SOLAR CONTROLLERS
PROMATIC® SGC14, SGC26, SGC36

ENG

SELTRON®

INTRODUCTION

Solar controllers SGC of 2nd generation are modern and powerfull controllers for solar and combined heating systems.
In SGC controllers a large selection of hydraulic schemes is built-in. Selected scheme and other system informations are shown on illuminated graphic LCD display. Simple handling of the controller is based on user interface with graphical icons. With added »Help« key you can access user help and instructions, anytime you need it. By the first start of the controller a setup wizard is activated, which guides you through the initial setup in steps.

SGC controllers feature many control, protective and advance functions such as:
- operation of not used control outputs can be freely programmed as a thermostat, differential thermostat, timer, activation of auxiliary heat sources or as a combination of all mentioned,
- all controller settings are permanently stored, user settings can be saved to a user file and later opened from it,
- each change of controller setting, maximum temperature overrun or system malfunction is written to a log,
- all measured temperaures and acquired energy are periodically stored, the data can be anytime overviewed as graphs on display,
- especially interesting function tis simulation of measured temperatures for testing the controller operation in any conditions.

FEATURES

	SGC14	SGC26	SGC36
Number of mechanical relays	0	1	1
Number of electronic relays	1	1	2
Number of temperature sensors	4	6	6
Number of hydraulic schemes	5	22	50
Number of collector fields	1	2	2
Number of storage tanks	1	2	3
Illuminated LCD display	yes	yes	yes
Heat metering (kWh)	yes	yes	yes
Heat metering with flow sensor (l/min)	yes	yes	yes
Pump speed control (RPM)	yes	yes	yes
Antilegionella protection*	yes	yes	yes
Frost protection	yes	yes	yes
Protection of solar system	yes	yes	yes
Collector's safety shutdown	yes	yes	yes
Storage tank protection	yes	yes	yes
Function for tube collectors	yes	yes	yes
Recooling function	yes	yes	yes
Graphic overview of temperatures and acquired energy	yes	yes	yes
Error and high temperature warning	yes	yes	yes
Simulation of system operation	yes	yes	yes
Operation time counter	yes	yes	yes
Log of changes in settings	yes	yes	yes
Holiday mode	yes	yes	yes
Program timer	yes	yes	yes
Possibility of free programming	no	yes, 1 output	yes, 2 outputs

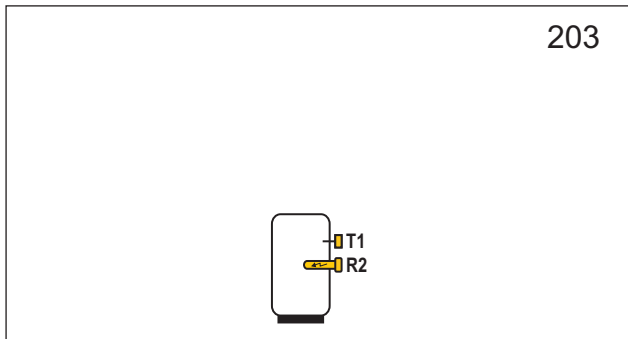*Available only by schemes with oil boiler, electric heater or heat pump.

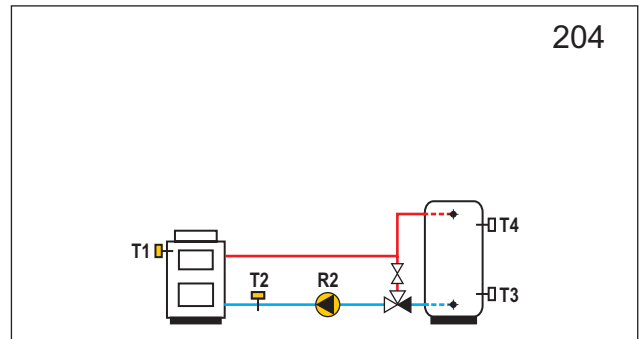**SELTRON®**

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201
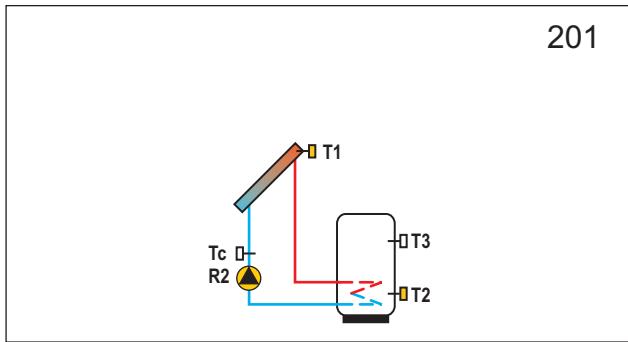
SGC14   Solar collectors, d. h. w. storage tank.

202

SGC14   Solid fuel boiler, d. h. w. storage tank.

203
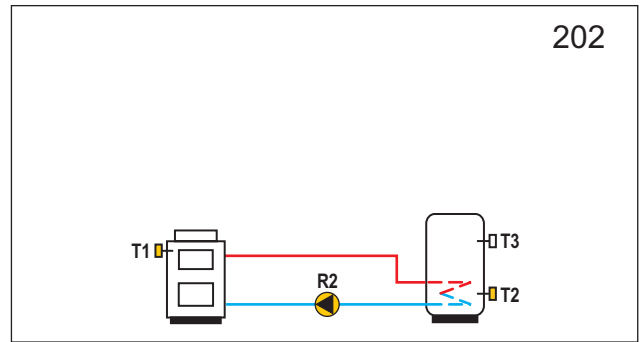
SGC14   D. h. w .storage tank, heating with electricity.

204

SGC14   Solid fuel boiler, heat accumulator.

