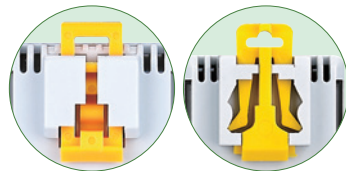
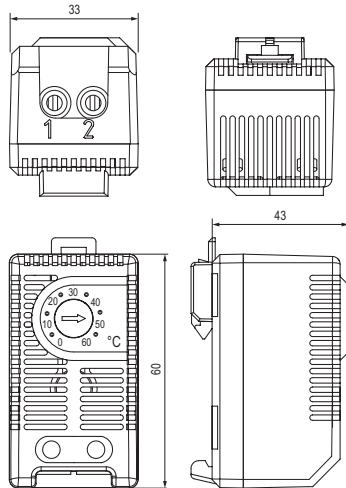


### NTL 10A-F / NTL 10B-F NTL 10A-M / NTL 10B-M

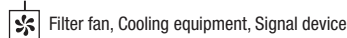
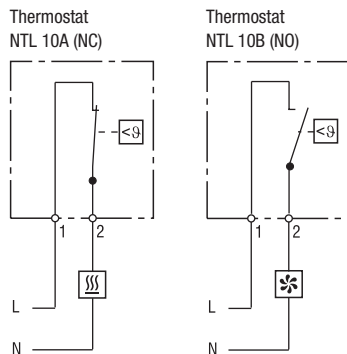


F Type

M Type



#### Connection diagrams



- Large setting range
- Small size
- Simple to mount
- High switching performance

**NTL 10A-F / NTL 10A-M: Thermostat (normally closed);** contact breaker for regulating heaters. The contact opens when temperature is rising.

**NTL 10B-F / NTL 10B-M: Thermostat (normally open);** contact maker for regulating of filter fans and heat exchangers or for switching signal devices when temperature limit has been exceeded. The contact closes when temperature is rising.

#### Technical Data

CE RoHS ISO9001 Patent

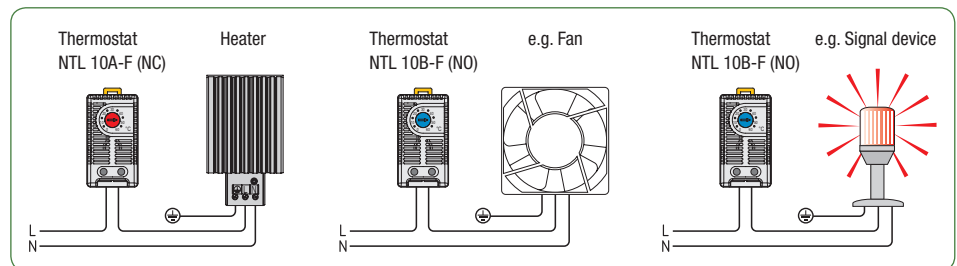
#### NTL 10A-F / NTL 10B-F / NTL 10A-M / NTL 10B-M

Switch temperature difference	+/-5°C
Sensor element	thermostatic bimetal
Contact type	snap-action contact
Service life	>100,000 cycles
Max. switching capacity	250VAC, 10 (2) A / 120VAC, 15 (2) A DC 30W at 24VDC to 72VDC
Max. inrush current	AC 16A for 10 sec.
Connection	2-pole terminal, clamping torque 0.5Nm max.: rigid wire 2.5mm <sup>2</sup> (AWG 14) stranded wire <sup>1</sup> 1.5mm <sup>2</sup> (AWG 16)
Mounting	clip for 35mm DIN rail, EN 60715
Casing	plastic according to UL94 V-0, light grey
Dimensions	60 x 33 x 43mm
Weight	approx. 40g
Fitting position	variable
Operating/Storage temperature	-45 to +80°C (-49 to +176°F)
Operating/Storage humidity	max. 90% RH (non-condensing)
Protection type	IP20

<sup>1</sup> When connecting with wires, wire end ferrules must be used.

