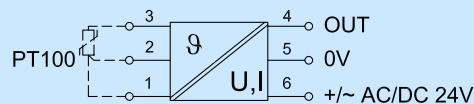


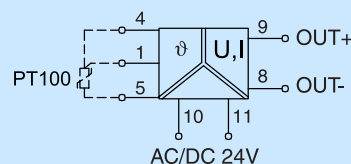
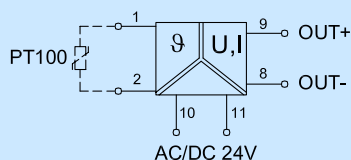
## Temperature converter for PT 100 with selectable temperature range from – 200 °C to + 800 °C



	<b>Microcompact</b>
Type	<b>WPT 7-0819</b>
Article no.	<b>750819</b>
<b>Input Side</b>	
Input source	PT100 / 3-wire
Electrical I/O isolation	2-channel isolation
Temperature range	-50 °C to 150 °C 0 °C to 100 °C 0 °C to 200 °C (can be selected via DIP switches)
Supply current	0,5 mA
<b>Load Side</b>	
Output signal	Selectable: 0 – 10 V, 0 – 20 mA, 4 – 20 mA (can be set via DIP switches)
Working resistance	400 Ω / 55 Ω

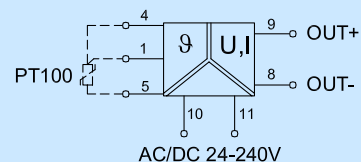
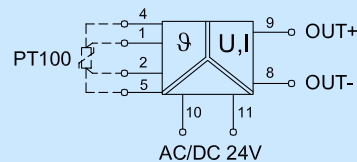
<b>General Data</b>	
Rated Voltage	AC/DC 24 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC
Accuracy	< 0.3% of final value
Linearity error	< 0.1% of final value
Temperature coefficient	0.015% of final value/K
Error coefficient of the instrumentation cable	0,1 K + 0,1 %/Ω
Operating temperature range	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 1,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	6,2 mm × 90 mm × 92,5 mm
Weight	0,03 kg/pcs
Approvals	cULus in preparation
CE conformity	yes
Accessories	Bridging link 760802 red, 760803 white, 760804 blue

## Temperature converter for PT 100 with selectable temperature range and output



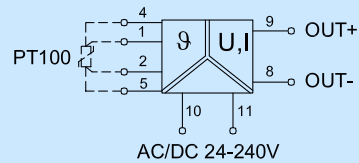
	Microkon	Microkon
Type	<b>WPT 7-0810</b>	<b>WPT 6-0816</b>
Article no.	<b>750810</b>	<b>750816</b>
<b>Input Side</b>		
Input source	PT100 / 2-wire	PT100 / 3-wire
Electrical I/O isolation	3-channel isolation	3-channel isolation
Temperature range	-50 °C to 50 °C -50 °C to 100 °C -50 °C to 150 °C 0 °C to 100 °C 0 °C to 150 °C 0 °C to 200 °C 0 °C to 300 °C 0 °C to 400 °C can be set via rotary coding switch	-50 °C to 50 °C -50 °C to 100 °C -50 °C to 150 °C 0 °C to 100 °C 0 °C to 150 °C 0 °C to 200 °C 0 °C to 300 °C 0 °C to 400 °C can be set via rotary coding switch
Supply current	0.5 mA	0.5 mA
<b>Load Side</b>		
Output signal	Selectable: 0 – 10 V, 0 – 20 mA, 4 – 20 mA (can be set via DIP switches)	Selectable: 0 – 10 V, 0 – 20 mA, 4 – 20 mA (can be set via DIP switches)
Working resistance	400 Ω / 55 kΩ	400 Ω / 55 kΩ
<b>General Data</b>		
Rated voltage	AC/DC 24 V	AC/DC 24 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 30 V with DC; 19,2 – 28,8 V with AC
Accuracy	< 0.3% of final value	< 0.3% of final value
Linearity error	< 0.1% of final value	< 0.1% of final value
Temperature coefficient	0.015% of final value/K	0.015% of final value/K
Error coefficient of the instrumentation cable	2.7 K / Ω	
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	17,5 mm × 79 mm × 84 mm	17,5 mm × 79 mm × 84 mm
Weight	0,06 kg/pcs	0,06 kg/pcs
Approvals	cULus in preparation	cULus in preparation
CE conformity	yes	yes
Accessories	–	–

