



For medium- and high voltage switchgear

compact fault annunciator

www.ees-online.de

info



SRM 8 Panel-mounted standard fault annunciator
8 alarms and relay output for each alarm

Performance data:

- compact module for 8 alarms 24V ... 250V
- standard LED - colour red, other colours optional
- green LED-operation indication
- single- frequency flashing light, automatically horn acknowledgement selectable
- functions programmable by jumpers
- potential separation of all current circuits
- plug-in connecting terminals
- clear windows for slide-in labels

General system description

In control and monitoring systems, there is a frequent demand on a simple fault indicator to be used as universally as possible. The wiring efforts should be limited to a minimum; there is no space for additional controls.

The module **SRM 8** in a panel-mounted housing 96 x 96mm is a complete fault annunciator unit with integrated 5mm LED's, push buttons for lamp test, horn acknowledgement and lamp acknowledgement.

Note: Alarm no. 8 has a switch on delay of only 10ms (for example trip alarm)

Alarm voltage is potentially separated by opto-couplers from the supply voltage and every phase can be used as alarm voltage. The collective alarm contacts and horn contacts are performed as potential-free NO contacts and can be changed in our workshop into NC contacts, if required.

The following functions can be selected by programming jumpers at the rear side:

- 1) Open-circuit working (NO) or closed working (NC) of signal inputs
- 2) Signalling sequence as no first-up or first-up alarm
- 3) Horn will be reactivate or not in case of subsequent alarms
- 4) Automatic horn acknowledgement on or off

Lamps and horn can be also acknowledged by means of internal or external push buttons. The wiring is made by plug-in terminals. The LED's can be labeled by slide-in strips.

Functional description

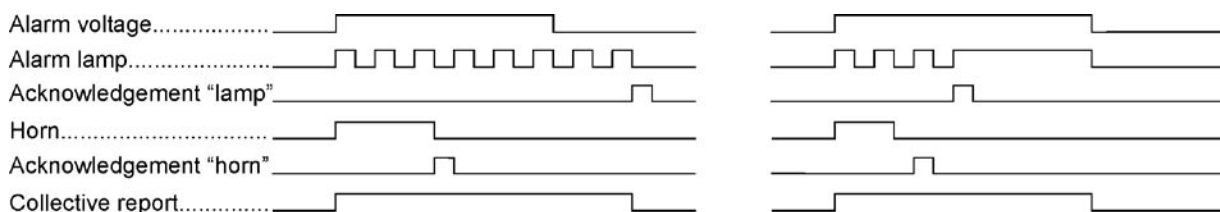
The input voltages are conducted by opto-couplers and resistance dividers to an electronic switching stage each. This ensures that interfering voltage below the response threshold (ripple) can not result in sounding horn or in flashing LED's. The LED's are directly controlled by the switching stage and supplied by the supply voltage to ensure the uniform brightness even for high variations of the input voltage.

Alarm sequence

Single- frequency fault annunciating „no first-up alarm“

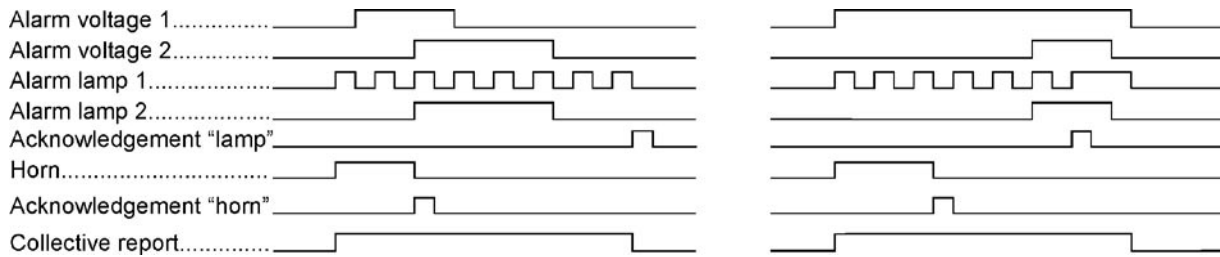
If an alarms prevails for more than about 100ms (channel 8 only 10ms), the corresponding LED flashes with single frequency, horn and collective alarm will be activated and the alarm will be stored. All incoming alarms are indicated by fast flashing. Faults already eliminated, but not yet acknowledged are indicated by flashing.

As soon as the acknowledgement buttons for horn and lamp are activated, the horn relay falls back and the lamp changes from flashing to permanent light, if the alarm still exists; otherwise the LED turns off. The collective report turns off only if all individual alarms have been acknowledged and eliminated.



Single-frequency fault annunciating „first-up alarm“

The handling of the first alarm is the same as described at the top. Following alarms are immediately indicated by permanent light and turns off if the individual alarm have been eliminated.



As standard, 3 versions are available for supply voltages of 24V, 110V and 220V. Other voltages on demand.

