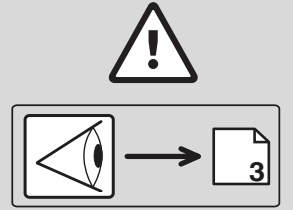


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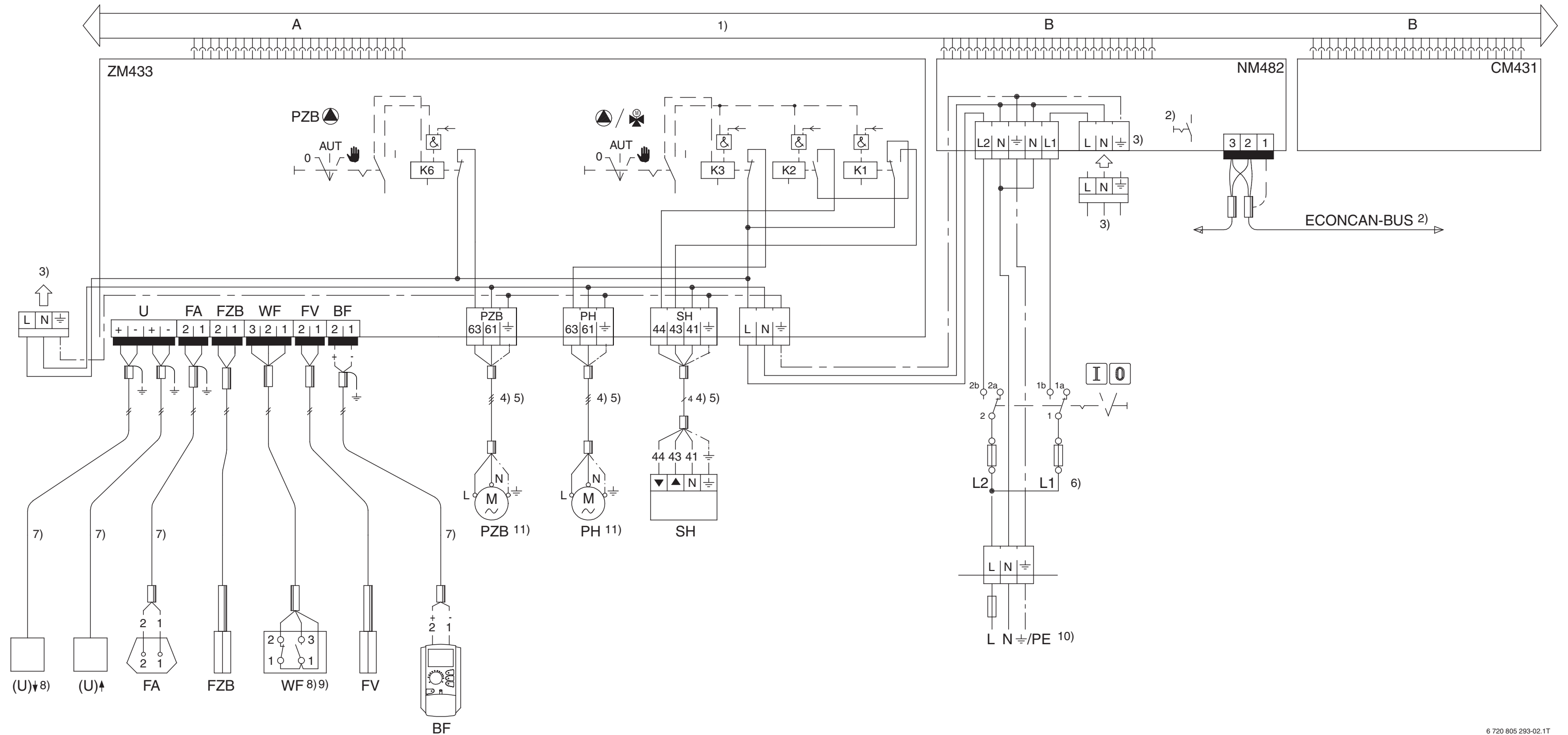
Switch position	(PZB) K6
0	
AUT	Control mode

Switching states

Switch position	(PH) K3		
		(SH) K2	(SH) K1
0			
AUT	Control mode	Control mode	Control mode

