

#### **Data sheet**

# Mains failure monitor KNAE 3xx protective function according to DIN VDE-AR-N 4105:2011-08



#### **Technical Data**

### **Auxiliary Voltage**

24V DC

(18 - 36 V DC)

Other auxiliary voltages on request.

## Power Consumption

ca. 4 W at 24 V DC,

## **Digital Inputs**

LowActive (contact voltage 12 V DC, 5 mA, opto de-coupled), cables not longer than 3 m.

#### **Relay Outputs**

230 V / 50 cy / 2 A (potential free)

#### **Measurement Ranges:**

#### Voltages:

approx. 20 up to 280 / 400 V AC, tolerance < 0,1 % of end value (270 / 480 V AC)

#### Frequency:

15.0 cy up to 100.0 cy starts at approx. 10 V L-N adjustable in 0.01 cy steps repeat accuracy < 0.01 cy

#### **Climatic Conditions**

acc. to DIN EN 60255-1 (09-2010) ambient temperature:

operation: -20 ... 55 °C transport / storage: -25 ... 55 °C

#### **Housing Dimensions**

B / H / T 100 x 75 x 110 mm for mounting on 35 mm top-hat rail according to DIN EN 60715

#### Description Order number The KNAE 3xx is a device for the monitoring of a 1- or 3-phase mains system on frequency, KNAE 340 2W340UV000 voltage, phase sequence, angular shift, rate of change of frequency (ROCOF) and vector 100 / 400 V / 24 V DC jump. Measurement can be done either with or without neutral connector. The detection of measured values occurs on all measuring paths synchronously by a 12-bit simultaneous Other voltages On request ADC. A separate frequency measuring is available for each of the 3 phases. The detection of vector jump can be assigned to a single phase or all phases. Due to a special internal wiring of the terminals, the loss of the neutral conductor can be detected in a 3-wire + N -Accessories: system. USB A: USB Mini By setting of the corresponding parameters, the KNAE 3xx provides the option for monitoring on nominal voltage and frequency in accordance to DIN VDE-AR-N-4105:2011-08 or On request parameter. cable: the dynamic grid support according to the Medium Voltage Guideline of BDEW (Bundesverband der Energie- und Wasserwirtschaft e.V.). The comfortable configuration of all settings of the KNAE 3xx is done by means of the parameterisation software KuPa010 ( - Version V2.36 or later required). Alternatively values can be entered directly at the device. The input to the device can be protected by use of a PIN. The output of display-texts at the device standardly takes place in German and English (switching between languages is possible at any time during operation). Alternative languages, suitable to the customer's requirements, can be configured and conveniently made available, by means of our parameterisation software KuPa010.