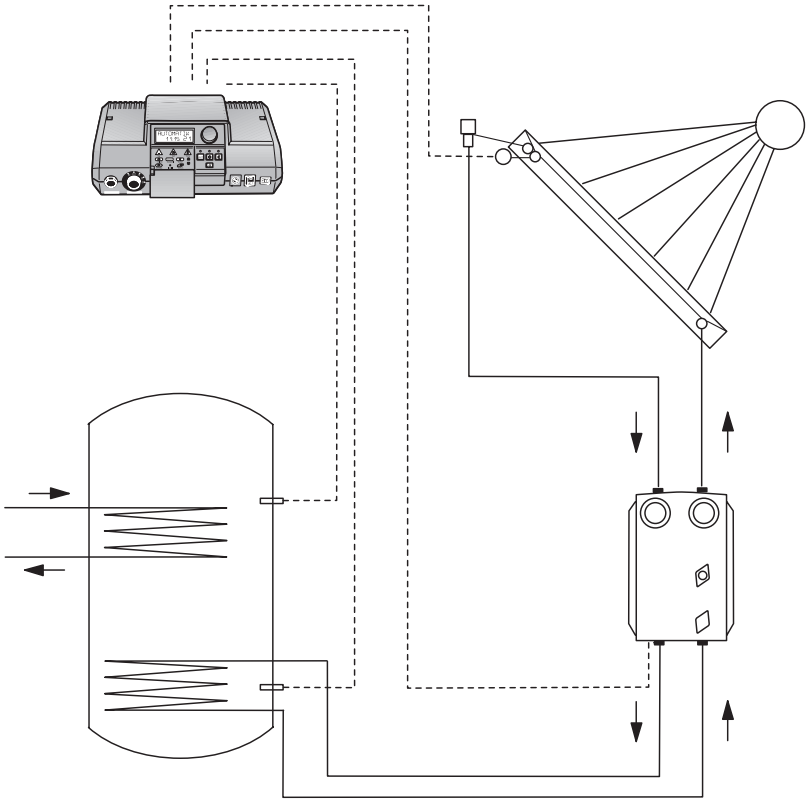
Buderus

Additional instruction "Solar"

for control panel Logamatic R2107 (M)
with module FM244



Introduction

Important - General Application Notes

Use this technical instrument only for its intended purpose and according to the installation instructions. Maintenance and repair must only be carried out by authorised and qualified personnel.

Only use this device only in those combinations and together with accessories and spare parts listed in the installation instructions of Solar. Any other combination, accessories and wear parts may only me used, if these are specifically designed for the intended application and impair neither the performance characteristics nor the stipulated safety requirements.

We reserve any technical changes.

Constant development may lead to minor deviations of illustrations, functional steps and specifications from those described/shown.

NOTE!
Please observe and comply with all local and state requirements pertaining to the assembly and operation of Solar plants!

1 Types of Sensor

Depending on the type of DHW tank the supplied sensors will be either immersion or contact sensors.

NOTE!
The contact between sensor and DHW tank can be enhanced through the use of the enclosed heat conducting paste.

1.1 Immersion sensor assembly

- Unroll the sensor lead and run to the measuring point (sensor well).
- Insert the immersion sensor unit (Fig. 1, **Item. 1**) until it bottoms out inside the sensor well (Fig. 1, **Item. 5**).

NOTE!
During insertion the plastic spiral (Fig. 1, **Item. 6**) – holding the sensor together – slides back automatically.
Insert the compensation spring (Fig. 1, **Item. 7**) and the dummy pieces (Fig. 1, **Item. 2 u. 8**) together with the sensor into the sensor well. These act to push the temperature sensor against the sensor well wall to provide improved heat conductivity.

- Push the sensor holder (Fig. 1, **Item. 4**) laterally over the sensor well head. This prevents the sensor from sliding out of the jacket.

NOTE!
Please note that the entire sensor surface comes into contact with the full length of the sensor well surface.