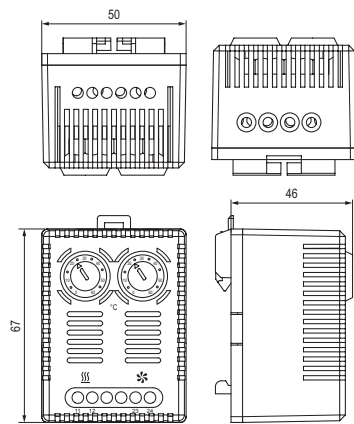
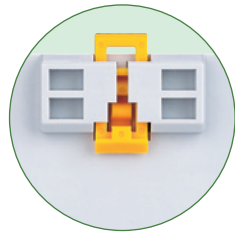
**Important note:** The contact system of the regulator is subjected to environmental influences, thus the contact resistance may change. This can lead to a voltage drop and/or self-heating of the contacts.

#### Examples of connection



Fast Fixing Type (F Type)		Manual Up down Type (M Type)		Setting range
NTL 10A-F (NC Type)	NTL 10B-F (NO Type)	NTL 10A-M (NC Type)	NTL 10B-M (NO Type)	
860001	860006	860610	860615	0 to +60°C
860002	860007	860611	860616	-10 to +50°C
860003	860008	860612	860617	+20 to +80°C
860004	860009	860613	860618	+32 to +140°F
860005	860010	860614	860619	+14 to +122°F

### NT 71-F



- NO and NC in one casing
- Separate adjustable temperatures
- High switching capacity
- Terminals easily accessible
- Clip fixing

Two thermostats in one casing:

Thermostat (contact breaker, normally closed) for regulating heaters. The contact opens when temperature is rising.

Thermostat (contact maker, normally open) for regulating filter fans and heat exchangers or switching signal devices when temperature limit has been exceeded. The contact closes when temperature is rising.

Heaters and cooling equipment can be switched independently from each other with a temperature offset as opposed to the usual change-over contacts.

### Technical Data

CE RoHS ISO9001 Patent

#### NT 71-F

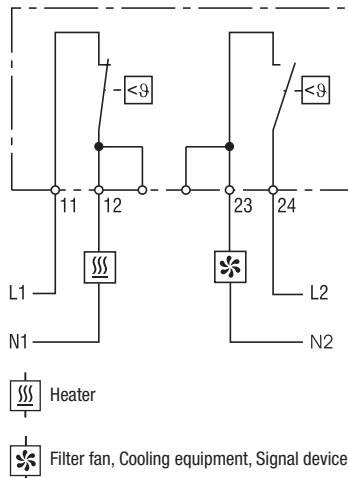
Switch temperature difference	+/-5°C
Sensor element	thermostatic bimetal
Contact type	snap-action contact
Service life	>100,000 cycles
Max. switching capacity	250VAC, 10 (2) A
Max. inrush current	AC 16A for 10 sec.
Connection	4-pole terminal, clamping torque 0.5Nm max.: rigid wire 2.5mm <sup>2</sup> (AWG 14) stranded wire <sup>1</sup> 1.5mm <sup>2</sup> (AWG 16)
Mounting	clip for 35mm DIN rail, EN 60715
Casing	plastic according to UL94 V-0, light grey
Dimensions	67 x 50 x 46mm
Weight	approx. 90g
Fitting position	variable
Operating/Storage temperature	-45 to +80°C (-49 to +176°F)
Operating/Storage humidity	max. 90% RH (non-condensing)
Protection type	IP20

<sup>1</sup> When connecting with wires, wire end ferrules must be used.

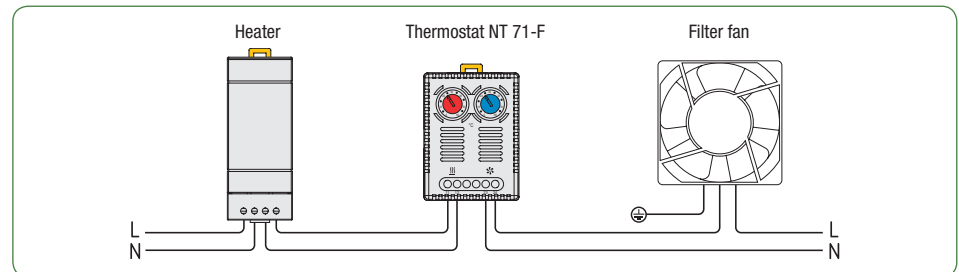
Important note: The contact system of the regulator is subjected to environmental influences, thus the contact resistance may change. This can lead to a voltage drop and/or self-heating of the contacts.

