Cepek[®]

Regulators from 0 up to 100% for loads supplied at 230V AC and 2500 W or 5000 W, according to the model. Regulation control by external signal from 0 up to 10 V DC or through 10K Ohms standard potentiometer (not included). They allow to change the rotary control way and they include an indicator Led. They don't accepts inductive loads such as PL Lamps, neon, etc..

TECHNICAL CHARACTERISTICS

Input voltage: 230 V AC. 10%. (50-60 Hz). Load adjustment: From 0 up to 100%. 230 V.AC.

Minimum Load: 50 W. Maximum Load: (R-25 = 2500 W.), (R-27 = 5000 W.). Adjustment Control: Input signal 0-10 V.D.C. or 10K ohms Potentiometer. Minimum Adjustment: Variable resistor inserted on the circuit.

Operating indication: Led 5 mm.

Operating Temperature: -25 °C up to +55 °C Input/Output 230 V. Minimum wires Section: (R-26 = 4 mm). (R-27 = 6 mm).

Net Weight: (R-26 = 301 gr.), (R-27 = 319 gr.). Length x width = $121,55 \times 107 \text{ mm}$. Height: (R-26 = 40 mm.), (R-27 = 60 mm.).

Length x width = 121,55 x 107 mm. Height: (R-26 = 40 mm.), (R-27 = 60 mm.), Rules: 89/336/CEE Electromagnetic Compatibility and their modifications 32/31/CEE and 93/68/CEE. RoHS free.

INSTALLATION

Input and Output.

In order to be in accordance with CE rule, you have to install a fuse and a switch before the entrance of the module's power supply, as it is indicated on the wiring map. Both are necessary for the module's protection as well as for your own safety.

The input wire's section, the fuse and the switch have to be correctly dimensioned according to the consumption/power that the device has to control.

Before to connect the module to the mains inserting voltage, please do the rest of connections specified hereafter. Do not forget that in several part of the module there is voltage (230 VAC), for this reason we suggest you to be careful during the installation and the handling.

On the output, the device or load to control has to consume as minimum 50W and a maximum inferior to the specified one on the technical characteristics of each model. You can't connect an inductive load such as PL Lamps or neon, etc...You have to connect it according to "L" line and "N" Neutral indications.

Control, (Input).

The control or regulation adjustment can be done through a 10K lineal potentiometer or by voltage level,

through an external signal from 0 to 10 V. Do never use both systems at the same time. The cable length, for both systems, as to be as short as possible. If the distance is superior to 50 cm, it will be necessary to use shielded cable, connecting the braid to the corresponding terminal indicated by the negative symbol, or to the terminal with the "A" character (for the potentiometer). Do never use a total length superior to 2m.

0-10 V DC external signal. The connection has to be done on the "DC Control" input, respecting the indicated polarity.

External potentiometer. Indicated as "Ext. Pote.", this input only accepts 10K Ohms linear potentiometers. The "A" Terminal corresponds to the minimum value of the potentiometer, the "B" terminal to the axis input and the "C" terminal to the maximum value.

Do not forget.

Do not install the module on place with high humidity, high temperatures or with possibility to be in contact with liquids.

The power supply's installation has to be preferably done in a box, enclosure or rack, correctly ventilated. You have to avoid the contact between the circuit and metallic objects like bracelets, chains, etc...

PCB Fuse Change

The module includes an additional fuse, different and independent, that the fuse that you have to install together with the supply switch. The change can only be done if you have previously disconnected the 230V input. Then, removing the protector you could substitute the fuse by a new one with the same indicated value. Do not use fuses with a value different form the specified one.

OPERATING MODE and ADJUSTMENT

Input and Output.

You can supply the module, activating the switch, once the installation is finished. The Led will light on to indicate that the circuit is operating. If the module is disconnected or any problem appears, then Led will light off.

Adjustment control, (Selection).

Once the installation is done on the suitable input, the module has to be configured to identify the control method (potentiometer or external signal). The configuration is done placing the Dip1 or Dip2 in ON position according to your needs. Do never place both dip on the same position, or neiher in ON position; otherwise the devise doesn't operate correctly. See the Fig.1.

Fig.1. Dip's functions

• (Control by 0-10 V DC signal)



(Control by potentiometer)

Fig.1. Dip's functions



Note: Each time you change the position of a Dip, you have to reset the circuit's power supply to allow the device to correctly recognize the new operating configuration.

Adjustment by 0-10 V DC Signal.

With the Dip1 in ON position and the Dip2 in OFF position, the module will be configured to adjust the output according to an external input signal from 0 up to 10 V DC. This DC voltage has to be preferably stabilised and it never exceed 10V, otherwise you can damage the circuit.

Adjustment by potentiometer.

With the Dip2 in ON position and the Dip1 in OFF position, the module will adjust the output according to the external potentiometer turn connected to the circuit. This one is not supplied with the module, you have to purchase it by separate. Its value has to be 10 K Ohms.

Minimum adjustment

With the Dip2 in ON position and the Dip1 in OFF position, the module will adjust the output according to the external potentiometer turn connected to the circuit. This one is not supplied with the module, you have to purchase it by separate. Its value has to be 10 K Ohms.

OPERATING and ADJUSTMENT, (part II)

Ascending/Descending Adjustment. For the adjustment by 0-10V Signal, if you place the dip4 in OFF Position, the output will supply a voltage between 0 and 230V, in direct proportion with the control signal value. At the opposite, if the dip4 is placed in ON position, the output will operate in inverse proportion regarding the control input. See Fig.2. For an adjustment through an external potentiometer, the change of the Dip4 position will only affect the turn way of this component.

Fig. 2. Dip Functions

Fig. 2. Dip Functions







• (Output behaviour with the Dip4 in ON position)





WIRING MAP R-26 / R-27.



WARRANTY and TECHNICAL INCIDENCES Warranty.

All cebek modules have a total warranty of 3 years as concern components and labour man. All damage, error or mistake due to problems independent from the circuit, connection, installation or operating mode, as well as wrong handling are not included in this warranty. More over it will be necessary the purchase invoice of this module for any claim.

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CEBEK offers a Wide and complete modules range which can be of your interest. Visit our web site: www.cebek.com