

FXV 33** EasySwitch: Electric distributor for positioning signals



FXV3308F011

How energy efficiency is improved

Distributor for intelligent, energy-efficient control with variable channel assignment

Features

- For the control of a maximum of twelve thermal actuators for unit valves and the connection of up to eight room thermostats
- Flexible assignment of the actuators to the room thermostats via rotary switch
- Distribution of the power supply, the positioning signals and a shared time programme for room operating units
- Easy to change channel assignment without rewiring
- Pump logic module for activating a circulation pump
- Input for timer for individual forwarding of time commands to the heating zones
- LED status indicators for power supply, pump logic module and active heating channels
- Integrated cable guides and terminal connection without tools
- Fitting on DIN rail or wall mounting

Technical data

Power supply		
Power supply		230 V~, ±10%, 50...60 Hz
Distributor fuse 230 V		T4AH (5 × 20 mm)
Parameters		
Control loops/heating zones ¹⁾		Max. 8 inputs
Timer channel/set-back		Yes
Ambient conditions		
Admissible ambient temperature		0...50 °C
Admissible storage temperature		-20...70 °C
Admissible ambient humidity		10...85% rh
Inputs/outputs		
Outputs	Number of actuators	Max. 12 thermal actuators for unit valves (for heating circuits)
	Pump connection	Max. 2 (1) A
Inputs	Set-back	Contacts input
Construction		
Housing material		PC-ABS plastic, black (similar to RAL9005) Fire-retardant as per UL94V-0
Cover material		PC plastic, grey transparent Fire-retardant as per UL94V-0
Fitting		Mounted unit, DIN rail, 35 mm or optionally screw-on mounting
Dimensions W x H x D		350 × 100 × 52 mm
Connection terminals / cable		
Connection terminals		Spring-loaded plug-in connectors
Cable cross-section		0.5...1.5 mm ²
Power cable		Solid: NYM-J/NYM-O (max. 5 × 1.5 mm ²) Flexible: H05V2V2H2-F
Cable clamping device		Cable fastening points integrated without tools into housing

¹⁾ TRA or TRT room thermostats:
TRA: max. five AXT2 per heating zone
TRT: max. six AXT2 per heating zone



Standards and directives

	Type of protection	IP20 (EN 60730)
	Protection class	II (EN 60730)
CE conformity	EMC Directive 2014/30/EU	EN 60730-1, residential premises
	Low-Voltage Directive 2014/35/EU	EN 60730-1 & -2-9 type 1C

Overview of types

Type	Nominal voltage	Features	Channels	Weight
FXV3308F011	230 V~	Heating/cooling, with set-back, pump logic module and LED indicator	8	0.58 kg

Description of operation

The FXV 33** Easy Switch is an electric distributor for thermal actuators for unit valves in room heating (underfloor heating).

The distributor is installed in the cabinet of the underfloor-heating distributor. It supplies the power for the connected thermostats and valves and a shared time programme.

The distributor forwards the room controller commands to the thermal actuators for unit valves.

Channel selection

The twelve rotary switches enable one or more thermal actuators for unit valves to be individually assigned to each room thermostat.

Time signal

Terminal ☉ is used as a time channel for decreasing the set temperature. The time programme can be defined using either a TRA 421 or an external timer. The corresponding connection can be used to reduce all heating zones depending on the time.

Pump control

A pump can be activated directly via the provided terminals. The pump logic is used to activate the pump according to requirements. This means that, as soon as an actuator is active, the pump starts operating. If none of the connected actuators is activated the pump is switched off.

Intended use

This product is only suitable for the purpose intended by the manufacturer, as described in the "Description of operation" section.

All related product regulations must also be adhered to. Changing or converting the product is not admissible.

Engineering and fitting notes

Note



The distributor can only be integrated after work is performed on the 230-V network. Only qualified electricians are permitted to work on the 230-V network. Prevent laypersons and children from accessing the network.

Place of installation

The devices are suitable only for dry, closed indoor spaces (installed in the cabinet of the underfloor-heating distributor). It is not permitted to use them outdoors, in humid spaces or in wet cells. They are fitted on a DIN rail or to the wall using screws (not supplied).

