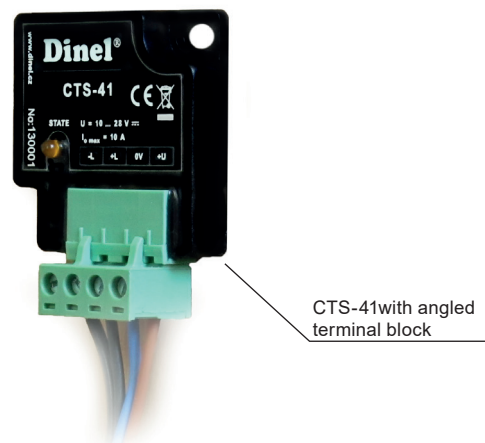


- For modern method of LED lighting switching or for similar power loads
- The touch sensor allows switching through non-conductive materials (such as wood, glass, ceramics, plasterboard, etc.)
- The sensor has no movable parts so that its service life is unlimited
- Multiple methods of installation using self-adhesive tape, glue or screws
- Power supply voltage 10 ... 28 V DC
- Sensitivity automatic control

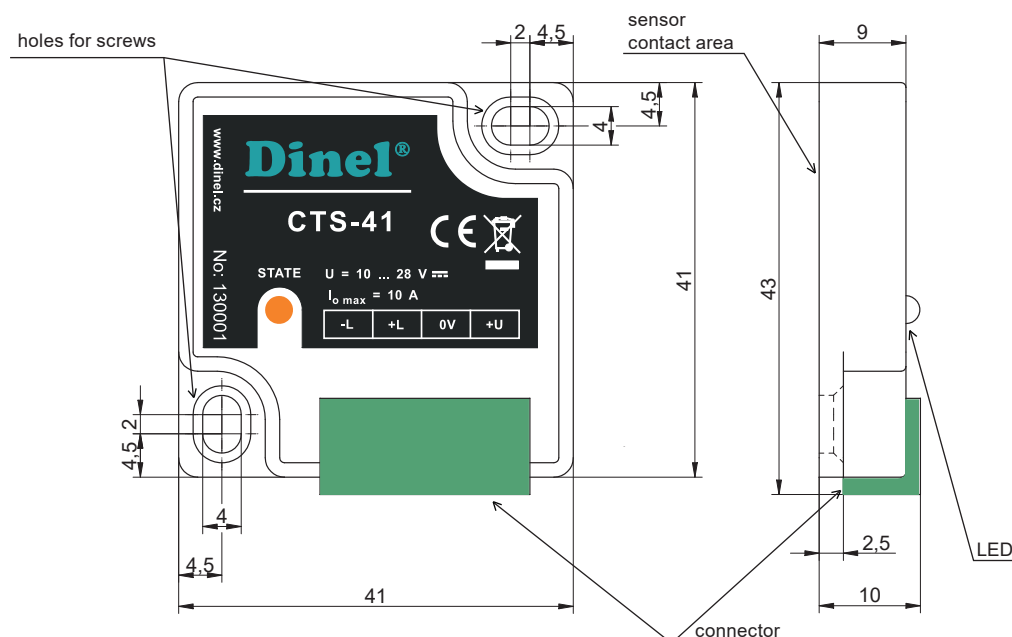


**CTS-41 capacitive touch sensors** are intended for LED lighting switching or for similar power loads. Possibility of perfect hiding of the switching system is a benefit of this unit. The touch sensor operates through non-conductive materials so that it can be installed into furniture, behind plasterboard, tiling or in any other place in the interior. Connector with two inputs is provided for electric connection on the sensor. One input is used for power supply while the other one for connection of electric equipment. The sensor has a function of automatic sensitivity setting after a power supply restoration. The sensor is also able to correct slow changes of dielectric properties of the covering wall (e.g.: in case of wall moistening).

### VARIANTS OF SENSORS

- **CTS-41T-0** Touch sensor **TOGGLE** - push ON / push OFF. With an angled terminal.
- **CTS-41T-1** Touch sensor **TOGGLE** - push ON / push OFF. With a straight terminal.
- **CTS-41S-0** Touch sensor **SINGLE KEY**  
- hand approaches, the sensor turns ON. Hand moves away, the sensor turns OFF. With an angled terminal.
- **CTS-41S-1** Touch sensor **SINGLE KEY**  
- hand approaches, the sensor turns ON. Hand moves away, the sensor turns OFF. With a straight terminal.

