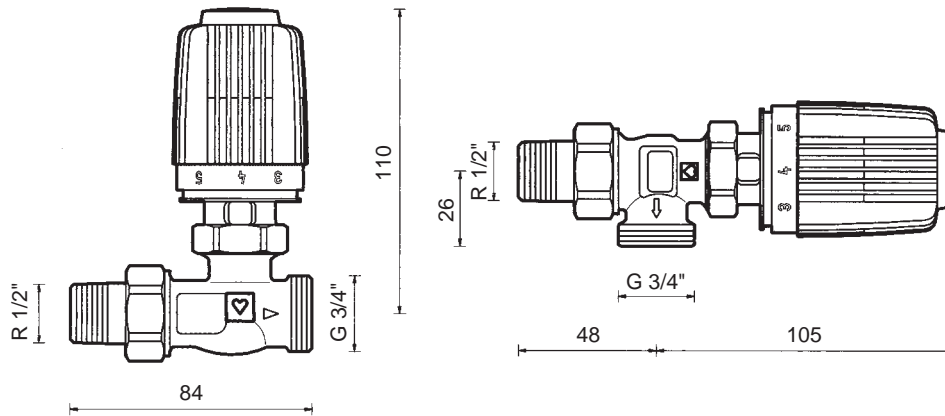


HERZ-Return Temperature Controllers

Standard Sheet for
7201
Edition 0700 (1299)



- 1 **7201 00** **Return temperature controller**
for controlling the return temperature between 25–60°C.
with limitation and locking of set value range
- 1 **7201 23** **Set, straight model**
1 **7201 00** Return temperature controller
1 **7733 81** HERZ-TS-90-thermostatic valve lower part, nickel-plated, radiator
connection with cone seal R 1/2", pipe connection male thread G 3/4.
- 1 **7201 24** **Set, angle model**
1 **7201 00** Return temperature controller
1 **7724 37** HERZ-TS-90-thermostatic valve lower part, nickel-plated, radiator
connection with cone seal R 1/2", pipe connection male thread G 3/4.
- Compression unions G 3/4 for connecting copper-, steel- or plastic pipes must be
ordered separately.

Models

Maximum operating temperature: 110 °C
Maximum operating pressure: 10 bar
Set value range: 25–60 °C
Hot water purity in accordance with ÖNORM H 5195 and/or VDI guideline 2035.

Operating Data

When using HERZ compression unions for copper and steel pipes take into account the permissible
temperature and pressure ratings according to EN 1254-2: 1998, as shown in table 5. For plastic
pipe connections the maximum operating temperature is 80 °C and the maximum operating pres-
sure is 4 bar if approved by the pipe manufacturer.

Compression Unions

The temperature values within the set value range are adjusted by placing the blue hand wheel
marks opposite the pointer. Deviations are possible depending on the heating system design and
mode of operation.

Setting Range Set Value Adjustment

Mark	1	2	3	4	5
approx. °C	25	35	45	55	60

The HERZ return temperature controller is an automatic proportional control unit for return water
temperature control in radiators or floor heating circuits.

Function

The water temperature is transmitted from the valve body to the temperature sensor. If the return
temperature exceeds the set value, the controller closes while it opens when the temperature is
lower than the set value.

We reserve the right to make
modifications necessitated by
technological progress.

During installation of the thermostatic valve not necessary take into account the direction of flow (arrow on the body). After removing the protective cap for building work, the return temperature controller is installed in completely open position (as delivered) by means of a freely moving 30 mm union nut. The pointer should be clearly visible.

Installation

The ambient temperature must not exceed the set value since otherwise the controller will remain permanently closed.