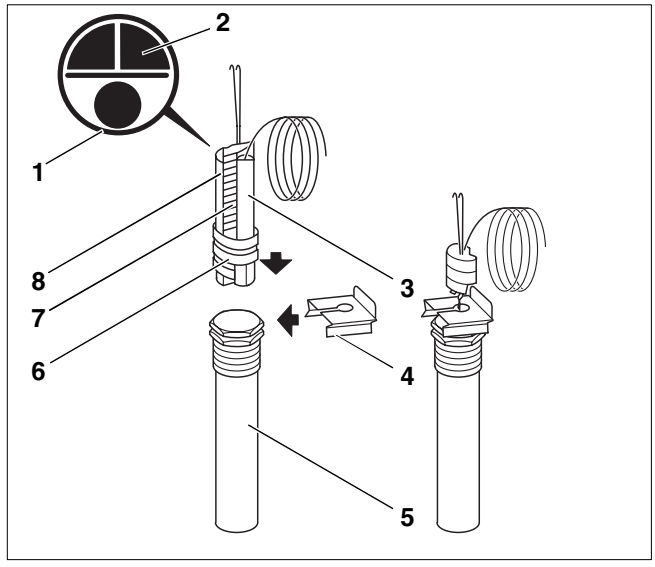


Fig. 1 Immersion sensor assembly

1.2 Contact sensor assembly

NOTE!
In this case only the sensor (Fig. 1, **Item. 3** and Fig. 2, **Item. 1**) the enclosed immersion sensor unit (Fig. 1, **Item. 1**) are used – the compensating spring and the dummy pieces are not required.

