

## Modbus-RTU

## **DANGER**

## Risk of serious injury or death due to electric shock

Some parts of the device's circuit board may still be live with 230 V even after the device has been physically isolated from the power supply by pulling out of the mains plug.

- Before you remove the covers, completely isolate the device controller from the power supply.
- · Verify that the main circuit board is voltage-free.

• Disconnect the power supply to the system prior to connecting to the network.

Connect the Modbus-RTU to the RS-485 interface.

The following functions are provided for data request:

Modbus Function Code	Designation	Addressing
2	Read discret inputs	Bit address
3	Read multiple registers (from address 100h $\rightarrow$ # = 1)	Word address
4	Read input registers (from address 000h $\rightarrow$ # = 0)	Word address

## The following data can be requested:

Designation	Word address	Bit addresses
System pressure in 1/100 bar, (not with Levelcontrol)	#10h	
Digital outputs	#12h	121h - Pump 1 on
		122h - Overflow valve 2 open
		123h - Overflow valve 1 open
		124h - Overflow valve open
		126h - Message: Group fault - 1 = OK
Digital inputs	#13h	130h - Feedback pump 1
		132h - Low water switch
		133h - Water meter
Fault messages 1	#14h	143h - Below minimum pressure
		144h - Low water 1
		145h - Pump 1 faulty
		149h - Pressure measurement fault
		14Ch - Stop mode for more than 4 hours
		14Dh - Low water 2

Designation	Word address	Bit addresses
Warnings 1	#17h	172h - Pump runtime exceeded
		173h - Make-up time exceeded
		174h - Make-up cycles exceeded
		175h - Max. pressure exceeded
		176h - Make-up quantity exceeded
		177h - Filling time exceeded
		178h - Filling quantity exceeded
		179h - Discharge period exceeded
		17Ah - Make-up valve leaking
		17Eh - Maximum make-up quantity exceeded
		17Fh - Maintenance requirement
Warnings 2	#18h	181h - Softening, replace cartridge
Dperating hours Compressor/Pum o 1 (32-bit value)	#1Ah (H) #1Bh (L)	
Water meter cumulative total in litres (32-bit value)	#1Eh (H) #1Fh (L)	
System type 4 = Magcontrol 5 = Levelcontrol	#21h	