### Connection diagrams

Thermostat NT 71 (NC/NO)

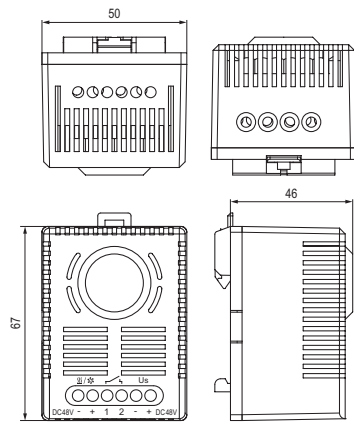
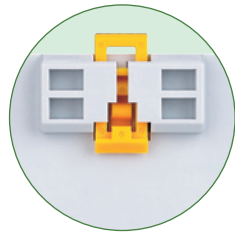


### Examples of connection

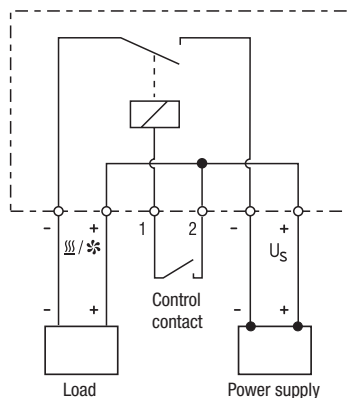


Art. No.	Setting range	Setting range
860041	Contact breaker (NC) 0 to +60°C	Contact maker (NO) 0 to +60°C
860042	Contact breaker (NC) +32 to 140°F	Contact maker (NO) +32 to 140°F
860043	Contact breaker (NC) -10 to +50°C	Contact maker (NO) +20 to +80°C
860044	Contact breaker (NC) +14 to 122°F	Contact maker (NO) +68 to +176°F
860045	Contact maker (NO) 0 to +60°C	Contact maker (NO) 0 to +60°C
860046	Contact maker (NO) +32 to 140°F	Contact maker (NO) +32 to 140°F

### NT 73-F



#### Connection diagrams



Heater



Filter fan, Cooling equipment, Signal device

- High DC switching capacity
- Variety of applications
- Compact design
- Simple connection
- Clip fixing

The Switch Module is designed for switching DC equipment with high currents. It is controlled via an external, potential-free contact (thermostat or hygrostat) connected between terminals 1 and 2. For switching the Module, the internally generated signal current has to be used. It must be ensured that the external contact can safely switch this signal current. The NT 73-F is available in 24VDC and 48VDC versions.

#### Technical Data

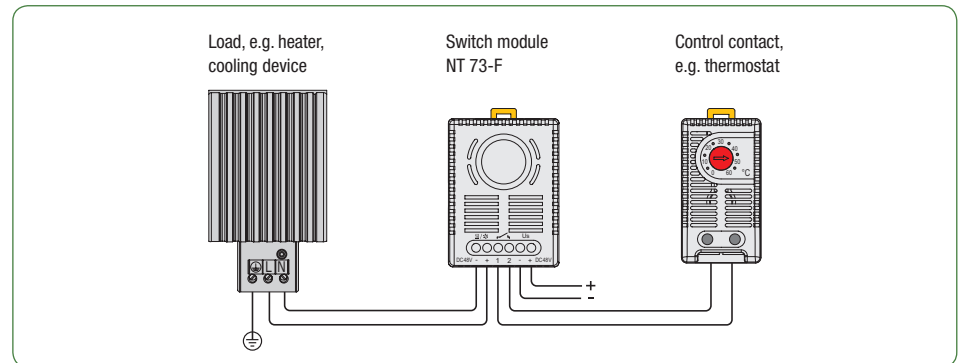
CE RoHS ISO9001 Patent

#### NT 73-F

Contact type	contact maker normally open (Relay/MOSFET)
Service life	>100,000 cycles
Max. inrush current	DC 16A
Connection	6-pole terminal, clamping torque 0.5Nm max.: rigid wire 2.5mm <sup>2</sup> (AWG 14) stranded wire <sup>1</sup> 1.5mm <sup>2</sup> (AWG 16)
Mounting	clip for 35mm DIN rail, EN 60715
Casing	plastic according to UL94 V-0, light grey
Dimensions	67 x 50 x 46mm
Weight	approx. 90g
Fitting position	variable
Operating/Storage temperature	-45 to +70°C (-49 to +158°F)
Operating/Storage humidity	max. 90% RH (non-condensing)
Protection type	IP20

<sup>1</sup> When connecting with stranded wires, wire end ferrules must be used.

