



- Reliable, bidirectional conversion from USB to RS485
- Versions with Ex i USB and/or Ex i RS485 interface
- Power supply via USB port
- LED status indicators
- Very resistant to interference
- Extended temperature range -40 to +75 °C
- Installation in Zones 1 and 2

A5

MY R. STAHL 9787A



The USB RS485 converters are used to convert a USB interface to an RS485 interface. Depending on the version, the USB interface and/or the RS-485 can be operated in an intrinsically safe configuration (USB-IS or RS485-IS, according to PI standard).

Ideal for converting the IS1+ USB ServiceBus of the 9442 CPU into an RS485 fieldbus.

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

Selection Table							
Product description		Network technology USB RS485 converter for Zone 2					
Product variant		USB RS485 converter					
Installation	Number of USB ports	USB version	Number of RS485 ports	Version RS485	Product Type	Art. No.	Weight
Zone 2	1	Standard	1	standard	9787/15-11-11	266011	170 g
Product description		Network technology USB RS485-IS converter for Zone 2					
Product variant		USB RS485 converter					
Installation	Number of USB ports	USB version	Number of RS485 ports	Version RS485	Product Type	Art. No.	Weight
Zone 2	1	Standard	1	Ex ia (RS485-IS)	9787/13-11-12	295356	170 g
Product description		Network technology USB-IS RS485-IS converter for Zone 1					
Product variant		USB RS485 converter					
Installation	Number of USB ports	USB version	Number of RS485 ports	Version RS485	Product Type	Art. No.	Weight
Zone 1	1	Ex ia (USB-IS)	1	Ex ia (RS485-IS)	9787/12-11-22	285849	170 g

Technical Data			
Variant	9787/15-11-11	9787/12-11-22	9787/13-11-12
Explosion Protection			
IECEX gas explosion protection	Ex ec IIC T4 Gc	Ex ia [ia Ga] IIC T4 Gb	Ex ec [ia Ga] IIC T4 Gc
ATEX gas explosion protection	Ⓔ II 3 G Ex ec IIC T4 Gc	Ⓔ II 2 (1) G Ex ia [ia Ga] IIC T4 Gb	Ⓔ II 3 (1) G Ex ec [ia Ga] IIC T4 Gc
Certificates	ATEX (TUR), China (NEPSI), IECEX (TUR), Korea (KTL)	ATEX (TUR), IECEX (TUR)	ATEX (TUR), IECEX (TUR)
Declaration of conformity	ATEX (EUK), China (CCC)	ATEX (EUK)	ATEX (EUK)
Electrical Data			
USB connection	Type B socket X2, 5-pole	Type B socket X2, 5-pole	Type B socket X2, 5-pole
USB specification	USB 2.0	USB 2.0	USB 2.0

Technical Data

Variant	9787/15-11-11	9787/12-11-22	9787/13-11-12
Electrical Data			
RS485 connection	D-SUB DE-9 socket X1, 9-pole	D-SUB DE-9 socket X1, 9-pole	D-SUB DE-9 socket X1, 9-pole
RS485 specification	RS485 (TIA/EIA-485-A)	RS485 (TIA/EIA-485-A)	RS485 (TIA/EIA-485-A)
RS485 data rate	Max. 1.5 Mbit/s	Max. 1.5 Mbit/s	Max. 1.5 Mbit/s
Auxiliary Power			
Power supply connection	Via USB port	Via USB port	Via USB port
Auxiliary power nominal voltage	5 V DC (4.5 to 5.5 V)	5 V DC (4.5 to 5.5 V)	5 V DC (4.5 to 5.5 V)
Max. power consumption	250 mW	350 mW	300 mW
Current consumption	50 mA	70 mA	60 mA
Max. power dissipation outputs	150 mW	82 mW	122 mW
Mechanical Data			
Degree of protection (IP) (IEC 60529)	IP30	IP30	IP30
Width	17.6 mm	17.6 mm	17.6 mm
Depth	114.5 mm	114.5 mm	114.5 mm
Length	111.1 mm	111.1 mm	111.1 mm

Accessories

Figure	Description	Art. No.	Weight
Sub-D plug, RS-485 IS, angled			
	9-pin for connecting fieldbus or ServiceBus to CPU & power module Series 9440/22, 9185 fieldbus isolating repeater and 9786/12-11 media converter. The end-of-line resistor is installed and switchable. For RS 485 IS (according to Profibus standard). Ambient temperature: -40 °C to +70 °C	162693	100 g
	9-pin for connecting 9185 fieldbus isolating repeater and 9786/12-11 media converter. The end-of-line resistor is installed. For RS-485 IS (according to Profibus standard). Ambient temperature: -25 °C to +70 °C	201805	50 g
USB cable type A to type B for 9787/12-11-22			
	Cable type: USB 2 5-pin with shield Colour(sheath): Black USB A to USB B connector; length: 1000 mm	298746	-
USB cable Type A to Type B for 9787/13-11-12 and 9787/15-11-11			
	Cable type: USB 2 5-pole with shielding Colour (sheath): black Connector plug USB A to USB B; Length: 3000 mm	266833	90 g
Sub-D plug, RS-485			
	9-pin for connecting fieldbus or ServiceBus to CPU & power module Type 9440/15, 9185 fieldbus isolating repeater and 9786/15-12 media converter. The end-of-line resistor is installed and switchable. For non-intrinsically safe RS-485. Ambient temperature: -40 °C to +75 °C	105715	60 g

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

A5

