



## Steca TR 0603mc U

6 inputs,  
3 outputs

The Steca TR 0603mc U controller was specially developed for the North American market based on the Steca TR 0603mc basic controller. With its special certification (ETL label) from a Nationally Recognized Testing Laboratory (NRTL) in the US, the controller meets the safety standards and minimum requirements of the North American market.

The equipment is connected inside the installation casing using either a plug & play solution for the mains and pump connections or alternatively 1/2 inch cut-outs.

As a particular highlight, the Steca TR 0603mc U stores the system's operational data on a SD card. The 40 pre-programmed systems and numerous additional functions allow universal use of the controller. The large graphic display shows the animated control circuits, which allows you to view the operating statuses of each system. The Steca TR 0603mc U has six inputs for recording temperatures or pulse values, as well as an extra Grundfos Direct Sensors™\* input for combined temperature and flow rate measurement. Pumps and switching valves are controlled using three outputs, some of which can be speed controlled.



### Product features

- Compact, multipart designer casing
- Electronic speed control
- High level of operational safety through fault diagnosis
- Hours-of-operation logger
- Software update possible
- Storage tank target temperature loading
- Seasonal systems (loading of pool / storage tank according to the time of the year)
- Daily pump start
- Plug & play for 120 V AC mains and pump connections in installation casing
- Screwed connections facilitate fast sensor installation
- Integrated Steca TPC 1 bus

### Displays

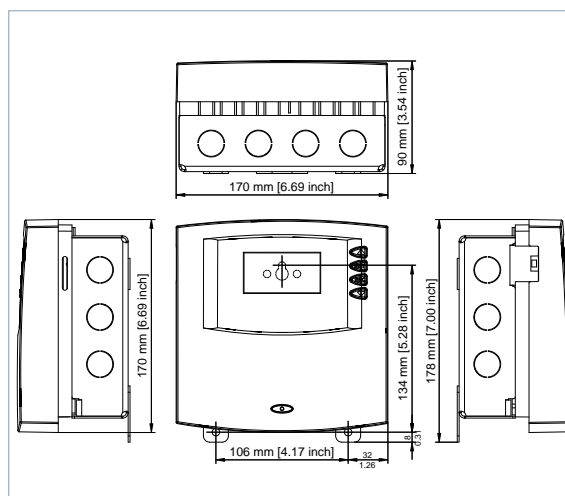
- Multifunction graphical LCD display with backlighting
- Animated representation of the systems and operating states

### Operation

- Multilingual menu navigation
- Side switch for manual, auto, off

### Options

- Installation casing with 1/2 inch cut-outs as an alternative to plug & play



### Functions

- Data logger on SD card
- Heat quantity (Grundfos Direct Sensors™\*, pulse generator, determination)
- Heating return increase
- Reduction of stagnation phases
- Holiday (storage tank recooling)
- Circulation (controlled by temperature / time / pulse)
- Back-up heating
- Solid fuel boiler
- Storage tank quick charge
- Bypass
- Thermostat
- Differential thermostat
- Timer
- Interval / tube collector
- Anti-freeze
- Anti-legionella cyclical storage tank heating
- Display storage tank top
- Alarm output
- Two loading zones

[areas of application]



[inputs/outputs]

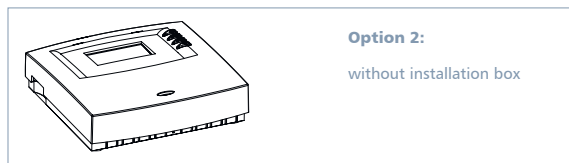
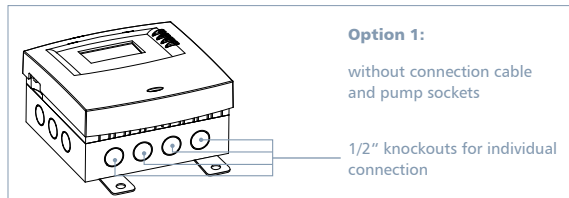
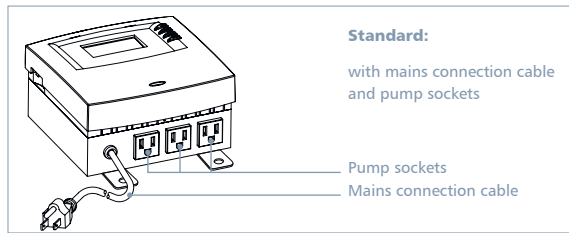


\*The trademark Grundfos Direct Sensors™ is owned and controlled by the Grundfos group.



