- For intrinsically safe 4-wire Ethernet 100BASE-TX-IS in Zone 1
- For class 1 fibre optic cables (IEC 60825-1) in Zone 1
- Supports 100 Mbps Ethernet communication
- Transmission range up to 2 km (multi-mode)/30 km (single-mode)
- Wide-range power supply 24 V DC, 115/230 V AC
- Easy commissioning, no configuration required
- Installation in Zones 1, 2 or in safe areas

MY R. STAHL **9723A**

The Ethernet media converters for installation in Zone 1 are used for conversion and galvanic separation of intrinsically safe Ethernet via copper/CAT cable (TX) to optical Ethernet via fibre optic cables (FX).
The copper Ethernet signal is designed with "ia" inherent safety type of protection, while the optical Ethernet signal meets the requirements of class 1 according to IEC 60825-1. Both interfaces are suitable for operation in hazardous areas of Zones 1 and 2. This means that industrial Ethernet cables and fibre optic cables can also be used in hazardous areas and may be connected and disconnected during operation (i.e. hot plug).
Due to the limited cable length of copper Ethernet (max. 100 m), the media converter is ideal for operating the IS1+ Remote I/O system and enables transmission lengths to reach up to several kilometres.

	IECEx / ATEX					
Zone	0	1	2	20	21	22
Ex interface	•	•	•			
Installation in		•	•			

Selection Table

Product variant		Ethernet media converter				
FO fibre type	Interface 1	Transmission distance	Interface 2	Product Type	Art. No.	Weight
Multi mode	1 port, 100BASE-FX MM LC	Up to 100 m (Cat5e or better)	1 Port, 100BASE-TX-IS, RJ45	9723/12-11-24	294420	350 g
Single mode	1 port, 100BASE-FX SM LC	Up to 100 m (Cat5e or better)	1 Port, 100BASE-TX-IS, RJ45	9723/12-11-64	294451	350 g

Technical Data

Variant	**9723/12-11-24**	**9723/12-11-64**
Explosion Protection		
IECEx gas explosion protection	Ex eb mb ib [ia Ga] IIC T4 Gb	Ex eb mb ib [ia Ga] IIC T4 Gb
ATEX gas explosion protection	Ⓔx II 2 (1) G Ex eb mb ib [ia Ga] IIC T4 Gb	Ⓔx II 2 (1) G Ex eb mb ib [ia Ga] IIC T4 Gb
Notes	Certificates in preparation	Certificates in preparation
Safety Data		
Max. FO radiant power	≤ 15 mW (Class 1)	≤ 15 mW (Class 1)
Electrical Data		
Transfer rate	100 Mbit/s	100 Mbit/s
Ethernet interface connection	RJ45 (EIA/TIA 568B)	RJ45 (EIA/TIA 568B)
Interface 1 version	Class 1 (IEC 60825-1)	Class 1 (IEC 60825-1)
Interface 2 version	Ex ia (100BASE-TX-IS)	Ex ia (100BASE-TX-IS)

A5

Technical Data

Variant	9723/12-11-24	9723/12-11-64
Electrical Data		
FO wavelength	1310 nm	1310 nm
FO attenuation	1 dB / km	0.3 dB / km
FO bandwidth	800 MHz * km	3.5 ps / nm * km
FO connection type	LC plug connector	LC plug connector
FO fibre cross section	50/125 µm [min. OM2]	9/125 µm [OS1, OS2]
FO optical budget	12 dB	16 dB
FO transmission distance	5 km	30 km
Auxiliary Power		
Nominal voltage	24 V DC, 120 / 230 V AC	24 V DC, 120 / 230 V AC
Power supply	3-pin spring clamp terminal	3-pin spring clamp terminal
Auxiliary power voltage range	90 to 253 V AC	90 to 253 V AC
Max. power consumption	2.5 W	2.5 W
Ambient Conditions		
Ambient temperature	-40 °C ... +75 °C	-40 °C ... +75 °C
Mechanical Data		
Degree of protection (IP)	IP20	IP20
Enclosure material	PA 6.6	PA 6.6

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