

Actuator 2 relays

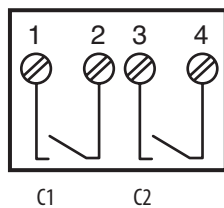
F430/2

Description

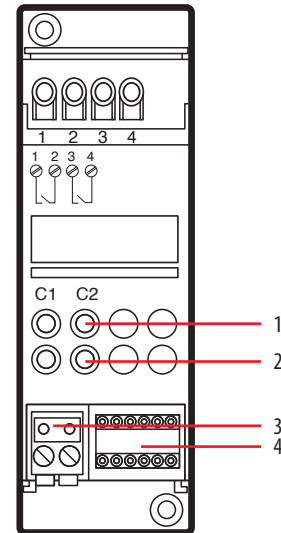
By means of internal relays, this device executes the controls received from the central unit or the probe. It is needed to control loads such as motorised valves, pumps and electric radiators.

It has two independent relays which can be used to control two distinct loads with ON/OFF function and to control a single load with open/close function.

To manage open/close loads the actuator must be configured with the logical interlock of the two relays and contact C1 must be considered for the opening control and contact C2 for the closing control.



Front view



Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Maximum absorption (relays activated individually):	25.5 mA
Absorption (relays activated with interlock):	14 mA
Absorption in stand-by:	9 mA
Current load of individual relays:	6 A (resistive) e.g. electric radiators 2 A (inductive) e.g. solenoid valves, pumps
Maximum power consumption:	1.7 W
Operating temperature:	5 – 40 °C

Dimensional data

Size: 2 DIN modules.

Configuration

L'articolo va configurato inserendo nelle sedi **ZA** e **ZB** due configuratori che identificano l'indirizzo dell'attuatore quindi il numero della zona di appartenenza; praticamente l'operazione è la stessa effettuata per la sonda in fase di definizione della zona.

Una sonda ed un attuatore che appartengono alla stessa zona riporteranno nelle sedi **ZA** e **ZB** gli stessi configuratori numerici. Sulla parte frontale dell'attuatore a due relè sono presenti cinque sedi dedicate ai configuratori: **ZA**, **ZB1**, **N1**, **ZB2**, **N2**. Le sedi di configurazione sono ripartite sui due relè nel seguente modo:

ZA ZB1 indirizzo di zona del Relè 1

N1 numero progressivo di zona del Relè 1

ZA ZB2 indirizzo di zona del Relè 2

N2 numero progressivo di zona del Relè 2

I due relè montati a bordo del dispositivo sono indipendenti e possono essere usati per azionare due carichi distinti con funzione ON/OFF come: pompe, valvole motorizzate di tipo on/off e radiatori elettrici. Nello schema riportato viene indicata la corrispondenza tra le sedi dei configuratori ed i contatti dei relè.

Legend

1. C1 clamps 1 - 2 relay forcing pushbutton
C2 clamps 3 - 4 relay forcing pushbutton
The forcing pushbuttons do not operate if the OFF configurator is connected to the ZB1 or the ZB2 configurator sockets.
2. Yellow LEDs for notification of activation of the corresponding relays.
3. Configurator socket.
4. Removable clamp for BUS connection SCS.

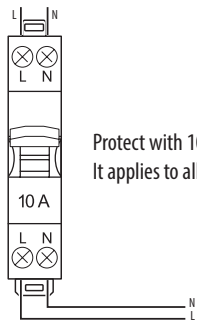
configurator	ZA	1	C1 contact
socket	ZB1	2	RL1
RL1	N1		
configurator	ZA	3	C2 contact
socket	ZB2	4	RL2
RL2	N2		

The operation of one of the two relays may be excluded. To do this, connect the OFF configurator to the socket corresponding to **ZB1** or **ZB2**. The two relays may also be used to control a single load with OPEN/CLOSE function, such as, for example, solenoid valves with opening and closing control. For the management of these loads, it will be necessary to configure the actuator with logic relay interlocking, connecting the same numeric configurator both to **ZB** and **N**, therefore **ZB1=ZB2** and **N1=N2**. In using the contacts, consider contact C1 for the opening control and C2 for the closing control. A relay configured in zone **00** operates as a circulation pump actuator; for this function, the two relays cannot be configured as interlocked.

Configurator summary table:

Socket	Function	Configurator
ZA	zone address	0 – 9
ZB1	Zone address - ON/OFF contact management - Open/Close contact management - circulation pump mode - OFF zone	0 – 9 – OFF
N1	progressive zone number - Open/Close contact management - circulation pump progressive number	1 – 9
ZB2	Zone address - ON/OFF contact management - Open/Close contact management - circulation pump mode - OFF zone	0 – 9 – OFF
N2	progressive zone number - Open/Close contact management - circulation pump progressive number	1 – 9

