

9002/77-100-400-001 Art. No. 158893



- For the intrinsically safe operation of a wide range of devices, such as HART transmitters, solenoid valves, sensors, zero-potential contacts and many more
- Compact, space-saving devices that are easy to install on a DIN rail
- Quick to install as barriers can be simultaneously snapped onto rail and connected to PE

WebCode **9002A**



The 9002 series INTRINSPAK two-channel safety barriers enable the intrinsically safe operation of virtually all field devices. The comprehensive portfolio and the combination of safety barriers cover a wide variety of signals. The devices are incredibly robust and require very little space. The back-up fuse is a convenient feature as it is standardised for all variants.

Technical Data

Explosion Protection

Application range (zones)	2 22
Ex interface zone	0 1 2 20 21 22
Certificate IECEX Gas	IECEX PTB 08.0057X
Certificate ATEX Gas	PTB 01 ATEX 2053 X
Certificate IECEX Dust	IECEX PTB 08.0057X
Certificate ATEX Dust	PTB 01 ATEX 2053 X
Gas explosion protection IECEX	Ex nA [ia Ga] IIC/IIB T4 Gc
Gas explosion protection ATEX	⊕ II 3 (1) G Ex nA [ia Ga] IIC/IIB T4 Gc
Dust explosion protection IECEX	[Ex ia Da] IIIC
Dust explosion protection ATEX	⊕ II (1) D [Ex ia Da] IIIC
Certificates	ATEX (PTB), Brazil (ULB), Canada (CSA), China (CQST), EAC (STV), IECEX (PTB), Korea (KGS), USA (FM), USA (UL)
EAC certificate	TS RU S-DE.GB04.B.00134
Installation	in Zone 2, Division 2 and in safe area

Safety Data

Max. voltage U_o	10 V
Max. voltage U_o	10 V 10 V 10 V
Max. current I_o	200 mA
Max. power P_o	500 mW
Max. permissible external capacitance C_o for IIC	3 μ F

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Safety Data

Max. permissible external capacitance C_o for IIB	20.2 μ F
Max. permissible external inductance L_o for IIC	0.5 mH
Max. permissible external inductance L_o for IIB	4 mH
Further information	see respective certificate and operating instructions

Electrical Data

Number of channels	2
Channel	1 2 1 + 2
Nominal voltage U_N	6 V
Min. resistance R_{min}	60 Ω 60 Ω
Max. resistance R_{max}	69.2 Ω 69.2 Ω
Max. current I_o	200 mA 200 mA 400 mA
Max. power P_o	500 mW 500 mW 1000 mW
Power supply	Controlled, nominal voltage
Maximum resistance R_{max}	69.2 Ω
Minimum resistance R_{min}	60 Ω
Potential	star barrier
Potential Ch 1	star barrier
Potential Ch 2	star barrier
Ohm.curr.lim.usingfreq.>= 50mA	$\leq$ 100 kHz
Ohm.curr.lim.usingfreq<= 50 mA	$\leq$ 50 kHz
Ileak leakage current for U_N	$\leq$ 2 μ A
Ileak leakage current for U_N 2	(Unless specified otherwise)

Channel	Nominal voltage U_N	Min. resistance R_{min}	Max. resistance R_{max}	Max. voltage U_o	Max. current I_o	Max. power P_o
1	6.00 V	60.00 Ω	69.20 Ω	10.00 V	200.0 mA	500.000 mW
2		60.00 Ω	69.20 Ω	10.00 V	200.0 mA	500.000 mW
1 + 2				10.00 V	400.0 mA	1000.000 mW

Ambient Conditions

Min. ambient temperature	-20 °C
Max. ambient temperature	+60 °C
Ambient temperature	-20 °C ... +60 °C
Min. storage temperature	-20 °C
Max. storage temperature	+75 °C

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Ambient Conditions

Table with 2 columns: Condition (Storage temperature, Maximum relative humidity, Temperature influence) and Value (-20 °C ... +75 °C, 95% on av., no condensation, ≤ 0,25 %/10K)

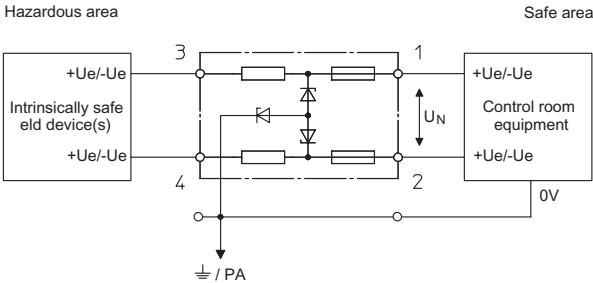
Mechanical Data

Table with 2 columns: Property (Degree of protection (IP), Enclosure material, etc.) and Value (IP40, Polyamide 6GF, etc.)