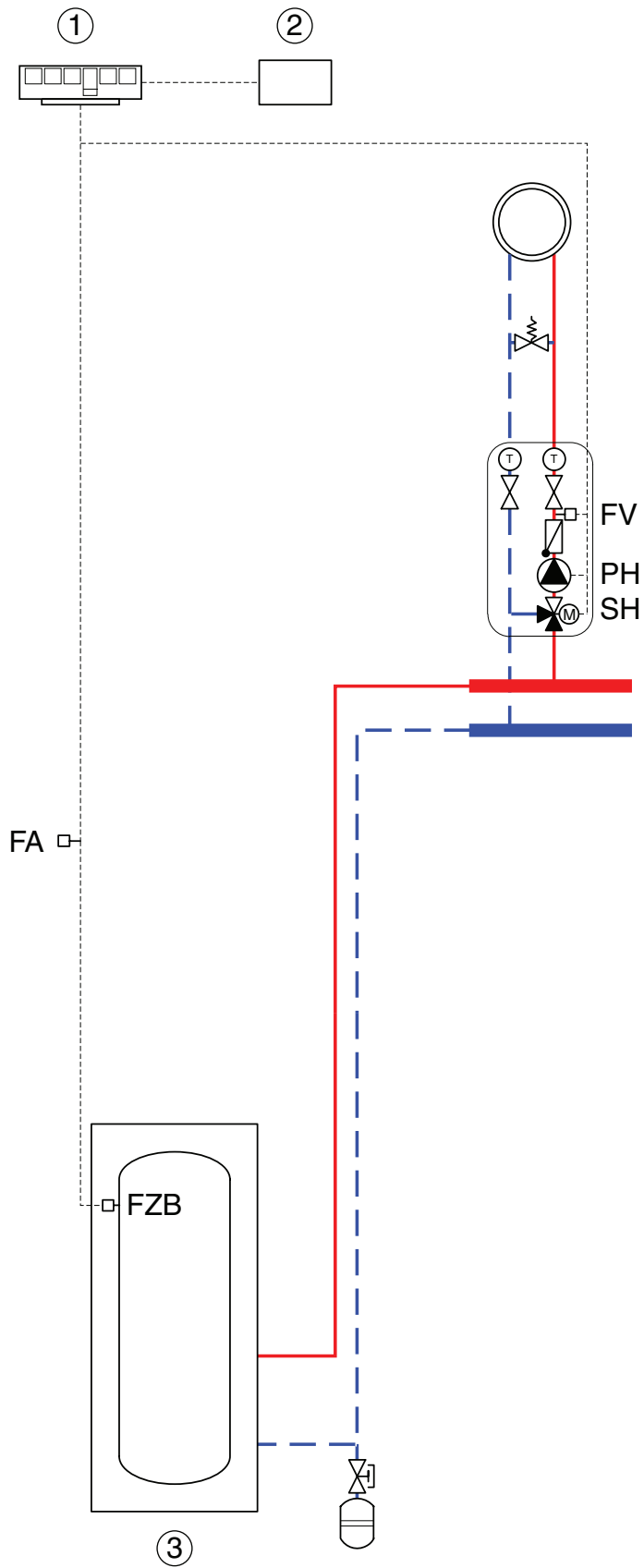


► Please note the safety instructions and captions on page 3.

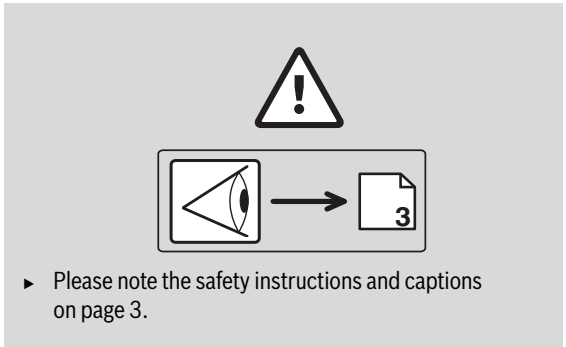
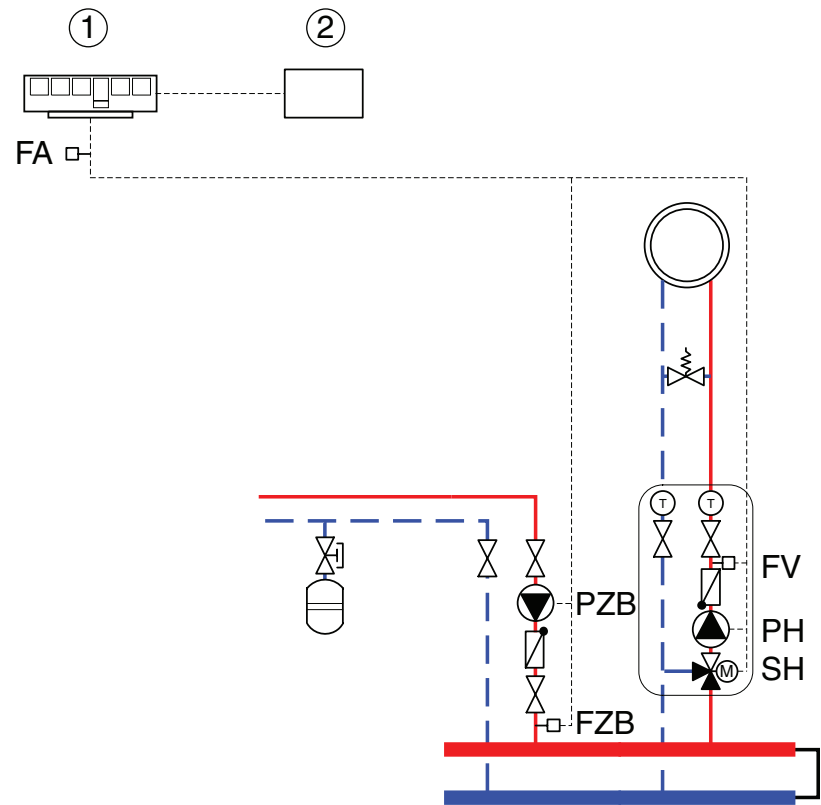


