

1 Ventilation systems

2 Air-air exchangers

3 Air-water exchangers
4 Cooling units

5 Resistance heaters

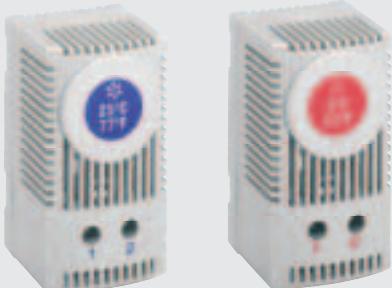
6 Control devices

7 Calculation and selection
aid software



TO CONTROL THE TEMPERATURE

Respects the entered value



Compact fixed thermostats

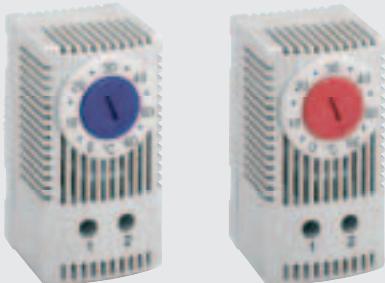
- Preset factory temperature:
NA (blue button): 5, 10, 15°C for the resistance heater.
NC (red button): 25, 30, 35°C for the fan.
- Small size.
- Simple assembly by clip on 35 mm DIN rail.
- Easy access terminals.
- High connection power.



Fixed double thermostat

- Preset factory values.
- Two thermostats in the same housing, operating separately.
- Easy access terminals.
- Simple assembly by clip on 35 mm DIN rail.

Large range of adjustments



Adjustable thermostats

- NA (blue button): with normally open contact, when the temperature increases the contact closes, activating the fan to evacuate the heat.
- NC (red button): with normally closed contact, when the temperature falls below the setpoint, the contact closes, activating the Resistance heater to prevent condensation.
- Broad adjustment temperature.
- Small size.
- Simple assembly by clip on 35 mm DIN rail.
- Easy access terminals.
- High connection power.



Adjustable dual thermostats

- To control two units independently and simultaneously: a resistance heater and fan.
- Red button: normally closed contact (NC) for the adjustment of Resistance heaters.
- Blue button: normally open contact (NO) for the adjustment of fans.
- Double thermostat in the same housing, with separate adjustment and operation.
- Easy access terminals.
- Simple Assembly by clip on 35 mm DIN rail.

TO CONTROL THE TEMPERATURE

Choice of contact



NO/NC Thermostat

- Its NO/NC inverter controls a resistance heater or a fan.
- Switching by means of two NO/NC contacts.
- Simple assembly by clip on 35 mm DIN rail.
- Easy access terminals.
- High connection power.

Temperature precision



Electronic thermostat 24 V DC

- It can control electrical equipment of 24 V DC by means of a potential-free inverter contact.
- They have a PTC temperature probe for more precise adjustment and low hysteresis.
- High DC switching capacity.
- Low hysteresis - greater precise temperature control.
- Switching by means of an inverter contact.
- Simple assembly by clip on 35 mm DIN/EN rail.

TO CONTROL THE RELATIVE HUMIDITY

Respects the entered value



Fixed Hygrostat

- Factory-adjusted relative humidity: 60% RH.
- Switching by means of an NO contact.
- Simple assembly by clip on 35 mm DIN rail.
- Easy access terminals.
- High connection power.

Large range of adjustments



Adjustable Hygrostat/Hygrometer

- It is used to adjust the relative humidity in the enclosure:
Hygrostat: adjustable relative humidity.
Hygrotherm: adjustable relative humidity.
- Switching by means of an inverter contact.
- Simple assembly by clip on 35 mm DIN rail.
- Easy access terminals.
- High connection power.

ClimaSys Control devices Selection table

TO CONTROL THE TEMPERATURE

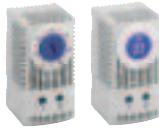
To control a resistance heater

Thermostat with NO contact

	Reference	Setting range	Display	Contact	Application	Control element	Switching power (resistive load)
	87565	fixed 5°C/41 °F	°C & °F	NO	anti-frost	bimetal	DC 30W AC 120V 15A AC 250V 10A
	87566	fixed 10°C/50°F			-		
	87567	fixed 15°C/59°F			condensation		
	87561	adjustable 0°...+60°C	°C		heat		
	87578	adjustable 32°...+140°F	°F				

