

Installation instructions

for contractors



Extension AM1

Part no. 7429 152

Safety instructions



Please follow these safety instructions closely to prevent accidents and material losses.

Safety instructions explained



Danger

This symbol warns against the risk of injury.



Please note

This symbol warns against the risk of material losses and environmental pollution.

Note

Details identified by the word "Note" contain additional information.

Installation, initial start-up, inspection, maintenance and repairs must only be carried out by a competent person (heating engineer/installation contractor).

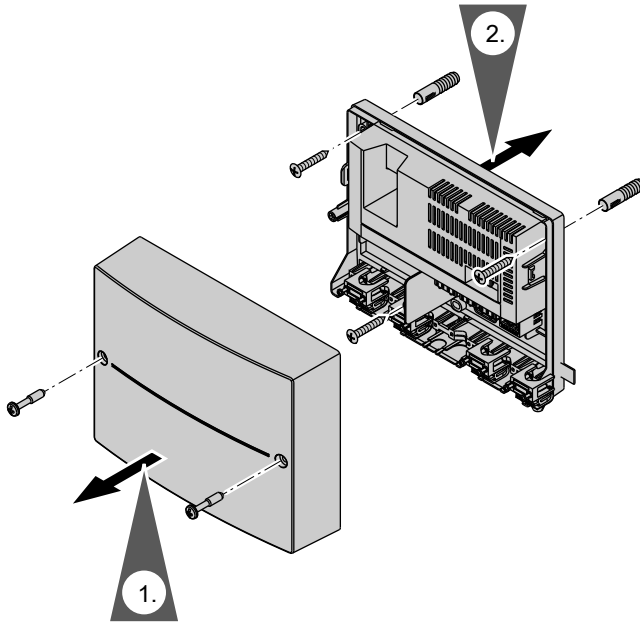
Before working on the equipment/heating system, isolate the power supply (e.g. by removing a separate mains fuse or by means of a mains isolator) and safeguard against unauthorised reconnection.

When using gas as fuel, also close the main gas shut-off valve and safeguard against unauthorised reopening.

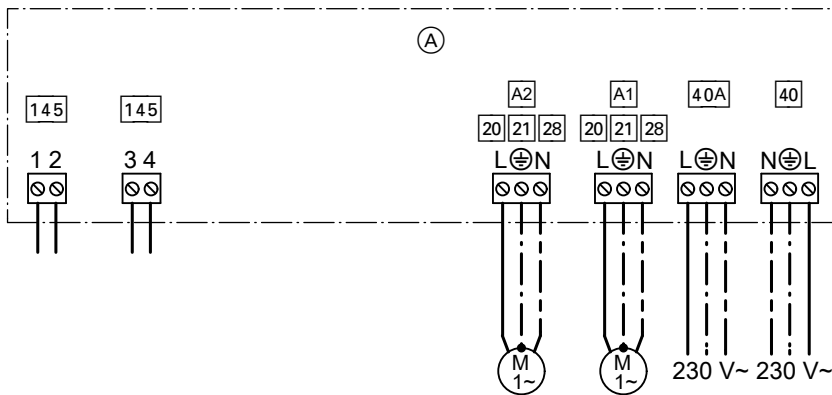
Repairing components which fulfil a safety function can compromise the safe operation of your heating system.

For replacements, use only original spare parts supplied or approved by Viessmann.

Mounting on the wall



Overview of electrical connections



A1 Circulation pump
A2 Circulation pump

40 Power supply [terminals]

Overview of electrical connections (cont.)

40A Power supply terminal for additional accessories

145 KM BUS to the control unit and additional accessories

Ⓐ Extension AM1



Please note

Electronic modules can be damaged by electrostatic charges. Before beginning work, touch earthed objects, such as heating or water pipes, to discharge static loads.

Note

Apply a strain relief to all on-site cables. Close any unnecessary knockouts with cable grommets (not cut open).

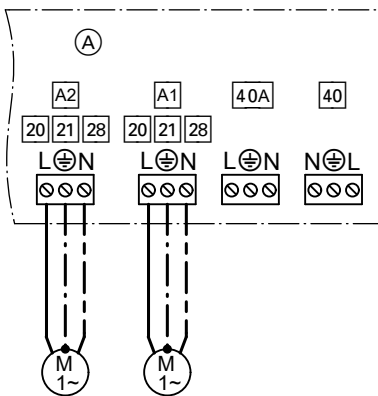
Connecting the pumps

One of the following circulation pumps can be connected to each of the terminals A1 and A2:

- Heating circuit pump for heating circuit without mixer 20
- Circulation pump for cylinder heating 21
- DHW circulation pump 28

Rated current: 4 (2) A~
 Recommended connecting cable: H05VV-F3G
 or
 H05RN-F3G
 0.75 mm²

If connecting circulation pumps with a total output above 500 W, connect the power cable of extension AM1 directly to the mains power supply. See page 7.