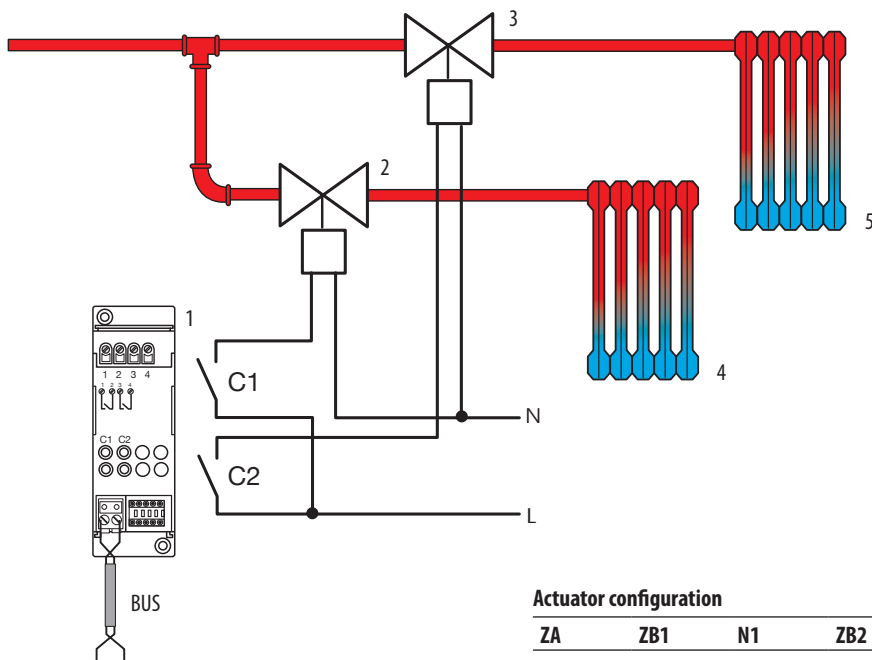
Protection



Protect with 10 A thermal magnetic circuit breaker.
It applies to all the following wiring diagrams.

Example 1

Configuration and connection of the 2-relay actuator, for the control of the solenoid valves (ON/OFF type) in two different zones (zone 1 and zone 2). The progressive zone number is 1.



Legend

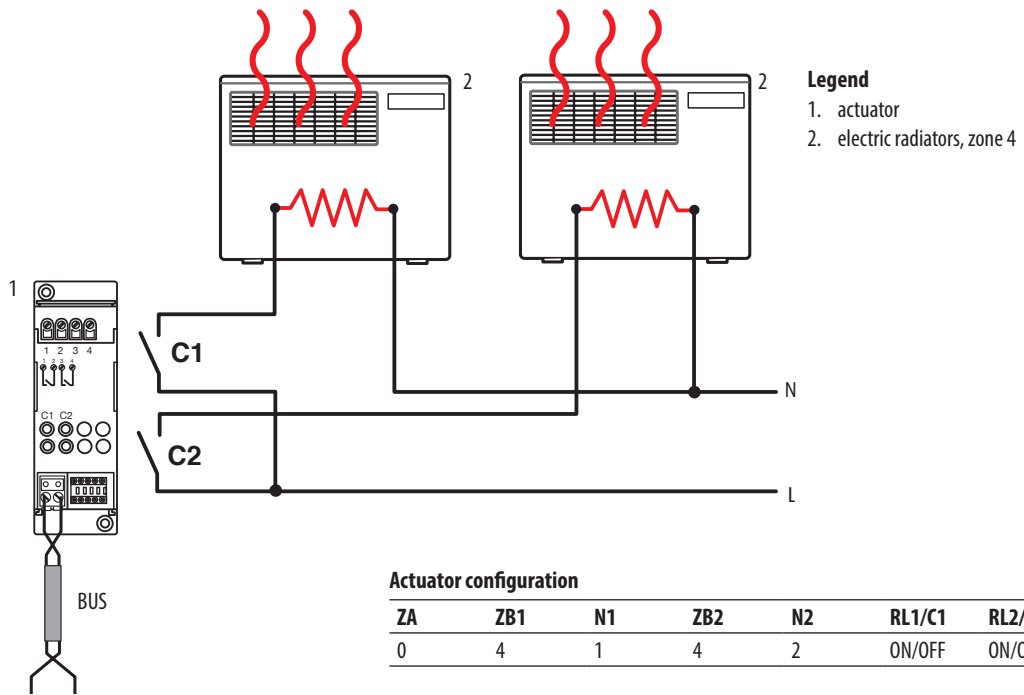
- 1. actuator
- 2. zone 1 solenoid valve
- 3. zone 2 solenoid valve
- 4. zone 1 radiator
- 5. zone 2 radiator