- Push the sensor (Fig. 2, **Item. 1**) into the spring holder (Fig. 2, **Item. 2**). The sensor contact surface must lie flat and rigid against the outside of the DHW tank wall.

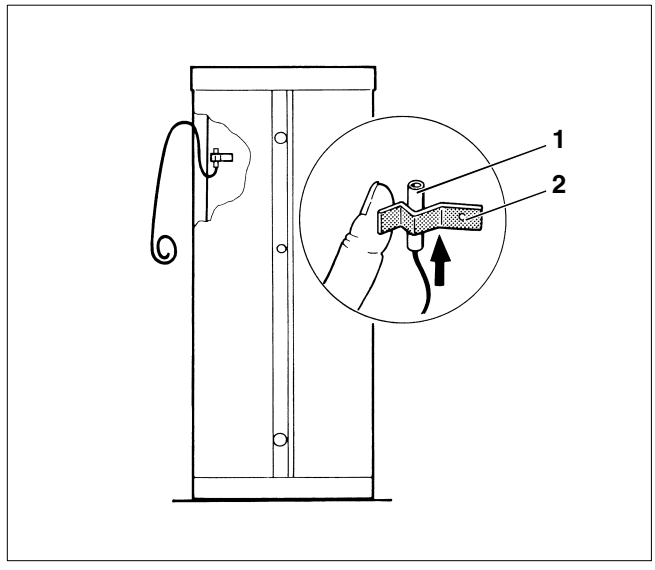
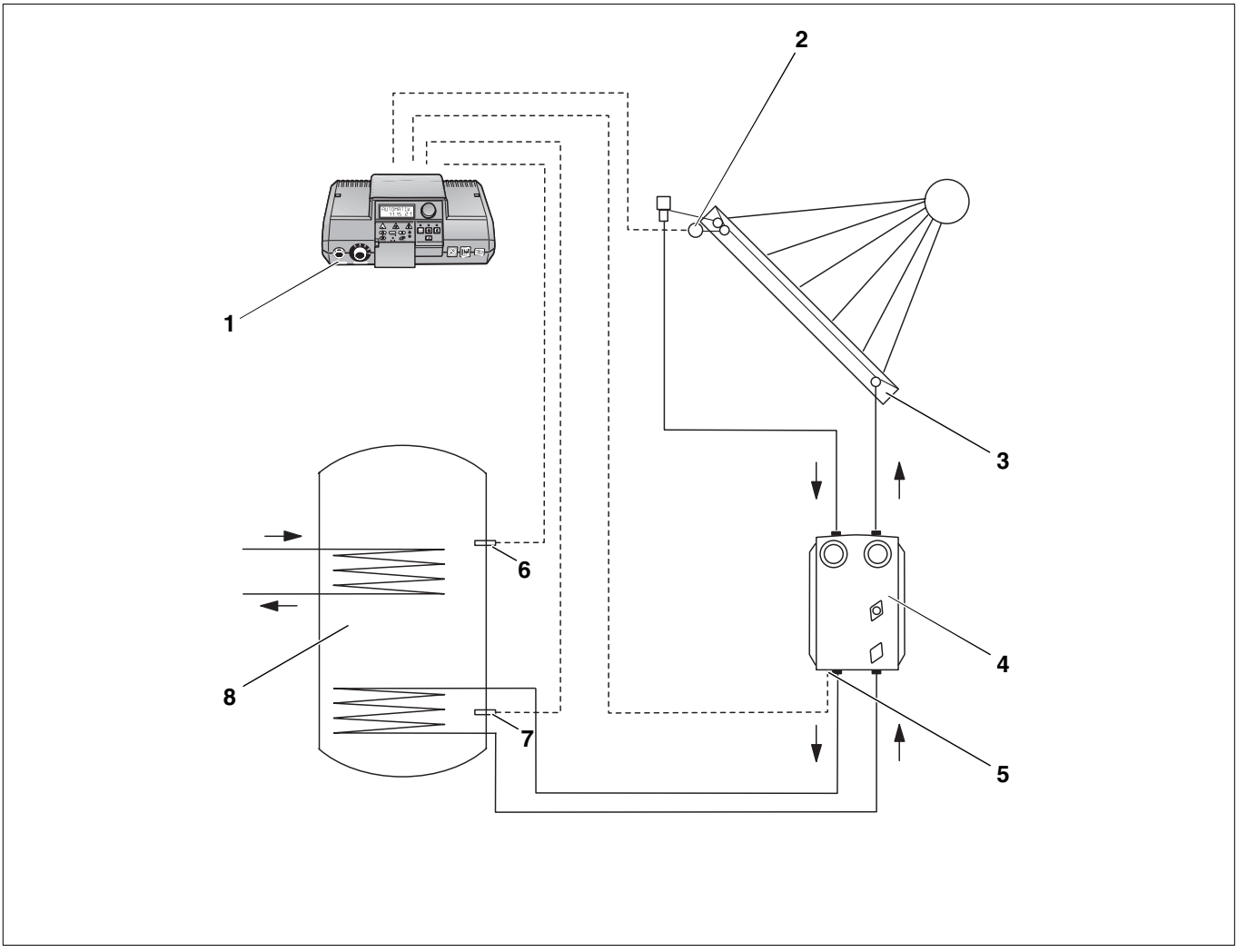


