

- For supplying field devices with intrinsically safe auxiliary power, variants for many applications
- Flexible, space-saving devices that are easy to install on a DIN rail
- Reduced storage due to standardised back-up fuse

WebCode **9004A**



R. STAHL's 9004 series INTRINSPAK single-channel zener barriers are ideally suited to supplying field devices with intrinsically safe auxiliary power due to their electronic current limitation. They have a particularly good power yield and are available in many variants for circuits with a negative or positive potential, including for unregulated power supplies.

### Technical Data

#### Explosion Protection

Application range (zones)	2
Ex interface zone	1 2 21 22
IECEx gas certificate	IECEx PTB 12.0003X
IECEx gas explosion protection	Ex nA [ib Gb] IIB/IIC T4 Gc
IECEx dust certificate	IECEx PTB 09.0001X
IECEx dust explosion protection	[Ex ib Db] IIIC
ATEX gas certificate	PTB 02 ATEX 2008
ATEX gas explosion protection	II 3 (2) G Ex nA [ib Gb] IIB/IIC T4 Gc
ATEX dust certificate	PTB 01 ATEX 2088 X
ATEX dust explosion protection	II (2) D [Ex ib Db] IIIC
Certificate cCSA	1497596
Certificates	ATEX (PTB), Canada (CSA), IECEx (PTB)
Installation	in Zone 2, Division 2 and in safe area
Further information	see respective certificate and operating instructions

#### Safety Data

Maximum voltage $U_o$	31.5 V
Maximum current $I_o$	25 mA
Maximum power $P_o$	787.5 mW
Max. permissible external capacitance $C_o$ for IIB	0.23 $\mu$ F
Max. permissible external inductance $L_o$ for IIB	2.5 mH

#### Electrical Data

Number of channels	1
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### Electrical Data

Rated operational voltage DC	26 V
Maximum resistance $R_{\max}$	73 $\Omega$
Minimum resistance $R_{\min}$	67 $\Omega$
Maximum output current $I_{\max}$	20 mA
Potential	Positive potential
Transmission frequency in case of electrical current limiting	$\leq 10$ kHz

### Auxiliary Power

Nominal voltage	26 V
Power supply	Controlled, nominal voltage

### Ambient Conditions

Ambient temperature	-20 °C ... +60 °C
Storage temperature	-20 °C ... +75 °C
Relative humidity max.	95% on average, no condensation
Temperature influence	$\leq 0,25$ %/10K

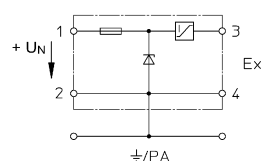
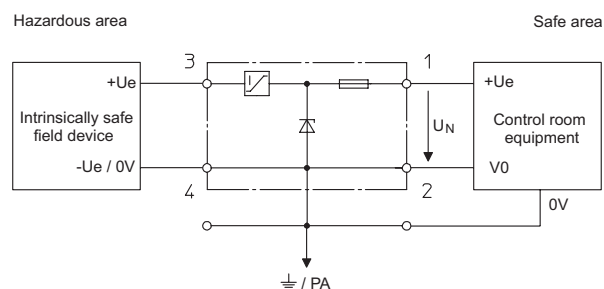
### Mechanical Data

Degree of protection (IP)	IP40
Terminal degree of protection (IP)	IP20
Enclosure material	Polyamide 6GF
Number of connection terminals	4
Connection cross section max.	1.5 mm <sup>2</sup>
Connection cross-section AWG	... 16 AWG
Type of connection cable	Finely stranded Solid
Width	103 mm
Length	12 mm
Mounting depth	72 mm
Weight	0.12 kg
Weight	0.26 lb

### Mounting / Installation

Connection cross-section ground	4 mm <sup>2</sup>
Cross-section ground AWG	12 AWG
Connection type	2 PA

