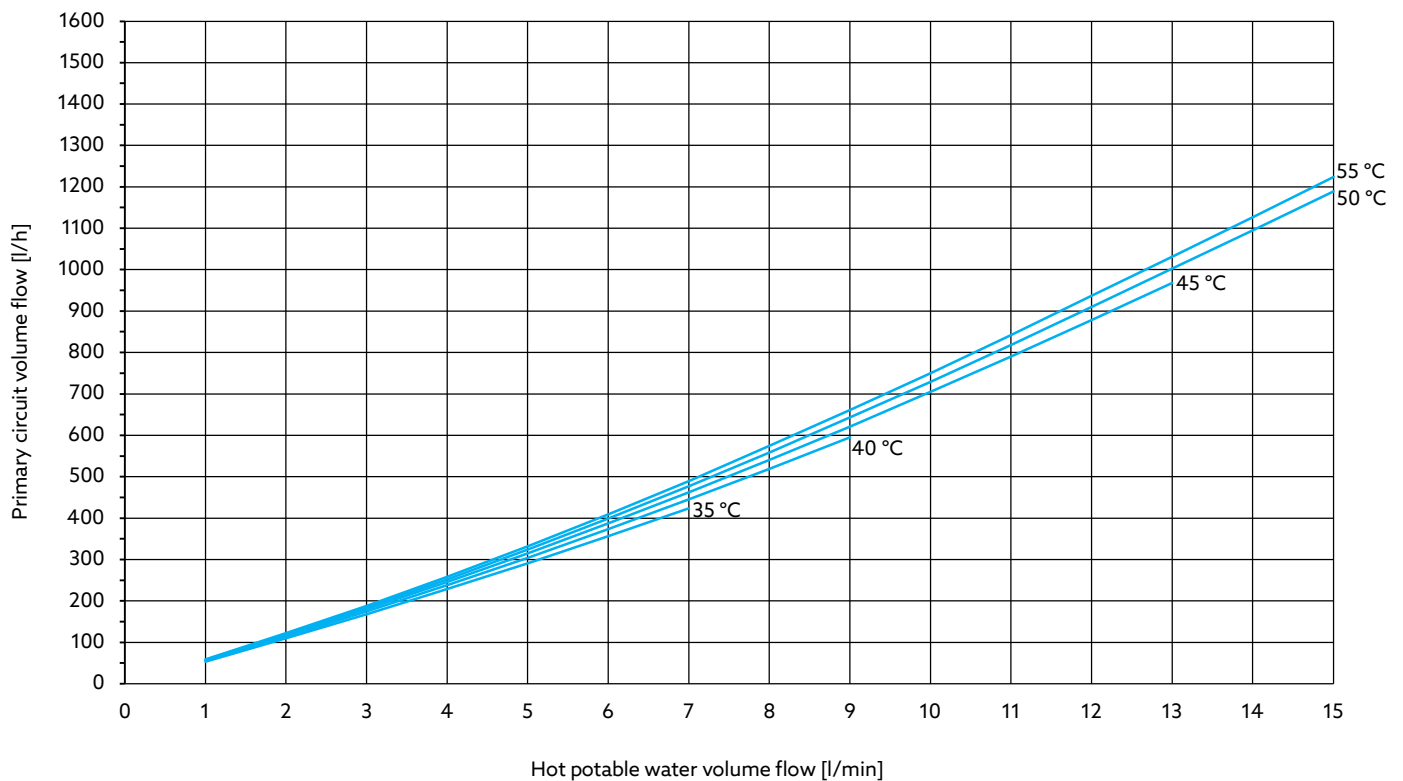




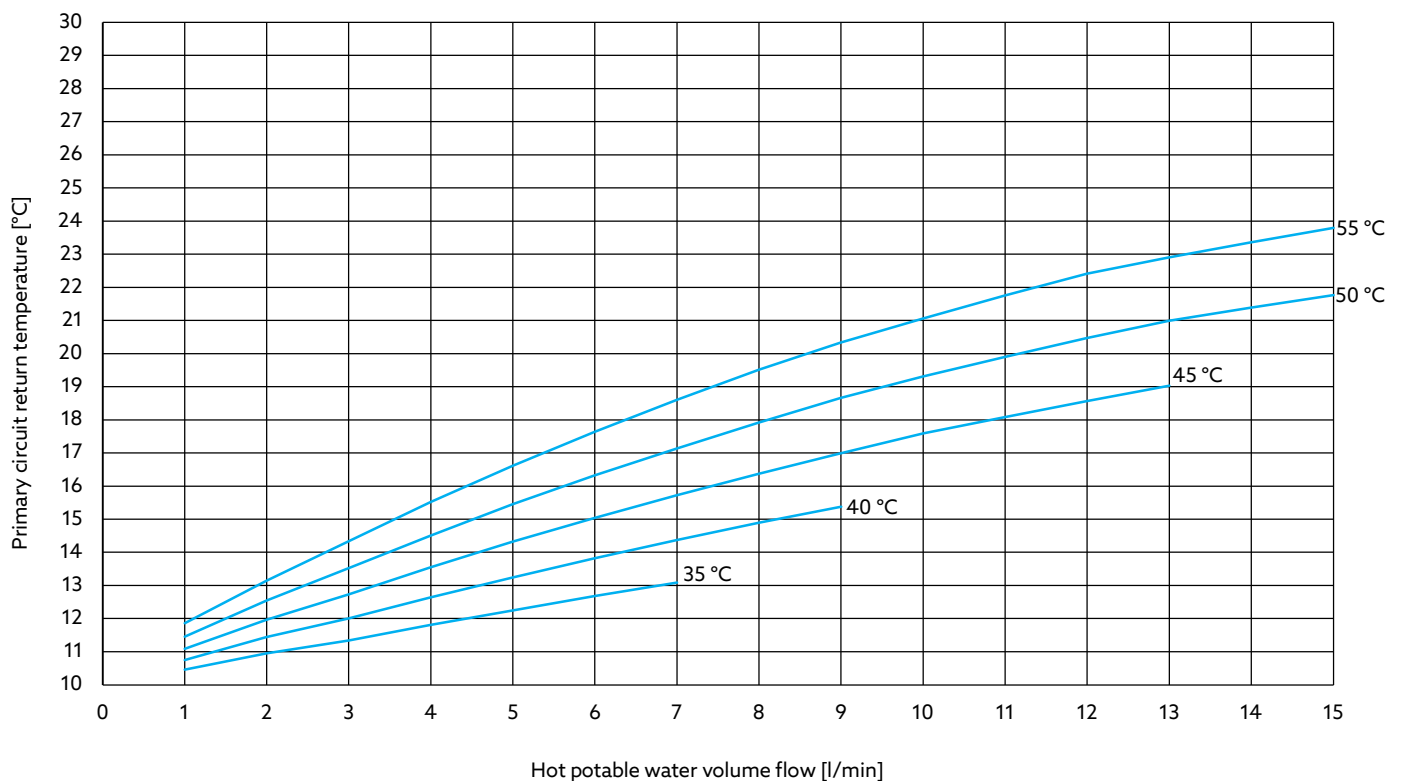
# Regudis W-HTE PR 3 with Instantaneous water heater module (13.5 kW)

Heating of potable water from 10 °C to 60 °C (performance data according to SPF test procedure)

## Volume flow primary circuit at different flow temperatures



## Return temperature primary circuit at different flow temperatures



## Mixing temperatures with different hot potable water volume flow rates

Regudis W-HTE PR 3 with Instantaneous water heater module (13.5 kW)

Heating of potable water from 10 °C to 50 °C (performance data according to SPF test procedure)

