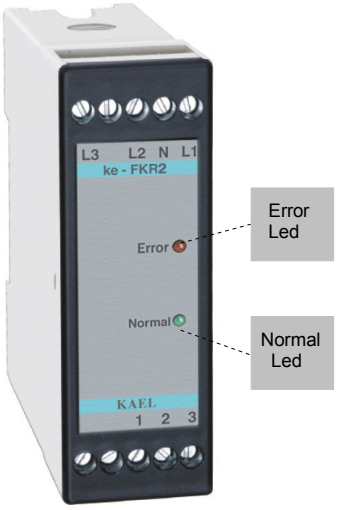
ke – FKR2

PHASE FAILURE and PHASE SEQUENCE DEVICE

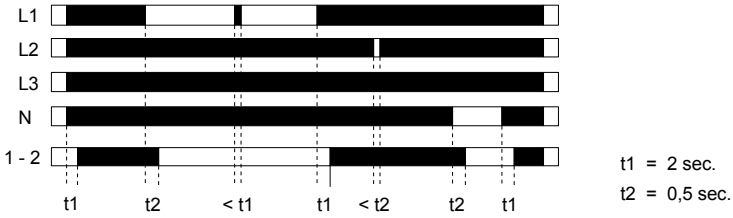
- ► Constant Voltage Asymmetry (Phase – Neutral 40%)
- ► Phase Sequence
- ► Phase Failure



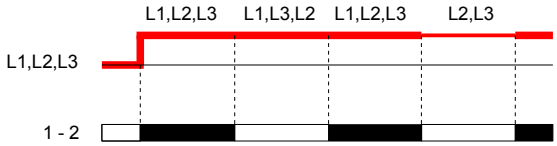
General:

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 ke-FKR2 are given below.

► **Phase Failure:**
In case of absence of at least one phase, relay immediately de-energizes its contact and ***Error*** LED is turned on.



► **Phase Sequence:**
In case of wrong phase order, ***Error*** LED is turned on and relay does not energize its contact. If phase order is corrected, ***Error*** LED is turned off and relay energizes its contact.



► **Voltage Asymmetry :**
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).

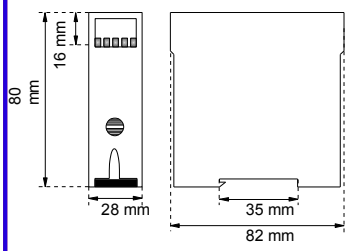
$$\text{Asym } \% = \frac{(V_{max} - V_{min})}{230} \times 100$$

Hys = 15 %

Application Areas:
- ■ Protection of electrical motors
- ■ Protection of 3 phase systems

TECHNICAL DATA:

Rated Voltage	: 3 Phase and 1 Neutral 230 VAC
Operating Range	: (0.8 – 1.2)xUn (Un nominal voltage)
Frequency	: 50/60 Hz
Asymmetry Adj.	: Phase to Neutral 40% constant
Output Contacts (1-2)	: Normally Open Contact
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	: 28x82x80 mm



Simple Connection :