

### Overspeed switch EGS®(H) 41 – SIL certified

#### Advantages:

- Certified by TÜV NORD for use in safety-related applications up to SIL 2 in accordance with IEC 61508 and PL d to DIN EN ISO 13849
- 2 safety switching outputs for speed monitoring
- User programmable over- and underspeed from 0.5 rpm
- Integrated standstill and slip monitoring
- 1 diagnostics switch to monitor integrated safety functions
- Programming software EGS® 41-Pro (USB interface) for user-friendly configuration
- Wear-free electronic switching contacts
- High switching accuracy
- Integrated overcurrent recognition of switching contacts
- Integrated status monitoring of switching contacts
- Robust aluminium housing with encapsulated terminal electronics
- Device operating temperature range: -25° ... +85°



### EGS®(H)41 functions

#### • Overspeed switch

Two electrically isolated overspeed monitoring switches are available. Each switch can be programmed to monitor over and underspeeds together with the corresponding switchback speeds. The “direction dependent” switch setting feature makes it possible to store different switching speeds for each switching point according to the direction of rotation

#### • Diagnostics

The diagnostics function automatically checks safety-function relevant hardware and software modules.

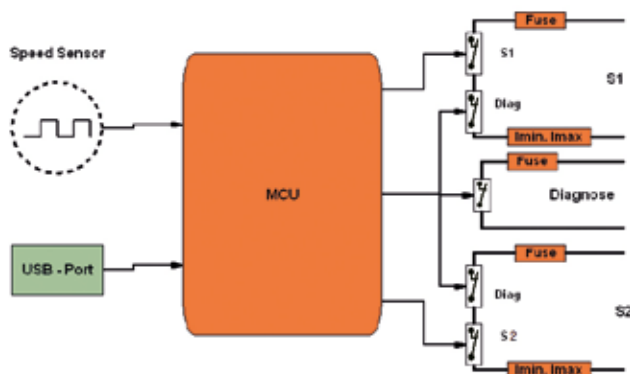
#### • Switch monitoring (Imin)

The switch monitoring function monitors the statuses of the switching contacts. A closed switch is recognised if a switching contact current > 5 mA flows. Current flow is monitored in both directions.

#### • Overcurrent recognition (Imax)

Each switching channel features integrated switch monitoring and overcurrent detection. Overcurrent detection responds to an overcurrent of 1.5 times the maximum current, no matter in which switching channel the overcurrent condition occurs. If an overcurrent condition occurs the device enters a safe state. The switch current is analysed and evaluated for both directions of current flow.

### Block diagram



### System requirements

For configuration purposes it is possible to use any Windows® PCs that fulfils the following system requirements:

- Windows® XP, Vista, W7
- When transferring administrator rights to the programme: Vista compatible
- CD-ROM drive
- Available USB port

### Range of supply

- Overspeed switch EGS®(H)41
- Programming software EGS® 41-Pro
- USB cable
- Documentation

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**Options:**

- Supply voltage: 12 ... 30 VDC or 100 ... 240 VAC
- Switching voltage: 0 ... 30 VDC (max. 500 mA) or 30 ... 230 VAC/DC (max. 250 mA)
- Design: B5 (flange) and B35 (flange and foot) EGS® 41 or EGS®H 41 hollow shaft
- Degree of protection: IP 65, IP 66, IP 66/67
- Additional incremental output (requires 2 terminal boxes)
- 4 programmable switching outputs (requires 2 terminal boxes)
- Second shaft extension for device combinations
- Other device options on request

**Fields of application:**

Specially developed for use in extreme conditions, for example:

- Steel and rolling mills
- Mining industry
- Cranes
- Nuclear power plant

