

## DIGITAL ROOM THERMOSTAT



### HT270 SET

#### Wireless Room Thermostat

Large LCD Backlight Display  
Daily and Weekly Program  
Touch Keys  
Key Lock  
Battery Indicator  
On-Off Control

Product Code	HT270 SET
Data sheet V. No	v.1.0

## USAGE OF ROOM THERMOSTAT

HT270 SET is a wireless room thermostat. The HT270 SET room thermostats are used in heating systems to keep the room temperature constant at the set temperature.

- Large LCD Backlight Display
- Touch Keys
- Daily and Weekly Program
- Different Mode Options (Comfort, Economy, Holiday)
- Battery Indicator, Key Lock, Heating Calibration
- For heating systems
- ON/OFF control
- Battery DC 3 V (2 × 1,5V AAA Alkaline battery)

### USAGE AREAS

Houses  
Apartments  
Residences  
Schools  
Offices

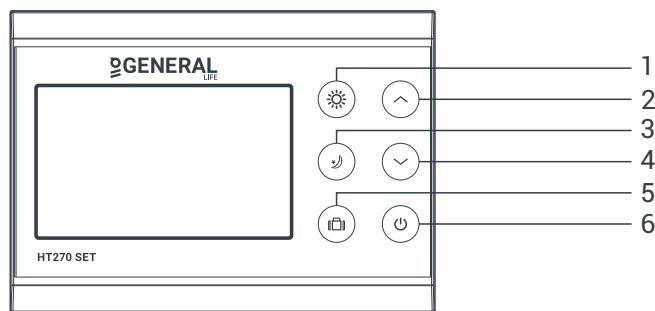
The device can be used on combi boilers and on all on/off heating systems operating at 220V AC 7A current and voltage values.

## MECHANICAL DESIGN

The device consists of 3 part:

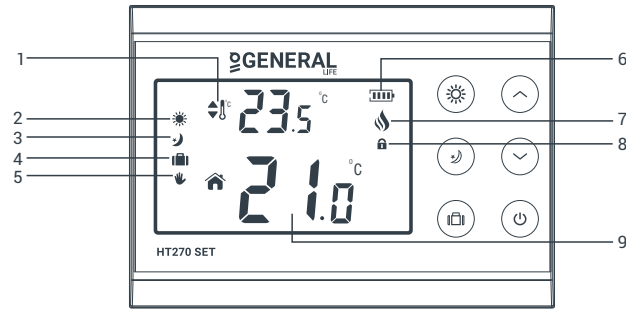
- Plastic body
- Battery cover
- Wall hanger
- Holder

The battery cover is attached to the plastic case. After the wall bracket is mounted in the wanted area, the plastic body is attached to the wall bracket.



1.		Comfort Mode
2.		Temperature Adjustment (To Increase)
3.		Economy Mode
4.		Temperature Adjustment (To Decrease)
5.		Holiday Mode
6.		On/Off Button

## Screen Indicators



1.		Set Temperature	6.		Battery Indicator
2.		Comfort Mode	7.		Boiler Operates
3.		Economy Mode	8.		Screen Lock
4.		Holiday Mode	9.		Room Temperature
5.		Manual Mode			

## OPERATING PRINCIPLES

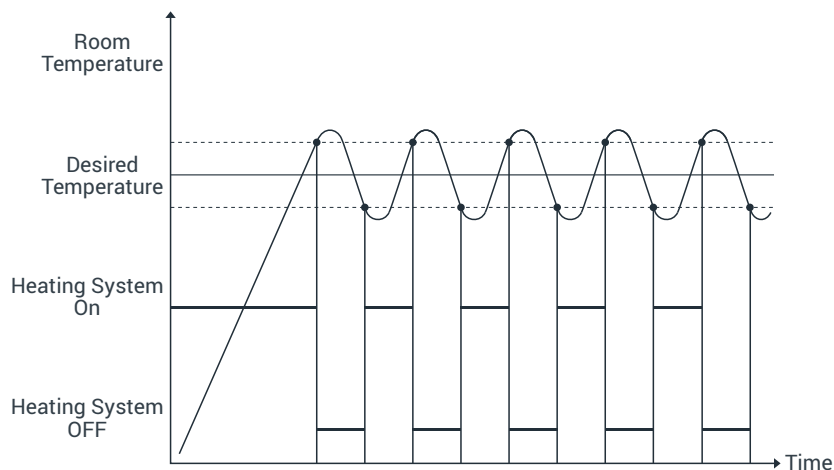
HT270 SET room thermostat specifications:

- LCD with backlight
- Two-position control (ON / OFF)
- Temperature sensor (NTC)

The thermostat measures the room temperature with its temperature sensor. The desired temperature value is set by turning the button to the right or left. When the room temperature rises above the set temperature value, the room thermostat sends a shutdown command to the modem. Modem Turns off the relay by receiving the command.