To control a fan, an alarm

Thermostat with NC contact

	Reference	Setting range	Display	Contact	Application	Control element	Switching power (resistive load)
	87568	fixed 25°C/77°F	°C & °F	NC	ventilate	bimetal	DC 30W AC 120V 15A AC 250V 10A
	87569	fixed 30°C/86°F					
	87570	fixed 35°C/95°F					
	87562	adjustable 0°...+60°C	°C				
	87580	adjustable 32°...+140°F	°F				

To control two equipments

Dual thermostat

	Reference	Setting range	Display	Contact	Application	Control element	Switching power (resistive load)
	87571	fixed 10°C/50°F 35°C/95°F	°C & °F	NO	heat	bimetal	DC 30W AC 120V 15A AC 250V 10A
	87572	fixed 35°C/95°F 45°C/113°F		NC	ventilate		
	87573	fixed 5°C/41°F 15°C/59°F		NO	alarm		
	87564	adjustable 0°...+60°C adjustable 0°...+60°C	°C	NO NC	heat ventilate		

To control a resistance heater or a fan

Thermostat with inverse contact

	Reference	Setting range	Display	Contact	Application	Control element	Switching power (resistive load)
	87558	adjustable 0°...+60°C	°C	inverse	ventilate or heat	bimetal	Close: DC 30W AC 250V 5A Open: DC 30W AC 250V 10A

To control in DC a resistance heater or a fan

Electronic thermostat

	Reference	Setting range	Display	Contact	Application	Control element	Switching power : (resistive load)	Switching capacity (resistive load)
	87563	adjustable 0°...+60°C	°C	24 V DC	2 to NC	ventilate or heat	electronic	28 V DC 16 A

TO CONTROL THE RELATIVE HUMIDITY

To control a resistance heater

Hygrostat NC

	Reference	Setting range	Display	Contact	Application	Switching power (resistive load)
	87574	fixed 60% RH	% RH	NC	heat	DC 20W AC 250 V 5A

To control a resistance heater or a fan

Hygrostat with inverse contact

	Reference	Setting range	Display	Contact	Application	Switching power (resistive load)
	87560	adjustable 35...95% RH	% RH	inverse	heat or ventilate	DC 20W AC 250 V 5A

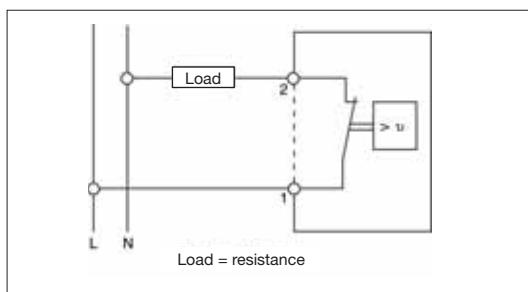
TO CONTROL THE TEMPERATURE AND THE RELATIVE HUMIDITY

To control a resistance heater or a fan

Hygrotherm

	Reference	Setting range	Display	Contact	Application	Application	Control element	Switching power (resistive load)
	17575	adjustable 0°...+60 °C adjustable 50...90% RH	°C and RH	120V AC	inverse (relais)	ventilate or heat	electronic	open AC 120V 6A AC 240V 6A
	17576		°F and RH	120V AC				close AC 120V 8A AC 240V 8A
	17559		°C and RH	230V AC				DC 24V 4A
	17577		°F and RH	230V AC				

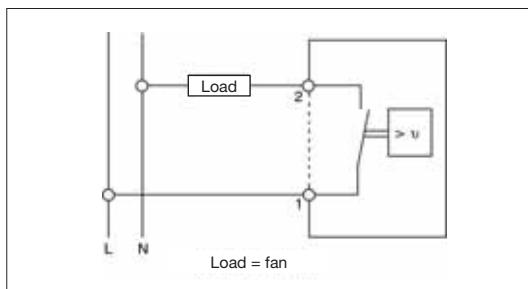
Thermostat with NO contact



- Thermostat with NO contact used for switching off the resistance heater when the temperature rises above the set value.
- It also increases service life of resistance heaters, since they are switched less frequently.
- DIN rail fixing.
- Degree of protection IP 30.
- V0 self-extinguishing thermoplastic as per UL94.
- Adjustable temperature from 0 to 60 °C.
- Connection: 2 x 2.5 mm² terminals.