Actuator configuration

ZA	ZB1	N1	ZB2	N2	RL1/C1	RL2/C2
0	1	1	2	1	ON/OFF	ON/OFF

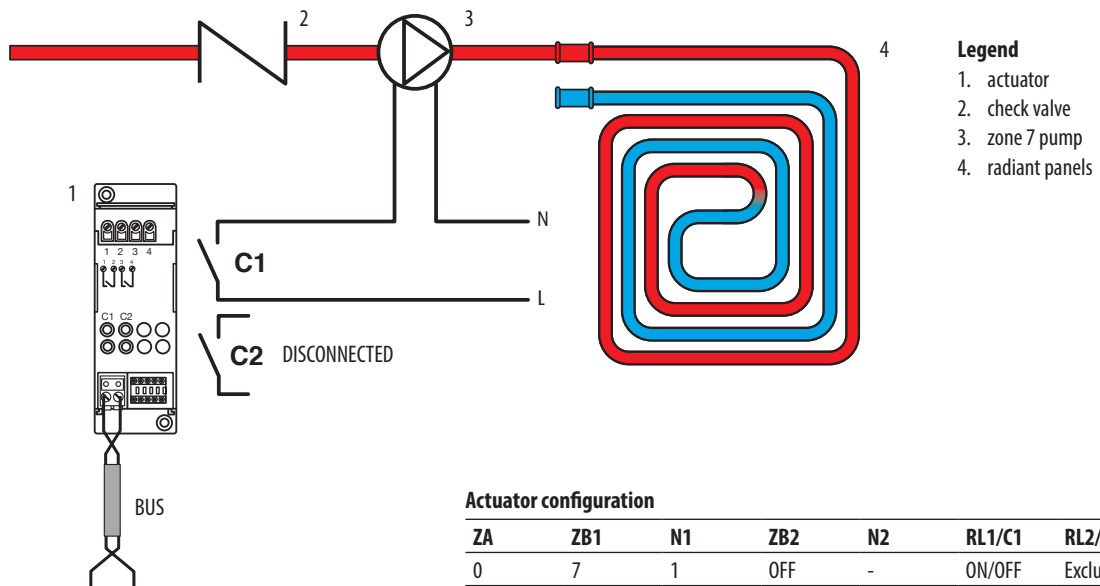
Example 2

Configuration and connection of the 2-relay actuator, for the control of two electric radiators within the same zone (zone 4). The progressive zone numbers are 1 and 2.



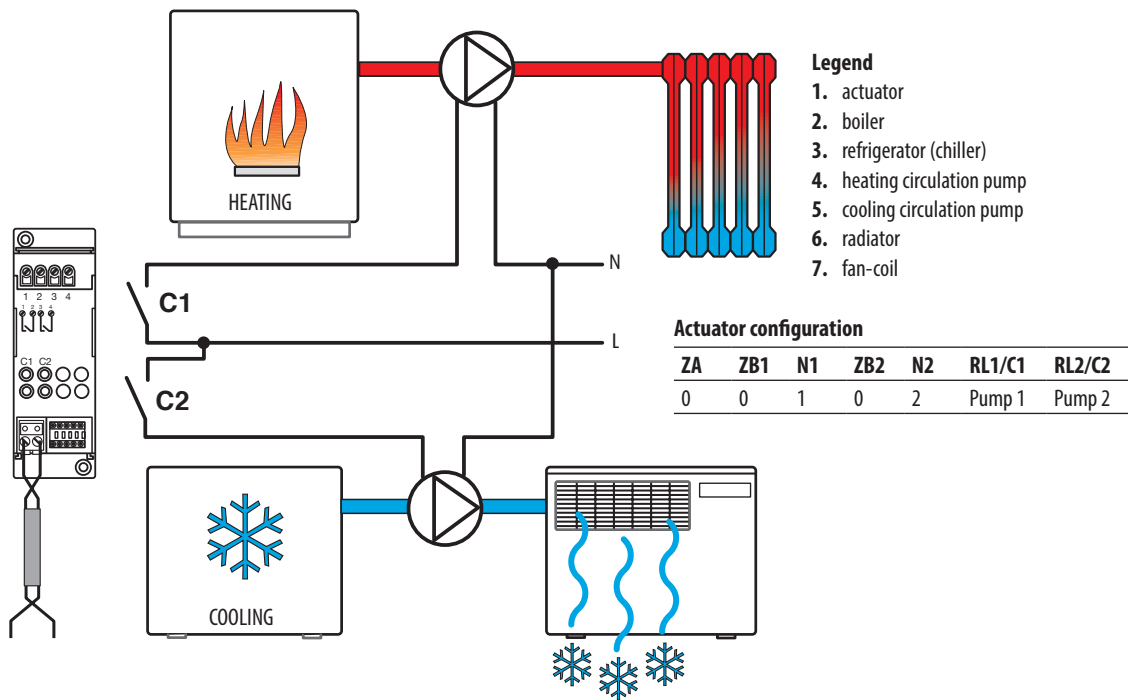
Example 3

Configuration and connection of the 2-relay actuator, for the control of a zone pump (in zone 7). The progressive zone numbers is 1. As relay RL2 is not used, it is excluded.



Example 4

Configuration and connection of the 2-relay actuator, for the control of two circulation pumps (zone 00). The progressive zone numbers are 1 and 2.



Example 5

Configuration and connection of the 2 interlocking relays actuator, for the control of a solenoid valve with opening and closing control in zone 16.

