EsMatix 3

Safety switching device for protecting hazardous areas on machinery and plant

Fast, safe, compact

■ **Short response time**

■ **EDM – external device monitoring**

■ **Program & diagnostic display**

EsMatix 3

Application

Situation
Machine safety

Solution
- Protection of hazardous areas near machinery when using contact mats combined with an EsMatix 3 safety switching device

Tip
- Larger hazardous areas can be protected with several contact mats
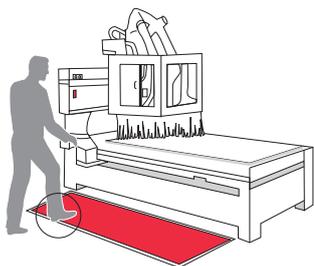
Situation
Milling or grinding machine with automatic protective door

Solution
- Reliable protection from moving machinery parts with safety edges and EsMatix 3 safety switching device

Benefit
- EsMatix 3 can monitor two tactile sensors at the same time (e.g. safety edge and contact mat)
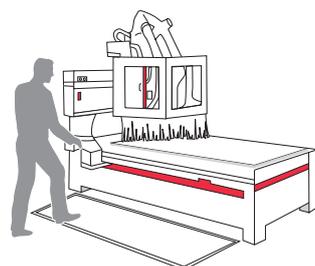
Ordering information

Article no.	Description
364283	**EsMatix 3** Safety switching device

Supplementary products

ClickLine
Electric safety edge rubber profiles with click-fit foot

CoverLine
Electric safety edge rubber profiles for clicking in at the side

Contact mats
Electric pushbutton for activating and deactivating machines and devices

Technical data

Mechanical data

Material	Polyamide red-grey
Dimensions	22.5 × 92 × 85 mm (W × H × D)
Weight	150 g
Connection type	Plug terminals
Mounting	DIN rail

Electrical data

Supply voltage	24 V DC −20% to +20% 24 V AC −20% to +10%, 50/60 Hz
Power consumption	Max. 3 W
Inputs	For 1 or 2 sensors with 8.2 kΩ termination
Reset input	24 V AC/DC, max. 3 mA@24 V $U_{th} > 8$ V DC
Safety outputs	Solid state relays, 24 V DC, min. 0,5 mA, max. 250 mA, $R_{DS(on)}$ ca. 2 Ω, internally protected by a 300 mA fuse
Status output	Solid state relays, 24 V AC/DC, max. 250 mA, $R_{DS\ (on)}$ ca. 2 Ω
Response time (actuation)	< 5 ms
Recovery time	< 30 ms (reset after actuation)
Start-up time	< 300 ms
External reset pulse (required)	> 100 ms

Displays
  Operation
  Safety shutdown
  Fault (interruption)
  LCD
	
	Green
	Orange
	Red
	Additional information

Programmable functions

Reset (confirmation)	Automatic (automatic start) Manual (pushbutton) Manual (external)
Fall-delay time	Between 0 and 1000 ms (5 levels)
Input delay	0, 15, 30 or 45 ms
Relay status	Error signal output

Ambient conditions

Protection class of switching device	IP20
Operating temperature	−20°C to +60°C
Storage temperature	−40°C to +70°C
Air humidity	Max. 95% relative, non-condensing

Standards

Approvals	EN ISO 13849-1 (PLe, cat.3)

Note
Technical details and recommendations concerning our products are based on experience and are an aid for the orientation of the user. Details stated in our brochures and data sheets do not guarantee special properties of the products. This does not apply to special product properties confirmed by us in writing or individually. Subject to technical alterations.