### Technical Drawings – Subject to Alterations

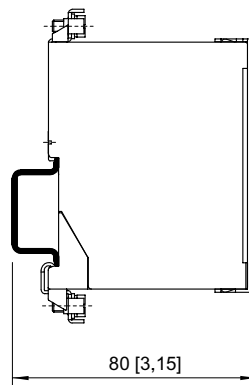
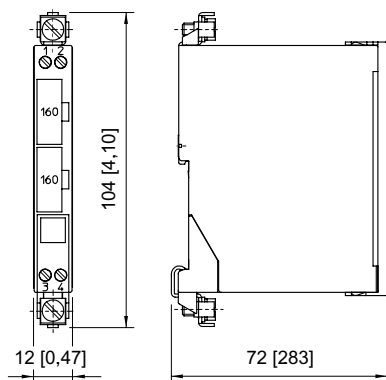


Picture A

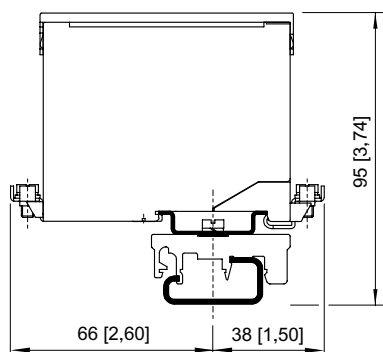
Single-Channel Safety Barriers with Electronic Current Limitation for Positive Polarity

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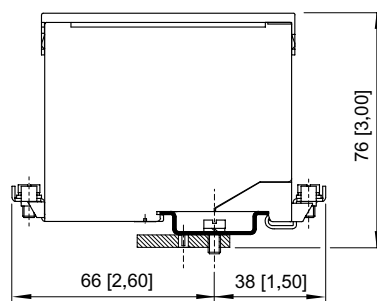
### Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



Mounting on DIN rail NS 35/15



Mounting on DIN rail NS 32 by means of adaptor and mounting attachment, moulded plastic



Mounting on mounting plate by means of adaptor

### Accessories and Spare Parts

#### Back-up fuse

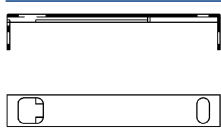


For all safety barriers Series 9001, 9002 and 9004  
unit: 5 pcs.

Art. No.

158964

#### Holder for label

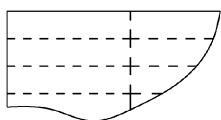


Transparent cover for labelling

Art. No.

158977

#### Labelling paper

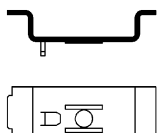


Perforated, for typing  
Format: DIN A4  
Packaging unit: 80 pieces

Art. No.

158973

#### Adaptor



Adaptor allows installation of a safety barrier Series 900x on a mounting plate of a previous series.

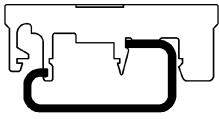
Art. No.

158826

9004/01-315-025-001 Art. No. 159086

### Mounting attachment moulded plastic

Art. No.

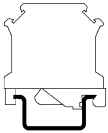


Enables mounting of safety barrier on a G-rail.

165283

### Protective conductor terminal

Art. No.



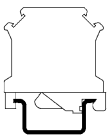
USLKG 5 (wire range 4 mm<sup>2</sup>)

Terminal enables connection of protective conductors to DIN rail. Colour green-yellow.

112760

### Earth terminal

Art. No.



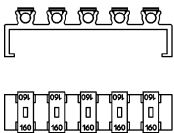
USLKG 6 N (wire range 6 mm<sup>2</sup>)

Terminal enables connection of protective / earthing conductors to DIN rail. Colour green-yellow.

112599

### Fuse holder

Art. No.

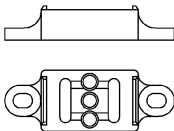


Fuse holder is snapped onto the side of the safety barrier and can be equipped with up to 5 back-up fuses (replacement).

158834

### Insulating stand off

Art. No.



Suitable for DIN rail NS35/15, allows electrically insulated mounting of DIN rail from mounting plate.

158828

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.