205
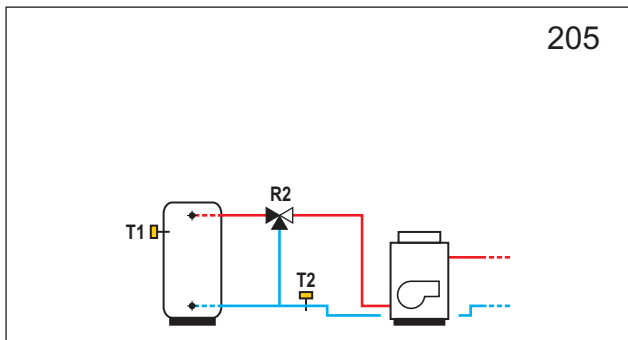
SGC14   Heating support with heat accumulator.

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SGC26   Liquid fuel boiler, d. h. w. storage tank.

212c
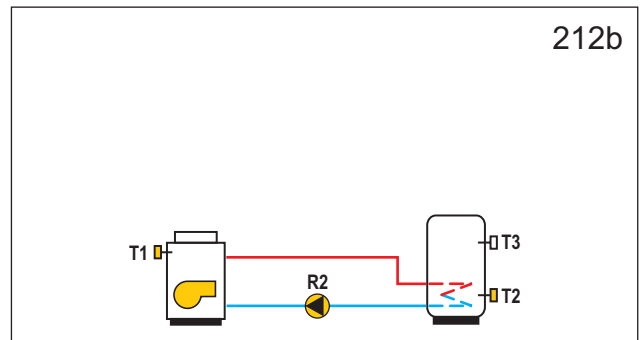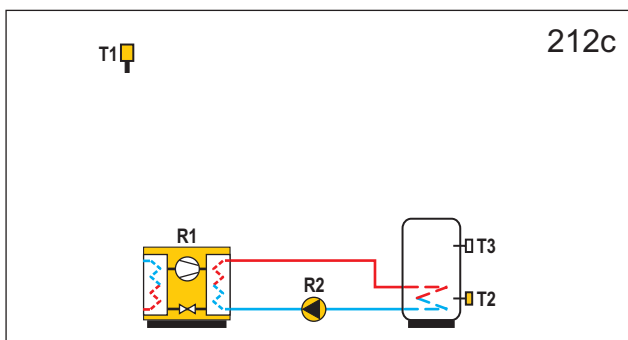
SGC26   Heat pump, d. h. w. storage tank.

213
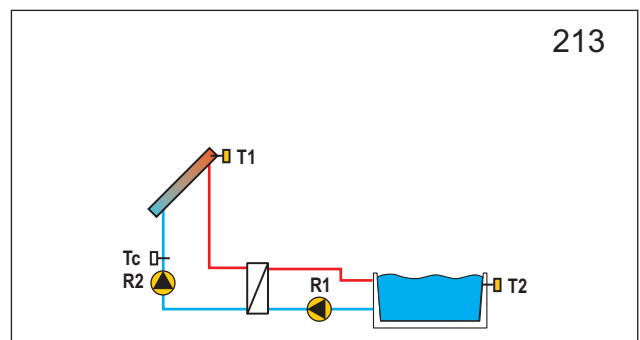
SGC26   Solar collectors, swimming pool.

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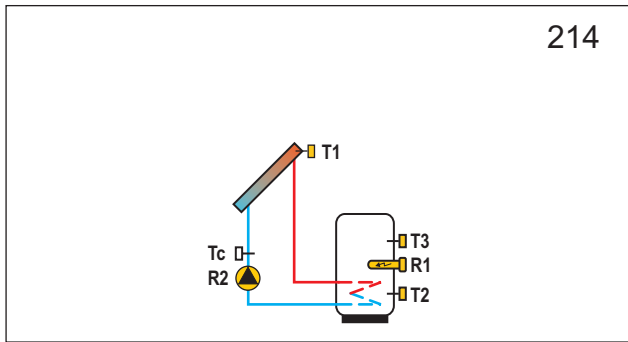
SGC26 Solar collectors, d. h. w. storage tank, backup heating with electricity.
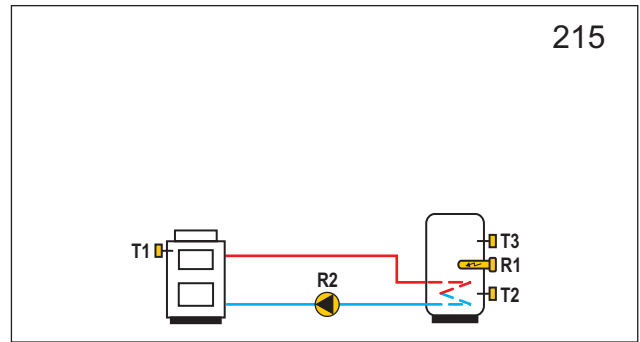
SGC26 Solid fuel boiler, d. h. w. storage tank, backup heating with electricity.
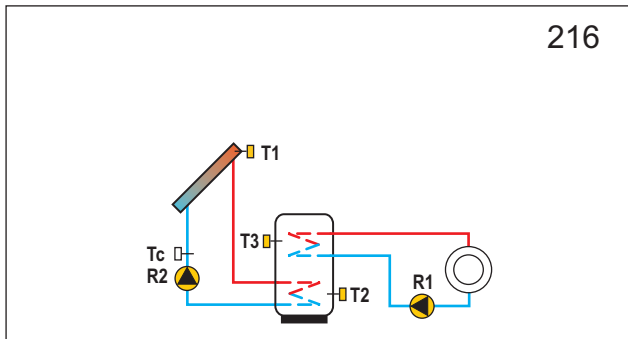
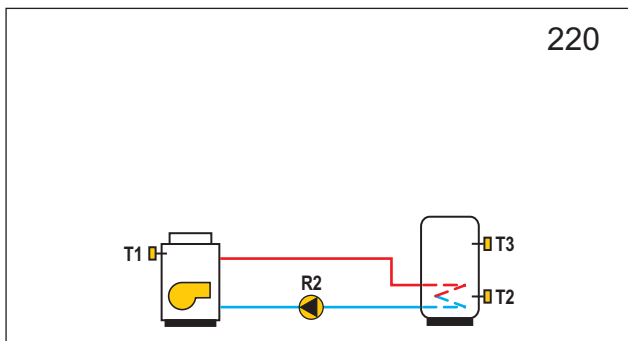**SGC26** Solar collectors, d. h. w. storage tank, heat take away.
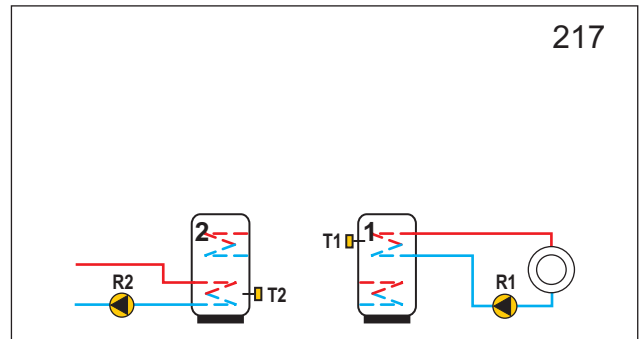
SGC26 D. h. w. storage tank, thermostat for heating R2, thermostat for cooling R1.
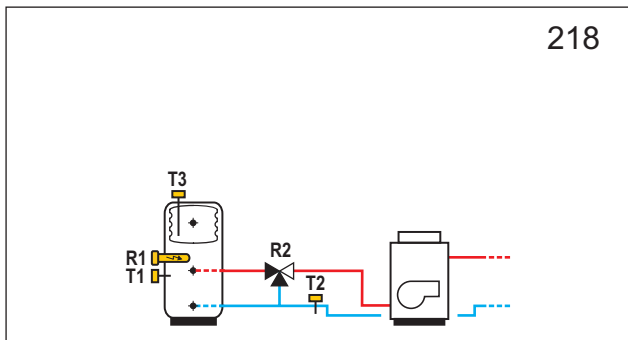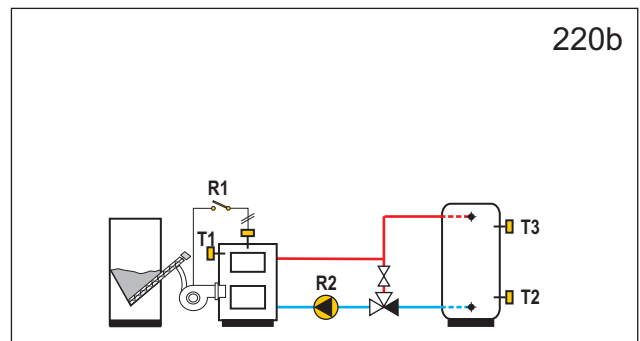