## Temperature converter for PT 100 with selectable temperature range and output



	Microkon	Microkon
Type	<b>WPT 6-0815</b>	<b>WPT 6-0817</b>
Article no.	<b>750815</b>	<b>750817</b>
<b>Input Side</b>		
Input source	PT100 / 2/4-wire	PT100 / 3-wire
Electrical I/O isolation	3-channel isolation	3-channel isolation
Temperature range	-50 °C to 50 °C -50 °C to 100 °C -50 °C to 150 °C 0 °C to 100 °C 0 °C to 150 °C 0 °C to 200 °C 0 °C to 300 °C 0 °C to 400 °C can be set via rotary coding switch	-50 °C to 50 °C -50 °C to 100 °C -50 °C to 150 °C 0 °C to 100 °C 0 °C to 150 °C 0 °C to 200 °C 0 °C to 300 °C 0 °C to 400 °C can be set via rotary coding switch
Supply current	0.5 mA	0.5 mA
<b>Load Side</b>		
Output signal	Selectable: 0 – 10 V, 0 – 20 mA, 4 – 20 mA (can be set via DIP switches)	Selectable: 0 – 10 V, 0 – 20 mA, 4 – 20 mA (can be set via DIP switches)
Working resistance	400 Ω / 55 kΩ	400 Ω / 55 kΩ
<b>General Data</b>		
Rated voltage	AC/DC 24 V	AC/DC 24 V – 240 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 264 V with DC; 19,2 – 264 V with AC
Accuracy	< 0.3% of final value	< 0.3% of final value
Linearity error	< 0.1% of final value	< 0.1% of final value
Temperature coefficient	0.015% of final value/K	0.015% of final value/K
Error coefficient of the instrumentation cable	0.01% / Ω	–
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	17,5 mm × 79 mm × 84 mm	17,5 mm × 79 mm × 84 mm
Weight	0,06 kg/pcs	0,06 kg/pcs
Approvals	cULus in preparation	cULus in preparation
CE conformity	yes	yes
Accessories	–	–

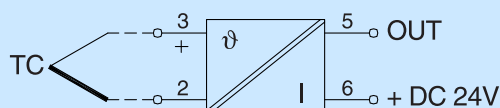
## Temperature converter for PT 100 with selectable temperature range and output



	<b>Microkon</b>
Type	<b>WPT 6-0818</b>
Article no.	<b>750818</b>
<b>Input Side</b>	
Input source	PT100 / 2/4-wire
Electrical I/O isolation	3-channel isolation
Temperature range	-50 °C to 50 °C -50 °C to 100 °C -50 °C to 150 °C 0 °C to 100 °C 0 °C to 150 °C 0 °C to 200 °C 0 °C to 300 °C 0 °C to 400 °C can be set via rotary coding switch
Supply current	0.5 mA
<b>Load Side</b>	
Output signal	Selectable: 0 – 10 V, 0 – 20 mA, 4 – 20 mA (can be set via DIP switches)
Working resistance	400 Ω / 55 kΩ

<b>General Data</b>	
Rated Voltage	AC/DC 24 V – 240 V
Rated voltage range	16.8 – 264 V with DC; 19.2 – 264 V with AC
Accuracy	< 0.3% of final value
Linearity error	< 0.1% of final value
Temperature coefficient	0.015% of final value/K
Error coefficient of the instrumentation cable	0.01% / Ω
Operating temperature range	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, fine strand max. 2.5 mm <sup>2</sup>
Dimensions (W × H × D)	17,5 mm × 79 mm × 84 mm
Weight	0,06 kg/pcs
Approvals	cULus in preparation
CE conformity	yes
Accessories	–

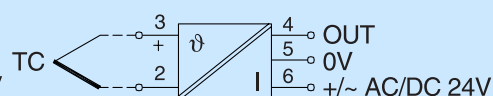
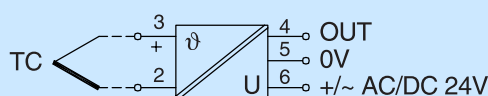
## Temperature converter for thermocouple type J, with fixed temperature range



Microkon	
Type	<b>WTH 7-0836</b>
Article no.	<b>750836</b>
Input Side	
Input source	Thermocouple (DIN IEC 584-1) type J (Fe-CuNi)
Electrical I/O isolation	2-channel isolation
Temperature range	0 – 300 °C
Supply current	–
Load Side	
Output signal	4 – 20 mA
Working resistance	400 Ω

General Data	
Rated Voltage	looped supply
Rated voltage range	Us min = 14 V + 20 mA RS; Us max = 28 V + 20 mA RS
Accuracy	< 0.5% + 2 K of final value
Linearity error	< 0.1% of final value (linear thermoelectric voltage)
Temperature coefficient	0.015% of final value/K
Error coefficient of the instrumentation cable	–
Operating temperature range	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 1,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	6,2 mm × 90 mm × 92,5 mm
Weight	0,03 kg/pcs
Approvals	cULus in preparation
CE conformity	yes
Accessories	Bridging link 760802 red, 760803 white, 760804 blue

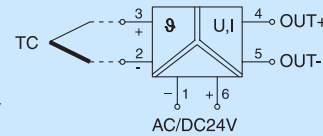
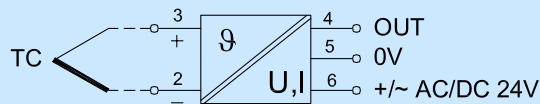
## Temperature converter for thermocouple, type K, selectable temperature range from – 50 °C to 700 °C