Digital display; The set temperature, battery life, room temperature and heating symbol are displayed. The heating symbol gives information about the operation status of the boiler. The product measures 0.1°C temperature accuracy. However, there is an operating sensitivity of 0.5°C to prevent the heating unit from starting and stopping too frequently.

The device manages the heating systems by the on-off operation algorithm. This working algorithm is shown in the following graph.



## FUNCTIONS

### Temperature Control

The room thermostat controls the room temperature according to the set value. The on / off temperature difference of the device is 0.5°C.

### Calibration

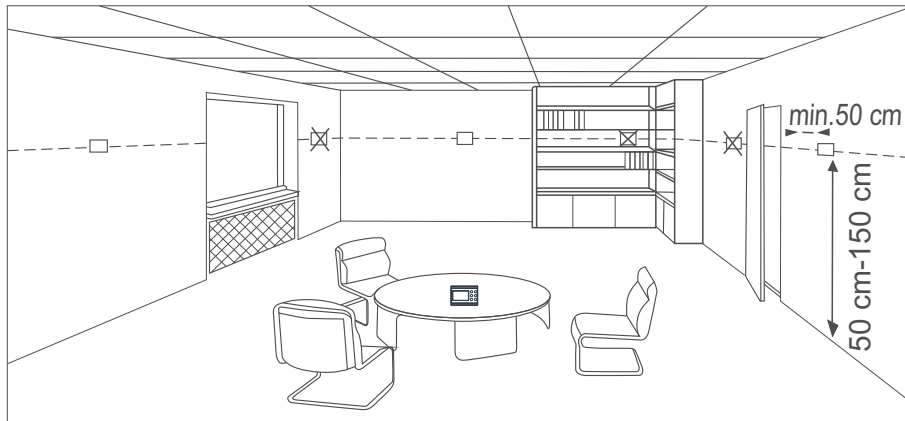
The room thermostat can be calibrated if the measuring temperature wanted to be changed. The calibration range is -8°C to +8°C.

## ORDERING

When ordering, specify both the product type and the product code, for example the HT270 SET wireless room thermostat.

## ROOM THERMOSTAT INSTALLATION

Remove the room thermostat by pulling it out of the wall bracket. If you want to use your room thermostat in a fixed place, mount the dismantled wall apparatus in a room you frequently use in your living space. If you want to use your room thermostat with the table bracket, place the room thermostat on the table bracket by removing the wall bracket. For example; Like your home lounge or living room. Avoid installing the room thermostat where there is a lot of air circulation, such as door entry or window edge. Also, do not place near heating units (heating panels, fireplaces etc.) and direct sunlight areas. We recommend that the room thermostat is placed at a height of 50 cm to 150 cm from the floor. You can try a few places to find where you can place the room thermostat.



If the room thermostat is to be used with the wall bracket, the wall bracket must be mounted on a flat wall.

Local electrical regulations must be observed during installation.

Installation of room thermostat must be done by authorized personnel.

The parts included in the room thermostat are made of ABS, PC materials.

In systems with room thermostats, if there are thermostatic radiator valves, keep them in the open position.

## BATTERY CHANGE

Remove the battery cover located on the back of your room thermostat. Insert a 3V DC (2xAAA) alkaline battery into the battery compartment. When installing batteries, make sure they are in the correct position. Place the room thermostat in the wall bracket or table bracket by closing the battery cover. Replace both batteries at the same time.

### **WARNING!**

Please dispose of your discharged batteries in waste bin which is separated for battery wastes.

## MAINTENANCE

The device is maintenance-free.