SGC26 Heating support with heat accumulator, backup heating with electricity.
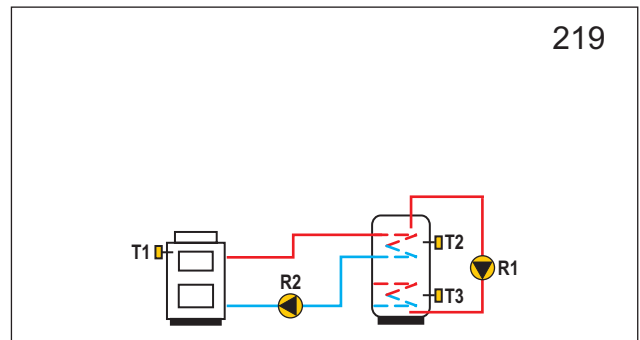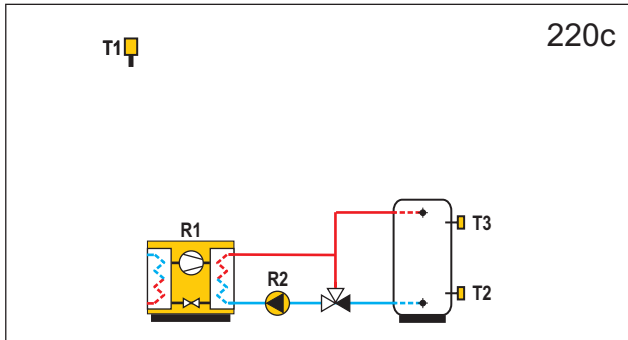

SGC26 Solid fuel boiler, d. h. w. storage tank.

SGC26 Liquid fuel boiler, d. h. w. storage tank.
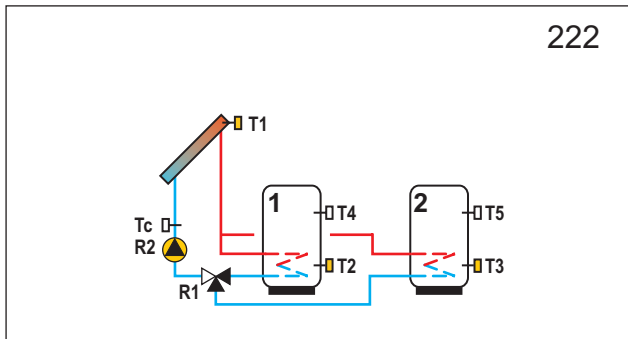
SGC26 Pellets boiler, heat accumulator.

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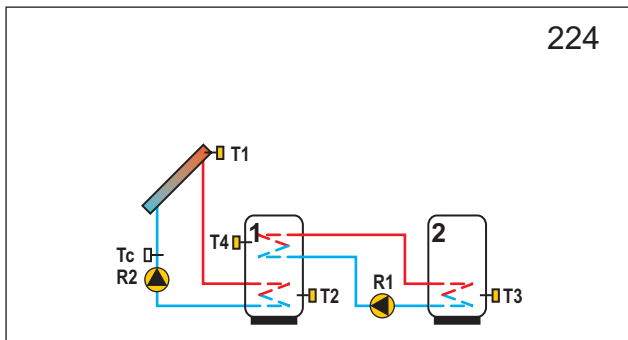**SGC26** Heat pump, heat accumulator.
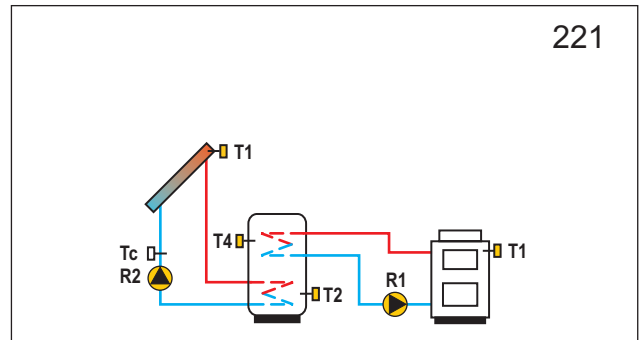
221

SGC26 Solar collectors, d. h. w. storage tank, solid fuel boiler.

