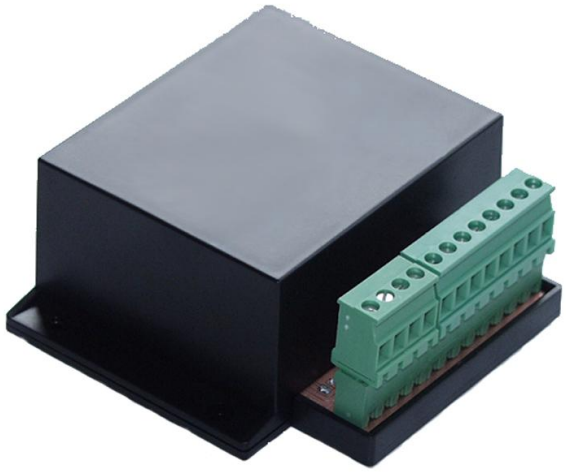
# Analogue limit monitor for top hat rail mounting



## Description

Designed to avoid overload in hoists, elevators, cranes and building machines.

The overload protection device possesses:

- 1 sensor input, 4 - 20 mA
- 3 comparators with one adjusting potentiometer each
- each comparator triggers 1 relay and 1 control LED
- each relais can be used as „ on“ or „off“ switch
- a 4th comparator which switches all relays into overload mode in case of a cable disruption

Force transducers for this overload protection:
all types with 4...20mA are connectable.

## Features

- Limit monitor for standard signal 4…20 mA
- 3 relay outputs
- Simple handing and setting
- Setting regular for switching thresholds
- Robust housing for top hat rail mounting
- Can also be used in tough conditions

## Applications

- overload in hoists
- cranes
- elevatores
- building machines

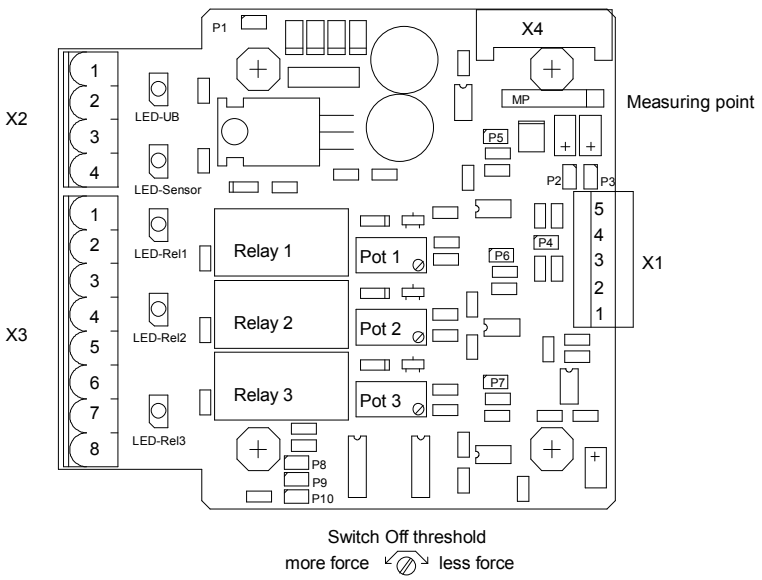
**Model: EGS08**

tecsis GmbH
Carl-Legien Str. 40
D-63073 Offenbach / Main
Tel.: +49 69 5806-0
Sales national
Fax: +49 69 5806-170
Sales international
Fax: +49 69 5806-177
e-Mail: info@tecsis.de
Internet: www.tecsis.de

## Technical data

| Model | EGS08 |
|---|---|
| Output<br>- Relay outputs<br>- Accuracy | <br>3<br>0.3% |
| Input<br>- Signal<br>- Sensor supply<br>- Filter setting | <br>1 … 9 mA or 4 … 20 mA<br>21 VDC, max. 50 mA<br>weak: approx. 1 ms cut-in delay<br>medium: approx. 10 ms cut-in delay<br>strong: approx. 20 ms cut-in delay |
| Setting<br>- Relay outputs | <br>Continuously adjustable via potentiometer |
| Power requirement | 24VDC (-10%/+40%)<br>max. 100 mA<br>AC or DC adjustable with solder bridges |
| Nominal temperature range | +10 … +40°C |
| Service temperature range | 0 … +60°C |
| Storage temperature range | -10 … +70°C |
| Burden resistor | 360 W or 180 W |
| Cable disruption detection | release relay function<br>as of 0.7 mA signal current at 1-9 mA burden<br>as of 1.4 mA signal current at 4-20 mA burden |
| Protection type<br>(acc. to EN 60 529/IEC 529) | IP 40 |
| Electrical connection | Screw terminals |
| Housing<br>- Material<br>- Dimensions (W x H x D) | For top hat rails acc. to DIN EN 50 022<br>Plastic<br>approx. 67 x 80 x 41 mm (Diagonal 45* 89 mm) |
| Fastening housing | drill hole diameter 3,2 mm |