Reference	Display	Max. rated current
87561	°C	10 A to 250 V
87578	°F	10 A to 250 V
Technical characteristics		
Sensor element	bimetal	
Contact type	snap-action contact	
Contact resistance	< 10 mΩ	
Service life	> 100,000 cycles	
Max. switching capacity	AC 250 V 10 A (resistive load) AC 120 V 15 A (resistive load) AC 250 V/120 V 2 A (inductive load cos φ = 0.6) DC 30 W	
Connection	two-pole terminal for 2.5 m ²	
Mounting	clip for 35 mm DIN rail (EN 50022)	
Material	V0 thermoplastic UL94, light grey	
Dimensions	60 x 33 x 43 mm	
Weight	40 g	
Fitting position	variable	
Working temperature	-20...+80 °C (-4...+176 °F)	
Protection type	IP 20	
Hysteresis	7 °K	
Regulation	0°...+60 °C	

Thermostat with NC contact



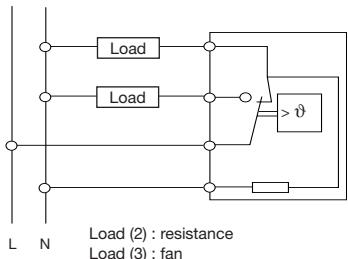
- No closing thermostat, used to start the fan when the temperature rises above the maximum value.
- As a result, service life of the fan is increased and its filter stays cleaner.
- DIN rail fixing.
- Degree of protection IP 30.
- V0 self-extinguishing thermoplastic as per UL94.
- Adjustable temperature from 0 to 60 °C.
- Connection: 2 x 2.5 mm² terminals.

Reference	Display	Max. rated current
87562	°C	10 A to 250 V
87580	°F	10 A to 250 V
Technical characteristics		
Sensor element	bimetal	
Contact type	snap-action contact	
Contact resistance	< 10 mΩ	
Service life	> 100,000 cycles	
Max. switching capacity	AC 250 V 10 A (resistive load) AC 120 V 15 A (resistive load) AC 250 V/120 V 2 A (inductive load cos φ = 0.6) DC 30 W	
Connection	two-pole terminal for 2.5 m ²	
Mounting	clip for 35 mm DIN rail (EN 50022)	
Material	V0 thermoplastic UL94, light grey	
Dimensions	60 x 33 x 43 mm	
Weight	40 g	
Fitting position	variable	
Working temperature	-20...+80 °C (-4...+176 °F)	
Protection type	IP 20	
Hysteresis	7 °K	
Regulation	0...+60 °C	

Thermostat with C/O contact



- Thermostat ideally suited to the control of fans, resistance heaters, ventilation racks, thermal exchangers, etc.
- Enables both signalling and control of temperature within enclosure.
- DIN rail fixing.
- Degree of protection IP 30.
- V0 self-extinguishing thermoplastic as per UL94.
- Adjustable temperature from 0 to 60 °C.
- Connection: 2 x 2.5 mm² terminals.



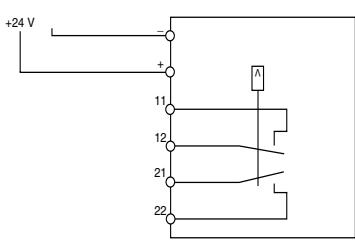
Reference	Display	Max. rated current
87558	°C	(NO) 5A (NC) 10A
Technical characteristics		
Sensor element	bimetal	
Contact type	snap-action contact	
Contact resistance	< 10 mΩ	
Service life	> 100,000 cycles	
Max. switching capacity	AC 250 V 10 A (resistive load)	
Maximum direct current switching capacity	AC 250 V 4 A (inductive load cos φ = 0,6) DC 30 W	
Connection	4-pole terminal for 2.5 mm ²	
Mounting	clip for 35 mm DIN rail (EN 50022)	
Material	V0 thermoplastic UL94, light grey	
Dimensions	67 x 50 x 44 mm	
Weight	100 g	
Fitting position	variable	
Working temperature	-20...+80 °C (-4...+176 °F)	
Protection type	IP 20	
Hysteresis	7 °K	
Regulation	+5...+ 60 °C	

Electronic thermostat

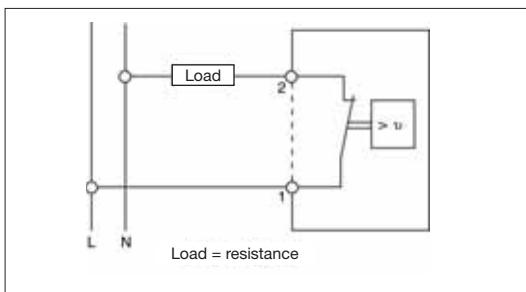


- Hysteresis.
- 35 mm DIN rail clip fixing.
- Thermostat with volt-free 2 dry contact switching relay.
- Allows high number of switching operations with improved temperature accuracy ($\pm 2^{\circ}\text{K}$) thanks to its PTC probe.
- Thermostat with a low hysteresis making the switching point and setting accuracy more precise.
- Heating or cooling appliance as well as signal devices can be switched via the potential free change-over contact.