	TR 0603mc U
System voltage	120 V AC, 60 Hz optional 240 V AC, 60 Hz
Own consumption	≤ 2 W [0.003 HP]
Inputs	6 5 x temperature (Pt1000) 1 x temperature (Pt1000) or pulse
Additional input	1 x Grundfos Direct Sensors™ (temperature / flow rate)
Outputs	3 2 x triac for speed control (R1, R2), max. 130 W / 0.17 HP (120 V AC) 1 x switch output relay (R3), max. 400 W / 0.5 HP (120 V AC) or R3 voltage free
Additional output	1 x alarm output
Line cord	75 inch, 3 x 18 AWG at 221 °F
Hydraulic schemes	40
Ambient temperature	0 °C [+32 °F] ... +45 °C [+113 °F]
Interfaces	SD card, RS232, RS485 (Steca TPC 1 bus)
Data logging	SD card
Degree of protection	IP 20 / DIN 40050
Dimensions (X x Y x Z)	170 x 178 x 90 mm [6.69 x 7.0 x 3.54 inch]
Weight	1.5 kg [48.23 oz]

Technical data at 25 °C / 77 °F



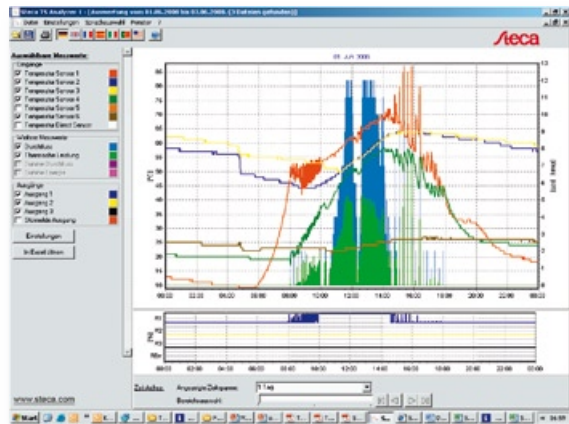
<b>Systems</b> 		<b>Data Logger</b>  °F W gal/min Err
<b>Functions</b> 	<b>Circulation</b> 	<b>Quick charge</b> 
<b>Heat quantity</b>  kWh	<b>Differenz-Thermostat</b> 	 English

### Display examples

The display examples shown here are merely a selection, designed to show the many and diverse function displays of the solar controller Steca TR 0603mc U.

### Datalogging on SD card and analysis software Steca TS Analyzer 1

Steca TR 0603mc U stores the solar thermal system's operational data on an SD card. The analysis software TS Analyzer 1 visualises the system results.



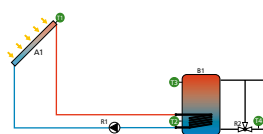


Systems with one storage tank

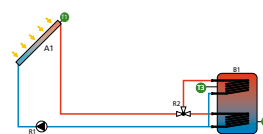
1 collector array



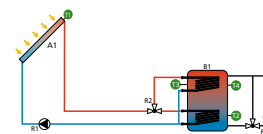
Internal heat exchanger, intelligent pump control



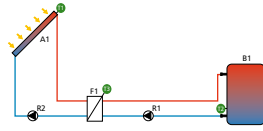
Internal heat exchanger, intelligent pump control, heating return increase



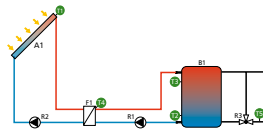
Internal heat exchanger, zone loading, intelligent valve control



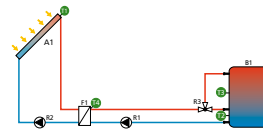
Internal heat exchanger, zone loading, intelligent valve control, heating return increase



External heat exchanger, intelligent pump control

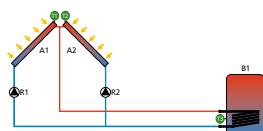


External heat exchanger, intelligent pump control, heating return increase

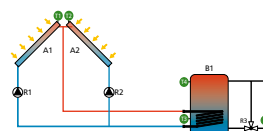


External heat exchanger, zone loading, intelligent valve control

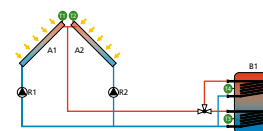
2 collector arrays (east/west roof)



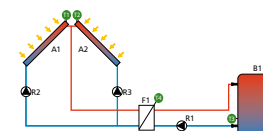
Internal heat exchanger, intelligent pump control