### DIMENSIONAL DRAWING



# TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS	
Power supply voltage	10 ... 28 V DC
Supply current (OFF state)	max. 10 mA
Switched current	max. 10 A (continuously)
Dimensions	41 x 43 x 10 mm
Covering wall maximum thickness	30 mm (material: wood)
Sensitivity	to hand contact
Ambient temperature range	-10 ... +50 °C
Weight	approx. 60 g

## PROCEDURE OF PUTTING THE SENSOR INTO OPERATION

### A) INSTALLATION

- Decide which method of mounting on the covering wall is to be used. It is possible to choose a double-sided self-adhesive tape, silicone adhesive or it is possible to fix the sensor to the covering wall using two screws. In case of using the self-adhesive tape or silicone adhesive, it is advisable to decrease the contact areas of the sensor and covering wall before attaching.
- Install the sensor on the back side of the covering wall in a place which is intended for finger contact (see Fig. 1 and 2). The sensor can be installed behind a wall of an object made of non-conductive material (such as wood, chipboard, glass, ceramics, plasterboard, etc.). Maximum thickness of the covering wall is 30 mm.

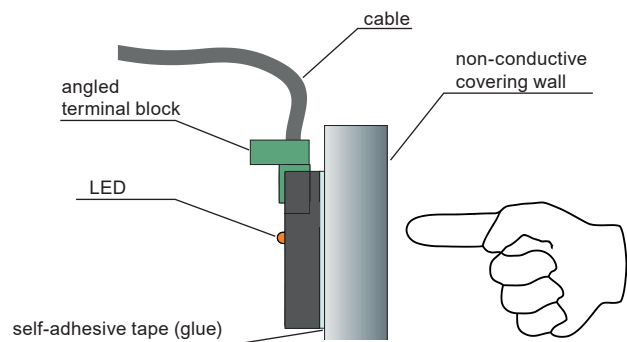


Fig. 1: CTS-41\_-0 sensor installation

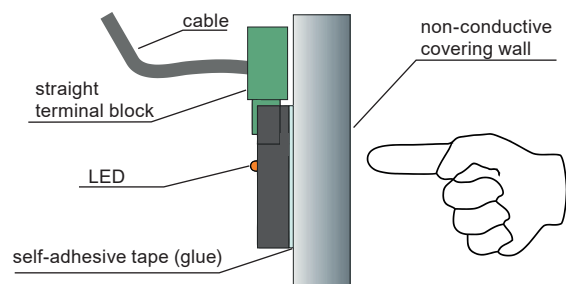


Fig. 2: CTS-41\_-1 sensor installation

### B) ELECTRIC CONNECTION



Electrical connection must be done in de-energized state!

- Connect counterpart with screw terminals to the connector on the sensor (see Fig. 4). (This terminal block is included in standard accessories either as straight or angled variant.)
- Connect power supply to the sensor terminals using the following method: connect the positive pole to the terminal marked +U and the negative pole to the terminal marked 0V.
- Connect LED lighting or similar power load to the terminals marked +L and -L.



CTS-41 sensor is provided with a reverse polarity protection.  
Protection against hazardous hand contact is provided by means of feeding safe voltage supply.  
Minimum allowed distance between 230 V mains power line and sensor is 100 mm.

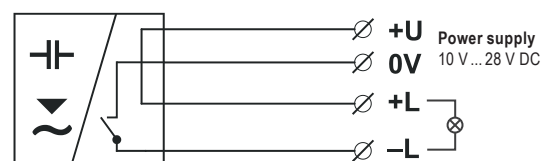


Fig. 3: Sensor wiring diagram

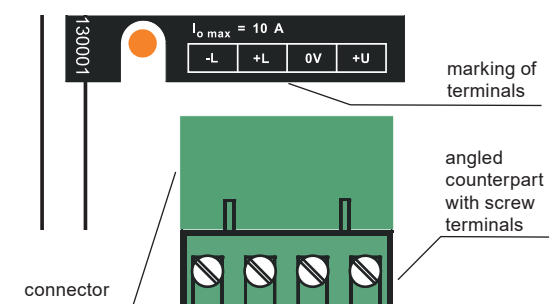


Fig. 4: Detailed view of screw terminals

## SENSOR OPERATION

### TOGGLE CTS-41T (push ON / push OFF)

- The sensor is in the open status after power supply connection (LED is off).
- The first contact will put the sensor in the closed status (LED is on).
- The second contact will put the sensor in the open status again (LED is off).

### SINGLE KEY CTS-41S (hand approaches, the sensor turns ON. Hand moves away, the sensor turns OFF)

- The sensor is in the open status after power supply connection (LED is off).
- When you move the hand closer, sensor switches ON (LED is on).
- When you move the hand away, sensor switches OFF (LED is off).

## STATUS SIGNALLING

indicator	operation
orange LED	<b>continuous light</b> – sensor is closed <b>no light</b> – sensor is open

## ORDER CODE

PRODUCT	
CTS-41	
PERFORMANCE	
T	TOGGLE (push ON / push OFF)
S	SINGLE KEY (Hand approaches, the sensor turns ON. Hand moves away, the sensor turns OFF.)
TERMINAL BLOCK TYPE	
0	angled
1	straight
CTS-41 T - 0	AVAILABLE PRODUCT ALTERNATIVES

## ACCESSORIES

### Standard – included in price of the sensor

- 1x both-sided adhesive layer

### Optional – at extra charge (see catalogue sheet)

- 2x screws with countersunk head 3.5x16 mm