Connection**CAUTION!**

Removing the cover exposes bare, live components.

- ▶ Disconnect the device from the mains before opening it.
- ▶ Do not fasten electric lines to water pipes and keep them away from sharp edges and hot surfaces.
- ▶ Immediately repair or replace damaged cables.
- ▶ Earth metal parts.

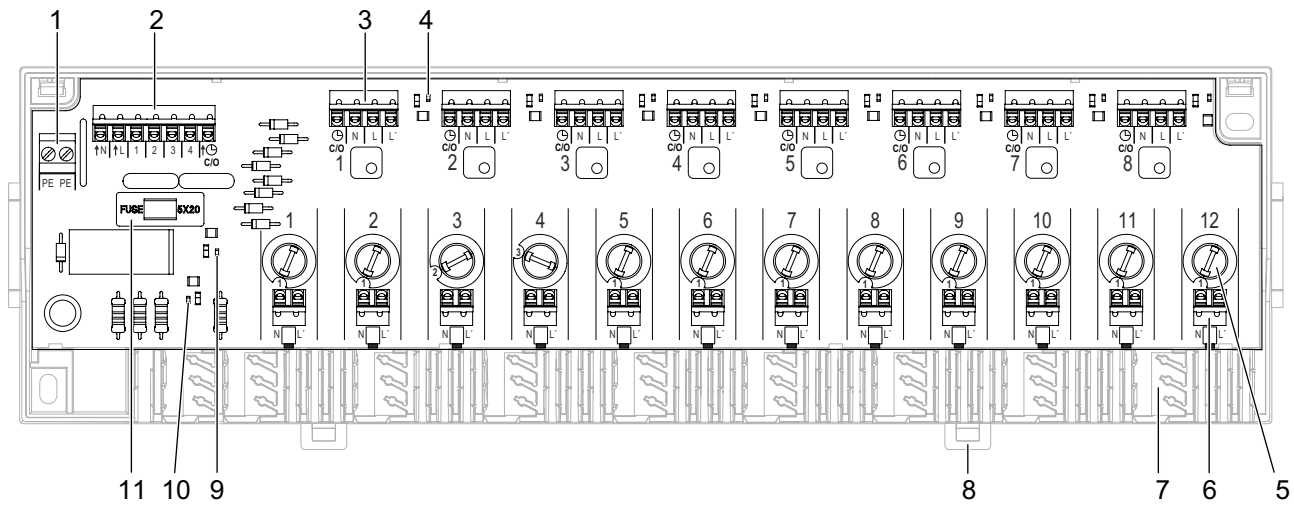
CAUTION!

The total output of the thermal actuators for unit valves must not exceed the maximum permitted switching capacity of the room thermostats. Only one thermal actuator per output and one room thermostat per input may be connected.

Feed the connecting cable through the cable clamping device into the housing. The cable jacket must not be damaged.

Only use the cable types specified above. All connecting cables must fit into the cable fastening points and be fixed against slipping. Silicone jackets are not permitted.

Structure and components



- (1) Protective earth
- (2) Power supply and pump logic module with input for external timer
- (3) Connections 1 to 8 for room thermostats (control loops) with spring-loaded plug-in connectors
- (4) Channel LEDs 1 to 8
- (5) Rotary switches 1 to 12 for easy assignment of the thermal actuators for unit valves
- (6) Connections 1 to 12 for thermal actuators for unit valves (heating zones)
- (7) Cable input positions
- (8) Quick locks for DIN rail mounting
- (9) Power LED
- (10) Pump LED
- (11) Fuse for overload protection, type: T4AH (5 × 20 mm)

LED indicator

LED (continuously green)	Description
Power LED (position 9)	On: Device in operation
	Off: Device not in operation
Channel LEDs (position 4)	On: Heating zone active
	Off: Heating zone off
Pump LED (position 10)	On: Pump active
	Off: Pump inactive

Standards and directives

The FXV 33** Easy Switch is tested to standards. The relevant EU Directives have been considered.