## MODEM

### 1-Modem Led Light

### 2-Sync Button:

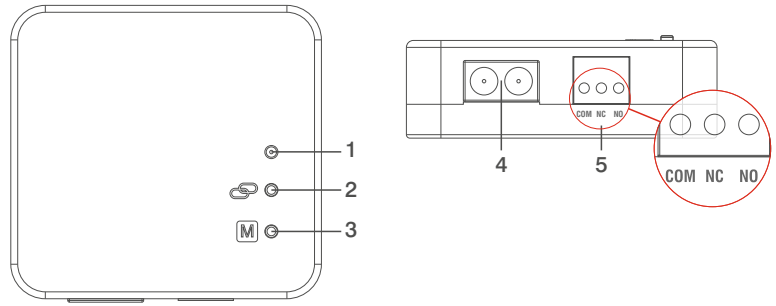
Syncs modem and room thermostat.

### 3-Manual Usage Button:

Deactivates receiver and allows you to use boiler manually.

### 4-Modem Power Cable Input

### 5-Boiler Connection Cable Input



## MODEM LED LIGHT COLOR EXPLANATIONS

Green	Receiver synced with thermostat and Works properly.
Green Flashing	Pressed to receiver sync button and waiting for thermostat sync signal.
Red	Receiver has energy but no thermostat synced.
Red Flashing	Boiler shut down because of, no signal from thermostat more than 22 minutes.
Orange	On Manual Mode.

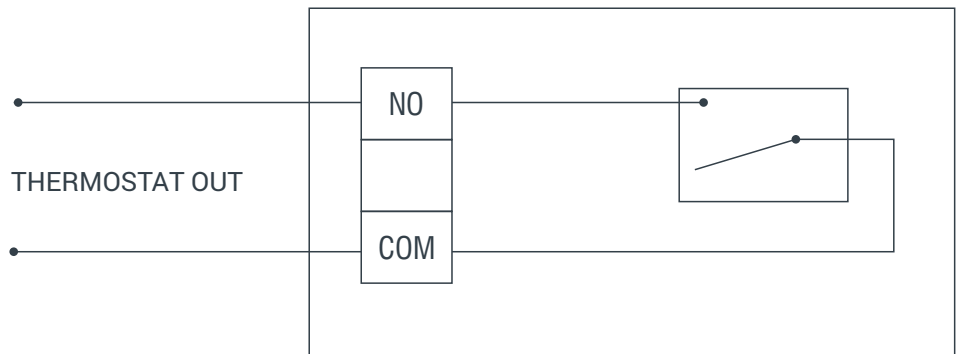
## MODEM PLACEMENT

The important thing to note for receiver placement is that avoiding physical contact with boiler and protecting against materials such as liquid, dust etc. You can place your receiver in boiler's cabinet without physical contact with boiler or mount receiver to Wall.

## MODEM SETUP

- First, shut down electrical current which your boiler is connected (fuse, power outlet etc.)
- Connect one of the boiler connection cable to receiver as shown in the Connection Scheme.
- Connect other boiler connection cable end to boiler's room thermostat input as shown in the boiler's user manual.
- Input receiver power cable first to receiver than to plug. If there is no plug near your boiler, you can connect cable to your boiler's connection fuse.
- After finishing connections, turn on electrical current first, then turn on your boiler.
- If you want to deactivate your receiver, press manual button for 2 seconds then you should see orange light on receiver. After being sure that your boiler is working, press same button and see orange light disappeared.
- Setup Room Thermostat to sync receiver with room thermostat.

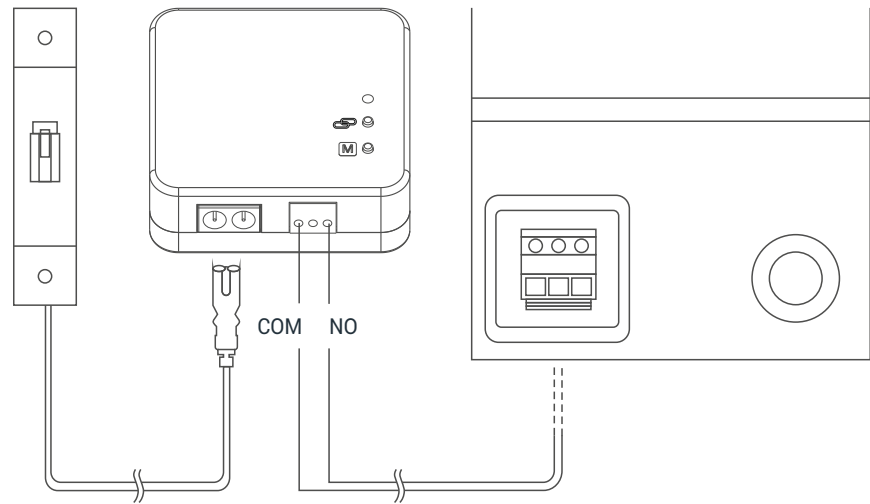
## CONNECTION DIAGRAM



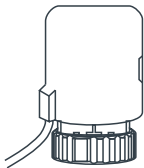
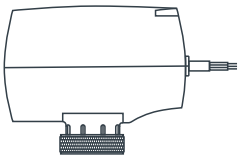
### WARNING!

