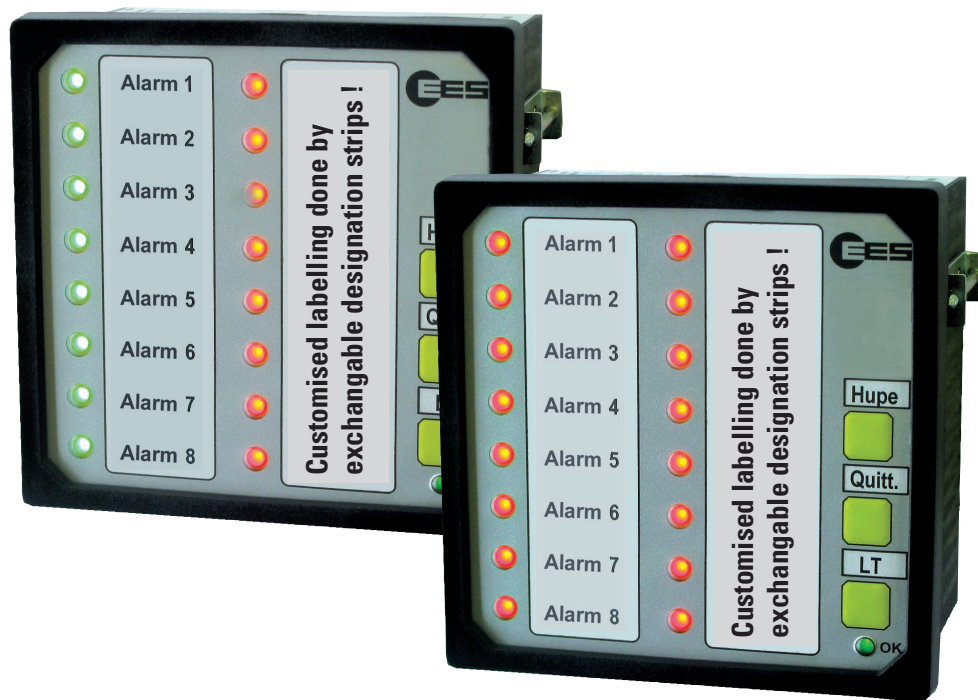




Switchboard panel mounting

Standard fault annunciator



→ Compact fault annunciator and combined operation / fault annunciator

- › Signal voltages 24 V ... 250 V AC/DC
- › Standard LED-colour for fault alarms red and operation indication green; other colour combinations as option
- › New value messaging with 1-frequency flashlight and single acknowledgement
- › Potential isolation of all electrical circuits by optocouplers
- › Labelled and pluggable terminals
- › Compact device in 96 x 96 mm housing for panel mounting
- › Transparent windows for customised labelling with slide-in strips

→ Functional 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 controlling elements left.

The devices from the SSMC1-family, are simple, very compact fault annunciator units for switchboard panel mounting. The devices are available as fault annunciator with 8 or respectively 16 inputs, or as combined operation / fault annunciator with 8 alarm inputs- and 8 operation indication inputs. Operation indication inputs are only realised by state indicaton with steady light and are not stored either included in triggering collective report or horn.

The fault annunciators provide LED displays with wide reading angle, buttons for lamp test, horn acknowledgement and lamp acknowledgement, as well as a collective report relay and a horn relay.

The relay contacts are designed as change-over contacts. External acknowledgement of the horn and the inputs can be attached on both functional inputs. The signal voltage can reach up to 250 V AC/DC depending on the respective variant. All inputs are electrically isolated and can be driven phase arbitrary. The wiring is done by pluggable terminals. The description of the LED's can be done by slide-in labelling strips.

→ Standard variants

SSM08C1 and SSM16C1	
Number of reporting inputs	SSM08C1 - 8 SSM16C1 - 16
Reporting sequence	New value with 1-frequency flashlight and single acknowledgement
Reporting inputs Colour of LED's	Response delay 100 ms red
Collective report Horn	Static / parallel to output Retriggerable, manual acknowledgement
Functional input 1 Functional input 2	Horn acknowledgement Lamp acknowledgement
Button 1 Button 2 Button 3	Horn acknowledgement Lamp acknowledgement Lamp test
Relay 1 Relay 2	Collective report Horn

LSM8/8C1	
Reporting sequence (Inputs 1 ... 8)	Operation indication with steady light
Reporting sequence (Inputs 9 ... 16)	New value with 1-frequency flashlight and single acknowledgement
Reporting inputs Colour of LED's	Response delay 100 ms Inputs 1 ... 8 green Inputs 9 ... 16 red
Collective report Horn	Static / parallel to output Retriggerable, manual acknowledgement
Functional input 1 Functional input 2	Horn acknowledgement Lamp acknowledgement
Button 1 Button 2 Button 3	Horn acknowledgement Lamp acknowledgement Lamp test
Relay 1 Relay 2	Collective report (Inputs 9 ... 16) Horn (Inputs 9 ... 16)

Furthermore information of the named reporting sequences can be taken from the separate documentation "SM-MA-FB-UK" containing the detailed description of the reporting sequences of the EES fault annunciators.