Fig. 2 Contact sensor assembly

2 Sketch of the solar installation



Legende:

Item. 1: Control unit
Item. 2: FSK (NTC control unit sensor)
Item. 3: Collector
Item. 4: Station complete
Item. 5: PSS
Item. 6: Under Floor Heating
Item. 7: FSS
Item. 8: DHW tank

3 Connection for collector sensor

The FSK collector sensor is part of the solar module set. The assembly process for both collectors, i.e. Logasol SKN (Fig. 3) and Logasol SKS (Fig. 4) is identical.

- Insert the collector sensor (Fig. 3 and Fig. 4, **Item. 1**) into the immersion sensor jacket of the end collector. The immersion sensor jacket is located in the top r.h. corner of the collector (Fig. 3, **Item. 3**).
  To position the sensor push through the protective rubber membrane. Insert the sensor until it bottoms out inside the immersion sensor jacket.
- Tighten the connection to secure the sensor and to achieve strain relief (Fig. 3 and Fig. 4, **Item. 2**). The sensor must sit snugly inside the sensor well.
- Plug the sensor connection plug into the FSK card (yellow) of the solar module FM 244 to connect the sensor (FSK) with the Logamatic 2107 (M) control unit.

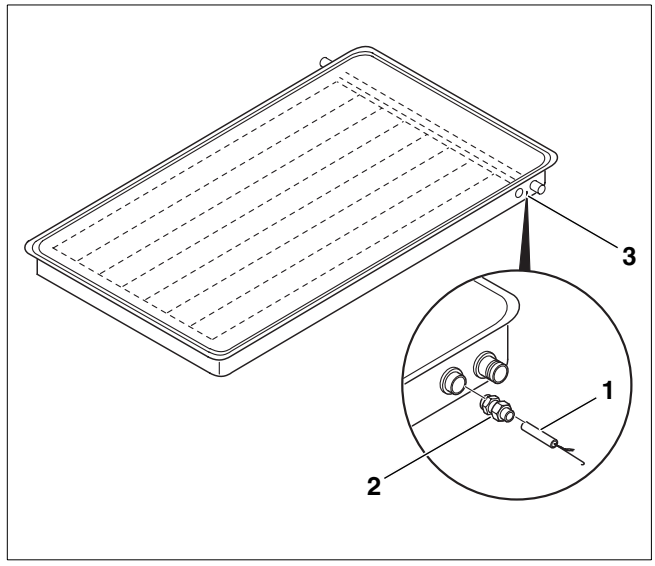


Fig. 3 Collector Logasol SKN

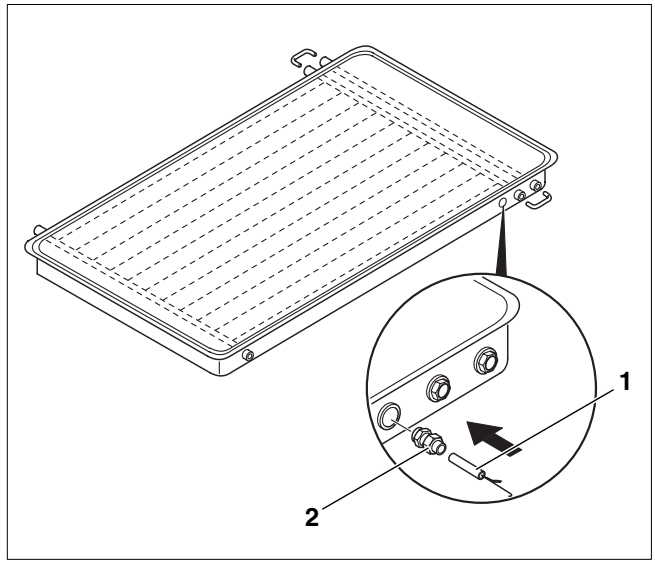


Fig. 4 Collector Logasol SKS

4 DHW tank sensor connection

Mount the temperature sensors for hot water (under floor heating) (light grey) and the FSS solar DHW tank (dark grey) to the appropriately marked position on the DHW tank. Connect the appropriate plug to the controller according to the wiring diagram.

Logalux SM 300/400/500

Position the temperature sensor for hot water (under floor heating) (light grey) into the upper sensor well (Fig. 5, **M1**).

Position the temperature sensor for the FSS solar DHW tank (dark grey) into the lower sensor well (Fig. 5, **M2**).

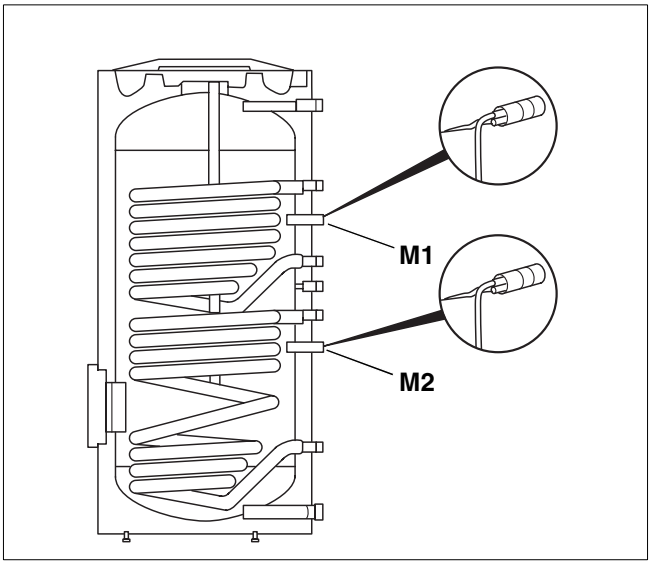


Fig. 5 Logalux SM 300/400/500

Logalux SL 300–2/400–2/500–2

Position the temperature sensor for hot water (under floor heating) (light grey) into the upper sensor well between flow and return (Fig. 6, **M**).

Insert the temperature sensor for the FSS solar DHW tank (dark grey) from below into the second spring holder (Fig. 6, **M3**).