Only persons who have got Professional Competence should make operations electric wiring or boiler setup.

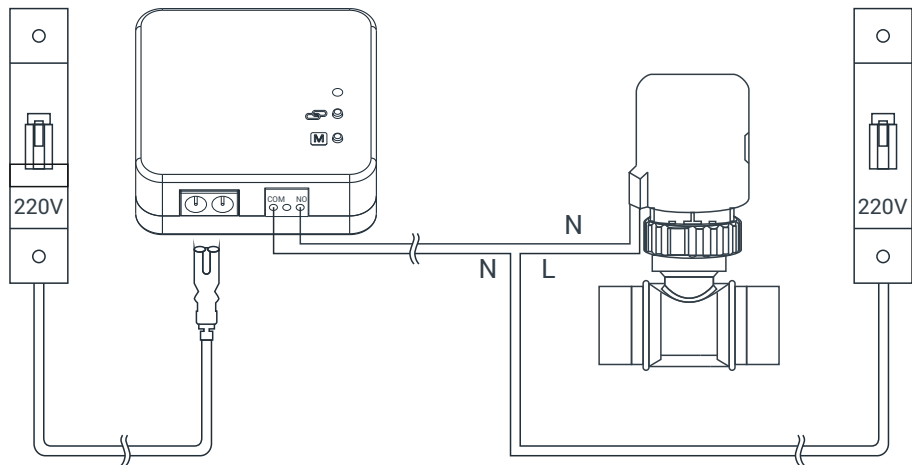
APPLICATION EXAMPLE



SYSTEM COMBINATION

	Actuator	Type of Actuator	Operating Voltage	Positioning Type	Positioning Time
	ST21	Thermal	AC 230 V	2 Position	180 sn.
	SEA21.10	Motor	AC 230 V	2 Position	< 20 sn.

APPLICATION EXAMPLE



**WARNING!**

Please do not connect the modem with another product's supply line.  
Risk of fire and injury due to short circuit!  
Please comply with local regulations when determining power cable diameters.  
Please supply the power line from a fuse.

**WARNING!**

The product is subject to the European Directive 2012/19 / EU as it is included in the electronic product category.  
It cannot be considered as domestic waste.  
You can leave the product in electronic waste collection areas.  
Follow all local and applicable laws and regulations.

**WARNING!**

There is no internal fuse inside the product.  
External fuses must be used on all supply lines.

## SYNC ROOM THERMOSTAT AND RECEIVER

Each room thermostat is matched with a modem inside the factory. In case of any signal loss, you can perform the matching by following the steps below.

- First of all sync button on receiver needs to be pressed down for 2 seconds until green light blinks.
- When your thermostat is in Off status "On/Off" button should be pressed for 3 seconds until heating calibration menu displays, when you see calibration menu press one more time to "On/Off" button and "Adr" menu which is a synchronization menu will show up.
- In "Adr" menu when either one of the temperature adjustment button pressed thermostat will send synchronization signal to receiver.
- Green light on the receiver will be stabilized and receiver would make notification sound.
- Now receiver and wireless room thermostat are matched and synchronized.

## ROOM THERMOSTAT HEATING CALIBRATION

If you want to take the temperature on your thermometers in your living space as reference, you need to calibrate your room thermostat. For this:

- When the device is on "Off" status "On/Off" button needs to be pressed for 3 seconds.
- From the calibration menu which appeared after 3 seconds, you may set to any temperature degree by pressing "Adjustment Buttons". This value can be arranged between "-8°C" and "+8°C".
- To exit calibration menu please press "On/Off" button 2 times.