222

SGC26 Solar collectors, two d. h. w. storage tanks, switchover.
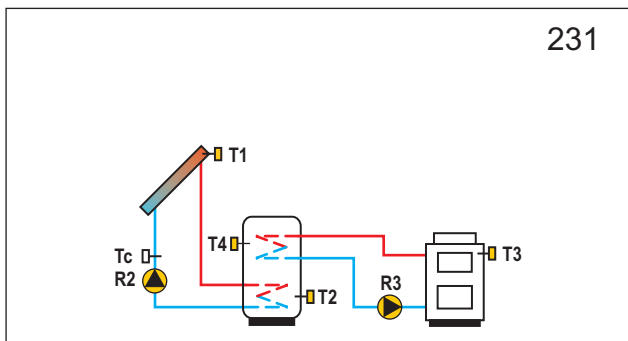

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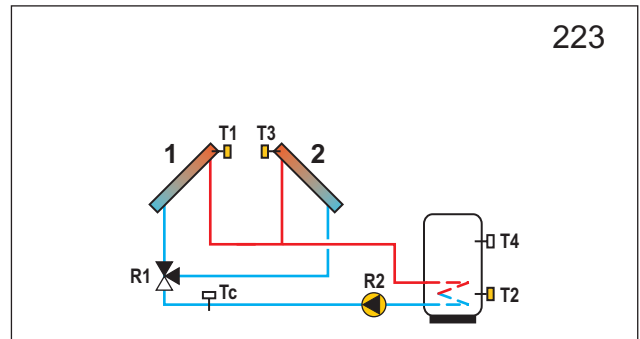
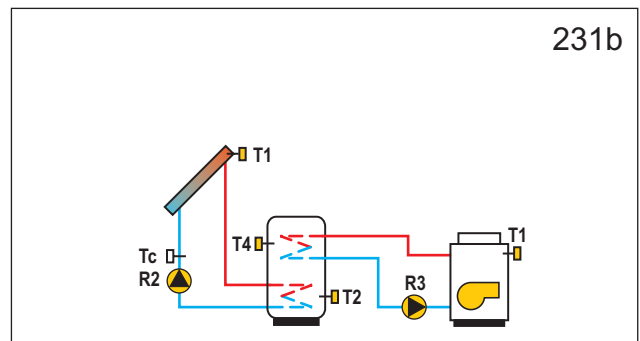**SGC26** Solar collectors east-west, d. h. w. storage tank.

224

SGC26 Solar collectors, two d. h. w. storage tanks, heat transport to storage tank 2.
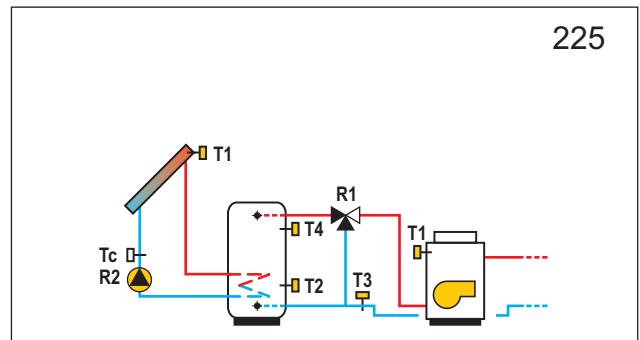
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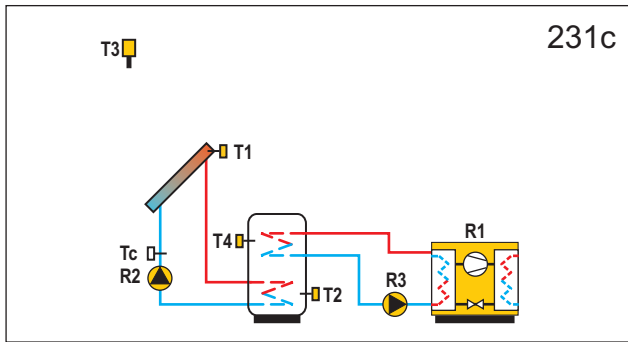**SGC26** Solar collectors, heating support with heat accumulator.

231

SGC36 Solar collectors, d. h. w. storage tank, solid fuel boiler.
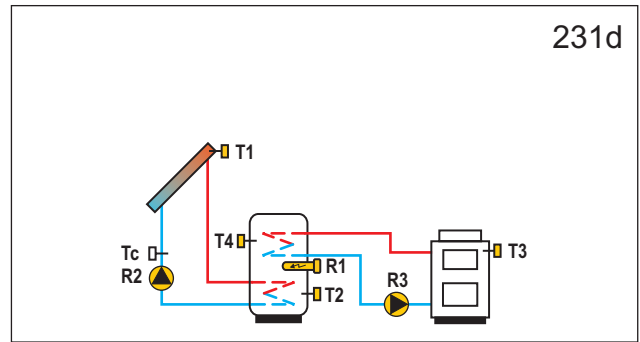

