



AS-Interface repeater

VAR-KE3-TERM

- Minimum delay of signal
- Line lengthening by 100 m (max. 2 repeater in series)
- Galvanic isolation between AS-Interface segments A and B
- No parameterization
- Need no specific address on the AS-Interface bus
- Housing with removable terminals
- The integrated terminator permits up to 200 m network lengths on Segment A

AS-Interface advanced repeater with terminator



Function

The Advanced-Repeater VAR-KE3-TERM galvanically separates two AS-Interface circuits, and conditions the AS-Interface signals electrically, which extends the cable length by 100 m. The Advanced-Repeater includes a Bus Termination, permitting a line extension of up to 200 m. The Bus Termination is switchable. Two repeaters can be cascaded, resulting in a maximum cable length of 300 m. With one Bus Termination included in line, the maximum circuit extension is up to approximately 600 m.

The Advanced-Repeater features an alignment between sender and receiver that has been optimized even further and offers a shorter delay when the signals pass through the Advanced-Repeater.

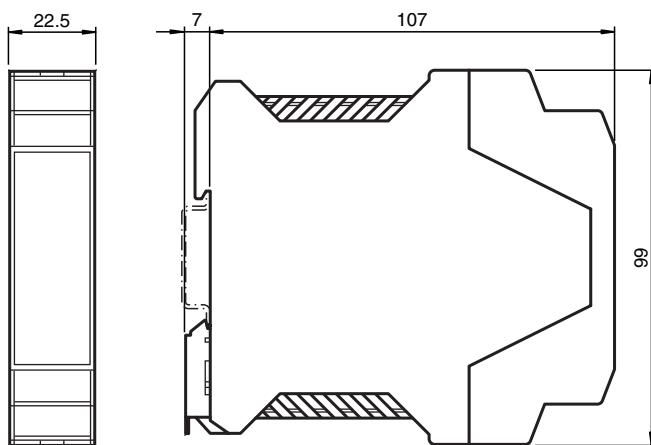
The Advanced-Repeater does not require any parameterisation and no own address in the AS-Interface; the overall number of slaves (31 or 62) per branch remains unchanged.

The housing, only 22.5 mm in width, takes up little place in the switch cabinet. The module is mounted by snapping it on to the 35 mm mounting rail in keeping with European standard EN 50022. Pluggable screw terminals are used for connection. This method of mounting permits easy removal during initial operation or servicing.

On account of the galvanic separation, each segment requires a power supply unit or a power extender.

Two LEDs indicate the correct polarity of the AS-Interface cables; two LEDs indicate any communication errors in the respective AS-Interface circuits.

Dimensions



Technical Data

General specifications

AS-Interface specification V3.0

Required gateway specification \geq V2.0

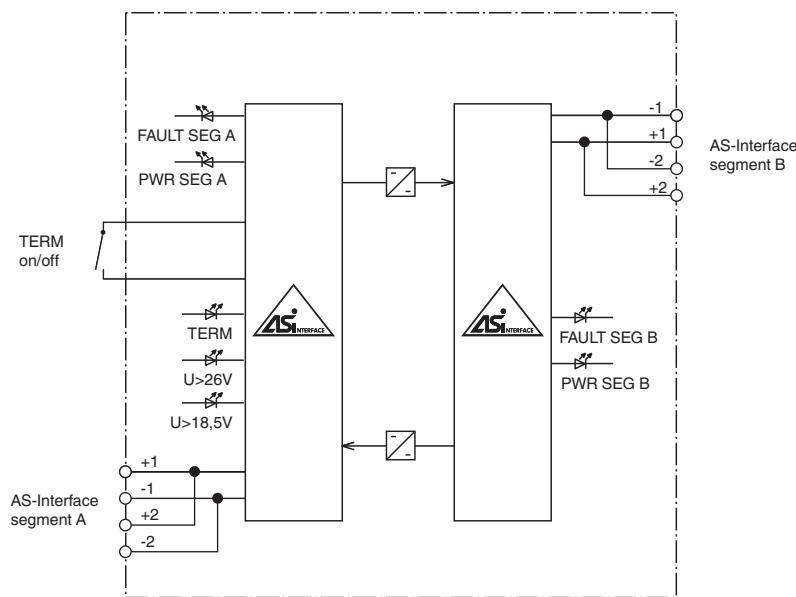
UL File Number E223772 only from low voltage, limited energy source (SELV or PELV) or listed Class 2 source

Functional safety related parameters

Technical Data

MTTF _d	155 a	
Indicators/operating means		
Switch	TERM ON/OFF	switches the segment A terminator on/off
LED FAULT SEG A	Segment A error display; red LED	red: communication error
LED FAULT SEG B	Segment B error display; red LED	red: communication error
LED PWR SEG A	AS interface voltage segment A; green LED	
LED PWR SEG B	AS-Interface voltage segment B; green LED	
LED TERM	Segment A bus terminator switched on	
LED U>26V	Segment A voltage > 26 V	
LED U>18,5V	Segment A voltage > 18.5 V	
Electrical specifications		
Insulation voltage	U _i	≥ 500 V
Rated operating voltage	U _e	26.5 ... 31.6 V from AS-Interface
Rated operating current	I _e	60 mA (per strand element), 120 mA (total)
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU	EN 62026-2:2013 EN 61000-6-2:2005, EN 61000-6-4:2007 EN 61000-6-3:2001 IEC 62026-2:2008	
Approvals and certificates		
UL approval	An isolated source with a secondary open circuit voltage of ≤ 30 V _{DC} with a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed. UL mark does not provide UL certification for any functional safety rating or aspects of the device.	
Ambient conditions		
Ambient temperature	0 ... 55 °C (32 ... 131 °F)	
Storage temperature	-25 ... 75 °C (-13 ... 167 °F)	
Mechanical specifications		
Housing width	22.5 mm	
Housing height	99 mm	
Housing depth	114 mm	
Degree of protection	IP20 according to EN 60529	
Connection	removable terminals, terminal connection ≤ 2.5 mm ²	
Material		
Housing	PA 66-FR	
Mounting	DIN mounting rail	

Connection



Assembly