	Microkon	Microkon
Type	<b>WTH 7-0835</b>	<b>WTH 7-0834</b>
Article no.	<b>750835</b>	<b>750834</b>
<b>Input Side</b>		
Input source	Thermocouple FeCuNi (type J) compliant with DIN/IEC-584-1	Thermocouple FeCuNi (type J) compliant with DIN/IEC-584-1
Electrical I/O isolation	2-channel isolation	2-channel isolation
Temperature range	Setting in accordance with customer order: -50 °C to 700 °C	Setting in accordance with customer order: -50 °C to 700 °C
Supply current	–	–
<b>Load Side</b>		
Output signal	0 – 10 V	4 – 20 mA
Working resistance	55 Ω	400 Ω

<b>General Data</b>		
Rated Voltage	AC/DC 24 V	AC/DC 24 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 30 V with DC; 19,2 – 28,8 V with AC
Accuracy	< 0.5% + 2 K of final value	< 0.5% + 2 K of final value
Linearity error	< 0.1% of final value (linear thermoelectric voltage)	< 0.1% of final value (linear thermoelectric voltage)
Temperature coefficient	0.015% of final value/K	0.015% of final value/K
Error coefficient of the instrumentation cable	–	–
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 1,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,5 to 1,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	6,2 mm × 90 mm × 92,5 mm	6,2 mm × 90 mm × 92,5 mm
Weight	0,03 kg/pcs	0,03 kg/pcs
Approvals	cULus in preparation	cULus in preparation
CE conformity	yes	yes
Accessories	Bridging link 760802 red, 760803 white, 760804 blue	Bridging link 760802 red, 760803 white, 760804 blue

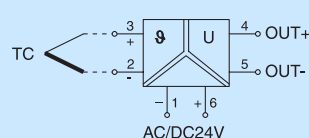
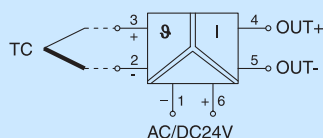
## Temperature converter for thermocouple type J, selectable temperature range and output



	Microkon	Microkon
Type	<b>WTH 7-0833</b>	<b>WTH 7-0839</b>
Article no.	<b>750833</b>	<b>750839</b>
<b>Input Side</b>		
Input source	Thermocouple (DIN IEC 584-1) type J (Fe-CuNi)	Thermocouple (DIN IEC 584-1) type J (Fe-CuNi)
Electrical I/O isolation	2-channel isolation	3-channel isolation
Temperature range	-50 °C to 200 °C 0 °C to 400 °C 0 °C to 600 °C (can be selected via DIP switches)	-50 °C to 200 °C 0 °C to 400 °C 0 °C to 600 °C (can be selected via DIP switches)
Supply current	–	–
<b>Load Side</b>		
Output signal	Selectable: 0 – 10 V, 0 – 20 mA, 4 – 20 mA (can be set via DIP switches)	Selectable: 0 – 10 V, 0 – 20 mA, 4 – 20 mA (can be set via DIP switches)
Working resistance	400 Ω / 55 Ω	400 Ω / 55 Ω

<b>General Data</b>		
Rated Voltage	AC/DC 24 V	AC/DC 24 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 30 V with DC; 19,2 – 28,8 V with AC
Accuracy	< 0.5% + 2 K of final value	< 0.5% + 2 K of final value
Linearity error	< 0.1% of final value (linear thermoelectric voltage)	< 0.1% of final value (linear thermoelectric voltage)
Temperature coefficient	0.015% of final value/K	0.015% of final value/K
Error coefficient of the instrumentation cable	–	–
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 1,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, fine strand max. 2.5 mm <sup>2</sup>
Dimensions (W × H × D)	6,2 mm × 90 mm × 92,5 mm	6,2 mm × 90 mm × 92,5 mm
Weight	0,03 kg/pcs	0,03 kg/pcs
Approvals	cULus in preparation	cULus in preparation
CE conformity	yes	yes
Accessories	Bridging link 760802 red, 760803 white, 760804 blue	Bridging link 760802 red, 760803 white, 760804 blue

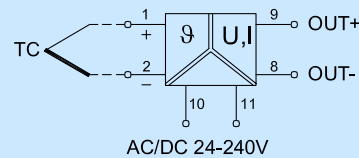
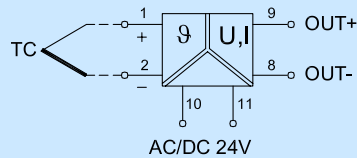
## Temperature converter for thermocouple type J with selectable temperature range from -50°C to 800°C



	Microkon	Microkon
Type	<b>WTH 7-0840</b>	<b>WTH 7-0841</b>
Article no.	<b>750840</b>	<b>750841</b>
<b>Input Side</b>		
Input source	Thermocouple (DIN IEC 584-1) type J (Fe-CuNi)	Thermocouple (DIN IEC 584-1) type J (Fe-CuNi)
Electrical I/O isolation	3-channel isolation	3-channel isolation
Temperature range	Setting in accordance with customer order: -50 °C to 800 °C	Setting in accordance with customer order: -50 °C to 800 °C
Supply current	–	–
<b>Load Side</b>		
Output signal	4 – 20 mA	0 – 10 V
Working resistance	400 Ω	55 Ω