231b

SGC36 Solar collectors, d. h. w. storage tank, liquid fuel boiler.
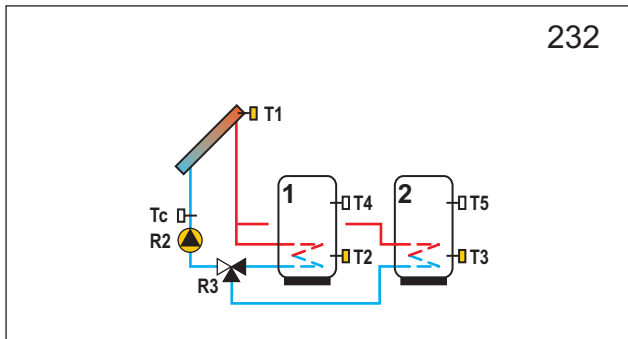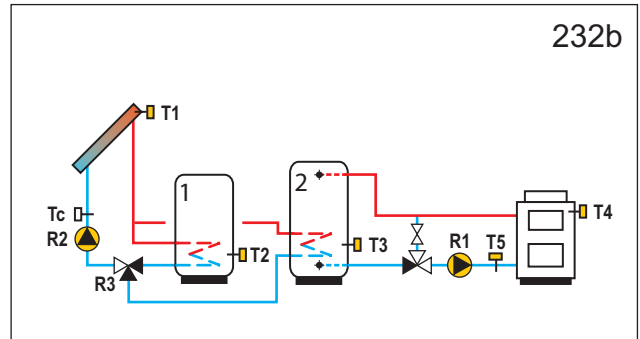
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231c

SGC36   Solar collectors, d. h. w. storage tank, heat pump.
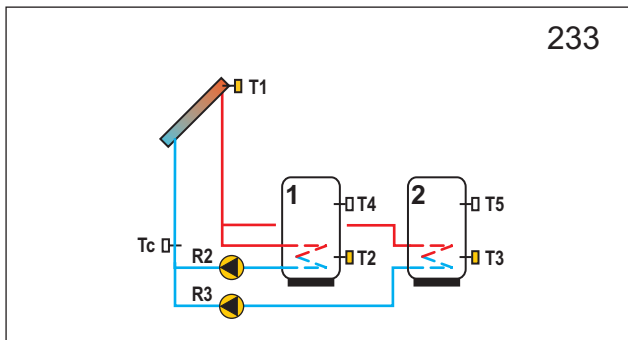

231d

SGC36   Solar collectors, d. h. w. storage tank, solid fuel boiler, backup heating with electricity.
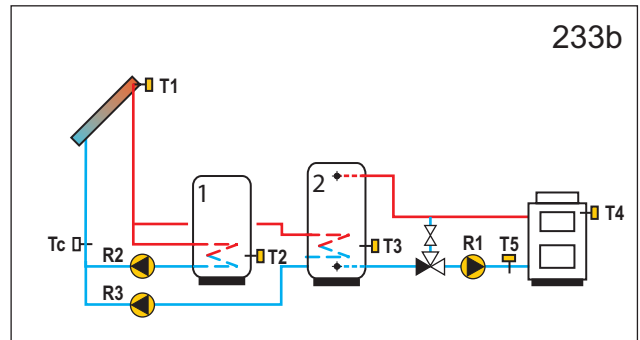

232

SGC36   Solar collectors, two d. h. w. storage tanks, switchover.
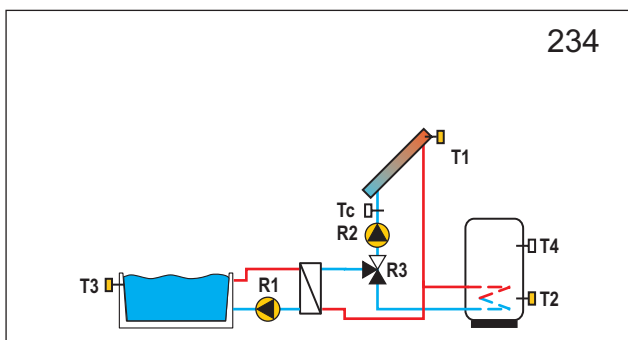

232b

SGC36   Solar collectors, d. h. w. storage tank, heat accumulator, switchover, solid fuel boiler.
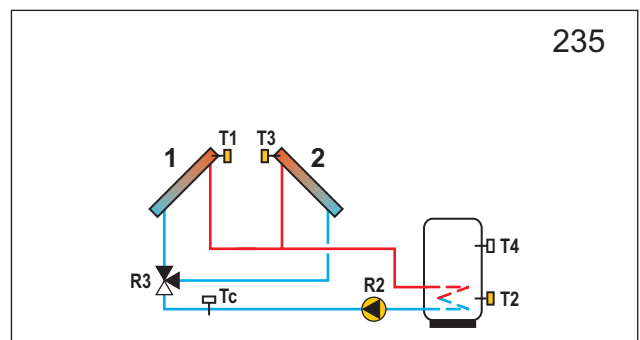

233

SGC36   Solar collectors, two d. h. w. storage tanks, two pumps.

233b

SGC36   Solar collectors, d. h. w. storage tank, heat accumulator, switchover, solid fuel boiler.
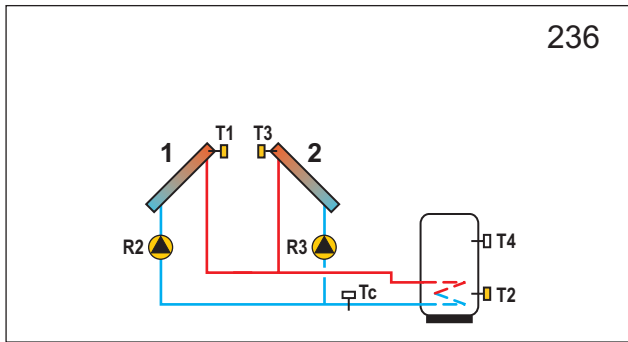

234

SGC36   Solar collectors, d. h. w. storage tank, swimming pool, switchover.
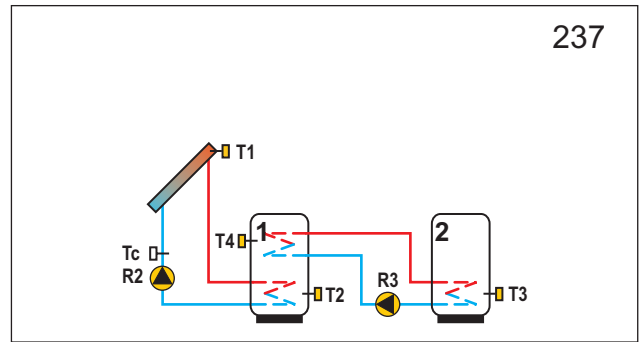

