

## **Technische Alternative RT GmbH**

PFSC

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Vers. 1.01

## **Potential-free signal converter**



Modern boilers have a 0-10 V input for burner demand and output modulation. In some boilers, their internal electronics cause retroactive high frequency signal interference, which prevents the boiler electronics from precisely evaluating the control signal. Interferences are negated by electrical isolation of the two sides via an optocoupler.

The **p**otential-free **s**ignal **c**onverter is used for electrically isolated control of boilers and other third party devices. A PWM signal from the controller is electrically isolated (up to 3 kV) and is transmitted as a PWM signal as well as being converted into a 0-10 V signal.

## Connection

**Example:** Connection to UVR16x2, analogue output A12



**PWM** and **GND** from the analogue output of the controller are connected on the left. The **12 V** supply (from the CAN bus) is also necessary.

On the other side, the PWM signal is again output electrically isolated as a PWM signal and also as a 0-10 V signal (0 % PWM = 0 V; 100 % PWM = 10 V).

**Dimensions in mm** 





Top-hat rail installation
(support rail TS35 to
standard EN 50022)

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Technical data		
IP rating	IP40	
Isolation	up to 3 kV	
Terminal capacity	max. 1.5 mm <sup>2</sup>	
Max. ambient temperature	45 °C	

Subject to technical modifications as well as typographical and printing errors. This manual is only valid for devices with the corresponding firmware version. Our products are subject to constant technical advancement and further development. We therefore reserve the right to make changes without prior notice.