## Terminal Assignment




P1 AC / DC
P2 Filter
P3 Filter
P4 1-9mA / 4-20mA
P5 hysteresis Rel 1
P6 hysteresis Rel 2
P7 hysteresis Rel 3
P8 Rel 1 closing / opening
P9 Rel 2 closing / opening
P10 Rel 3 closing / opening

**Connecting clamp X1**

| Pin | description | Cable colour | Pin |
|---|---|---|---|
| 1 | UB | Excitation Load Cell 21VDC (internal generate) | 1 |
| 2 | GND | Ground | 2 |
| 3 | Im | Output Load Cell 1-9mA oder 4-20mA | 3 |
| 4 | not used | | 4 |
| 5 | protect | protection of the connection cable against emc | 5 |

4-20mA 2-wire, only connecting clamp 1 and 3 with UB+/S+ and 0V/S- are added

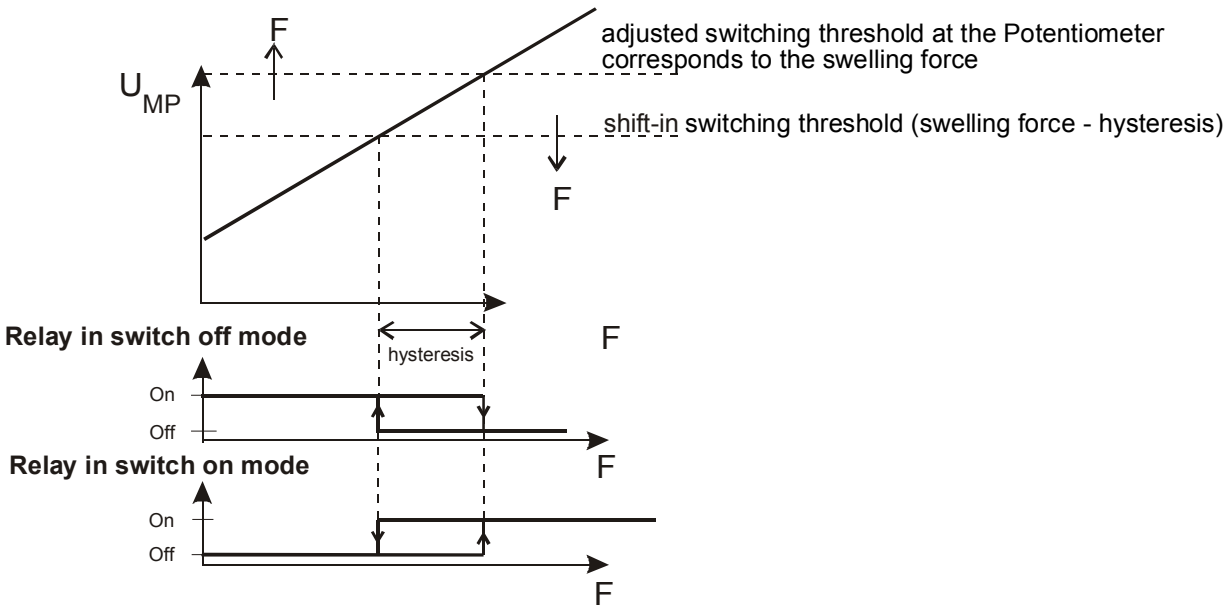
**Connecting clamp X2**

| Pin | description | potentiometer |
|---|---|---|
| 1 | 24 VAC Power supply or +24 VDC | |
| 2 | 24 VAC Power supply or 24 VDC ( GND) | |
| 3 | not used | |
| 4 | Ground | |

**Connecting clamp X3**

| Pin | description | potentiometer |
|---|---|---|
| 1 | Relay 1, make contact | |
| 2 | Relay 1, middle contact | POT 1 |
| 3 | Relay 2, make contact | |
| 4 | Relay 2, home contact | |
| 5 | Relay 2, middle contact | POT 2 |
| 6 | Relay 3, make contact | |
| 7 | Relay 3, home contact | |
| 8 | Relay 3, middle contact | POT 3 |

## Force / Voltage diagram for overload detection




Subject to technical alternations