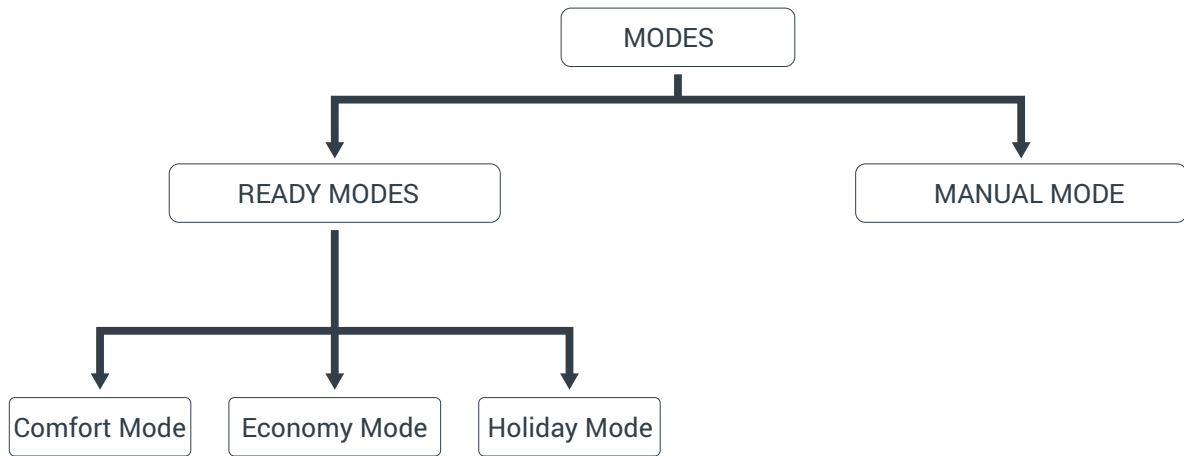
**Note:** Recommended temperature calibration is "0.0°C".

## KEY LOCK

In room thermostat there is a key lock function to avoid any unintended contact.

- In order to unlock the thermostat's key lock "Holiday" button should be pressed for 3 seconds. If buttons on thermostat are not touched for 10 seconds, key lock will be reactivated.

## MODE SETTINGS



Room thermostat have 4 diferent modes 3 of them are prepared for your comfort and ready to use. Other mode is a manual mode.

In prepared modes ,temperature degrees are based on user's preferences which has been set in the beginning

Temperature degrees of prepared modes can be adjusted. In order to set a temperature for any mode, mode button of that function needs to be pressed for 3 seconds. Set degree of that specific mode would appear on the screen and by pressing "Temperature Adjustment Buttons" degree can be reset. After finishing setting the degree same "Mode" button needs to be pressed down for 3 seconds in order to go back to home screen.

In manual mode, temperature degree can be set through pressing "Up" and "Down" buttons. Pressing either "Up" or "Down" button would automatically set the thermostat to manual mode.

In order to switch to any mode that specific mode button needs to be pressed.



