

**VOLTAGE RELAYS**  
 one-phase type

**CP-709**

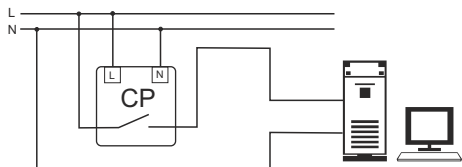
**WARRANTY.** The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us. More information how to make a complaint can be found on the website: [www.fif.com.pl/reklamacje](http://www.fif.com.pl/reklamacje)



**CE** Do not dispose of this device in the trash along with other waste! According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.

**PURPOSE**

Voltage relays CP-709 serves to voltage control in single phase mains and to protect receiver against the effects of voltage collapse or increase beyond set values.



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**TECHNICAL DATA**

|                              |                                    |
|------------------------------|------------------------------------|
| supply                       | 50÷450V AC                         |
| current load                 | <16A                               |
| contact                      | separated 1× NO/NC                 |
| signalling of supply         | 4× LED                             |
| voltage activation threshold |                                    |
| lower U1                     | 150÷210V                           |
| upper U2                     | 230÷260V                           |
| hysteresis                   |                                    |
| for U1                       | 5V                                 |
| for U2                       | 5V                                 |
| activation time              |                                    |
| for U1                       | 0.5sec                             |
| for U2                       | 0.1sec                             |
| recovery time                |                                    |
| for U1                       | 1.5sec                             |
| for U2                       | 1.5sec                             |
| power consumption            | 0.8W                               |
| working temperature          | -25÷50°C                           |
| connection                   | 2.5mm <sup>2</sup> screw terminals |
| dimensions                   | 1 module (18mm)                    |
| mounting                     | on rail TH-35                      |
| ingress protection           | IP-20                              |

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**FUNCTIONING**

Lower voltage value (U1) and upper voltage value (U2) are set by means of potentiometers. It is so-called eye of voltage, in limits of which can occur changes of phases voltages that do not cause activation of relay. Supplied a relay is signalized by shine of LED green U. Correct value of voltage is signalized by shine of yellow LED. (position of joint 5-7). Change of phase voltage on one of phases above or below set voltage thresholds will cause activation of relay (switch joints to position 5-8). Decrease of voltage below establish value U1 is signalized by shine of LED red (U1). Increase of voltage below establish value U2 is signalized by shine of LED red (U2). Reactivation follows automatically return of correct voltage value.

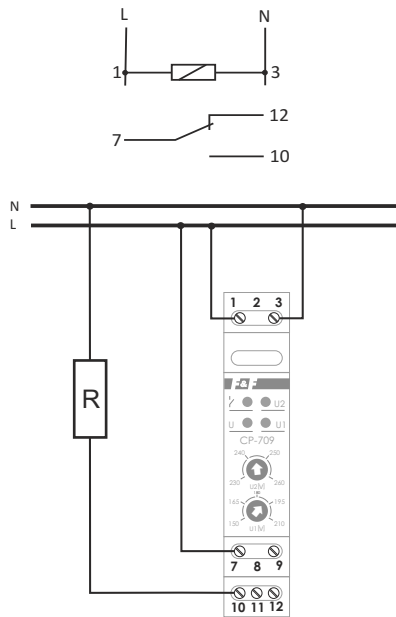
All types of CP can be supplied with a voltage up to 450V~. This ensures the effective protection of the receiver even in case of a voltage increase beyond allowable standards. Also, in case of supply polarity exchange or when "zero" is switched off (for three-phase types) the relay will not be destroyed ("burned").

**ASSEMBLY**

1. Take OFF the power.
2. Put on the relay on the rail in the switchgear box .
3. Connected to installation with wiring diagram.
4. Set to voltage thresholds U1 and U2.

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**WIRING DIAGRAM**



D151124

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