<b>General Data</b>		
Rated Voltage	AC/DC 24 V	AC/DC 24 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 30 V with DC; 19,2 – 28,8 V with AC
Accuracy	< 0.5% + 2 K of final value	< 0.5% + 2 K of final value
Linearity error	< 0.1% of final value (linear thermoelectric voltage)	< 0.1% of final value (linear thermoelectric voltage)
Temperature coefficient	0.015% of final value/K	0.015% of final value/K
Error coefficient of the instrumentation cable	–	–
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, fine strand max. 2.5 mm <sup>2</sup>	Screw terminals, fine strand max. 2.5 mm <sup>2</sup>
Dimensions (W × H × D)	6,2 mm × 90 mm × 92,5 mm	6,2 mm × 90 mm × 92,5 mm
Weight	0,03 kg/pcs	0,03 kg/pcs
Approvals	cULus in preparation	cULus in preparation
CE conformity	yes	yes
Accessories	Bridging link 760802 red, 760803 white, 760804 blue	Bridging link 760802 red, 760803 white, 760804 blue

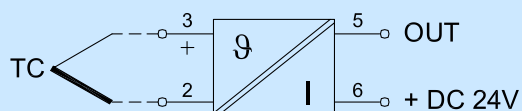
## Temperature converter for thermocouple type J and type K, selectable temperature range and output



	Microkon	Microkon
Type	<b>WTH 6-0844</b>	<b>WTH 6-0847</b>
Article no.	<b>750844</b>	<b>750847</b>
<b>Input Side</b>		
Input source	Thermocouple FeCuNi (type J); NiCrNi (type K) compliant with DIN/IEC584-1	Thermocouple FeCuNi (type J); NiCrNi (type K) compliant with DIN/IEC584-1
Electrical I/O isolation	3-channel isolation	3-channel isolation
Temperature range	-50 °C to 200 °C -50 °C to 350 °C 0 °C to 200 °C 0 °C to 400 °C 0 °C to 600 °C 0 °C to 800 °C 0 °C to 1000 °C 0 °C to 1200 °C can be set via rotary coding switch	-50 °C to 200 °C -50 °C to 350 °C 0 °C to 200 °C 0 °C to 400 °C 0 °C to 600 °C 0 °C to 800 °C 0 °C to 1000 °C 0 °C to 1200 °C can be set via rotary coding switch
Supply current	–	–
<b>Load Side</b>		
Output signal	Selectable: 0 – 10 V, 0 – 20 mA, 4 – 20 mA (can be set via DIP switches)	Selectable: 0 – 10 V, 0 – 20 mA, 4 – 20 mA (can be set via DIP switches)
Working resistance	400 Ω / 55 Ω	400 Ω / 55 Ω

<b>General Data</b>		
Rated Voltage	AC/DC 24 V	AC/DC 24 – 240 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 264 V with DC; 19,2 – 264 V with AC
Accuracy	< 0.5% + 2 K of final value	< 0.5% + 2 K of final value
Linearity error	< 0.1% of final value (linear thermoelectric voltage)	< 0.1% of final value (linear thermoelectric voltage)
Temperature coefficient	0.015% of final value/K	0.015% of final value/K
Error coefficient of the instrumentation cable	–	–
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	17,5 mm × 79 mm × 84 mm	17,5 mm × 79 mm × 84 mm
Weight	0,06 kg/pcs	0,06 kg/pcs
Approvals	cULus in preparation	cULus in preparation
CE conformity	yes	yes
Accessories	–	–

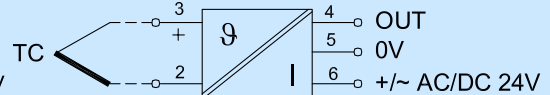
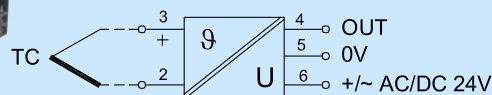
## Temperature converter for thermocouple type K, with fixed temperature range



	<b>Microkon</b>
Type	<b>WTH 7-0876</b>
Article no.	<b>750876</b>
<b>Input Side</b>	
Input source	Thermocouple (DIN IEC 584-1) type K (NiCr-Ni)
Electrical I/O isolation	2-channel isolation
Temperature range	0 – 300 °C
Supply current	–
<b>Load Side</b>	
Output signal	4 – 20 mA
Working resistance	400 Ω

<b>General Data</b>	
Rated Voltage	Powered from current loop
Rated voltage range	Us min = 14 V + 20 mA RS; Us max = 28 V + 20 mA RS
Accuracy	< 0.5% + 2 K of final value
Linearity error	< 0.1% of final value (linear thermoelectric voltage)
Temperature coefficient	0.015% of final value/K
Error coefficient of the instrumentation cable	–
Operating temperature range	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 1,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	6,2 mm × 90 mm × 92,5 mm
Weight	0,03 kg/pcs
Approvals	cULus in preparation
CE conformity	yes
Accessories	Bridging link 760802 red, 760803 white, 760804 blue