235

SGC36   Solar collectors field with east - west orientation, d. h. w. storage tank, switchover.
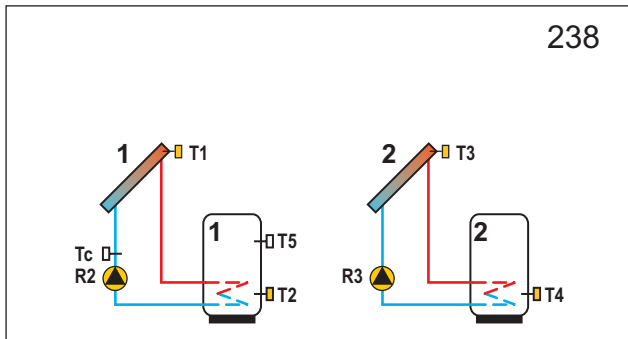
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SGC36 Solar collectors with east - west orientation, d. h. w. storage tank, two pumps.
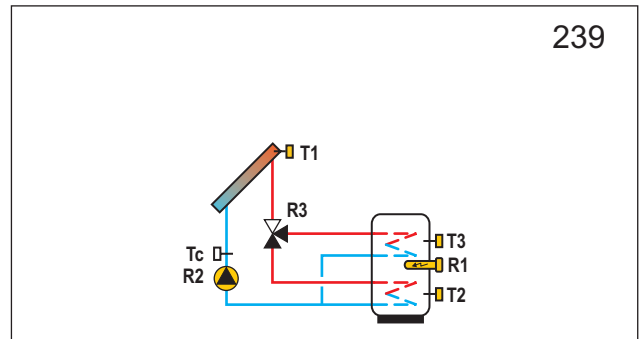
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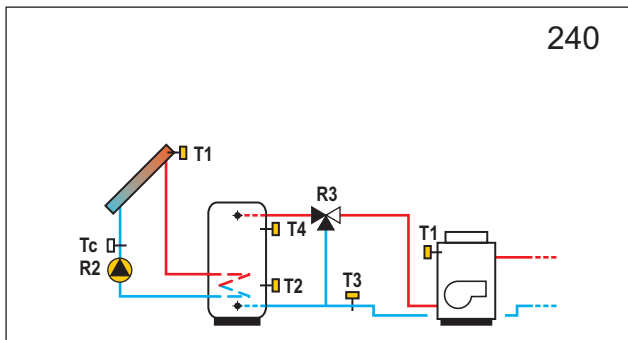**SGC36** Solar collectors, two d. h. w. storage tanks, heat transfer into the d. h. w. storage tank 2.

238

SGC36 Solar collectors, d. h. w. storage tank. two separate circuits.
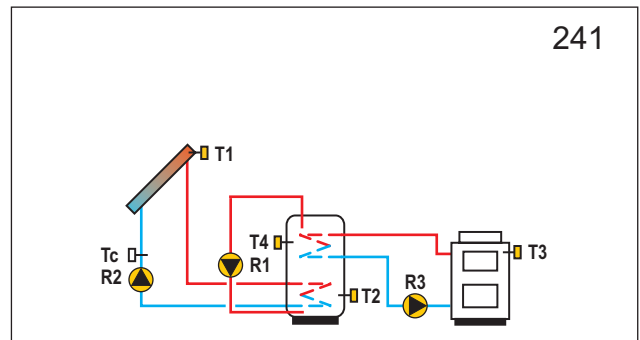
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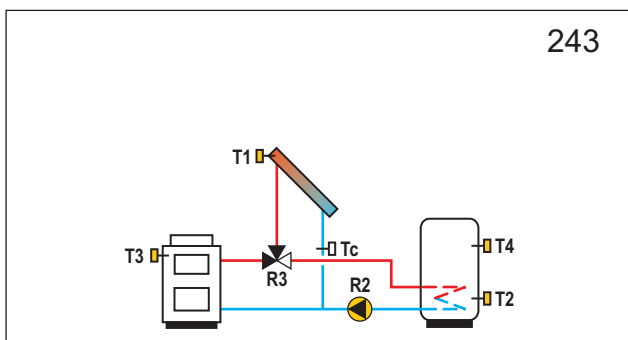**SGC36** Solar collectors, d. h. w. storage tank, switchover top/bottom, backup heatig with electricity.

240

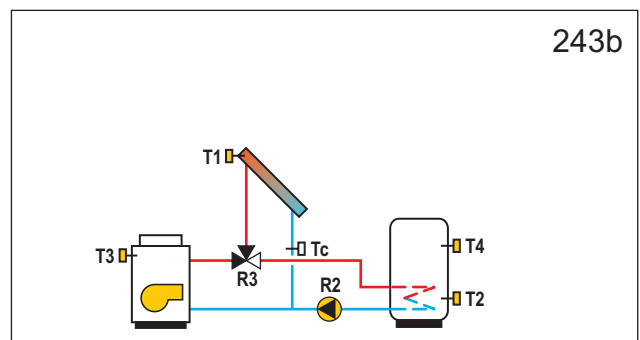**SGC36** Solar collectors, heating support with heat accumulator.

