

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



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 and sequence monitor is designed to protect three phase electric motors against voltage drop in at least one phase or voltage asymmetry between phases, which could damage the motor, with additional protection of motor rotation direction in case of phase change before the monitor.

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STARTING

1. Take on the power.
2. Green LED is shining - correct phase sequence of connection phases joint - can switch ON motor.
3. Red LED is shining - incorrect phase sequence of connection phases contact.
 - a. Take OFF the power.
 - b. change sequence of connection of phases contact e.g. from L2 to L3.
 - c. Make action with points 1 and 2.
4. Any LED isn't shining:
 - Lack of phase
 - Voltage asymmetry is greater than value set by user

TECHNICAL DATA

supply	3×400/230V+N
current load	<10A
contact	1NO/NC
signalling of supply	3×LED
activation voltage asymmetry	40÷80V~
hysteresis	5V~
switching OFF delay	0.5÷5sec
power consumption	1.6W
working temperature	-25÷50°C
connection	screw terminals 2.5mm ²
dimensions	2 modules (35mm)
fixing	on rail TH-35
protection level	IP20

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FUNCTIONING

Supplied a receiver is signaled by shine of green LED. Voltage collapse in any phase or voltage asymmetry between phases above fixed actuation threshold causes switching-OFF the motor. The motor switching-OFF occurs after delay of 4 sec, which prevents accidental motor switching-OFF caused by instantaneous voltage drop. Switching the motor ON anew occurs automatically when the voltage increases of 5V~ above activation voltage (i.e. about value of voltage hysteresis). At occurrence of these disturbances, it is not possible to set motor in motion. In case of change of phase sequence, before the monitor, which causes change of motor rotation direction (in relation to that primarily set) is signaled by shining red diode LED along with impossibility of switching-on the motor. The re-connection is possible after the return to correct phase sequence.

ATTENTION!

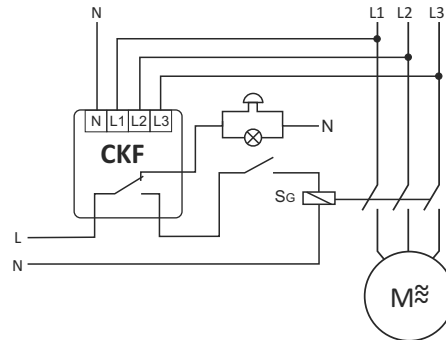
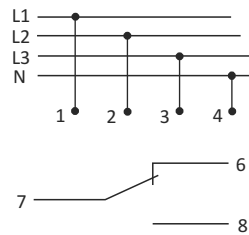
Switching contact of relay could to connect system of LED or bell which will be inform about activation of relay i.e. switch OFF the motor .

ASSEMBLY

1. Check work of motor (direction of sales).
2. Take OFF the power.
3. Put on the relay on the rail in the switchgear box.
4. To contacts L1, L2, L3 connect to inputs contacts of three phase line of contractor. **Connect contact 4 to N.**
5. Contractor relay (contacts 7-8) connect in line to system of coil of switch ON motor.
6. By potentiometer set value of activation threshold and time of delay of switching OFF.

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WIRING DIAGRAM



D151023

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