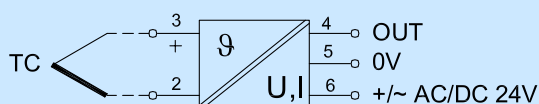
## Temperature converter for thermocouple, type K, selectable temperature range from – 50°C to 1200°C



	Microkon	Microkon
Type	<b>WTH 7-0875</b>	<b>WTH 7-0874</b>
Article no.	<b>750875</b>	<b>750874</b>
<b>Input Side</b>		
Input source	Thermocouple (DIN IEC 584-1) type K (NiCr-Ni)	Thermocouple (DIN IEC 584-1) type K (NiCr-Ni)
Electrical I/O isolation	2-channel isolation	2-channel isolation
Temperature range	Setting in accordance with customer order: -50 °C to 1200 °C	Setting in accordance with customer order: -50 °C to 1200 °C
Supply current	–	–
<b>Load Side</b>		
Output signal	0 – 10 V	4 – 20 mA
Working resistance	Output impedance 55 Ω	400 Ω

<b>General Data</b>		
Rated Voltage	AC/DC 24 V	AC/DC 24 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 30 V with DC; 19,2 – 28,8 V with AC
Accuracy	< 0.5% + 2 K of final value	< 0.5% + 2 K of final value
Linearity error	< 0.1% of final value (linear thermoelectric voltage)	< 0.1% of final value (linear thermoelectric voltage)
Temperature coefficient	0.015% of final value/K	0.015% of final value/K
Error coefficient of the instrumentation cable	–	–
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 1,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,5 to 1,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	6,2 mm × 90 mm × 92,5 mm	6,2 mm × 90 mm × 92,5 mm
Weight	0,03 kg/pcs	0,03 kg/pcs
Approvals	cULus in preparation	cULus in preparation
CE conformity	yes	yes
Accessories	Bridging link 760802 red, 760803 white, 760804 blue	Bridging link 760802 red, 760803 white, 760804 blue
Note	Same versions with 3-channel isolation can be supplied as of September 2004. 750861 = output 0 – 10 V	Same versions with 3-channel isolation can be supplied as of September 2004. 750860 = output 4 – 20 mA

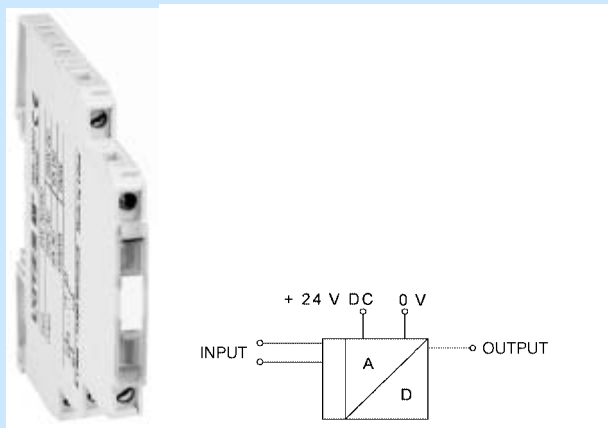
## Temperature converter for thermocouple type K, selectable temperature range and output



Microkon	
Type	<b>WTH 7-0873</b>
Article no.	<b>750873</b>
<b>Input Side</b>	
Input source	Thermocouple (DIN IEC 584-1) type K (NiCr-Ni)
Electrical I/O isolation	2-channel isolation
Temperature range	-50 °C to 200 °C 0 °C to 400 °C 0 °C to 600 °C (can be selected via DIP switches)
Supply current	–
<b>Load Side</b>	
Output signal	Selectable: 0 – 10 V, 0 – 20 mA, 4 – 20 mA (can be set via DIP switches)
Working resistance	55 k $\Omega$ with voltage, 400 $\Omega$ with current output

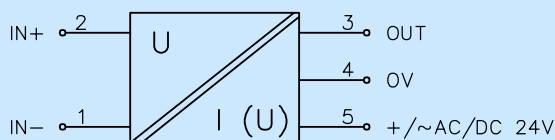
General Data	
Rated Voltage	AC/DC 24 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC
Accuracy	< 0.5% + 2 K of final value
Linearity error	< 0.1% of final value (linear thermoelectric voltage)
Temperature coefficient	0.015% of final value/K
Error coefficient of the instrumentation cable	–
Operating temperature range	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 1,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	6,2 mm × 90 mm × 92,5 mm
Weight	0,03 kg/pcs
Approvals	cULus in preparation
CE conformity	yes
Accessories	Bridging link 760802 red, 760803 white, 760804 blue
Note	Same versions with 3-channel isolation can be supplied as of September 2004. 750869 WTH 7-0869

