

ul. Konstantynowska 79/81 95-200 Pabianice tel/fax 48 42 2270971 POLAND e-mail: fif@fif.com.pl

## CKF-B PHASE CONTROL RELAYS

three-phase asymmetry and sequence monitors







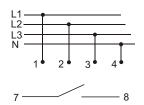
F&F products are covered by an 24 months warranty from date of purchase

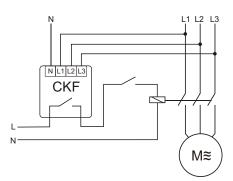
#### **PURPOSE**

Three phase and sequence monitor is designed to protect tree 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.



# WIRING DIAGRAM





A090625

STARTING

- Take on the power.
   Green LED is shining correct phase sequence of connection phases joint can switch ON motor.
- Red LED is shining incorrect phase sequence of connection pheses joint.
   Take OFF the power.
- b. change sequence of connection of phases joint e.g. from L2
- c. Make action with points 1 and 2. 4. Any LED isn't shining:

- Lack of phase
  Voltage asymmetry is greater than 45V~

### TECHNICAL DATA

supply	3×400/230V+N
current load	<10A
joint	1Z
sygnalling of supply	2×LED
activation voltage asymmetry	45V~
hystereisis	5V~
switching OFF delay	4sec
power consumption	1,6W
working temperature	-25÷50°C
connection	screw terminals 2,5mm <sup>2</sup>
dimensions	2 modules (35mm)
fixing	on rail TH-35
-	

# **FUNCTIONING**

Supplied a receiver is signalized by shine of green LED. Voltage collapse in any phase or voltage asymmetry between phases -more than 45V - 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 reconnection is possible after the return to correct phase sequence.

#### **ASSEMBLY**

- Check work of motor (direction of sales).
   Take OFF the power.
   Put on the relay on the rail in the switchgear box...
- 4. To joints 1, 2, 3 connect phases L1, L2, L3 with marks. To joint 4 connect N.
- 5. Contractor of relay (joints 7-8) connect in line to system of coil of switch ON motor.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for General Purpose Relays category:

Click to view products by F&F manufacturer:

Other Similar products are found below:

APF30318 JVN1AF-4.5V-F PCN-105D3MHZ 5JO-10000S-SIL 5JO-1000CD-SIL 5JO-400CD-SIL LY2S-AC220/240 LYQ20DC12
6031007G 6131406HQ 6-1393099-3 6-1393099-8 6-1393122-4 6-1393123-2 6-1393767-1 6-1393843-7 6-1415012-1 6-1419102-2 61423698-4 6-1608051-6 6-1608067-0 6-1616170-6 6-1616248-2 6-1616282-3 6-1616348-2 6-1616350-1 6-1616350-8 6-1616358-7 61616359-9 6-1616360-9 6-1616931-6 6-1617039-1 6-1617052-1 6-1617090-2 6-1617090-5 6-1617347-5 6-1617353-3 6-1617801-8 61617802-2 6-1618107-9 6-1618248-4 M83536/1-027M CX-4014 MAHC-5494 MAVCD-5419-6 703XCX-120A 7-1393100-5 7-1393111-7
7-1393144-5 7-1393767-8