

## 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 unit's outputs cut the power if anyone/anything presses the sensing strip and also following a short-circuit or open circuit.

### Technical data

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

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

## Technical characteristics



### Depending on safety requirements

- Force guided contacts
- Internal/external redundancy

### User benefits

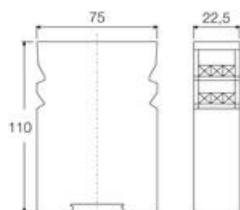
- Safety category 3 in accordance with EN954-1
- 2 NO and 1 CO output
- Contact load 4 A
- LED status indication
- Monitoring of external contactors

### Status indication

-  Strip activated
-  Fault in the safety circuit
-  Output activated
-  Output activated

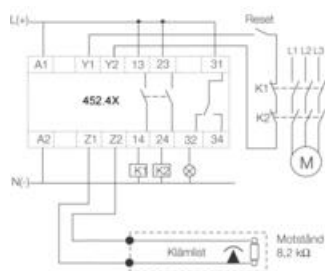
## Dimensions

(mm)

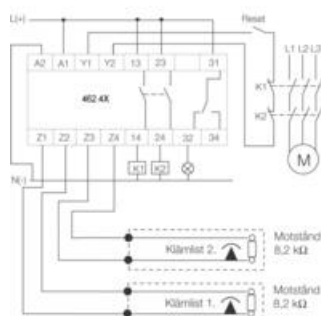


## Connection

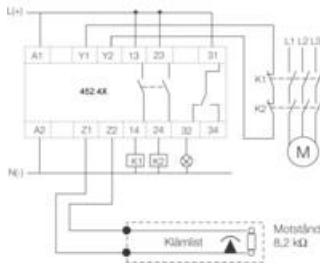
### 452.4 (One input)



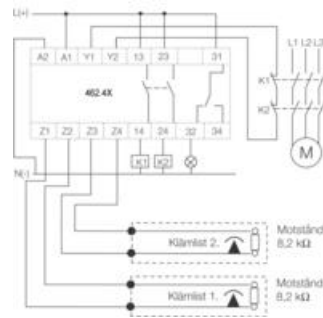
### 462.4 (Two inputs)



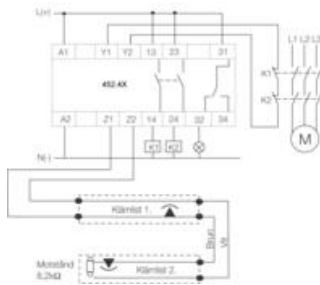
1. One sensing strip.  
Manual reset.  
Monitoring of external contactors.



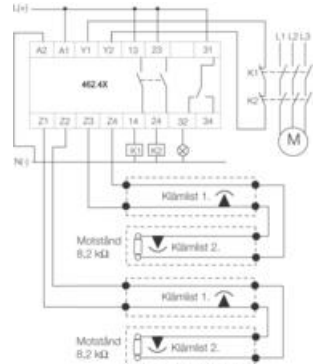
4. Two sensing strips.  
Manual reset.  
Monitoring of external contactors.



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.

## 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

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

## Specifications

<b>Approvals</b>	CE, TÜV NORD
<b>Cable length to clip list max</b>	50 m (min. 0,5 m <sup>2</sup> )

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