## TECHNICAL DATA

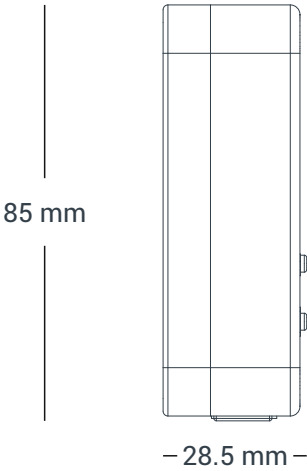
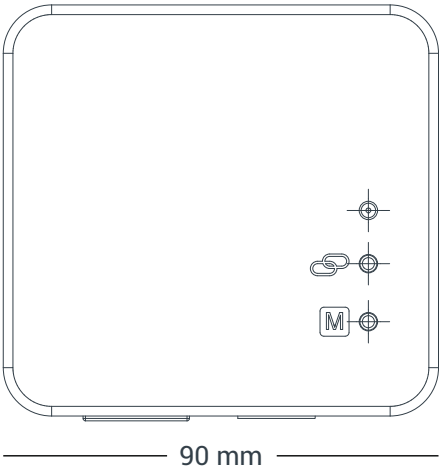
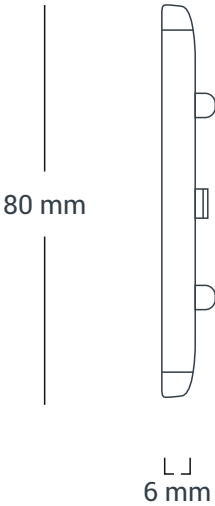
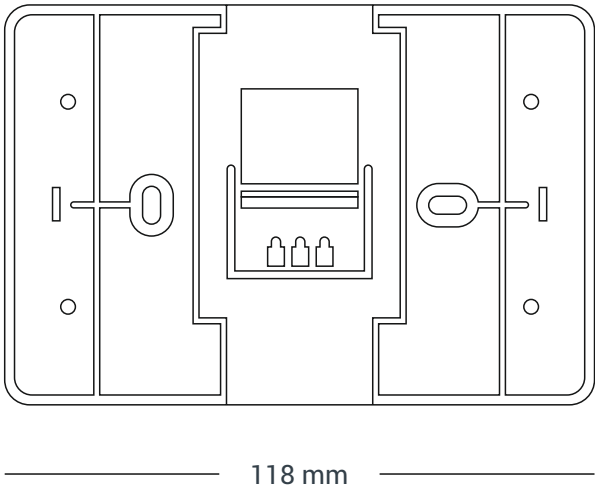
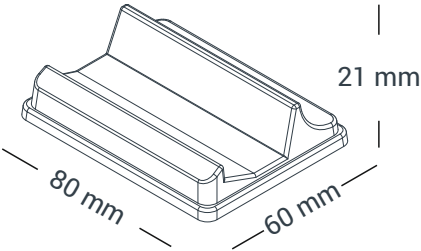
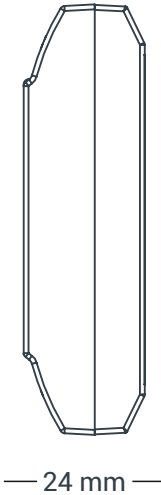
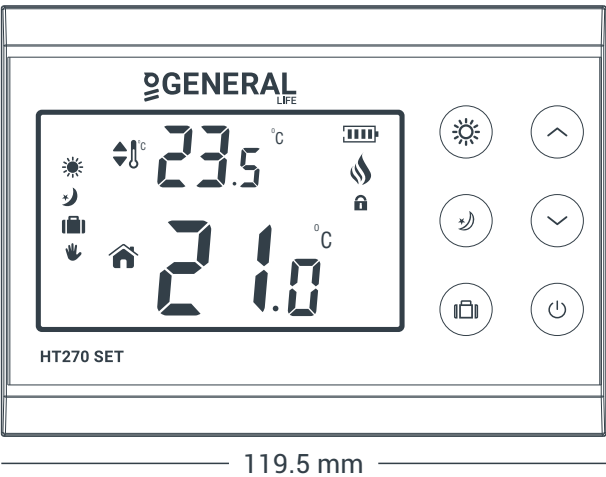
### Room Thermostat

Power Supply	
Operating Current	3V DC (2 x AAA alkaline battery)
Battery Life	1 Years (2 x AAA)
Operational Data	
Temperature Measurement Accuracy	0.1°C
Operating Sensitivity	0.5°C
Operating Temperature Range	(5°C) – (30°C)
Environmental Conditions	
Operating Temperature	(0°C) – (+45°C)
Storage Temperature	(-10°C) – (+50°C)
Transport Temperature	(-10°C) – (+50°C)
Standards	
Radio and Telecommunications Terminal Equipment Regulation	2014/53/EU (R&TTE/RED EN 301 489-1 V2.1.1:2017, EN 300 220-1 V3.1.1:2017, EN 301 489-3 V2.1.1:2017, EN 300 220-2 V3.1.1:2017, EN 62479: 2010, EN 60730-2-9:2010, EN 60730-1:2011)
Electromagnetic Compatibility Regulation	2014/30/EU (EMC EN 61000-6-3: 2007 + A1: 2011, EN 61000-6-1: 2007)
Low Voltage Directive	2014/35/EU (LVD EN 60730-2-9:2010, EN 60730-1:2011)
General Data	
Weight (including package)	435 g
Color	White
Material	ABS, PC

### Modem

Power Supply	
Operation Current	220V AC
Relay NO Switching Current	7A (220V AC)
Environmental Conditions	
Operating Temperature	(0°C) – (+45°C)
Storage Temperature	(-10°C) – (+50°C)
Transport Temperature	(-10°C) – (+50°C)
General Data	
Color	White
Material	ABS

DIMENSIONS



**ISIPARK İÇ VE DIŞ TİCARET A.Ş.**

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