

GELBAU - CONTROL UNIT 452.4/462.4

3004.5246

Resistance Evaluator Cat3. 1 Input, 2x NO, 1x CO Cont.
24Vdc



- 2 NO+1 CO output
- Safety category 3 in accordance with EN954-1
- Automatic or manual reset
- Available with variable supply voltage



Product description

Compact control unit with only 22.5 mm enclosure for the monitoring of sensing strips in dangerous applications. It is also suitable for use on motorised gates which, in line with the standard, must have relays conforming to safety category 3. A low current is transmitted from the control unit connectors (Z1 and Z2) through the sensing strip, and a closed circuit is formed via a resistor (8.2 kΩ). The control units outputs cut the power if anyone/anything presses the sensing strip and also following a short-circuit or open circuit.

Technical data

Supply voltage	24 V AC/DC, 230 V AC	
Tolerance	-15 % to +10 %	
Consumption (operation)	3 W	
Relay outputs:	Safe	2 NO (single)
	Signal	1 CO
Max. contact voltage	250 V AC/24 V DC	
Max. contact current	4 A AC/2 A DC	
Fuse outputs	4 A	
Disconnection time	15 ms	
Max. length of sensing strip	100 m	
Max. cable length to the sensing strip	50 m (min. 0.5 m ²)	
Status indication	4xLED	
Ingress protection class:	Terminal block	IP20
	Enclosure	IP40

Ambient temperature	-20 °C to +55 °C
Installation	DIN rail
Mechanical service life	3x10 ⁷
Safety category	3 in accordance with EN954-1
Standard	EN1760-2, ZH1/494
Conforming to	MD, LVD, EMC
Approvals	 

Technical characteristics

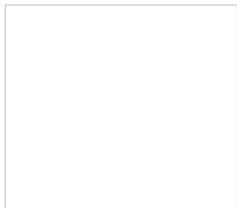
Depending on safety requirements

- Force guided contacts
- Internal/external redundancy

User benefits	Status indication
• Safety category 3 in accordance with EN954-1	
• 2 NO and 1 CO output	 Strip activated
• Contact load 4 A	 Fault in the safety circuit
• LED status indication	 Output activated
• Monitoring of external contactors	 Output activated

Dimensions

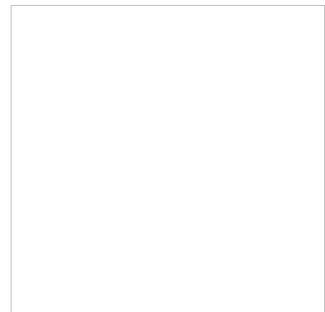
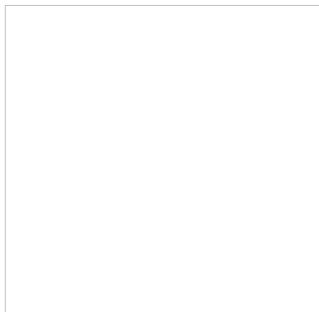
(mm)



Connection

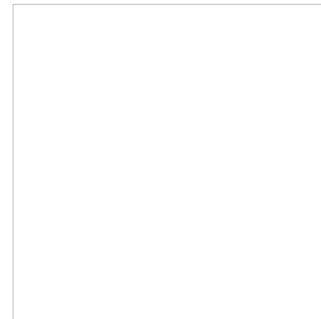
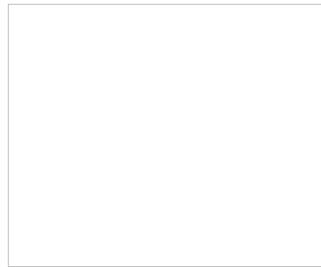
452.4 (One input)

462.4 (Two inputs)



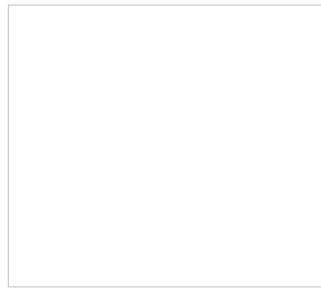
1. One sensing strip.
Manual reset.
Monitoring of external contactors.

4. Two sensing strips.
Manual reset.
Monitoring of external contactors.



2. One sensing strip.
Automatic reset.
Monitoring of external contactors.

5. Two sensing strips.
Automatic reset.
Monitoring of external contactors.



3. Two sensing strips.
Automatic reset.
Monitoring of external contactors.

6. Several sensing strips.
Automatic reset.
Monitoring of external contactors.

Order number

Order no.	Description
3004.5246	Control unit 452.4, 2 NO+1 CO, one input, cat. 3, 24 V DC, 22.5 mm
3004.5240	Control unit 452.4, 2 NO+1 CO, one input, cat. 3, 230 V AC, 22.5 mm
3004.6246	Control unit 462.4, 2 NO+1 CO, 2 inputs, cat. 3, 24 V DC, 22.5 mm
3004.6240	Control unit 452.4, 2 NO+1 CO, 2 inputs, cat. 3, 230 V AC, 22.5 mm
3004.5242	Control unit 452.4, 2 NO+1 CO, 1 input, variable voltage
3004.6242	Control unit 462.4, 2 NO+1 CO, 2 inputs, variable voltage

Specifications

Approvals	CE, TÜV NORD
Cable length to clip list max	50 m (min. 0,5 m2)

Conforming To	EMC, LVD, MD
Contact Current Max	4 A AC/DC
Contact Voltage Max	250 V AC/24 V DC
Disconnection	15
Fuse output	4
IP Class Connection	IP20
IP Class House	IP40
PL	e enl. SS-EN ISO 13849-1:2008
Power Consumption	3
Supply voltage	24 V DC
Temperature ambient from	-20
Temperature ambient to	55
Terminal Strip Length Max	100 m
Tolerance max	10
Tolerance min	-15