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A



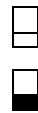
B



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- ▶ Electrical work may only be carried out by a qualified electrician.
- ▶ Carry out electrical work in accordance with the current standards and local regulations.
- ▶ Install mains connection so that it is fixed and in the correct phase.
- ▶ Ensure that the total current does not exceed the rating stated on the data plate.
- ▶ Ensure that a country-specific Emergency Stop device (boiler emergency stop) is present.
In systems with devices that consume three-phase current, the emergency-off device must be integrated into the safety chain.
- ▶ Make sure that a circuit breaker which conforms to the EN 60335 standard is available to disconnect all poles in the electrical circuit. If there is no circuit breaker present, you must install one.
- ▶ Before opening the control unit, isolate all poles of the heating system via the circuit breaker. Secure against unintentional re-connection.
- ▶ Size cables according to how they are to be laid and environmental conditions. The cable cross-section for power outputs (pumps, mixers, etc.) must be at least 1.0 mm².
- ▶ Do not use the yellow/green earth lead as a control cable.
- ▶ Fasten the wires of each electrical cable to each other (e.g. with cable ties) or strip the cable sheath short, to prevent the risk of voltage flashes between 230 V and low voltage through unintentional loosening of a wire at the terminals.
- ▶ Observe the safety instructions in the documentation of the control unit and the modules used.
- ▶ If a neutralisation device is available, the contact for the overfill safety device must be incorporated into the safety chain.

Page 1 caption



- Control voltage 230 V~
- 1.5 mm²/AWG 14, max. 5 A
- Low voltage
- 0.4 mm² - 0.75 mm²/AWG 18

- A ZM433 - boiler module
- B Programmer or boiler display
- C Connection socket for external service units
- 1–4 Plug-in position for modules

- 1) Internal BUS inside the control unit
- 2) Maximum length of the bus cable: 1000 m.
Where several ECOCAN BUS components are connected:
Activate load resistance by closing the hook switches (NM482) of the two outermost ECOCAN BUS devices.
Only connect the shield on one side.
- 3) Mains supply for further modules
- 4) Minimum H05xx, 1.5 mm²
- 5) Minimum 5 A
- 6) Miniature circuit breaker (automatic fuse) 10 AT
L2: Fuse protection of the modules in slots A, 1 and 2
L1: Fuse protection of the modules in slots 3 and 4.
The overall current for each phase (L1, L2) must not exceed 10 A. You must comply with this value. In order to avoid damage to the units, check the value when commissioning.
- 7) Use shielded cable
- 8) See also service instructions
- 9) Heating circuit
1-3 man. heating mode
1-2 man. decrease mode
1-2 pump fault notification
DHW
1-2 pump fault notification
1-3 input therm. disinfection
1-3 one-off loading
- 10) 230 V mains ~ 50 Hz max. permissible fuse protection
20 AT on site, at least 2.5 mm²
- 11) In the case of devices that consume three-phase current (e.g. burners, boiler circuit pumps, etc.), appropriate on-site switching devices must be connected upstream to the devices and fuse-protected.
- ▲ Warmer
- ▼ Cooler

Page 2 caption

System examples

- A Stand-alone heating system
- B Heating sub-station with feed pump and non-pressurised manifold

Components

- 1 Control unit R4323/CMS920
- 2 Remote programmer or TR25
- 3 Stand-alone heating system

General caption

- AUT Control mode
- BF BFU/TR25, MEC/programmer
Only one MEC/programmer may be assigned to each control unit. The MEC/programmer can be inserted in the controller module or connected via the room installation set (extra equipment).
- CM431 Control module
- FA Outs. temp. sensor
- FV Flow temperature sensor
- FZB System flow temperature sensor
- NM482 Mains module (behind control module)
- PH Heating circuit pump
- PZB Feed pump
- SH Heating circuit mixing valve
- U ↑ Input 0–10 V
- U ↓ Output 0–10 V, 0–20 mA
- WF Selection function (volt free)
- ZM433 Boiler module