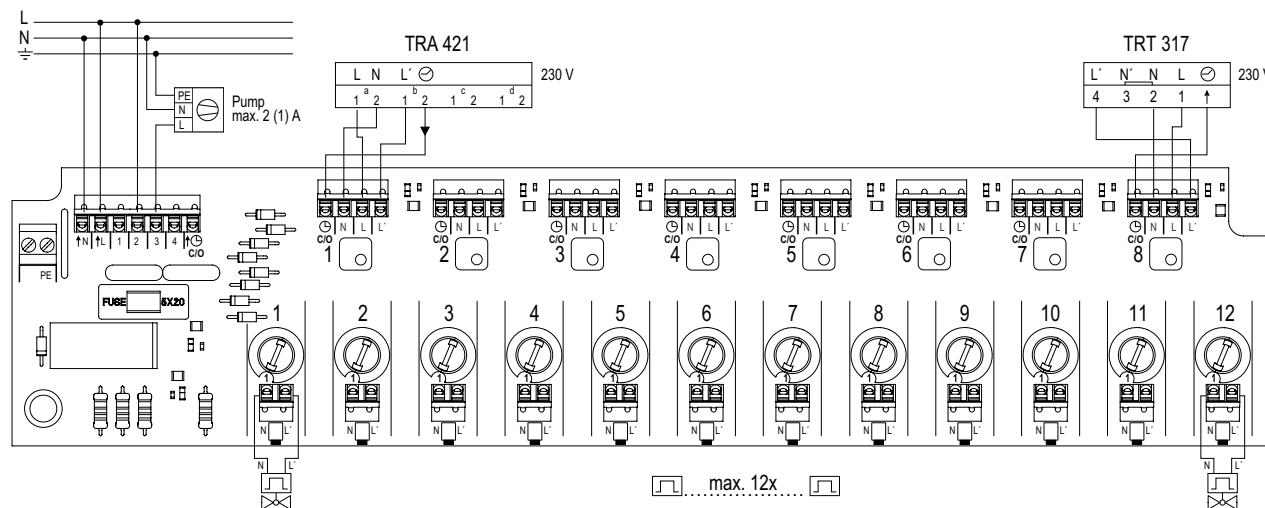
Disposal

When disposing of the product, observe the currently applicable local laws.

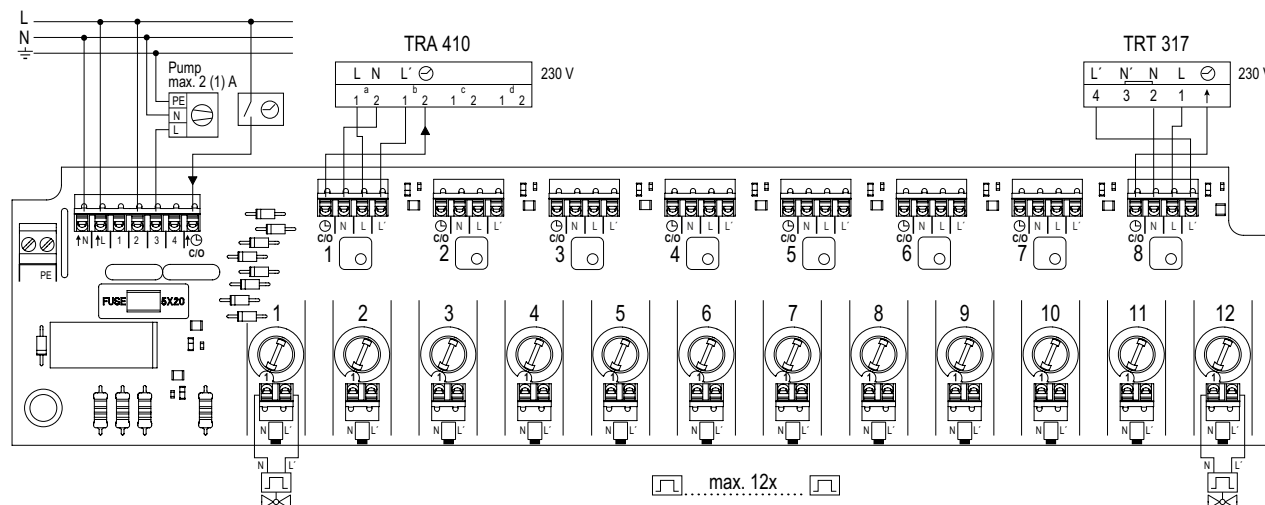
More information on materials can be found in the Declaration on materials and the environment for this product.