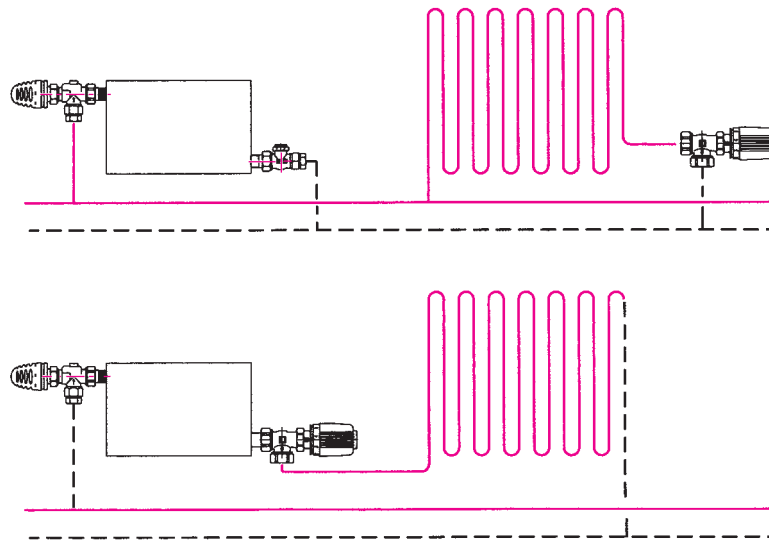
Important for Installation

Water heating systems.

The return temperature controller is used for limiting the return temperature in radiators or for return temperature control in small floor heating areas (up to 15 m²) in combined floor and radiator heating systems.

The return temperature controller is a volume controller. In case of floor heating system control with parallel connection, the pipe of the floor heating system will be exposed to the same intake temperature as the radiator heating system.

Field of Application



Block Diagram of the System

Parallel Connection

Serial Connection

Spindle Seal

The spindle seal is an O-ring located in a brass chamber which can be changed while the system is in operation. The O-ring guarantees minimum maintenance requirements and lasting ease of valve operation.

Replacement of the O-ring is described in the HERZ-TS-90 Standard Sheet.

Seat Seal

When closing the valve, the torus seat seal gently attaches itself to the valve seat, and thus ensures perfect shutting behaviour.

Replacement of the Thermostatic Valve Upper Part

The upper part can be changed by means of the HERZ changing tool while the system is under pressure. Take into account the instructions supplied with the changing tool.

Special Design Features

Iron pipe connection 6210 with cone seal, installed.

It is recommended to use the HERZ assembly key 1 6680 00.

Radiator Connection

Instead of the radiator connection, the following components be used:

- 6210** 1/2" Iron pipe connection, Length: 26 or 35 mm
- 6211** 1/2" Reducing connection, 1/2" x 3/8"
- 6218** 1/2" Long threaded bush without nut, can be shortened in order to compensate for differences in structural dimensions. Length: 39, 42, or 76 mm
- 6218** 1/2" Threaded bush without nut, Length: 36, 48, or 76 mm
- 6235** 1/2" Soldering connection for outside pipe diameters 12, 15, or 18 mm
- 6249** 1/2" Iron pipe connection elbow without nut, with cone seal
- 6274** G 3/4 Compression union for copper and thin-walled steel pipes, for outside pipe diameters 8, 10, 12, 14, 15, 16, 18 mm
- 6275** G 3/4 Compression union with soft seal for copper and thin-walled steel pipes, particularly suitable for hard high-grade steel pipes and pipes with hard electroplated surfaces. For outside pipe diameters 12, 14, 15 mm.
- 6098** G 3/4 Compression union for PE-X-, PB-, and plastic composite pipes.

Further Connection Options

For order numbers refer to the HERZ catalogue

For pipe connection, a male thread G 3/4 is provided. Connections and compression unions must be ordered separately.

6235	1/2"	Soldering connection with cone seal for outside pipe diameters 12, 15, or 18 mm
6274	G 3/4	Compression union for copper and thin-walled steel pipes, for outside pipe diameters 8, 10, 12, 14, 15, 16, 18 mm
6275	G 3/4	Compression union with soft seal for copper and thin-walled steel pipes, particularly suitable for hard high-grade steel pipes and pipes with hard electroplated surfaces. For outside pipe diameters 12, 14, 15 mm
6098	G 3/4	Compression union for PE-X-, PB-, and plastic composite pipes.

Pipe Connection

For pipe dimensions of plastic pipe connections refer to the HERZ Catalogue

After removing the hand wheel (2 mm Allen key), the set value range can be limited, locked, or a definite value can be fixed by changing the position of limiting pins in the threaded part. Flat pliers will make this task easier.

The two limiting pins are installed by the manufacturer in such a way that the entire set value range is available.

Limiting and Locking the Set Value Range

For theft protection, we offer clips to be mounted above the fastening nut of the return temperature controller. Special keys are required to open these clips.