Reference	Display	Max. rated current
87563	°C	16 A
Technical characteristics		
Regulation	0...+ 60 °C	
Hysteresis	2 °K ± 2 °K	
Sensor element PTC	sonde PTC	
Connection	6-pole terminal for 2.5 mm ²	
Contact type	2 to NC 24 V DC 16 A	
Mounting	clip for 35 mm DIN rail (EN 50022)	
Material	ABS according to UL94 V0	
Working temperature	0...+60 °C (-32...+140 °F)	
Protection type	IP 20	
Dimensions	67 x 50 x 44 mm	
Weight	80 g	



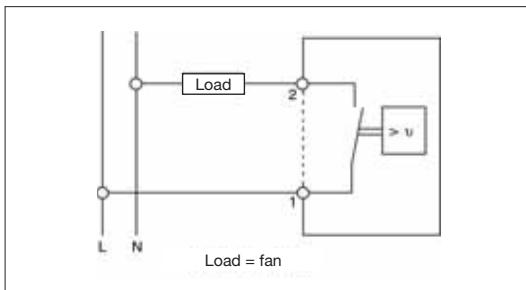
Fix thermostat with NC contact



- Thermostat with NC contact used for switching off the resistance heater when the temperature rises above the set value. It also increases service life of resistance heaters, since they are switched less frequently.
- DIN rail fixing.
- Degree of protection IP 30.
- V0 self-extinguishing thermoplastic as per UL94.
- Factory-adjusted temperature.
- Connection: 2 x 2.5 mm² terminals.

Reference	Factory –adjusted temperature	Max. rated current
87565	5 °C /41 °F	10 A to 250 VAC
87566	10 °C /50 °F	15 A to 120 AC DC 30 W
87567	15 °C /59 °F	
Caractéristiques techniques		
Sensor element	bimetal	
Contact type	snap-action contact	
Contact resistance	< 10 mΩ	
Service life	> 100,000 cycles	
Max. switching capacity	AC 250 V 10 A (resistive load) AC 120 V 15 A (resistive load) AC 250 V/120 V 2 A (inductive load cos φ = 0,6) DC 30 W	
Connection	2-pole terminal for 2.5 mm ²	
Mounting	clip for 35 mm DIN rail (EN 50022)	
Material	V0 thermoplastic UL94, light grey	
Dimensions	60 x 33 x 43 mm	
Weight	40 g	
Fitting position	variable	
Working temperature	-20...+80 °C (-4...+176 °F)	
Protection type	IP 20	
Hysteresis	7 °K	

Fix thermostat with NO contact



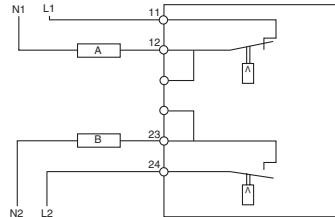
- No closing thermostat, used to start the fan.
- Degree of protection IP 30.
- V0 self-extinguishing thermoplastic as per UL94.
- Factory-adjusted temperature.
- Connection: 2 x 2.5 mm² terminals.
- DIN rail fixing.

Reference	Factory –adjusted temperature	Max. rated current
87568	25 °C /77 °F	
87569	30 °C /86 °F	10 A to 250 VAC 15 A to 120 AC DC 30 W
87570	35 °C /95 °F	
Caractéristiques techniques		
Sensor element	bimetal	
Contact type	snap-action contact	
Contact resistance :	< 10 mΩ	
Service life	> 100,000 cycles	
Max. switching capacity	AC 250 V 10 A (resistive load) AC 120 V 15 A (resistive load) AC 250 V/120 V 2 A (inductive load cos φ = 0,6) DC 30 W	
Connection	2-pole terminal for 2.5 mm ²	
Mounting	clip for 35 mm DIN rail (EN 50022)	
Material	V0 thermoplastic UL94, light grey	
Dimensions	60 x 33 x 43 mm	
Weight	40 g	
Fitting position	variable	
Working temperature	-20...+80 °C (-4...+176 °F)	
Protection type	IP 20	
Hysteresis	7 °K	

Fix dual thermostat



- Dual temperature regulator.
- Two thermostat in one casing.
- 35 mm DIN rail clip fixing.
- Factory-adjusted temperature.
- This unit allows trip control of a fan and a resistance heater, independent setting and operation.

