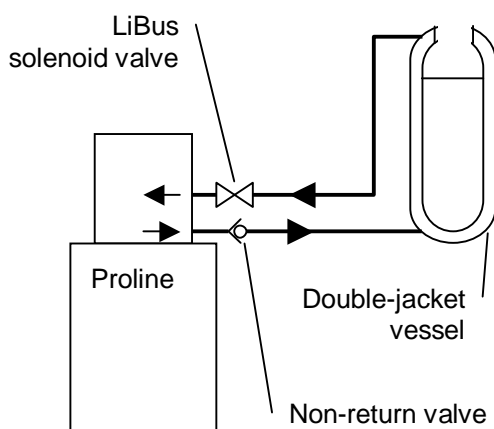


1 Intended application

The Reverse Flow Protection Device LCZ 9673 facilitates the safe operation of a closed external load (e.g. a double-jacket vessel), which is positioned above the thermostat. If the system is not completely sealed, the bath medium can, when the pump is stopped, drain completely from the external vessel into the bath, leading inevitably to flooding. The reverse flow protection device prevents the external closed vessel from draining into the thermostat in that a non-return valve closes the pressure line and a solenoid valve closes the suction line.

The reverse flow protection device can be connected to units which are equipped with the LAUDA internal device bus (LiBus). The LAUDA Proline is adapted in this respect. The valve is designed for a heat transfer medium operating temperature of -40 °C to $+130\text{ °C}$.

2 Installation (using Proline P8 as an example)



- Interrogate the software version of the thermostat (\Rightarrow thermostat operating instructions) and compare with the requirements (page 2, below). Request an update, if necessary.
- Switch the mains switch to OFF.

Connecting the non-return valve:

- Remove the blind plugs on one of the two pump connections for the outflow (pressure side) (in the illustration: side connections).
- Screw the non-return valve with the union-nut side (M16x1) onto this pump connection. Use an AF 19 open-ended wrench on the valve and counter the torque with an AF 14 open-ended wrench on the pump connection.
- Screw the connecting hose onto the M16x1 threaded connection. Counter the torque on the valve with an AF 24 open-ended wrench. Connect the other end of the hose to the vessel and secure as required.

Connecting the solenoid valve:

- Remove the blind plug on the pump connection for the return (suction side).
- Screw the valve with the union-nut side (M16x1) onto the pump connection. Counter the torque as with the non-return valve.
- Screw on the connecting hose. In doing this, counter the torque on the valve with an AF 22 open-ended wrench. Connect the other end to the vessel.

Connect the LAUDA device bus (LiBus):

- Plug the connecting lead of the solenoid valve into a free 70S socket on the thermostat and secure it. When necessary, use the LiBus T-piece connection cable EKS 073 (standard accessory).

3 Starting up

- It is recommended that the temperature limits of the operating temperature range on the reverse flow protection device are entered in the thermostat as T_{il} and T_{ih} (⇒ thermostat operating instructions).
- Fill with bath liquid (⇒ thermostat operating instructions).
- Switch the mains switch to ON.
- The solenoid valve closes automatically with the mains switched off and on standby and when a fault occurs.



The function can be tested by loosening the union-nuts from the valves to the thermostat.

4 Special functions

4.1 Displays

Master:

Modu → *URL .3* → *Show* enter the display mode with the Enter key and then page with the arrow keys:

<i>VER</i>	Module software version.
<i>P x</i>	Displays the switching status of the solenoid valve. <i>0</i> = CLOSED, <i>1</i> = OPEN.
<i>U24</i>	Displays the 24V supply voltage.
<i>Snr_H</i>	Serial number, high word.
<i>Snr_L</i>	Serial number, low word.
<i>End</i>	Quits the display level.

Command:

- Module software version: → → → → .
- Module serial number: → → → → .

4.2 Resetting the valve to the factory setting

Master: *Modu* → *URL .3* → *DEF* Press the Enter key for a few seconds. The reverse flow protection device is then reset to the factory setting.

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Valid from series: LCZ 9673-04-0001
from software version of Master: 1.33
from software version of Command: 1.37
from software version of solenoid valve: 1.34
YACE0076 / 23.11.06

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