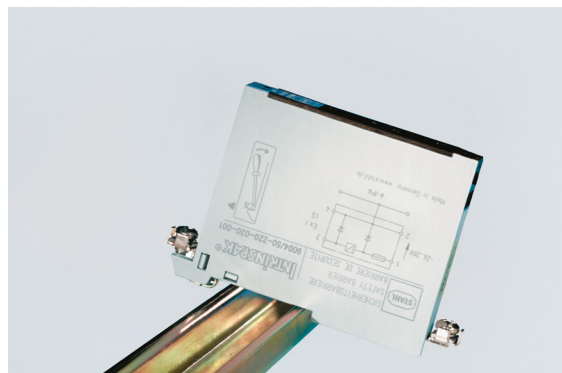


Safety barriers

Single-channel safety barriers with electr. current limiting



9004/51-206-085-001 Art. No. 159094



- For supplying field devices with intrinsically safe auxiliary power, variants for many applications
- Flexible and space-saving devices that are easy to install on a DIN rail
- Reduced stock-keeping thanks to a uniform back-up fuse

MY R. STAHL 9004A



R. STAHL's series 9004 INTRINSPAK single-channel safety barriers are ideally suited to supplying field devices with intrinsically safe auxiliary power due to their electronic current limiting. 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	
IECEEx gas certificate		IECEEx PTB 12.0003X	
IECEEx gas explosion protection		Ex ec [ib Gb] IIB T4 Gc	
IECEEx dust certificate		IECEEx PTB 12.0003X	
IECEEx dust explosion protection		[Ex ib Db] IIIC	
ATEX gas certificate		PTB 02 ATEX 2008 X	
ATEX gas explosion protection		Ⓔ II 3 (2) G Ex ec [ib Gb] IIB T4 Gc	
ATEX dust certificate		PTB 02 ATEX 2008 X	
ATEX dust explosion protection		Ⓔ II (2) D [Ex ib Db] IIIC	
Certificates		ATEX (PTB), Canada (CSA), IECEEx (PTB)	
Installation		in Zone 2, Division 2 and in safe areas	
Further information		See relevant certificate and operating instructions	
Safety Data			
Max. voltage U _o		20.6 V	
Max. current I _o		85 mA	
Max. power P _o		1751 mW	
Max. permissible external capacity C _o for IIB		0.85 µF	
Max. permissible external inductance L _o for IIB		0.37 mH	
Intrinsically safe limiting values Inductance L _o /capacitance C _o		Jointly connectable inductance L _o /capacitance C _o	
IIC	L _o [mH]		
	C _o [µF]		
IIB	L _o [mH]	0.370 mH	0.200 mH
	C _o [µF]	0.68 µF	0.85 µF

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Electrical Data

Number of channels	1
Type of voltage	DC
Maximum output current I_{max}	70 mA
Potential	Positive w. voltage limitation
Transmission frequency channel 1	≤ 10 kHz
I_{leak} leakage current for U_n	< 2 mA
Max. open-circuit output volt.	17 V

Auxiliary Power

Nominal voltage	23 – 27 V
Power supply	Uncontrolled

Output

Temperature influence	$\leq 0,25$ %/10K
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Ambient Conditions

Ambient temperature	-20 °C ... +60 °C
Ambient temperature	-4°F ... +140°F
Storage temperature	-20 °C ... +75 °C
Storage temperature	-4°F ... +167°F
Maximum relative humidity	95% average, no condensation

Mechanical Data

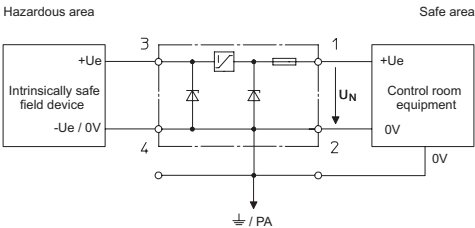
Degree of protection (IP)	IP40
Degree of protection (IP) terminals	IP20
Enclosure material	Polyamide 6GF
Number of connection terminals	4
Connection cross-section max.	1.5 mm ²
Connection cross-section AWG	16 AWG
Type of connection cable	Finely stranded Solid
Width	103 mm
Width, inches	4.09 in
Length	12 mm
Length in inches	0.48 in
Mounting depth	72 mm
Mounting depth in inches	2.76 in
Weight	126 g
Weight	0.28 lb

Mounting / Installation

Earthing connection cross-section	4 mm ²
Earthing conductor cross-section AWG	12 AWG
Connection type	2 PA
Min. torque, Nm	0.5 N · m
Min. torque, lb/in	4.43 lb/in
Max. torque, Nm	0.6 N · m
Max. torque, lb/in	5.31 lb/in

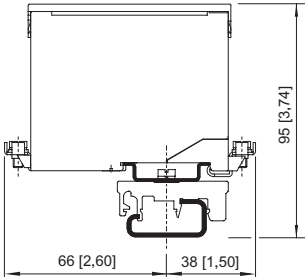
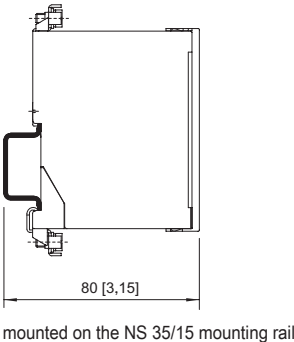
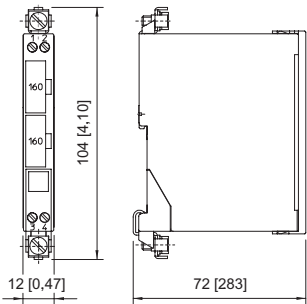
9004/51-206-085-001 Art. No. 159094

Technical Drawings – Subject to Alterations

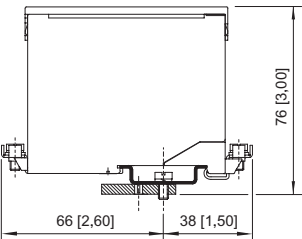


Single-Channel Safety Barriers with Electronic Current Limitation for Positive Polarity with Voltage Limitation

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



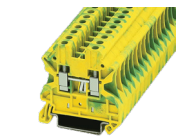
mounted on the NS 32 mounting rail with adaptor and clamping base made of moulded material



installed on mounting plate with adaptor

Accessories

Terminal block

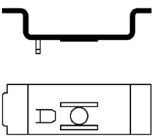


Phoenix Contact terminal block UT 4-PE
Phoenix Contact terminal block UT 6-PE

Art. No.

113057
113058

Adaptor

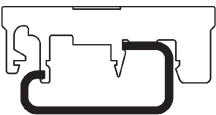


The adaptor enables a safety barrier to be installed on a clamping base (Art. No. 165283) or mounting plate from a previous series.

Art. No.

158826

Clamping base, moulded material



Enables the safety barrier to be mounted on a G-rail. The safety barrier is mounted using the adaptor (Art. No. 158826).

Art. No.

165283

Safety barriers

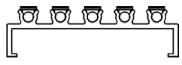
Single-channel safety barriers with electr. current limiting

STAHL

9004/51-206-085-001 Art. No. 159094

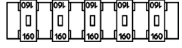
Fuse holder

Art. No.



The fuse holder is snapped onto the side of a safety barrier and can be equipped with up to five back-up fuses (replacement).

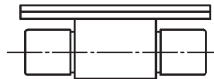
158834



Spare Parts

Back-up fuse

Art. No.



For all series 9001, 9002 and 9004 safety barriers
Packaging unit: 5 pieces

158964

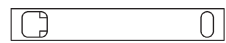
Label carrier

Art. No.



Transparent cover for the label

158977



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