Hot potable water volume flow [l/min]	Pressure loss [mbar]	Hot potable water volume flow [l/min] at mixing temperature 38 °C	Hot potable water volume flow [l/min] at mixing temperature 40 °C	Hot potable water volume flow [l/min] at mixing temperature 42 °C
<b>0</b>	-	-	-	-
<b>1</b>	<b>16</b>	1.4	1.3	1.3
<b>2</b>	<b>65</b>	2.9	2.7	2.5
<b>3</b>	<b>147</b>	4.3	4.0	3.8
<b>4</b>	<b>261</b>	5.7	5.3	5.0
<b>5</b>	<b>407</b>	7.1	6.7	6.3
<b>6</b>	<b>587</b>	8.6	8.0	7.5
<b>7</b>	<b>799</b>	10.0	9.3	8.8
<b>8</b>	<b>1043</b>	11.4	10.7	10.0
<b>9</b>	<b>1320</b>	12.9	12.0	11.3
<b>10</b>	<b>1630</b>	14.3	13.3	12.5
<b>11</b>	<b>1972</b>	15.7	14.7	13.8
<b>12</b>	<b>2347</b>	17.1	16.0	15.0
<b>13</b>	<b>2754</b>	18.6	17.3	16.3
<b>14</b>	<b>3194</b>	20.0	18.7	17.5
<b>15</b>	<b>3667</b>	21.4	20.0	18.8

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