Mounting / Installation

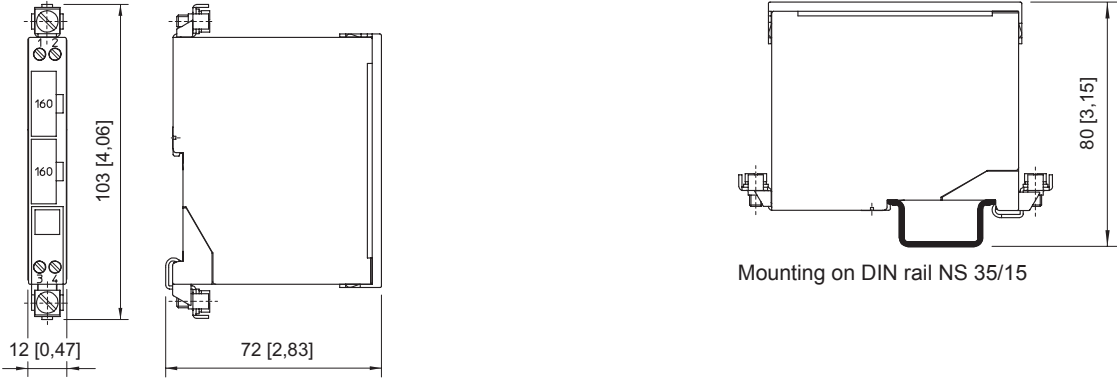
Table with 2 columns: Connection type and Value (2 PA)

Technical Drawings

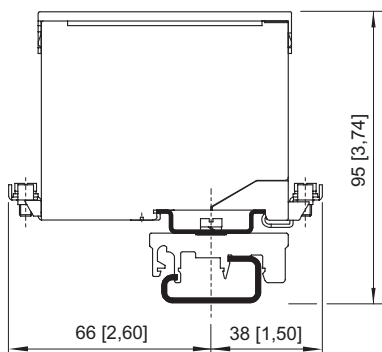


Two-channel safety barriers, star barrier / star barrier

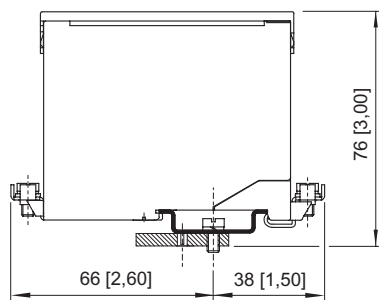
Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



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



Mounting on mounting plate by means of adaptor

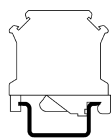
Accessories and Spare Parts

Back-up fuse		Art. No.
	For all safety barriers Series 9001, 9002 and 9004 unit: 5 pcs.	158964
Holder for label		Art. No.
	Transparent cover for labelling	158977
Labelling paper		Art. No.
	Perforated, for typing Format: DIN A4 Packaging unit: 80 pieces	158973
Adaptor		Art. No.
	Adaptor allows installation of a safety barrier Series 900x on a mounting plate of a previous series.	158826
Mounting attachment moulded plastic		Art. No.
	Enables mounting of safety barrier on a G-rail.	165283
DIN rail		Art. No.
	NS35/15 (meter length)	103714

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Earth terminal

Art. No.



USLKG 5 (wire range 4 mm²)

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

112760

USLKG 6 N (wire range 6 mm²)

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

112599

Fuse holder

Art. No.



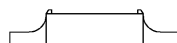
Fuse holder is snapped onto the side of the safety barrier and can be equipped with up to 5 back-up fuses (replacement).

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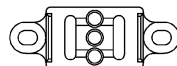
Insulating stand off

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.