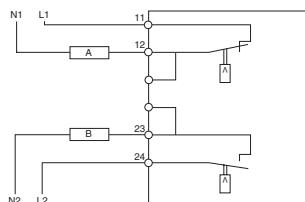


Reference	Contact	Factory-adjusted temperature	Max. rated current
87571	NO NC	10 °C /50 °F 35 °C /95 °F	
87572	NC NC	35 °C /95 °F 45 °C /113 °F	10 A to 250 VAC 15 A to 120 VAC DC 30W
87573	NO NO	5 °C /41 °F 15 °C /59 °F	
Technical characteristics			
Sensor element	bimetal		
NC contact	snap-action contact		
Contact resistance	< 10 mΩ		
Service life	> 100,000 cycles		
Max. switching capacity	AC 250 V 10 A (resistive load) AC 120 V 15 A (resistive load) AC 250 V/120 V 2 A (inductive load cos φ = 0,6) DC 30 W		
Connection	6-pole terminal for 2.5 mm ²		
Mounting	clip for 35 mm DIN rail (EN 50022)		
Material	VO thermoplastic UL94, light grey		
Dimensions	67 x 50 x 44 mm		
Weight	90 g		
Fitting position	variable		
Working temperature	-20...+80 °C (-4...+176 °F)		
Protection type	IP 20		
Hysteresis	7 °K		

Dual thermostat



- Dual temperature regulator.
- 2 thermostats independent setting and operation.
- 35 mm DIN rail clip fixing.
- Two thermostat in one casing.
- Thermostat (contact breaker, normally closed) for regulating heaters.
- Thermostat (contact maker, normally open) for regulating filter fans and heat exchangers or switching signal devices.

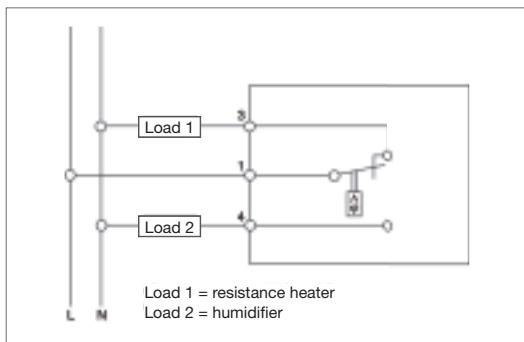


Reference	Display	Max. rated current
87564	°C	(NO) 5A (NC) 10A
Caractéristiques techniques		
Sensor element	bimetal	
NC contact	snap-action contact	
Contact resistance	< 10 mΩ	
Service life	> 100,000 cycles	
Max. switching capacity	AC 250 V 10 A (resistive load) AC 120 V 15 A (resistive load) AC 250 V/120 V 2 A (inductive load cos φ = 0,6) DC 30 W	
Connection	6-pole terminal for 2.5 mm ²	
Mounting	clip for 35 mm DIN rail (EN 50022)	
Material	VO thermoplastic UL94, light grey	
Fitting position	variable	
Working temperature	-20...80 °C (-4...+176 °F)	
Protection type	IP 20	
Hysteresis	7 °K	
Regulation	0... +60 °C	

Fix hygrometer



- This device only measures the relative humidity inside the enclosure.
- It can be used to start up a resistance heater when this relative humidity exceeds the preset value.
- DIN rail fixing.
- Degree of protection IP 30.
- V0 self-extinguishing thermoplastic as per UL94.
- Factory-adjusted relative humidity.

