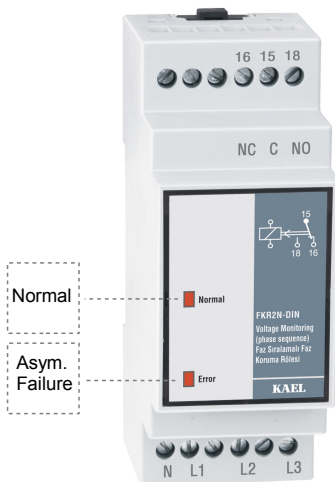


# FKR2N-DIN



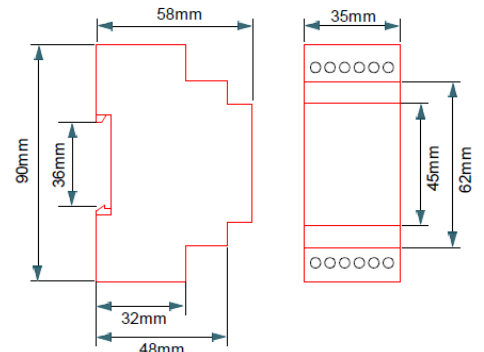
## PHASE FAILURE and PHASE SEQUENCE DEVICE

► Constant Voltage Asymmetry (Phase – Neutral 40%)



### TECHNICAL DATA:

Rated Voltage	: 3 Phase and 1 Neutral (VL-N; 230 Vac and VL-L; 400Vac)
Operating Range	: (0,8 – 1,2) x Un (Un nominal voltage)
Frequency	: 50/60 Hz.
Contact current	: Max.5 A / 240 Vac
Power Consumption	: < 8 VA
Device Protection Class	: IP20
Connector Protection Class	: IP00
Ambient Temperature	: - 5 °C...+ 50 °C
Connection Type	: To connection rail in electrical panel
Dimensions	: 35x90x58 mm

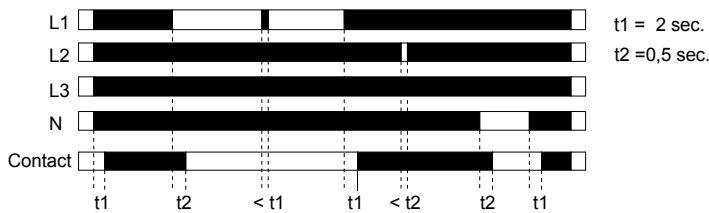


### General:

In three phase systems, when phase sequence is correct and there is no asymmetry between phases, **normal** LED is turned on and relay contact is energised. Protection functions of FKR2N-DIN are given below.

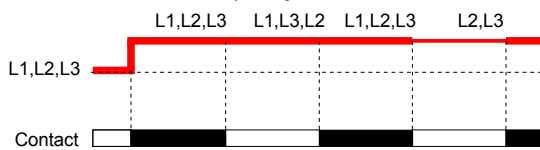
### Phase Failure:

In case of absence of at least one phase, relay immediately de-energises its contact and **E2** LED is turned on.



### Phase Sequence:

In case of wrong phase order, both of **E1** and **E2** LEDs are turned on at the same time and relay does not energise its contact. If phase order is corrected, both of **E1** and **E2** LEDs are turned off and relay energises its contact.

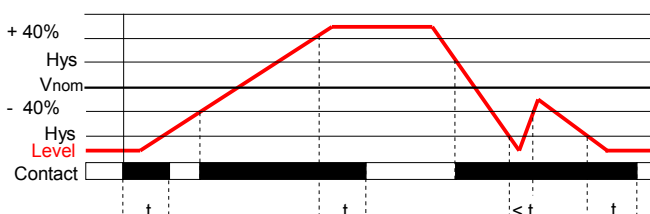


### Voltage Asymmetry: (asym.%) ( fixed 40% for phase-neutral )

Phase to neutral asymmetry is fixed 40%. If asymmetry exceeds this value, **Error** LED is turned on and relay contact is de-energized. To return normal state, voltage asymmetry value must be under 15% (hysteresis).

$$\% \text{ Asm} = \frac{(V_{\max} - V_{\min})}{230} \times 100$$

$$\text{Hys} = (15\%)$$



### Connection Scheme