Connection diagram

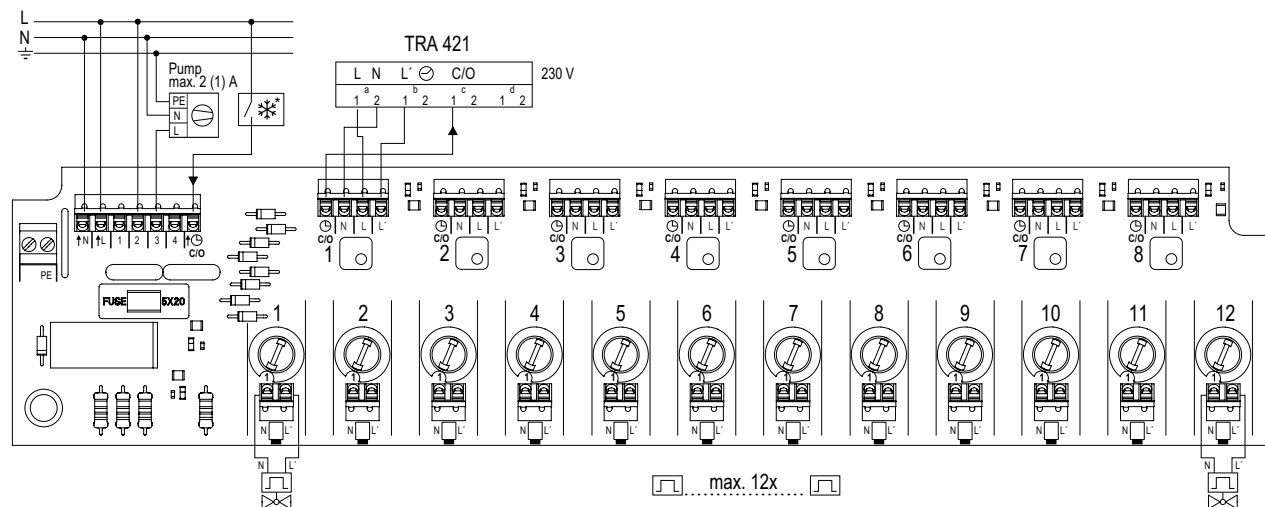
FXV 33** with TRA 421 as timer



FXV 33** with external timer

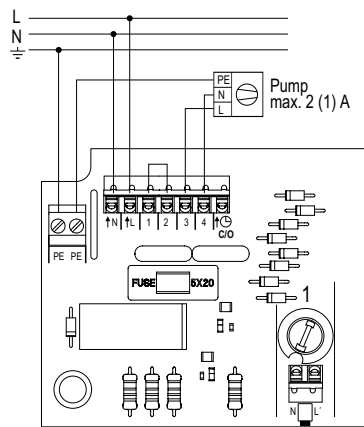


FXV 33** with TR421 for heating/cooling

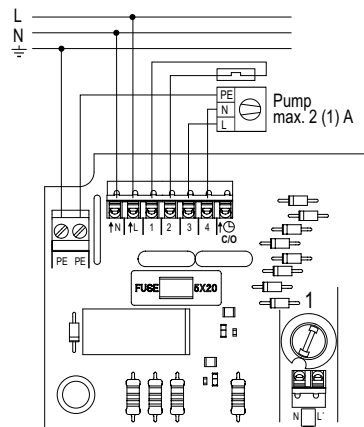


* Cooling is switched on when the switch is closed

FXV 33 direct connection of pump**



FXV 33 direct connection of pump with supply temperature limitation**



Dimension drawing

All dimensions in millimetres.