## Analog converter, 1-channel with serial output



	Minicompact	Minicompact
Type	<b>ADF-6-0582 PT100-27/+100</b>	<b>ADF 6-0590 0-10V</b>
Article no.	<b>760582</b>	<b>760590</b>
<b>Input Side</b>		
Input source	PT 100, 2 wires	0 – 10 V
Electrical I/O isolation	no	no
Input current	1 mA	–
<b>Load Side</b>		
Output signal	Frequency signal 10 – 265 Hz,	Frequency signal 10 – 265 Hz
Output voltage	24 V, $\pm 20\%$	24 V, $\pm 20\%$
Output current	100 mA, short-circuit-protected	100 mA, short-circuit-protected
<b>General Data</b>		
Rated Voltage	DC 24 V + 20% / - 30%	DC 24 V + 20% / - 30%
Charging rate	25 mA	
Accuracy	< 1% of final value at 20°C	< 1% of final value at 20°C
Temperature coefficient	0.05% of final value / K	0.05% of final value / K
Error coefficient of the instrumentation cable	0.02% / $\Omega$	0.02% / $\Omega$
Operating temperature range	-27 °C – 100 °C	0 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Dimensions (W x H x D)	6,2 mm x 79 mm x 84 mm	6,2 mm x 79 mm x 84 mm
Weight	0,03 kg/pcs	0,03 kg/pcs

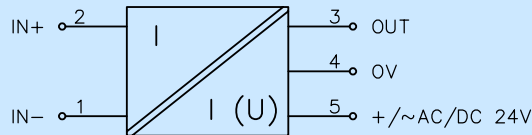
## Single-channel with one configuration, 2-channel isolation



	Microkon	Microkon	Microkon
Type	<b>WAA 6-0500</b>	<b>WAA 6-0501</b>	<b>WAA 6-0502</b>
Article no.	<b>750500</b>	<b>750501</b>	<b>750502</b>
<b>Input Side</b>			
Input source	0 – 10 V	0 – 10 V	0 – 10 V
Electrical I/O isolation	2-channel isolation	2-channel isolation	2-channel isolation
Input current	–	–	–
Input voltage	–	–	–
Input characteristic impedance	330 k $\Omega$	330 k $\Omega$	330 k $\Omega$
<b>Load Side</b>			
Output signal	0 – 10 V	0 – 20 mA	4 – 20 mA
Working resistance	55 $\Omega$	400 $\Omega$	400 $\Omega$

<b>General Data</b>			
Rated Voltage	AC/DC 24 V	AC/DC 24 V	AC/DC 24 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 30 V with DC; 19,2 – 28,8 V with AC
Charging rate	10 mA (auxiliary service)	10 mA (auxiliary service)	10 mA (auxiliary service)
Accuracy	0.1% of final value at 23°C	0.1% of final value at 23°C	0.1% of final value at 23°C
Transmission frequency	< 30 Hz	< 30 Hz	< 30 Hz
Temperature coefficient	0.02% of final value/K	0.02% of final value/K	0.02% of final value/K
Test voltage input/output	1500 V <sub>eff</sub> , 50 Hz, 1 min.	1500 V <sub>eff</sub> , 50 Hz, 1 min.	1500 V <sub>eff</sub> , 50 Hz, 1 min.
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 x ( 0,25 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 x ( 0,25 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 x ( 0,25 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W x H x D)	6,2 mm x 79 mm x 84 mm	6,2 mm x 79 mm x 84 mm	6,2 mm x 79 mm x 84 mm
Weight	0,035 kg/pcs	0,035 kg/pcs	0,035 kg/pcs
Approvals	cULus	cULus	cULus
CE conformity	yes	yes	yes
Note	Also available with spring clamp.	Also available with spring clamp.	Also available with spring clamp.

## Single-channel with one configuration, 2-channel isolation

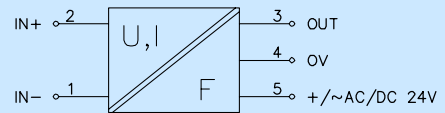
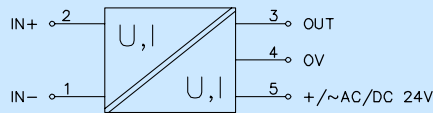


	Microkon	Microkon	Microkon
Type	<b>WAA 6-0503</b>	<b>WAA 6-0504</b>	<b>WAA 6-0505</b>
Article no.	<b>750503</b>	<b>750504</b>	<b>750505</b>
<b>Input Side</b>			
Input source	0 – 20 mA	0 – 20 mA	0 – 20 mA
Electrical I/O isolation	2-channel isolation	2-channel isolation	2-channel isolation
Input current	–	–	–
Input voltage	–	–	–
Input characteristic impedance	100 Ω	100 Ω	100 Ω
<b>Load Side</b>			
Output signal	0 – 10 V	0 – 20 mA	4 – 20 mA
Working resistance	55 Ω	400 Ω	400 Ω

<b>General Data</b>			
Rated Voltage	AC/DC 24 V	AC/DC 24 V	AC/DC 24 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 30 V with DC; 19,2 – 28,8 V with AC
Charging rate	10 mA (auxiliary service)	10 mA (auxiliary service)	10 mA (auxiliary service)
Accuracy	0.1% of final value at 23°C	0.1% of final value at 23°C	0.1% of final value at 23°C
Transmission frequency	< 30 Hz	< 30 Hz	< 30 Hz
Temperature coefficient	0.02% of final value/K	0.02% of final value/K	0.02% of final value/K
Test voltage input/output	1500 V <sub>eff</sub> , 50 Hz, 1 min.	1500 V <sub>eff</sub> , 50 Hz, 1 min.	1500 V <sub>eff</sub> , 50 Hz, 1 min.
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,25 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,25 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,25 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	6,2 mm × 79 mm × 84 mm	6,2 mm × 79 mm × 84 mm	6,2 mm × 79 mm × 84 mm
Weight	0,035 kg/pcs	0,035 kg/pcs	0,035 kg/pcs
Approvals	cULus	cULus	cULus
CE conformity	yes	yes	yes
Note	Also available with spring clamp.	Also available with spring clamp.	Also available with spring clamp.



