

Room resistance thermometer

Safety warnings

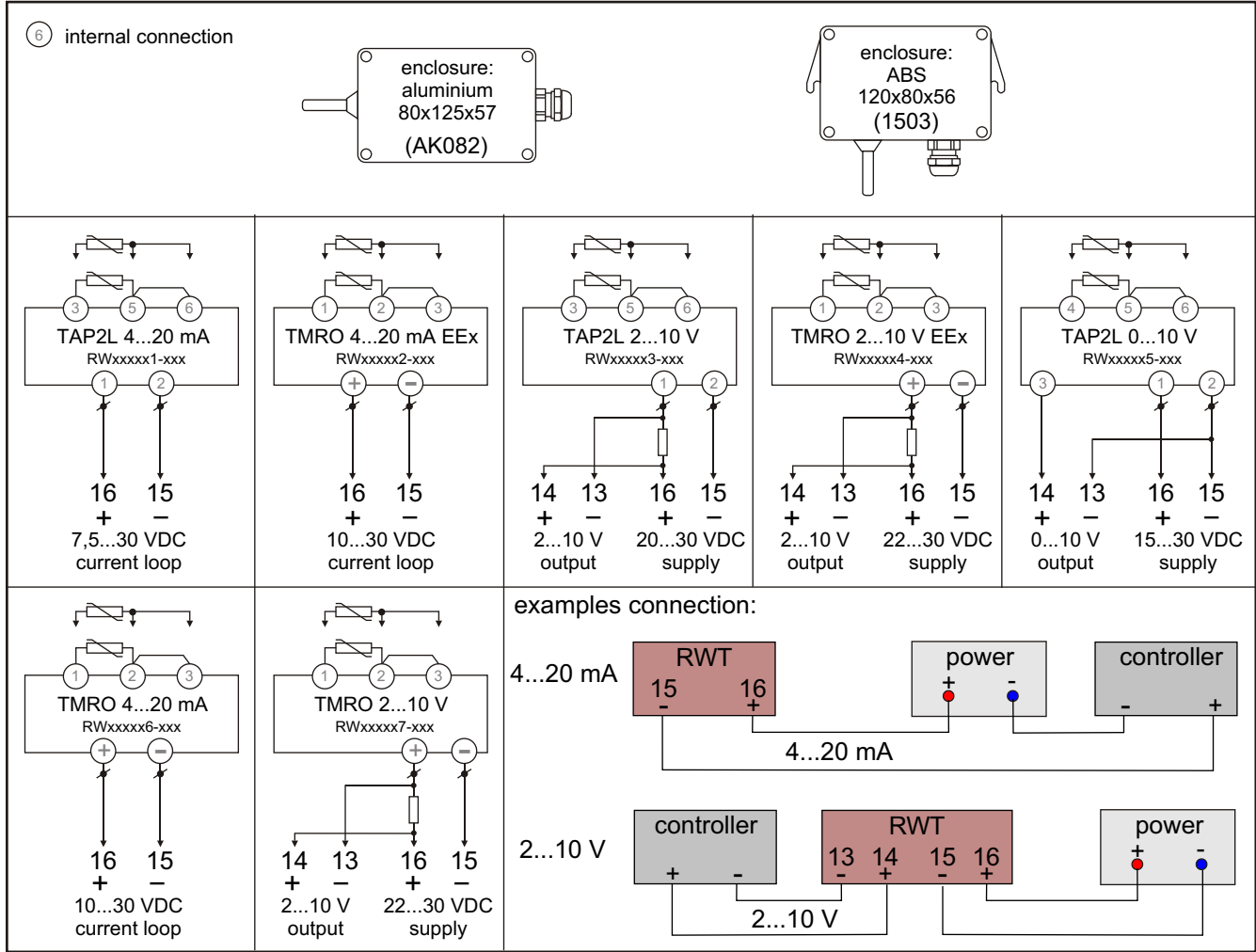


General: When mounting, initiating and operating this resistance amplifier the safety precautions and regulations have to be observed. Only staff with a corresponding qualification should work with the resistance thermometer. A non-observance of the safety regulations may cause serious injuries and / or damages. Check before initial operation the suitability of the resistance thermometer for this area of application. The technical data of this manual have to be followed.

Connection (without transmitter)

⑥ internal connection		enclosure: aluminium 80x125x57 (AK082)	enclosure: aluminium 64x58x36 (AK061)	enclosure: ABS 120x80x56 (1503)	enclosure: aluminium 75x80x57 (AK081)
RW00... / RW10... RTD 1x Pt 100 / 1000 (2-wire)	out1				
RW20... / RW30... RTD 2x Pt 100 / 1000 (2-wire)	out1				
	out2				
RW01... / RW11... RTD 1x Pt 100 / 1000 (3-wire)	out1				
RW21... / RW31... RTD 2x Pt 100 / 1000 (3-wire)	out1				
	out2				
RW02... / RW12... RTD 1x Pt 100 / 1000 (4-wire)	out1				
RW22... / RW32... RTD 2x Pt 100 / 1000 (4-wire)	out1				
	out2				
RW4X... 1x NTC	out1				

Connection (with transmitter)



Follow the corresponding data sheet and manual of the transmitter!

Technical data

Input

Sensor RTD: 1x Pt100 / 2 x Pt 100 (2-, 3-, 4-wire)
1x Pt1000 / 2 x Pt 1000 (2-, 3-, 4-wire)
3x Pt100 (2-, 3-wire)
Other: NTC
With transmitter: 1x Pt100 (2-, 3-wire)

Output

Transmitter: 4...20 mA / 2...10 V / 0...10 V
Range: customized

Accuracy

Pt100, Pt1000: class B, A / 1/2, 1/3, 1/5, 1/10 DIN
Transmitter: TAP2L: ±0,2% FS / ±0,2K
TMRO (EEx): ±0,2% vom FS
TMRO: ±0,5% FS

Power supply

Transmitter: TAP2L: 7,5...30 VDC (4...20 mA)
TAP2L: 20...30 VDC (2...10 V)
TAP2L: 15...30 VDC (0...10 V)
TMRO: 10...30 VDC (4...20 mA)
TMRO: 22...30 VDC (2...10 V)

The transmitter with 4...20 mA are supplied out of current loop.

Ambient conditions

Operating temperature: aluminium enclosure: -50...+100°C
ABS enclosure: -50...+85°C
transmitter: -40...+85°C
Storing temperature: aluminium enclosure: -50...+100°C
ABS enclosure: -50...+85°C
transmitter: -50...+85°C

Mechanics

Enclosure: aluminium: 80 x 125 x 57 mm (AK082)
aluminium: 75 x 80 x 57 mm (AK081)
aluminium: 64 x 58 x 36 mm (AK061)
plastics: 120 x 80 x 56 mm (1503)
Material: diecast aluminium
plastics ABS
Colour: aluminium: grey RAL 7032
ABS: bottom part black, cover light grey
Weight: aluminium 80/125/57: approx. 500g
aluminium 75/80/57: approx. 400 g
aluminium 64/58/36: approx. 225g
ABS 120/80/56: approx. 275g
Protection: degree IP 66
Connection: terminal screw up to 2,5 mm²
Cable entry: screwed cable gland (according giving)