

**PHASE CONTROL RELAY**  
**three-phase monitor**

**CZF-BT**

**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/reklamacja](http://www.fif.com.pl/reklamacja)



Do not dispose of this device to a garbage bin with other unsorted waste! In accordance with the Waste Electrical and Electronic Equipment Act any household electro-waste can be turned in free of charge and in any quantity to a collection point established for this purpose, as well as to the store in the event of purchasing new equipment (as per the old for new rule, regardless of brand). Electro-waste thrown in the garbage bin or abandoned in the bosom of nature pose a threat to the environment and human health.

**PURPOSE**

Three phase monitors serve to protect the three-phase electric motors supplied from three-phase mains, against phase collapse in at least one phase or against phase-to-phase voltage asymmetry, threatening to damage the motor.

**FUNCTIONING**

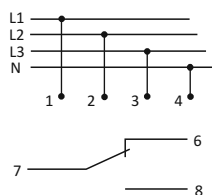
Supplied a receiver is signaled by shine of diode LED in at everyone phase. Phase collapse in at least one phase or voltage unbalance between phases above fixed actuation threshold causes switching-OFF the motor. The motor switching-OFF occurs with preset delay, which prevents any accidental motor disconnecting at temporary voltage drop. The re-connection will occur automatically at voltage increase of 5V above activation voltage (i.e. of value of voltage hysteresis). At occurrence of these disturbances, it is not possible to set a motor in motion.

- 1 -

**ATTENTION!**

Switching contact could to connect LED or bell which will be to brief about of action of relay i.g. switch OFF the motor.

**DESCRIPTION INPUT/OUTPUT**



- 3 -

**ASSEMBLY**

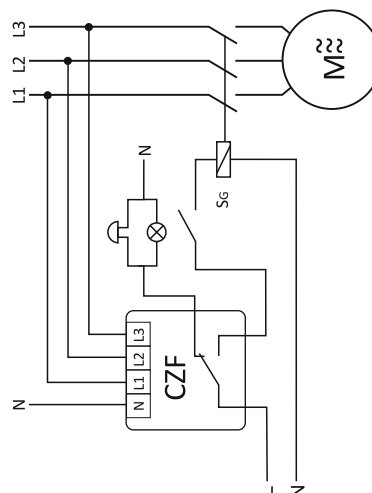
1. Check work of motor.
2. Take OFF the power.
3. Put on the relay on the rail in switchgear box.
4. Connect power with marks.
5. To contacts 7-8 connect in line system of supply coil of switch ON contractor.
6. By potentiometer set value of threshold activation and delay time of switch OFF.

**TECHNICAL DATA**

supply	3×400/230V+N
current load	<10 A
contact	separated 1 NO/NC
signalling of supply	3× LED
activation voltage asymmetry	40÷80V~
hysteresis	5V~
switching OFF delay	0.5÷5 s
power consumption	0.8W/8VA
working temperature	-25÷40°C
connection	screw terminals 2.5mm <sup>2</sup>
dimensions	2 modules (35mm)
fixing	on TH-35 rail
ingress protection	IP20

- 2 -

**WIRING DIAGRAM**



D141010

- 4 -