Internal heat exchanger, intelligent pump control, heating return increase



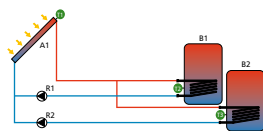
Internal heat exchanger, zone loading, intelligent valve control



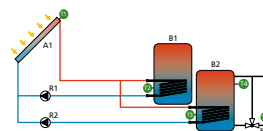
External heat exchanger, intelligent pump control

Systems with two storage tanks

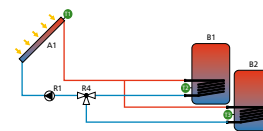
1 collector array



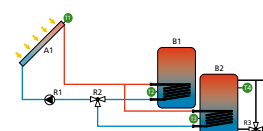
Internal heat exchanger, intelligent pump control



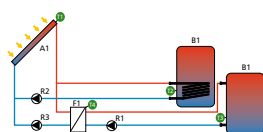
Internal heat exchanger, intelligent pump control, heating return increase



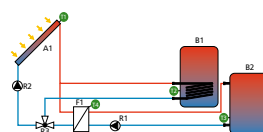
Internal heat exchanger, intelligent valve control



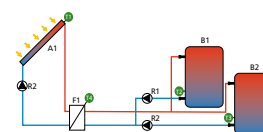
Internal heat exchanger, intelligent valve control, heating return increase



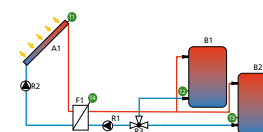
Internal/external heat exchanger, intelligent pump control



Internal/external heat exchanger, intelligent valve control

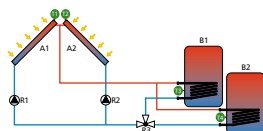


External heat exchanger, intelligent pump control



External heat exchanger, intelligent valve control

2 collector arrays (east/west roof)

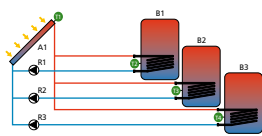


Internal heat exchanger, intelligent valve control

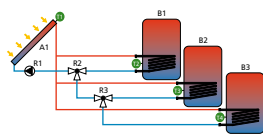


Systems with three storage tanks

1 collector array



Internal heat exchanger, intelligent pump control



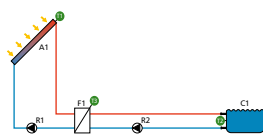
Internal heat exchanger, intelligent valve control

Systems with a swimming pool

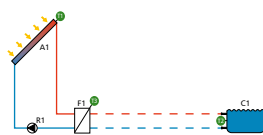
1 collector array



Direct flow-through, intelligent pump control

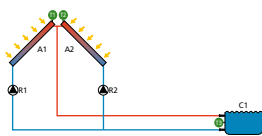


External heat exchanger, intelligent pump control

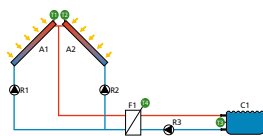


Stand-alone operation of the external heat exchanger, intelligent pump control

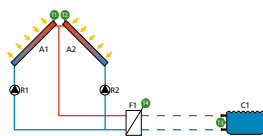
2 collector arrays (east/west roof)



Direct flow-through, intelligent pump control



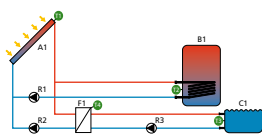
External heat exchanger, intelligent pump control



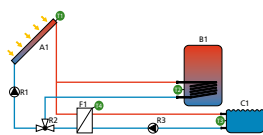
Stand-alone operation of the external heat exchanger, intelligent pump control

Systems with one storage tank and a swimming pool

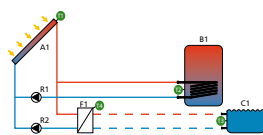
1 collector array



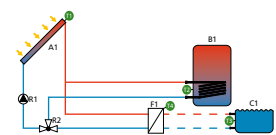
External heat exchanger, intelligent pump control



External heat exchanger, intelligent valve control



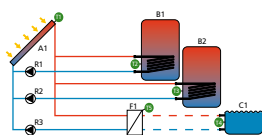
Stand-alone operation of the external heat exchanger, intelligent pump control



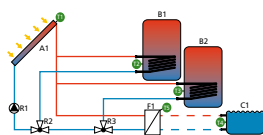
Stand-alone operation of the external heat exchanger, intelligent valve control

Systems with two storage tanks and a swimming pool

1 collector array



Stand-alone operation of the external heat exchanger, intelligent pump control



Stand-alone operation of the external heat exchanger, intelligent valve control