

**General description:**

Compact device in 96x96 mm switch panel format for operating and malfunction indication in control and monitoring equipment.

Red LED's are used to indicate malfunctions, yellow for pre-alarms and green for operating indications on the front plate (other colours are possible as options).

Operating indications are controlled by contact inputs, and have a pure display function;

In addition, pre-alarms are switched to a collective relay.

Malfunction indications also initiate an internal, self-latching alarm circuit, switched to a collective relay. Furthermore an additional relay exists for new value messages.

All operating functions are routed on terminals. The functions "Reset" and "LEDTest" are available by connecting external keys. This allows for each operating function also to be executed on multiple devices by a common key.

The labeling is done by the manufacturer with adhesive labels, according to customised specifications using a template file.

**Type summary:**

Type	Malfunction indications	Pre-alarms	Operating indications	Collective relay	Collective relay pre-alarms	New value relay	Keys
822 004.na	0	0	4x4	0	0	0	1
822 040.na	0	4x4	0	0	1	0	2
822 103.na	1x4	0	3x4	1	0	1	2
822 202.na	2x4	0	2x4	1	0	1	2
822 211.na	2x4	1x4	1x4	1	1	1	2
822 301.na	3x4	0	1x4	1	0	1	2
822 400.na	4x4	0	0	1	0	1	2
822 000_.....na	*	*	*	1	0	1	2

\* = Freely selectable segmentation by two up to maximum 16 operating and malfunction indications (e.g. 822 000\_0214.na = 2 malfunction indications, 14 operating indications)

**model designation voltage (seventh position, e.g. 822 2028na)**

0 230V AC supply voltage, operating / malfunction and external key inputs

8 24V DC supply voltage, operating / malfunction and external key inputs

type addition ".z" all malfunction indication inputs with 5 sec time delay

type addition ".i" all malfunction indication inputs with inverted logic (failsafe)

**Supplementary equipment:**

**829s** Serial interface according to the KFM protocol 2.0 (service interface, e.g. permits connection of PROFIBUS-DP adapter 99spde.. for transmission of single indications)

**Functions:**

Depending on type there are operating, pre-alarm and malfunction-displays and -functions existing.

*Operating displays* have a mere display function. Their display is by green LEDs (optional colours can be supplied).

When a pre-alarm is registered at one of the *pre-alarm* inputs, the pre-alarm collective relay K3 (depending on type) operates and the associated yellow LED flashes.

After the external *reset* key is pressed, the pre-alarm LED now has steady light.

After the pre-alarm has been corrected the pre-alarm collective relay is reset, i.e. it drops out again and the pre-alarm LED goes out.

When a malfunction is registered at one of the *malfunction* inputs, the malfunction collective relay K1 operates and the associated red LED flashes. Additionally the new value relay operates for 3 sec.

After the external *reset* key is pressed, the malfunction LED now has steady light.

After the fault has been corrected the malfunction collective relay is reset, i.e. it drops out again and the malfunction LED goes out.

If another malfunction, in addition to the existing malfunction, occurs, the LED for the malfunction input that has now become active flashes and the new value relay operates for 3 sec.

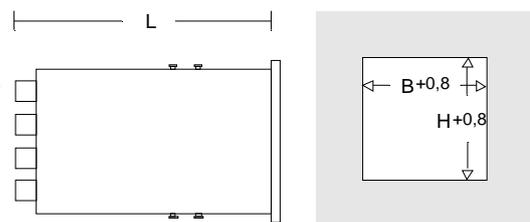
Option "Time delay" (type add-on z): The malfunction signal is only evaluated if it continues for a minimum of 5 seconds. This allows short and intermittent disturbances to be suppressed.

The function "LED-Test" serves to test the function of the light diodes.

**Technical data:**

- Signal inputs: 230 VAC / 24VDC, approx. 2 mA
- ext. key inputs: 230 VAC / 24VDC, approx. 2 mA
- Supply voltage: 230 VAC / 24VDC, approx. 3,5 VA
- Relay outputs: 230 V / max. 2 A
- Protective system EN 60529:IP54 (terminals IP20)
- Permissible ambient temp.: 0...60°C, rated temp. 20°C
- Service position : optional
- Relative humidity: <= 75 % yearly average, no condensation
- Climatic category: KWF to EN 60529
- EMC: referring to EN 61326

**Installation dimensions:**



Form 96x96: L=150mm, B=92mm, H=92mm

**Connection diagram: (example)**