→ **Technical data**

Mechanical data

Assembly	Switchboard panel mounting (hole 91 x 91 (+/- 0,5 mm))
Housing	MBS (fibre-glass reinforced Noryl)
Protection class front	IP 54
Protection class rear	IP 20
Terminals	pluggable, labelled
Conductor cross section rigid or flexible	
without wire sleeves	0,2 ... 2,5 mm ²
with wire sleeves	0,25 .. 2,5 mm ²
Dimensions incl. terminals (W x H x D)	96 mm x 96 mm x 86 mm
Weight	approx. 0,30 kg

Ambient conditions

Operation ambient temperature	-20°C ... +60°C
Storage temperature	-20°C ... +70°C
Humidity	75% r.H. max. on average over the year; up to 93% r.H. during 56 days; condensation during operation not permitted [Test: 40°C, 93% r.H. >4days]

Electrical data

Power consumption	max. 2,0 W
maximum switch-on current	< 10 A @ 24 V DC for < 1 ms < 15 A @ 110 V DC for < 1 ms
Load on relay contacts	24 ... 250 V AC / 2 A 30 V DC / 2 A 110 V DC / 0,5 A 220 V DC / 0,3 A

power-frequency electric strength all circuits except: relay contacts against each other	4 kV _{eff} / 50 Hz 1 min
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power-frequency electric strength relay contacts against each other	500 V _{eff} / 50 Hz 1 min
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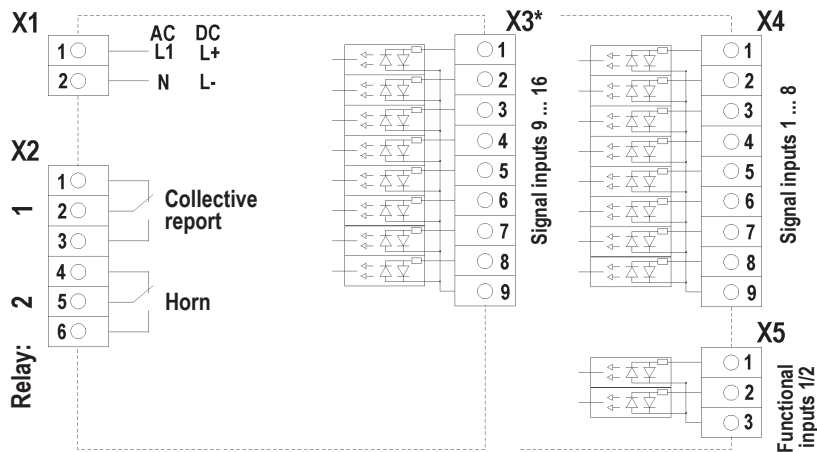
Electromagnetic compatibility

Noise immunity acc. to	DIN EN 61000-6-2:2006-03 DIN EN 61000-4-2:2001-12 DIN EN 61000-4-3:2008-06 DIN EN 61000-4-4:2005-07 DIN EN 61000-4-5:2007-06 DIN EN 61000-4-6:2008-04 DIN EN 61000-4-11:2005-02
Noise irradiation acc. to	DIN EN 61000-6-4:2007-08 DIN EN 61000-3-3:2006-06 DIN EN 55011:2007-11