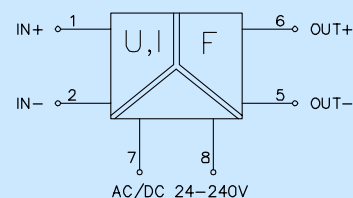
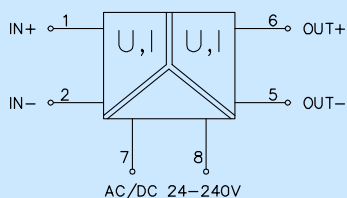
## Single-channel with adjustable ranges, 2-channel isolation



	Microkon	Microkon, frequency output
Type	<b>WNAA 6-0509</b>	<b>WNAF 6-0511</b>
Article no.	<b>750509</b>	<b>750511</b>
<b>Input Side</b>		
Input source	adjustable: 0 – 10 V; 0 – 20 mA; 4 – 20 mA	adjustable: 0 – 10 V; 0 – 20 mA; 4 – 20 mA
Electrical I/O isolation	2-channel isolation	2-channel isolation
Input current	–	–
Input voltage	–	–
Input characteristic impedance	330 k $\Omega$ with voltage, 100 $\Omega$ with current input	330 k $\Omega$ with voltage, 100 $\Omega$ with current input
<b>Load Side</b>		
Output signal	adjustable: 0 – 10 V; 0 – 20 mA; 4 – 20 mA	adjustable: 0 – 50, 0 – 100, 0 – 1000, 0 – 10000 Hz
Working resistance	55 k $\Omega$ with voltage, 400 $\Omega$ with current output	–

<b>General Data</b>		
Rated Voltage	AC/DC 24 V	AC/DC 24 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 30 V with DC; 19,2 – 28,8 V with AC
Charging rate	Input 20 mA/output 40 mA	
Accuracy	0.1% of final value at 23°C	0.1% of final value at 23°C
Transmission frequency	< 30 Hz	< 30 Hz
Temperature coefficient	0.02% of final value/K	0.02% of final value/K
Test voltage input/output	1500 V <sub>eff</sub> , 50 Hz, 1 min.	1500 V <sub>eff</sub> , 50 Hz, 1 min.
Operating temperature range	-25 °C – 60 °C	-20 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,25 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,25 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	6,2 mm × 79 mm × 84 mm	6,2 mm × 79 mm × 84 mm
Weight	0,035 kg/pcs	0,035 kg/pcs
Approvals	cULus	cULus
CE conformity	yes	yes
Note	Also available with spring clamp.	Also available with spring clamp.

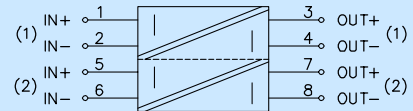
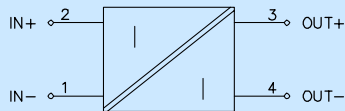
## Single-channel with adjustable ranges, 3-channel isolation



	Microkon	Microkon, frequency output
Type	<b>WNA 6-0510</b>	<b>WNAF 6-0512</b>
Article no.	<b>750510</b>	<b>750512</b>
<b>Input Side</b>		
Input source	adjustable: 0 – 10 V; 0 – 20 mA; 4 – 20 mA	adjustable: 0 – 10 V; 0 – 20 mA; 4 – 20 mA
Electrical I/O isolation	3-channel isolation	3-channel isolation
Input current	–	–
Input voltage	–	–
Input characteristic impedance	330 k $\Omega$ with voltage, 100 $\Omega$ with current input	330 k $\Omega$ with voltage, 100 $\Omega$ with current input
<b>Load Side</b>		
Output signal	adjustable: 0 – 10 V; 0 – 20 mA; 4 – 20 mA	adjustable: 0 – 50, 0 – 100, 0 – 1000, 0 – 10000 Hz
Working resistance	55 k $\Omega$ with voltage, 400 $\Omega$ with current output	–

<b>General Data</b>		
Rated Voltage	AC/DC 24 – 240 V	AC/DC 24 – 240 V
Rated voltage range	16.8 – 264 V with DC; 19.2 – 264 V with AC	16.8 – 264 V with DC; 19.2 – 264 V with AC
Charging rate	Input 20 mA/output 40 mA	
Accuracy	0.1% of final value at 23°C	0.1% of final value at 23°C
Transmission frequency	< 30 Hz	< 30 Hz
Temperature coefficient	0.02% of final value/K	0.02% of final value/K
Test voltage input/output	4000 V <sub>eff</sub> , 50 Hz, 1 min.	4000 V <sub>eff</sub> , 50 Hz, 1 min.
Operating temperature range	-20 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	17,5 mm × 79 mm × 84 mm	17,5 mm × 79 mm × 84 mm
Weight	0,05 kg/pcs	0,05 kg/pcs
Approvals	cULus	cULus
CE conformity	yes	yes
Note	Also available with spring clamp.	Also available with spring clamp.