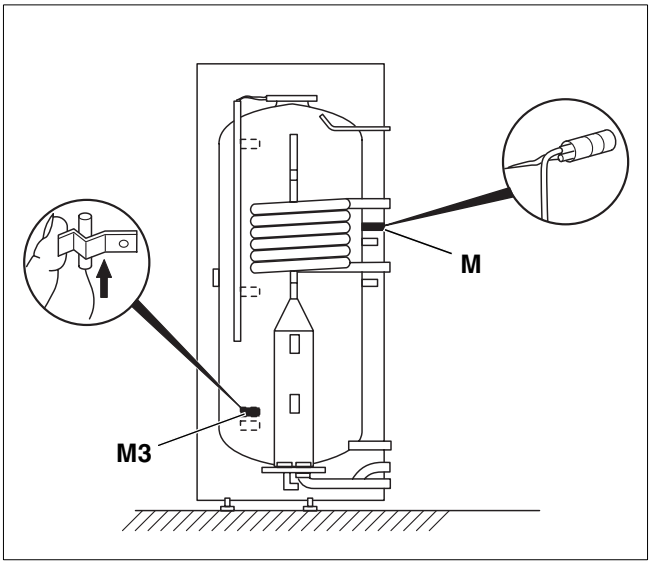


Fig. 6 Logalux SL 300–2/400–2/500–2

5 Circulation pump connection

The circulation pump (Fig. 7, **Item. 12**) is an integral part of the complete stations KS 0105, KS 0110, and KS 0120 (Fig. 7).

The PSS connector (cream coloured) is included with the solar module FM 244. Connect this to the circulation pump lead according to the wiring diagram.

Plug the PSS connector into the appropriate position on the solar module FM 244.

NOTE!
Check and, where necessary, switch on the solar function on the control unit.
For full instructions, see the service instructions for control unit 2107 (M).

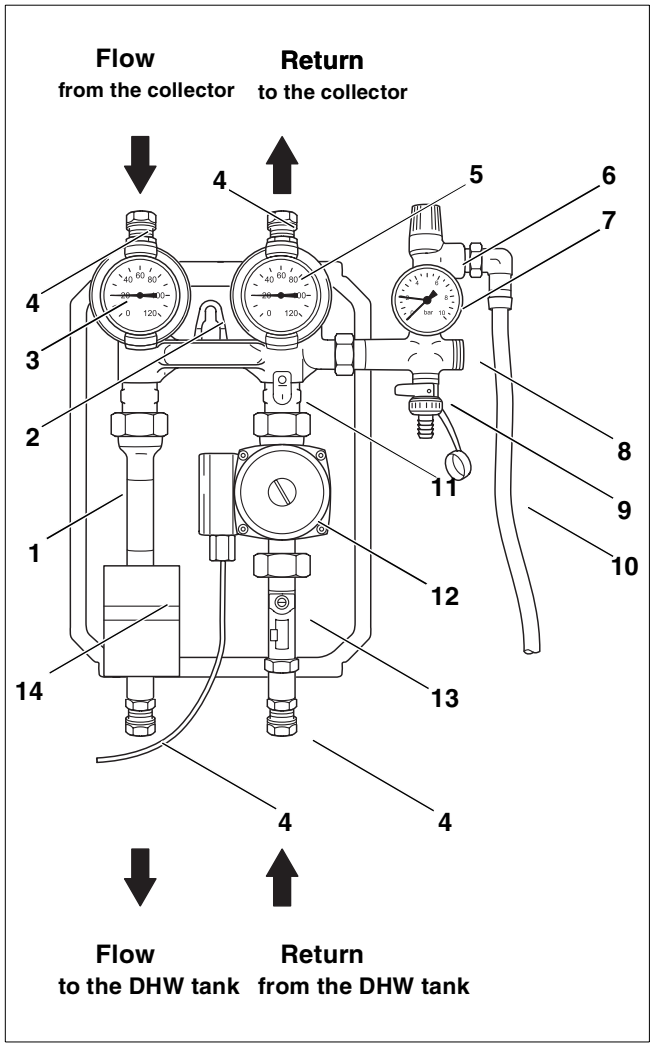


Fig. 7 Complete station KS 01...

Legende:

Item. 1: Rear thermal protection
Item. 2: Suspension
Item. 3: Stop cock (red handle) with thermometer (flow)
Item. 4: Locking ring connection
Item. 5: Stop cock (blue handle) with thermometer (return)
Item. 6: Safety valve
Item. 7: Pressure gauge
Item. 8: MAG connection (expansion vessel)
Item. 9: FE-Valve
Item. 10: Drain hose with hose clip
Item. 11: Gravity brake
Item. 12: Circulation pump (adjustable)
Item. 13: Flow limiter with shut-off valve
Item. 14: Cover

Your local heating engineer:

Buderus

HEIZTECHNIK

Buderus Heiztechnik GmbH, 35573 Wetzlar
http://www.heiztechnik.buderus.de
e-mail: info@heiztechnik.buderus.de