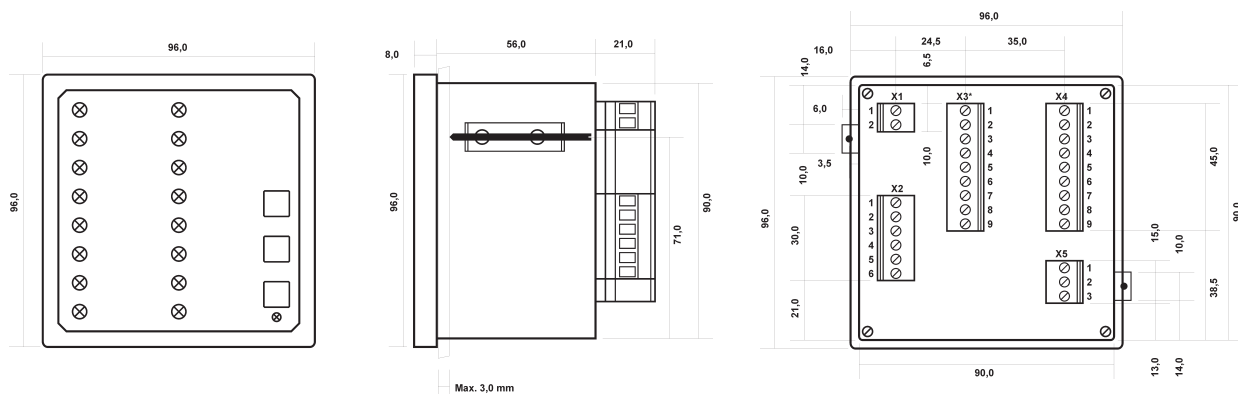
Voltage key	Nominal operation voltage U _{sup}	Operational voltage range	Nominal signal voltage U _{sig}	Signal voltage range	Input resistance
1	24 V AC/DC	10 ... 36 V DC 8 ... 26 V AC	24 V AC/DC	16 ... 50 V AC/DC	10 kΩ
3	-	-	48 ... 60 V AC/DC	28 ... 75 V AC/DC	22 kΩ
4	-	-	110 ... 125 V AC/DC	80 ... 170 V AC/DC	100 kΩ
H	-	-	110 ... 125 V AC/DC	80 ... 170 V AC/DC	100 kΩ
5	48 ... 220 V AC/DC	36 ... 370 V DC 26 ... 264 V AC	220 V AC/DC	150 ... 260 V AC/DC	180 kΩ

The information given for alternating voltages are referring to an sinusoidal alternating voltage with a frequency of 50/60 Hz, otherwise noted.

→ Terminal assignment



→ Dimensional drawing



* At the SSM08C1 the terminal X3 is missing.

→ Ordering code

Article-number	Type	Short description and voltage ranges *2
55SSM08C111	SSM08C1-24	8 Alarm inputs; $U_{sup} = 24 V$; $U_{sig} = 24 V$
55SSM08C153	SSM08C1-48	8 Alarm inputs; $U_{sup} = 48-220 V$; $U_{sig} = 48-60 V$
55SSM08C154	SSM08C1-110	8 Alarm inputs; $U_{sup} = 48-220 V$; $U_{sig} = 110 V$
55SSM08C15H	SSM08C1-125	8 Alarm inputs; $U_{sup} = 48-220 V$; $U_{sig} = 110-125 V$
55SSM08C155	SSM08C1-220	8 Alarm inputs; $U_{sup} = 48-220 V$; $U_{sig} = 220 V$
55SSM16C111	SSM16C1-24	16 Alarm inputs; $U_{sup} = 24 V$; $U_{sig} = 24 V$
55SSM16C153	SSM16C1-48	16 Alarm inputs; $U_{sup} = 48-220 V$; $U_{sig} = 48-60 V$
55SSM16C154	SSM16C1-110	16 Alarm inputs; $U_{sup} = 48-220 V$; $U_{sig} = 110 V$
55SSM16C15H	SSM16C1-125	16 Alarm inputs; $U_{sup} = 48-220 V$; $U_{sig} = 110-125 V$
55SSM16C155	SSM16C1-220	16 Alarm inputs; $U_{sup} = 48-220 V$; $U_{sig} = 220 V$
55LSM8/8C111	LSM8/8C1-24	8 RI and 8 OI; $U_{sup} = 24 V$; $U_{sig} = 24 V$ *3
55LSM 8/8C153	LSM8/8C1-48	8 RI and 8 OI; $U_{sup} = 48-220 V$; $U_{sig} = 48-60 V$
55LSM88C154	LSM8/8C1-110	8 RI and 8 OI; $U_{sup} = 48-220 V$; $U_{sig} = 110 V$
55LSM 8/8C15H	LSM8/8C1-125	8 RI and 8 OI; $U_{sup} = 48-220 V$; $U_{sig} = 110-125 V$
55LSM 8/8C155	LSM8/8C1-220	8 RI and 8 OI; $U_{sup} = 48-220 V$; $U_{sig} = 220 V$

*2 The specified voltage ranges are valid both for AC and DC.

*3 RI = Reporting Inputs for faults, OI = Operating Inputs for status indication.

→ Contact