Connecting the pumps (cont.)

Recommendation

- Connect the heating circuit pump for a heating circuit without mixer [20] to output A1. The frost protection function of the boiler control unit is enabled for output A1.
 - If possible, connect the circulation pump for cylinder heating [21] to output A1.
 - Connect DHW circulation pump [28] to output A2.
- If a fault occurs at extension AM1 or the communication is interrupted, output A1 is switched on and output A2 is switched off (provisional operation).

Allocating functions for outputs A1 and A2

Select the function for the outputs via the coding at the boiler control unit:

- Output A1: Code 33
- Output A2: Code 34

Function	Code	
	Output A1	Output A2
DHW circulation pump [28]	33:0	34:0 (delivered cond.)
Heating circuit pump [20]	33:1 (delivered cond.)	34:1
Circulation pump for cylinder heating [21]	33:2	34:2



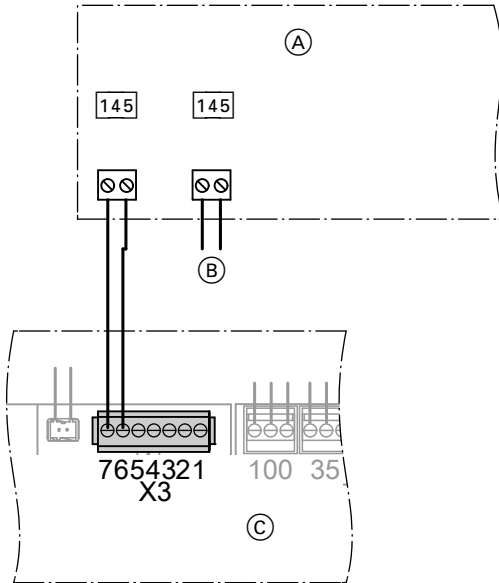
Boiler service instructions

Connecting the KM BUS to the boiler control unit

Note

Remove plug [145] of the cable supplied before connecting the KM BUS to terminal X3.

Connecting the KM BUS to the boiler control unit (cont.)



- (A) Extension AM1
(B) Terminal for KM BUS and additional accessories
(C) Boiler control unit

Power supply [terminals]

Connecting to the boiler control unit or additional accessories

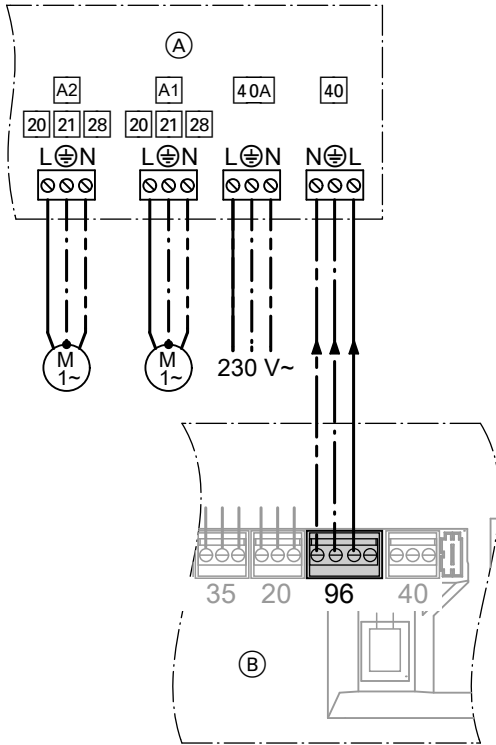


Danger

Incorrect core termination can cause severe injuries and damage to the equipment.

Never interchange cores "L" and "N".

Power supply [terminals] (cont.)



(A) Extension AM1

(B) Boiler control unit

Power supply [terminals] (cont.)

Connecting directly to the mains power supply



Danger

Incorrectly executed electrical installations can lead to injury from electrical current and result in equipment damage.

Make the power supply connection and implement all earthing measures (e.g. RCD circuit) in accordance with the following regulations:

- IEC 60364-4-41
- VDE requirements
- Requirements specified by your local power supply utility
- Protect the power cable with 16 A max.



Danger

If components in the system are not earthed, this can lead to serious injury from electrical current if an electrical fault occurs.

The equipment and the pipework must be connected to the earth bonding of the building.

