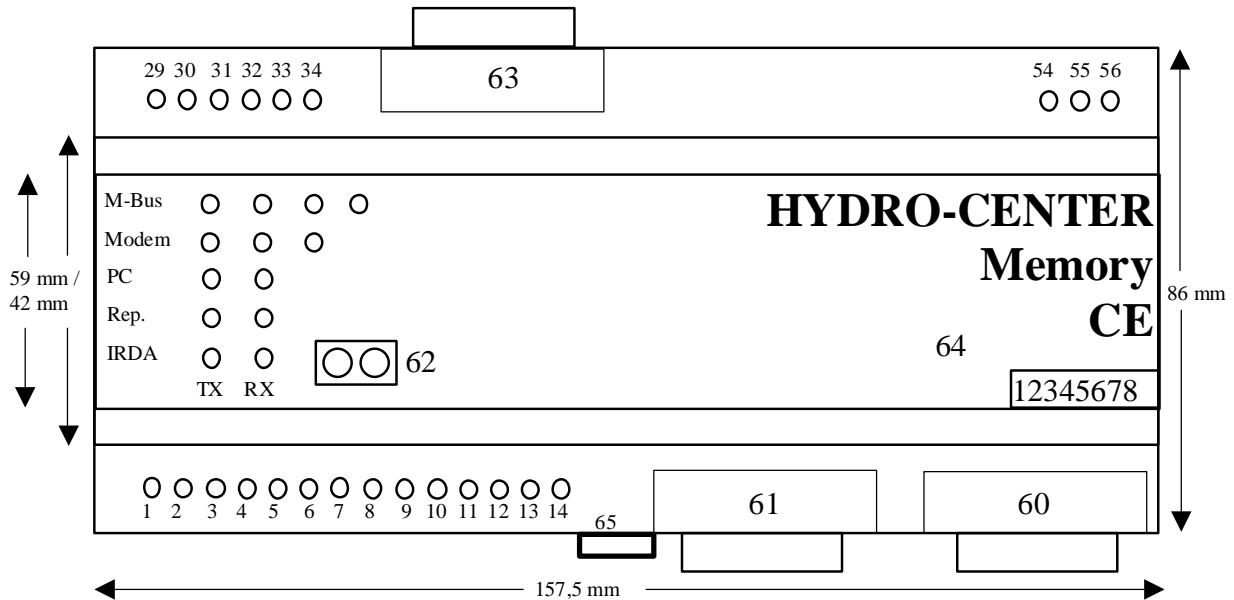


HYDRO-CENTER 250 / HYDRO-CENTER 250 Memory HYDRO-CENTER 60 / HYDRO-CENTER 60 Memory Installation



Important Note: The HYDRO-CENTER device may only be installed and operated by trained personnel.

Mounting and Dismounting

HYDRO-CENTER is prepared for mounting on a standard rail mount.

Important Note: Disconnect power supply (54, 55, 56) prior to mounting or dismounting the HYDRO-CENTER device.

Mounting: Clamp the HYDRO-CENTER device on the rail mount. The black hook at the bottom of the device should snap in firmly.

Dismounting: Use a screwdriver to pull the black hook down. The HYDRO-CENTER device will snap off the rail mount and you can take it off.

Electrical Connections

Important Note: Disconnect power supply prior to connecting or disconnecting a HYDRO-RADIO transceiver. You do not have to disconnect power if you are connecting or disconnecting M-Bus devices.

Number	Description
56,55	20..38 V DC / 24..38 V AC (max. 1,5 A) HYDRO-CENTER 250 11..38 V DC / 15..38 V AC (max. 750 mA) HYDRO-CENTER 60
54	Protective earth
63	Connector SUB DB9 female for HYDRO-RADIO transceiver
1,3,5,7,9,30,32,34	M-Bus Output +
2,4,6,8,10,29,31,33	M-Bus Output -
11	+5 V DC Output (max. 100 mA)
12	GND for +5 V DC Output
13	M-Bus Repeater Input +
14	M-Bus Repeater Input -
61	Connector SUB DB9 male for Modem (RS232, analog modem, ISDN modem, cellular Modem, CLIP modem)
60	Connector SUB DB9 female for PC (RS232 interface)
62	Optical IRDA interface
64	Sticker with serial number
65	Black hook

- Power Supply:** Connect power supply to clamp 55 and 56. See the table for voltage range. HYDRO-CENTER has an internal voltage regulator, therefore, unregulated power supplies may be used.
- Protective Earth:** Connect clamp 54 to a protective earth potential.
Important Note: Protective earth must be connected to HYDRO-CENTER.
- M-Bus Devices:** M-Bus devices are connected to the M-Bus clamps (see table). The M-Bus is polarity independent, but you have to use one + and one - output for each branch of the M-Bus network. All M-Bus outputs are parallel.
- +5V Output:** The HYDRO-CENTER device has got a + 5 V DC power supply output for supplying small external devices (like interface converters). Connect only devices with a + 5 V DC power supply input and a maximum power consumption of 100 mA. Do not connect any M-Bus lines to this power supply output.
- Repeater:** If you want to use the HYDRO-CENTER device as a M-Bus repeater connect the M-Bus output of another HYDRO-CENTER to clamp 13 and 14. Do not mix-up clamps 13, 14 and clamps 11, 12 of the + 5 V DC power supply output.
- HYDRO-RADIO:** Connect the HYDRO-RADIO transceiver to connector 63. Do not mix-up connector 63 and PC connector 60.
Important Note: Disconnect power supply prior to connecting or disconnecting a HYDRO-RADIO transceiver.
- Modem:** Connect a modem to connector 61. Use the interface cable provided with your modem.
- PC:** Connect a PC to connector 60. Use the interface cable which comes with your HYDRO-CENTER.

Display

- M-Bus:** The HYDRO-CENTER device has got a total of 13 display lights (LEDs):
0..50% M-Bus load (first green), 50..100% M-Bus load (second green), 100..130% M-Bus load (yellow, warning) and overload (red). If the yellow LED is lit up the maximum M-Bus load is reached. Do not connect any more M-Bus devices. In this state the HYDRO-CENTER is still fully functional. The red overload light signals an M-Bus overload. An overload occurs if there are too many M-Bus devices connected to the bus or if the bus lines are shortened. In this case the HYDRO-CENTER switches the M-Bus for approx. 2 seconds off. After that the bus load is tested and the bus is switched off again if the overload condition remains.
- Communication:** The HYDRO-CENTER has got four different input channels: PC, Modem, Repeater and IRDA (optical). The green LEDs, respectively, are signalling that the HYDRO-CENTER is receiving data from one of its input channels. The red LEDs, respectively, are signalling that the HYDRO-CENTER is sending data to one of its input channels.
- Modem:** An additional yellow LED is light up if a modem connection is established.

Customer Support

A complete technical datasheet, additional information, and the HYDRO-CENTER software are available at our download center internet page.

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Configuration Examples

