SIGNAL BOXES DGM-SK 2N/4N /6N /10N

Signal box

Intrinsically safe barriers

Signal box, for optical and acoustic signaling of fault reporting, 2, 4, 6 and 10-channel versions

SPECIAL FEATURES

- Optional Fax-/SMS alarm
- Low supply pressure monitoring with contact gauges
- Collective alarm for control room
- Fast system overview
- Installation outside the Ex-Zone

DESCRIPTION

The gas management signal box DGM-SK it a fault indicating unit and can monitor up to ten electrical circuits for deviation from the norm. An integrated lamp and signal horn allow for testing the correct operation of the instrument. If one or more alarm signals are triggered (e.g. gas failure) an acoustic (buzzing noise) and an optical signal (red LED) are emitted for each channel. The acoustic signal is acknowledged by pressing a button, the optical signal does not switch off until all malfunctions have been remedied. The instrument is equipped with a collective alarm to notify a main central office, a control unit or an external signalling device. Any equipment is possible for use as a signal transmitter as long as it has either a mechanical contact or an inductive-contact in accordance with DIN 19234 NAMUR.

APPLICATION

The DGM-SK is used for all kinds of alarm signalling, predominantly for monitoring gas supply or metered flow in gas applications. Monitoring of gas supply can be done by controlling the upstream or downstream pressure (using contact gauges), the weight of the bottle or through monitoring rupture disks, dependent upon model for as many as 10 cylinders simultaneously. Flow-switches, floaters or mass flow controllers are suitable as signal transmitters for the monitoring of metered flow. In connection with these new IT relay stations individual faults can be passed on by SMS or fax . For every individual alarm you can program an individual text or an SMS and also a separate target number.

AVAILABLE ACCESSORIES

Solenoid valve control and regulator DGM-MV, relay box DGM-IT, contact gauges and operation terminal DGM-AX for gas management system, mass flow controller, cylinder scales, rupture disks, floater , flow switch and cable monitoring.

INSTALLATION

The housing is designed for wall mounting outside of a ex-area. Four mounting holes are provided in the back of the housing for this purpose. These can be accessed by unscrewing the cover.

TECHNICAL DATA

CONNECTION LOAD

Power supply:	230V AC, 50Hz, 5VA; 110V AC, 60Hz
Fuse:	3.15 mA slow-blow
Note:	defective fuses may only be replaced by the manufacturer

INLETS

Signal transmitter:	zero potential, mechanical contacts, initiators comply with DIN 19234 (NAMUR)
Effective direction:	NC (normally closed)
Connection system:	2 wires
Signal transmitter supply:	10 V max. throughout the instrument, 10 mA max. (short circuit proof)
Max. load/circiut:	330 mH/ 4.0 µF (EEx ib IIC); 1000 mH/ 30.0 µF (EEx ib IIB)
Cabel monitoring (optional):	Short circuit I> 6 mA, cable break I<80 µA
Connection cross section:	2.5 mm² max.

OUTLET (COLLECTIVE ALARM)

Alarm output:	2* relay output (1 change over contact)
Contact load:	max. 230 V ~, 50 Hz, 100 VA max. 48 V , 1A

INTERNAL ALARM EQUIPMENT

Signal lamp:	LED green 5 mm
Acoustic alarm:	Piezo buzzer, f = 3.3 kHz
Collective alarm:	via zero potential break contact

AMBIENT CONDITIONS

Ambient temperature:	max. 40 °C
Humidity:	0 – 95 % rel. humidity, not condensing

DESIGN

Housing:	Polystyrene colour similar to RAL 7035 (light grey)
Protection category:	IP 54
Dimensions (wxhxd):	200x160x60 mm
Installation position:	upright
Cable glands:	blue: 1 each of PG 9 and PG 11; grey: 1 each of PG 11 and PG 13.5

ORDER CODE

Type	Signals	Ex-protection	Power supply
DGM-SK	**02N**	**0**	**220**
DGM-SK	02N = 2 channels	0 = without	220 = 230V 50 Hz
DGM-SK	04N = 4 channels	EX = with	110 = 110V 60Hz
DGM-SK	06N = 6 channels		
	10N = 10 channels		

Subject to change without notice