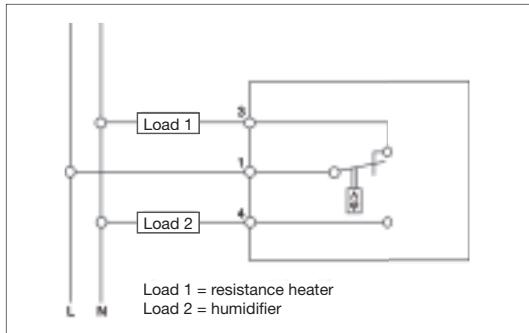


Reference	Factory-adjusted relative humidity	Max. rated current
87574	60% RH	5 A to 250 VAC DC 20W
Technical characteristics		
Switching precision	humidity 4% ($\pm 3\%$)	
Permissible air velocity	15 m/sec	
Contact type	change-over contact	
Contact resistance	< 10 m Ω	
Service life	50,000 cycles	
Min. switching power	AC/DC 20 V 100 mA	
Min. switching power	AC 250 V 5 A (resistive load) AC 250 V 0,2 A (inductive load cos $\phi = 0,6$) DC 20 W	
Connection	3-pole terminal for 2.5 mm 2	
Mounting	clip for 35 mm DIN rail (EN 50022)	
Material	V0 thermoplastic UL94 light grey	
Dimensions	67 x 50 x 37 mm	
Weight	100 g	
Fitting position	variable	
Working temperature	-20...+60 °C (-4...+140 °F)	
Protection type	IP 20	

Hygrometer

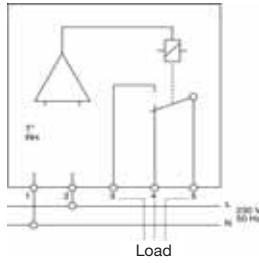


- This device only measures the relative humidity inside the enclosure.
- It is used to switch on the resistance heater when the humidity rises above the set value.
- DIN rail fixing.
- Degree of protection IP 30.
- V0 self-extinguishing thermoplastic as per UL94.
- Adjustable relative humidity from 30 to 90%.



Reference	Display	Max. rated current
87560	% RH	5 A to 250 V/AC
Technical characteristics		
Control	35 to 95 % RH	
Switching precision	humidity 4% ($\pm 3\%$)	
Permissible air velocity	15 m/sec	
Contact type	change-over contact	
Résistance de contact	< 10 m Ω	
Service life	50,000 cycles	
Min. switching power	AC/DC 20 V 100 mA	
Max. switching capacity	AC 250 V 5 A (resistive load) AC 250 V 2 A (inductive load cos $\phi = 0,6$) DC 20 W	
Connection	3-pole terminal for 2.5 mm 2	
Mounting	clip for 35 mm DIN rail (EN 50022)	
Material	V0 thermoplastic UL94	
Dimensions	67 x 50 x 37 mm	
Weight	100 g	
Fitting position	variable	
Working temperature	-20...+60 °C (-4...+140 °F)	
Protection type	IP 20	

Hygrometer switch



■ The device independently measures the temperature and humidity within the electrical enclosure. The resistance heater is switched on when either of the limiting values set for the two parameters is exceeded: the temperature rises and the relative humidity RH falls.

The hygrometer switch should be preferably be installed in the upper part of the enclosure at a minimum distance of 50 cm from the resistance heater.

- DIN rail fixing.
- Degree of protection IP 30.
- V0 self-extinguishing thermoplastic as per UL94.
- Adjustable temperature from 0 to 60 °C.
- Adjustable relative humidity from 50 to 90%.
- Hysteresis: 2 °C, 3% RH.
- Service life: >100,000 cycles.

Reference	Display	Voltage
17575	°C	120 V AC
17576	°F	120 V AC
17559	°C	230 V AC
17577	°F	230 V AC
Technical characteristics		
Operating voltage	AC 230 V, 50/60 Hz	
Switching precision	temperature 2 °K (± 1 °K)	
Switching precision	humidity 4% (± 1 %)	
Response time	approx. 160 seg.	
Contact type	change-over contact	
Contact resistance	< 10 mΩ	
Service life	> 100,000 cycles	
Max. switching intensity	AC 240 V 8 A (resistive load) AC 240 V/120 V 4 A (inductive load cos φ = 0.6) DC 240 V 0.1 A DC 48 V 0.8 A DC 24 V 8 A	
Connection	5-pole terminal for 2.5 mm ²	
Mounting	clip for 35 mm DIN rail (EN 50022)	
Material	plastique UL94 V0, light grey	
Dimensions	673 x 50 x 39 mm	
Weight	200 g	
Fitting position	vertical	
Working temperature	-20...+60 °C (-4...140 °F)	
Protection type	IP 20	
Power-on indicator	LED	