241

SGC36 Solar collectors, d. h. w. storage tank, solid fuel boiler.
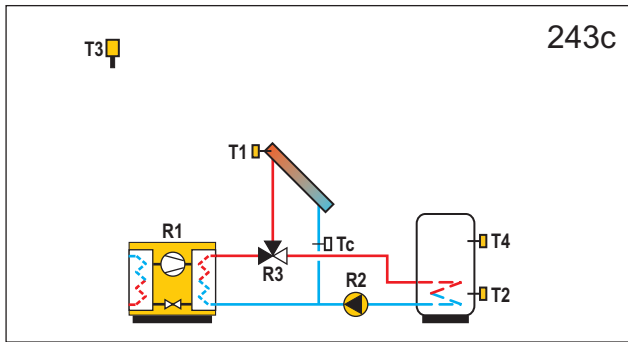
243

SGC36 Solid fuel boiler, solar collectors, d. h. w. storage tank, switchover.
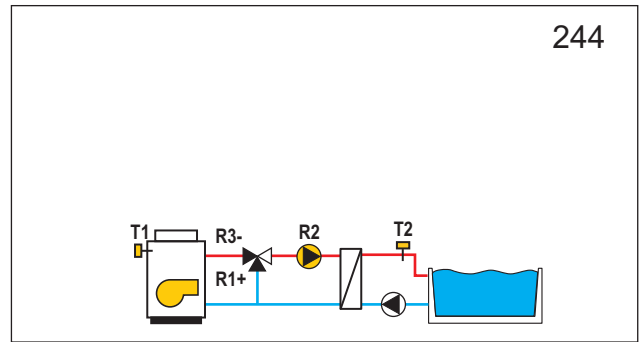
243b

SGC36 Liquid fuel boiler, solar collectors, d. h. w. storage tank, switchover.
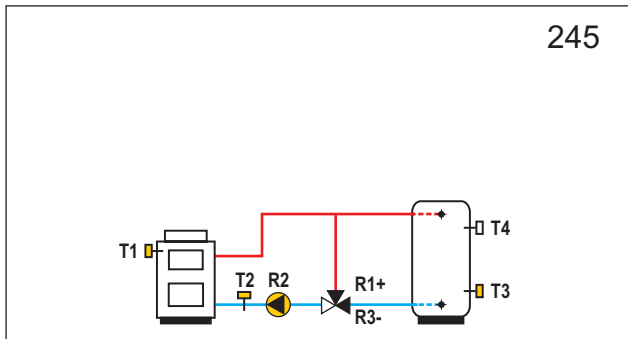
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243c

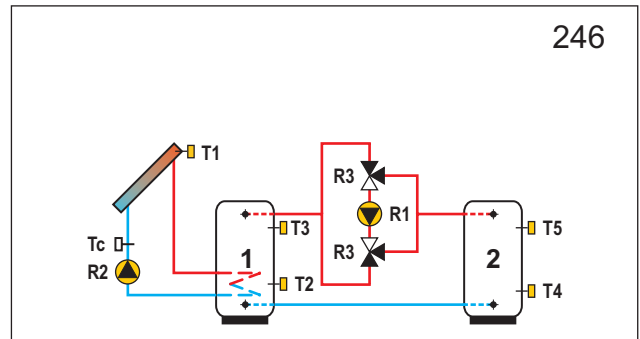**SGC36** Heat pump, solar collectors, d. h. w. storage tank, switchover.

244

SGC36 Control of the swimming pool warming.
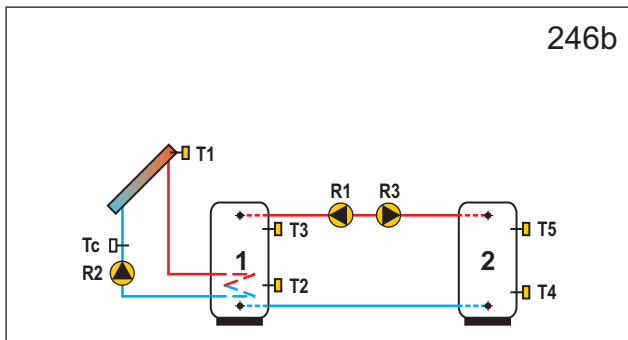

245

SGC36 Solid fuel boiler, return pipe temperature control.
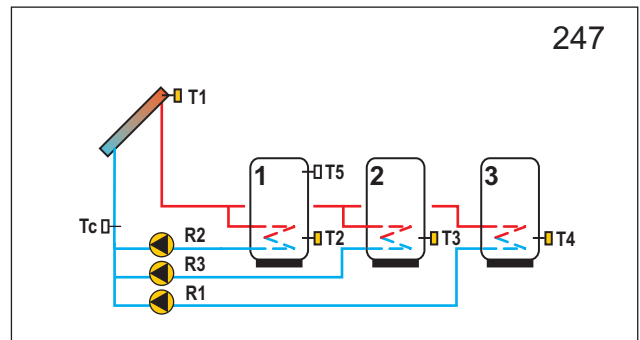

246

SGC36 Solar collectors, reversible transfer of heat between the main and auxiliary heat accumulator, switchover.
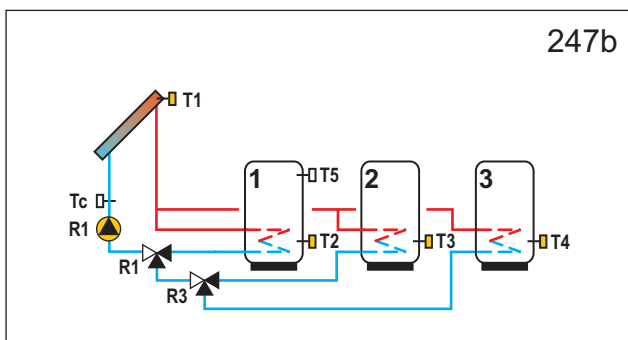

246b

SGC36 Solar collectors, reversible transfer of heat between the main and auxiliary heat accumulator, two pumps.

247

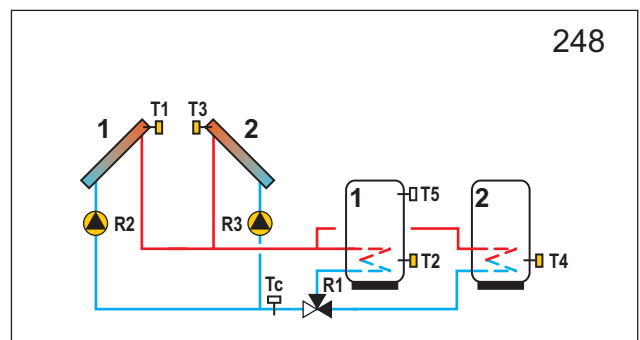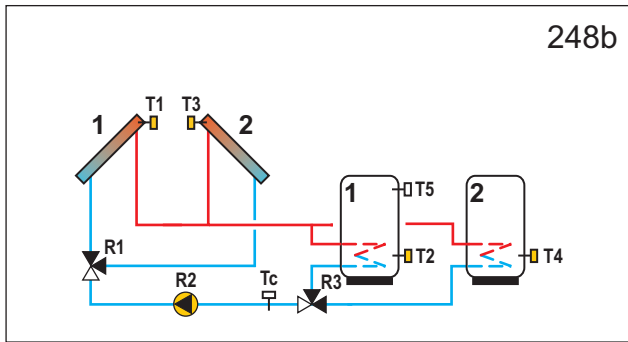**SGC36** Solar collectors, three d. h. w. storage tanks, three pumps.