#### Examples of connection



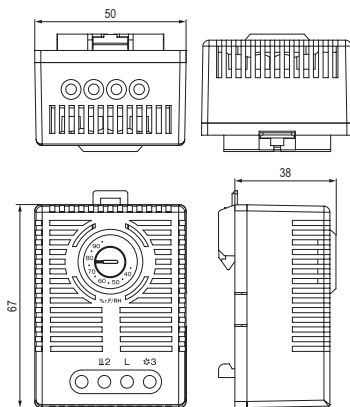
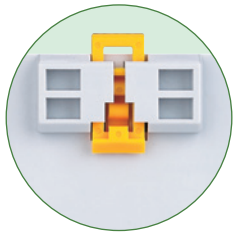
Art. No.	Max. switching capacity	Signal current	Operating Voltage
860047	28VDC, 16A	13mA at 20VDC / 22mA at 28VDC	24VDC (20-28VDC)
860048	56VDC, 16A	10mA at 38VDC / 18mA at 56VDC	48VDC (38-56VDC)

### NT 74-F



- Adjustable relative humidity
- Change-over contact
- High switching capacity
- Easily accessible terminals
- Clip fixing

The electromechanical hygrostat is designed to control enclosure heaters so that the dew point is raised when a critical relative humidity of 65% is exceeded. In this way condensation and corrosion in enclosures with electric/electronic components is effectively prevented.



CE RoHS ISO9001 Patent

#### Technical Data

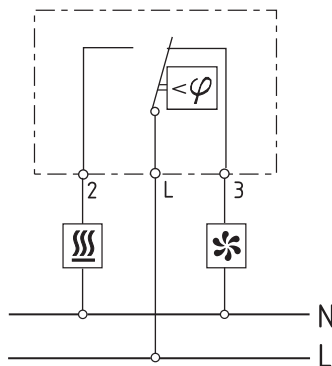
##### NT 74-F

Switch difference <sup>1</sup>	+/-5% RH
Permissible air velocity	15m/sec.
Contact type	change-over contact
Service life	>50,000 cycles
Min. switching capacity	20VAC / DC 100mA
Max. switching capacity	250VAC, 5A / DC 20W
Connection	3-pole terminal for 2.5mm <sup>2</sup> , clamping torque 0.5Nm max.: rigid wire 2.5mm <sup>2</sup> (AWG 14); stranded wire <sup>2</sup> 1.5mm <sup>2</sup> (AWG 16)
Mounting	clip for 35mm DIN rail, EN 60715
Casing	plastic according to UL94 V-0, light grey
Dimensions	67 x 50 x 38mm
Weight	approx. 60g
Fitting position	variable
Operating/Storage temperature	0 to +60°C (+32 to +140°F) / -40 to +60°C (-40 to +140°F)
Operating/Storage humidity	max. 95% RH (non-condensing)
Protection type	IP20

<sup>1</sup> at 50% RH

<sup>2</sup> When connecting with stranded wires, wire end ferrules must be used.

#### Connection diagrams

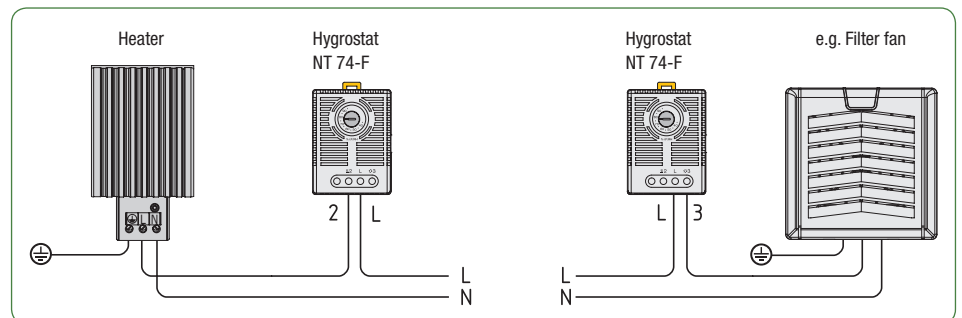


Heater



Filter fan, Cooling equipment, Signal device

#### Examples of connection



Art. No.	Setting Range	Operating Voltage
860049	35 to 95% RH	20VAC/DC, 250VAC