Technical data	SRM 8/24V DC	SRM 8/110V DC	SRM 8/220V DC
Supply voltage	24V DC ± 20%	48 ... 110V DC -20/+15%	125 ... 220V DC +10/-15%
Power consumption	approx. 6W	approx. 6W	approx. 6W
Alarm signal voltage	19 ... 60V DC*	85 ... 145V DC*	175 ... 250V DC*
Switch on delay Alarm 1 – 7 Alarm 8	approx. 100ms approx. 10ms	approx. 100ms approx. 10ms	approx. 100ms approx. 10ms
Response threshold	approx. 16V	approx. 72V	approx. 170V
Input current	approx. 4mA	approx. 2mA	approx. 1,4mA
Surge input voltage	2,5kV acc. to IEC-Pub. 60 1,2µs/50µs		
Load of relay contacts	24 ... 250V AC 2A; 110V DC 0,5A; 220V DC 0,3A		
Flashing frequency	approx. 1Hz		
automatically horn acknowledged	~ 7sec ... 1min.		
Isolation input/supply/ output.	4kV		

* Channel 1 ... 7 are possible with AC. Channel 8 can only handle DC.

Mechanical data

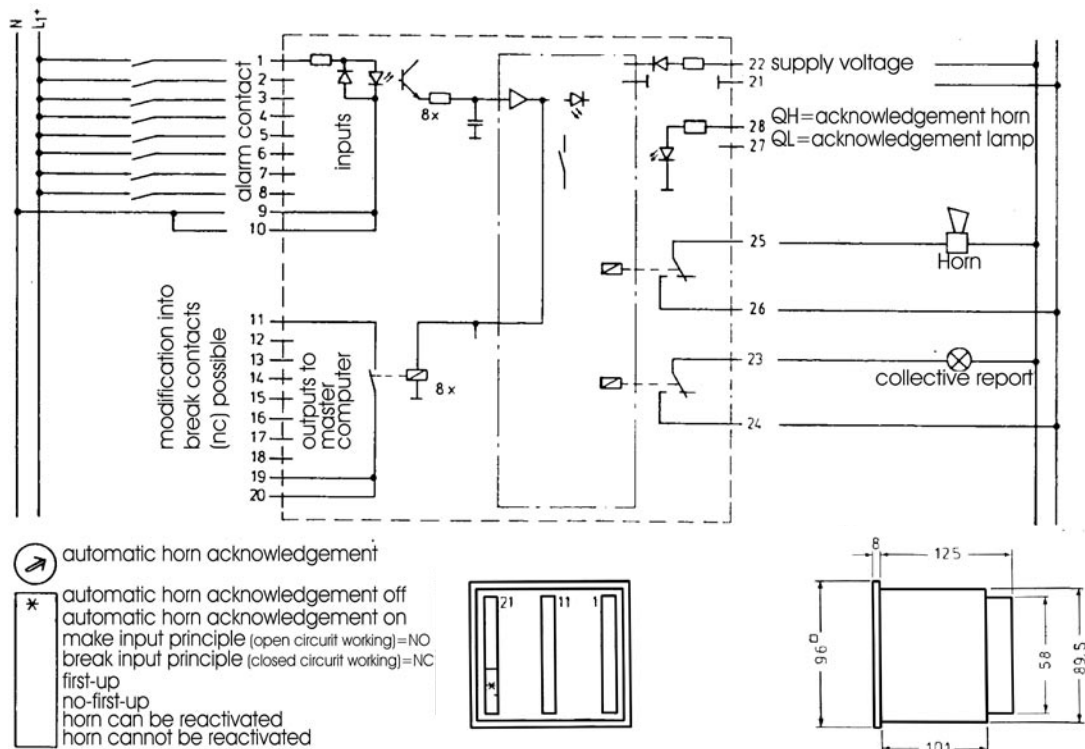
Panel frame	96 x 96mm; approx. mounting depth 125mm
Mounting hole	91 x 91 ^{+0,5} mm
Mounting position	arbitrary
Weight	approx. 0,5kg

Ambient conditions

Ambient temperature	-20°C +60°C without condensation
Storage temperature	-20°C +70°C without condensation
Duty cycle	100%
Increase protection in front	IP40; IP50 with window door, IP 65 with protection cover
Increase protection in rear	IP20
Terminals	nominal cross section 1,5 mm ²
Humidity	max. 75% average annual temperature (group F DIN 40040)
Immunity to interference	EMC-tested acc. to EN 61000-4-2,4,5

Available Options

- **BSV 1** labelling pattern (10 in a pack)
- **BSV-Soft** a disk with labelling pattern for WIN WORD Version 6.0
- **KSH1** protection cover
- **KST1** window door
- **tropical protected version**



dimension in mm
Subject to technical changes without prior notice.



HOTLINE
07191/182-235
-214



INTERNET
www.ees-online.de


Elektra Elektronik GmbH & Co Störcontroller KG
 Hummelbühl 7-9 • D-71522 Backnang/Germany • P.O.Box 12 40 • D-71502 Backnang
 Telephone: +49(0)7191/182-0 • Telefax: +49(0)7191/182-200 • e-mail: info@ees-online.de