Isolator for non-earthed conductors

- The main isolator (if installed) must simultaneously isolate all non-earthed conductors from the mains with a minimum contact separation of 3 mm.
- If **no** main isolator is installed, all non-earthed cables must be isolated from the mains by the upstream MCB with at least 3 mm contact separation.



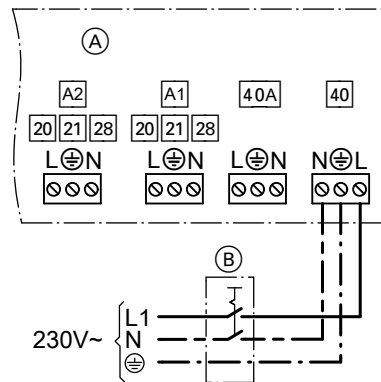
Danger

Incorrect core termination can cause severe injuries and damage to the equipment. Never interchange cores "L" and "N".



Please note

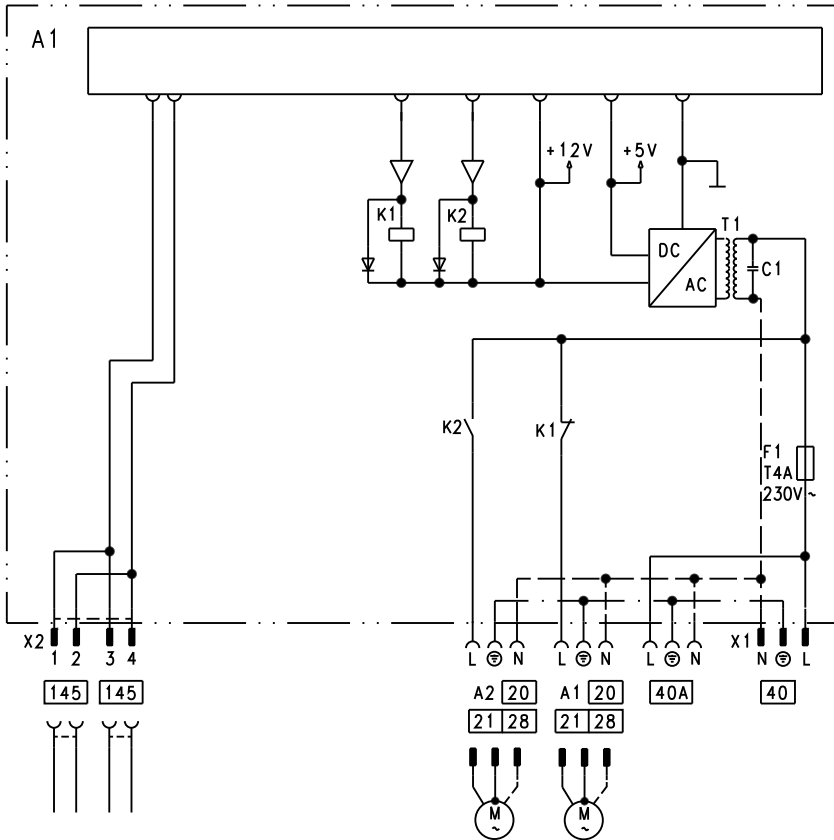
An incorrect phase sequence can cause damage to the unit. Check for phase equality with the power supply connection of the control unit.



(A) Extension AM1

(B) Main isolator (if required)

Connection and wiring diagram



- A1 Circulation pump
- A2 Circulation pump
- 40 Power supply [terminals]
- 40A Power supply terminal for additional accessories

- 145 KM BUS to the control unit and additional accessories
- (A) Extension AM1

Specification

Rated voltage	230 V~
Rated frequency	50 Hz
Rated current	4 A
Power consumption	1.5 W
Protection class	I
IP rating	IP32 D to EN 60 529; ensure through design/installation
Permissible ambient temperature	
■ during operation	0 to +40 °C
■ during storage and transport	-20 to +65 °C
Rated capacity of the relay outputs	
■ Output A1	4 (2) A 230 V~
■ Output A2	4 (2) A 230 V~
■ Total	4 (2) A 230 V~



Viessmann Werke GmbH&Co KG
D-35107 Allendorf
Telephone: +49 6452 70-0
Fax: +49 6452 70-2780
www.viessmann.com

Viessmann Limited
Hortonwood 30, Telford
Shropshire, TF1 7YP, GB
Telephone: +44 1952 675000
Fax: +44 1952 675040
E-mail: info-uk@viessmann.com

5443 275 GB Subject to technical modifications.



Printed on environmentally friendly,
chlorine-free bleached paper