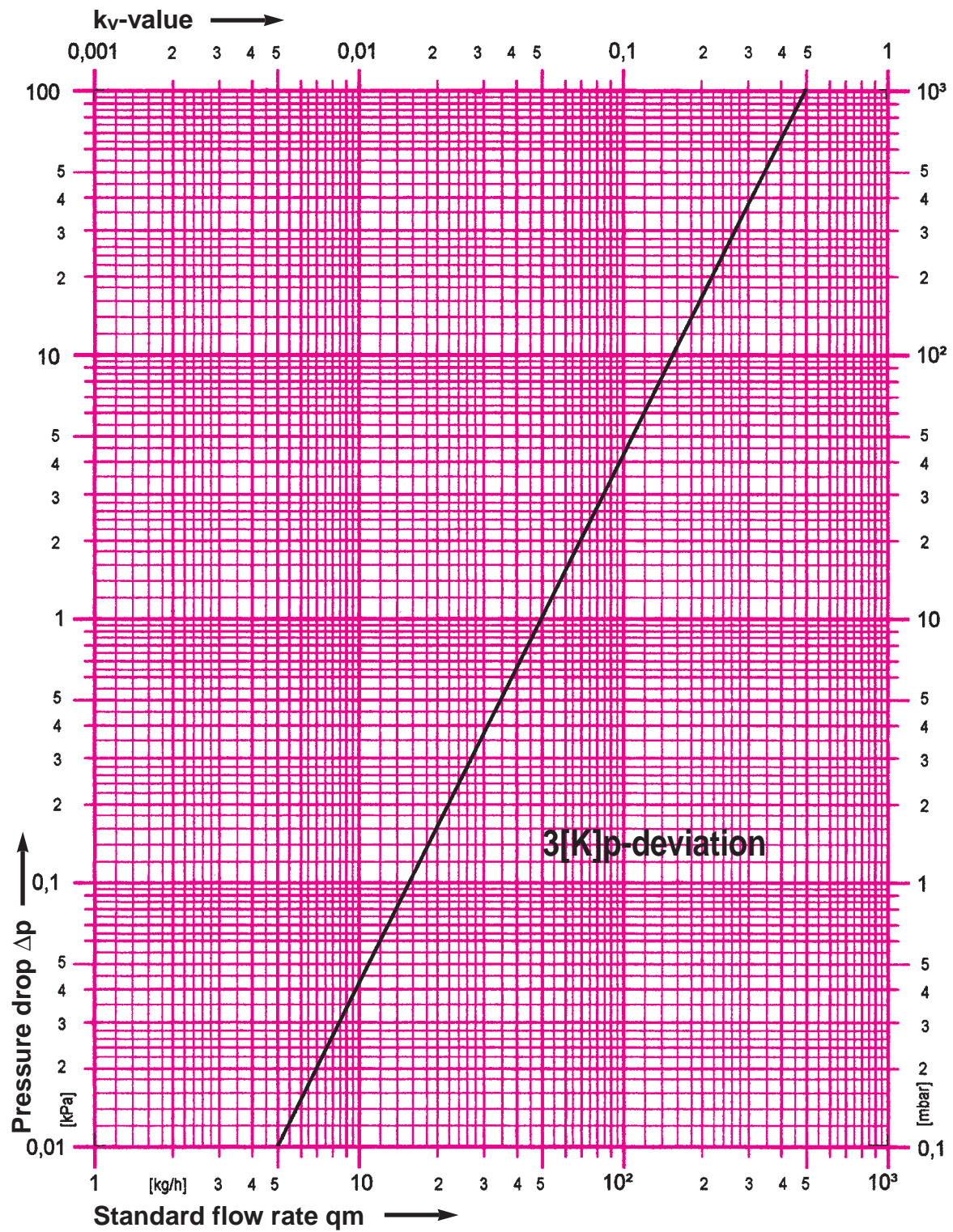
Theft Protection

1 6616 00	2-mm Allen key for the hand wheel of the return temperature controller and for theft protection 1 7552 03
1 6640 00	HERZ universal key, for opening theft protection 1 9552 03
1 6680 00	HERZ assembly key for connections
1 6807 90	HERZ-TS-90 assembly key
1 7552 03	Theft protection, 2 clips to be fastened by means of Allen screws. Locking and opening by means of key 1 6616 00
1 7780 00	HERZ-changing tool for thermostatic upper parts
1 9552 03	Theft protection (snap-on clips), to be opened with universal key 1 6640 00

Accessories

1 6390 91	Thermostatic upper part
1 6890 00	HERZ-TS-90 O-ring set

Spare Parts



We reserve the right to make modifications.