

Ethernet-APL Field Switch for Use in Zone 1

Series 9740



- Operation of 16 Ethernet-APL or PROFIBUS PA field devices (PA proxy, only for 9740/12-16-40)
- All spurs intrinsically safe "ia" (2-WISE) with port profile A or A+B (only for 9740/12-16-00)
- Operation with 100BASE-TX (Zones 1, 2) and optionally 100BASE-FX (Zone 2)
- Redundant auxiliary power supply and extensive integrated diagnostics
- Installation in Zone 1

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MY R. STAHL 9740B



The Series 9740 Ethernet-APL field switches are intended for the connection of intrinsically safe "2-WISE" field devices to higher-level 4-wire Ethernet networks, and supply the devices with intrinsically safe power. The field switches can be installed in Zone 1. The integrated diagnostics functions of the Ethernet-APL field switches make commissioning or troubleshooting far easier and faster.

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

Selection Table								
Product Description		Ethernet-APL field switch Zone 1 installation Trunk 3TX Spurs 16 ia 12A4B						
Intrinsic safety concept		2-WISE (CLC IEC/TS 60079-47)						
Power Class		A B						
Spurs version	Number of ports spurs	Characteristic spurs	Max. current consumpt. 24 V DC	Max. power consumption 24 V DC	Max. power dissipation at 24 V	Product Type	Art. No.	Weight
Ethernet-APL (10BASE-T1L)	16	2-WISE power supply	1.3 A	31.2 W	19 W	9740/12-16-00	304725	5.8 kg
Product Description		Ethernet-APL field switch Zone 1 installation Trunk 3TX Spurs 16 ia 16APA						
Intrinsic safety concept		2-WISE (CLC IEC/TS 60079-47)						
Power Class		FISCO (EN 60079-11, -25) A						
Spurs version	Number of ports spurs	Characteristic spurs	Max. current consumpt. 24 V DC	Max. power consumption 24 V DC	Max. power dissipation at 24 V	Product Type	Art. No.	Weight
Ethernet-APL (10BASE-T1L) PROFIBUS PA	16	2-WISE power supply FISCO	0.95 A	22.8 W	13 W	9740/12-16-40	304746	5.8 kg

Technical Data	
Explosion Protection	
IECEx gas explosion protection	Ex eb ia q [ia Ga] IIC T4 Gb
IECEx dust explosion protection	[Ex ia Da] IIIC
ATEX gas explosion protection	Ⓜ II 2 (1) G Ex eb ia q [ia Ga] IIC T4 Gb
ATEX dust explosion protection	Ⓜ II (1) D [Ex ia Da] IIIC
Notes	Certificates in preparation

Technical Data	
Safety Data	
Max. voltage U_o	17.5 V
Max. current I_o (Ex ia)	380 mA
Max. power P_o (Ex ia)	1.67 W
Max. permissible external capacity C_o for IIC	0.25 μ F
Max. permissible external inductance L_o for IIC	0.15 mH
Electrical Data	
Number of ports interface 1	3 (XT1, XT2, XT3)
Connection type interface 1	Plug. spr.-cl. term. 5-pin BK Plugg. screw terminal 5-pin BK
Interface 1 version	100BASE-TX
Auxiliary Power	
Auxiliary power nominal voltage	24 V DC, 48 V DC
Galvanic Isolation	
Test voltage for galvanic separation	Acc. to standard EN 60079-11
Field Device Interface	
Link spurs LED	S01 ... S16 LED, yellow
Output power power class A	0.54 W
Diagnostics	
Physical layer 10BASE-T1L	SNR TDR Shield unbalance
Ambient Conditions	
Ambient temperature	-40 °C ... +70 °C
Ambient temperature note	(+60 °C for B-port operation)
Mounting / Installation	
Mounting type	On mounting plate

Accessories			
Figure	Description	Art. No.	Weight
Terminal set			
	Terminal set for 9740/12 Version: Screw terminals Contents: 16 x 3-pin, blue; 2 x 4-pin, black; 3 x 5-pin, black	305678	105 g
	Terminal set for 9740/12 Version: Spring clamp terminals Contents: 16 x 3-pin, blue; 2 x 4-pin, black; 3 x 5-pin, black	305679	120 g

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

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