247b

SGC36 Solar collectors, three d. h. w. storage tanks, switchover.
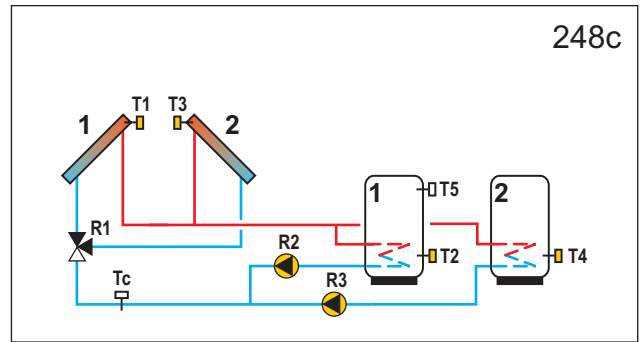

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SGC36 Solar collectors east-west, two pumps, two d. h. w. storage tanks, switchover.

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SGC36　Solar collectors east-west - switchover, two d. h. w. storage tanks - switchover.
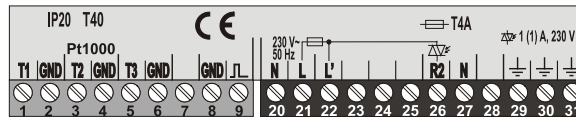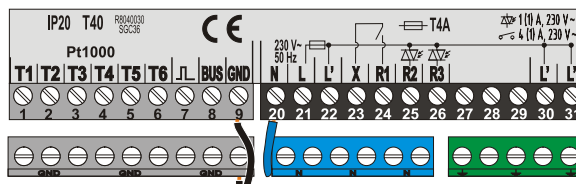
248b

SGC36　Solar collectors east-west - switchover, two d. h. w. storage tanks, two pumps.

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CONNECTION TERMINALS

SGC14

SGC26 , SGC36

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TEMPERATURE SENSORS, ACTUATORS

For SGC controllers are available following sensors and actuators:

Outdoor sensor AF
For measurement of outdoor temperature.

Surface sensor VF
For measurement of stand-pipe or return-pipe temperature.

Immersion sensor TF
For measuring temperature of boiler, solar collectors, heat accumulator or domestic hot water storage tank.

Actuator AVC
For control of mixing/switchover valve.

ORDERING CODES

Solar controllers SGC	
2SGC1400-010	Solar controller SGC14
2SGC2600-010	Solar controller SGC26
2SGC3600-010	Solar controller SGC36

Solar controllers SGC with sensors	
2SGC1430-010	Solar controller SGC14 with sensors 3 x TF/Pt
2SGC2640-010	Solar controller SGC26 with sensors 4 x TF/Pt
2SGC3640-010	Solar controller SGC36 with sensors 4 x TF/Pt

TECHNICAL DATA

General technical data	
Rated operating voltage	230 V ~ , 50 Hz
Power consumption	5 VA
Relay output	4 (1) A ~, 230 V ~
Triac output	1 (1) A ~, 230 V~
Safety Class	IP20 according to EN 60529
Degree of protection	I according to EN 60730-1
Controller housing	ASA - thermoplastics
Dimensions	113 x 163 x 48 mm
Weight	391 g
Permissible ambient temperature	5 °C ... +40 °C
Storage temperature	20 °C ... +65 °C

DIMENSIONS
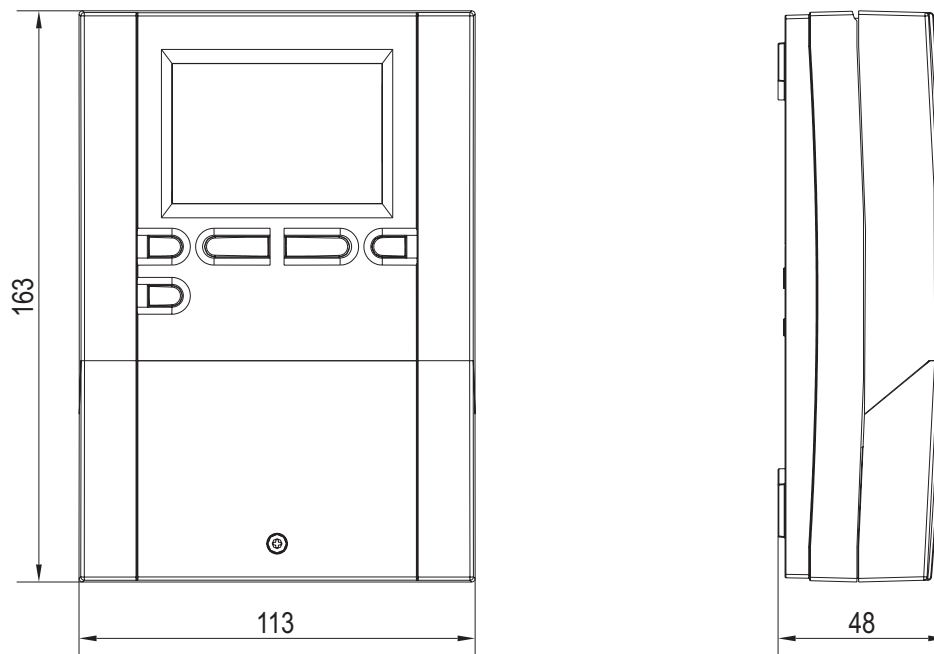
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