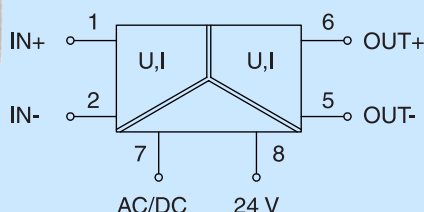
## Passive converter 1-channel and 2-channel



	Microkon	Microkon
Type	<b>WPA 6-0513</b>	<b>WPA 6-0521</b>
Article no.	<b>750513</b>	<b>750521</b>
<b>Input Side</b>		
Input source	0 (4) – 20 mA	0 (4) – 20 mA
Electrical I/O isolation	2-channel isolation	2-channel isolation
Input current	–	–
Input voltage	–	–
Input characteristic impedance	–	–
<b>Load Side</b>		
Output signal	0 (4) – 20 mA	0 (4) – 20 mA
Working resistance	400 Ω at 20 mA	400 Ω at 20 mA

<b>General Data</b>		
Rated Voltage	–	–
Rated voltage range	–	–
Charging rate	–	–
Accuracy	0.1% of final value at 23°C	0.1% of final value at 23°C
Transmission frequency	–	–
Temperature coefficient	0.02% of final value/K	0.02% of final value/K
Test voltage input/output	500 V <sub>eff</sub> , 50 Hz, 1 min.	500 V <sub>eff</sub> , 50 Hz, 1 min.
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,25 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	6,2 mm × 79 mm × 84 mm	12,5 mm × 79 mm × 84 mm
Weight	0,035 kg/pcs	0,05 kg/pcs
Approvals	cULus	cULus
CE conformity	yes	yes
Note	Also available with spring clamp.	Also available with spring clamp.

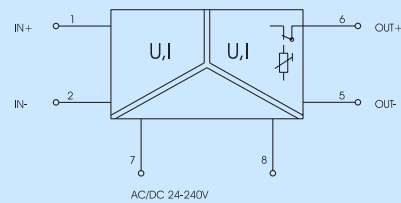
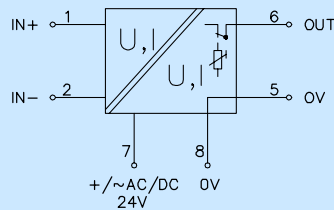
## Single-channel with adjustable configuration, 3-channel isolation



	Microkon	Microkon
Type	<b>WUAA 6-0516</b>	<b>WUAA 6-0517</b>
Article no.	<b>750516</b>	<b>750517</b>
<b>Input Side</b>		
Input source	adjustable via S1: 0 – 60, 0 – 100, 0 – 300, 0 – 500 mV; 0 – 1, 0 – 10, 0 – 20, 2 – 20 V; 0 – 5, 0 – 10, 0 – 20, 4 – 20, ± 5, ± 20 mA	adjustable via S1: 0 – 60, 0 – 100, 0 – 300, 0 – 500 mV; 0 – 1, 0 – 10, 0 – 20, 2 – 20 V; 0 – 5, 0 – 10, 0 – 20, 4 – 20, ± 5, ± 20 mA
Electrical I/O isolation	3-channel isolation	3-channel isolation
Input current	–	–
Input voltage	–	–
Input characteristic impedance	330 kΩ with voltage; 100 Ω with current input	330 kΩ with voltage; 100 Ω with current input
<b>Load Side</b>		
Output signal	adjustable via S2: 0 – 10 V; 0 – 20 mA; 4 – 20 mA	adjustable via S2: 0 – 10 V; 0 – 20 mA; 4 – 20 mA
Working resistance	55 Ω with voltage; 400 Ω with current output	55 Ω with voltage; 400 Ω with current output

<b>General Data</b>		
Rated Voltage	AC/DC 24 V	AC/DC 24 – 240 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16.8 – 264 V with DC; 19.2 – 264 V with AC
Charging rate	10 mA (auxiliary service)	10 mA (auxiliary service)
Accuracy	0.1% of final value at 23°C	0.1% of final value at 23°C
Transmission frequency	< 30 Hz	< 30 Hz
Temperature coefficient	0.02% of final value/K	0.02% of final value/K
Test voltage input/output	1500 V <sub>eff</sub> , 50 Hz, 1 min.	4000 V <sub>eff</sub> , 50 Hz, 1 min.
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	17,5 mm × 79 mm × 84 mm	17,5 mm × 79 mm × 84 mm
Weight	0,05 kg/pcs	0,05 kg/pcs
Approvals	cULus	cULus
CE conformity	yes	yes
Note	Also available with spring clamp.	Also available with spring clamp.

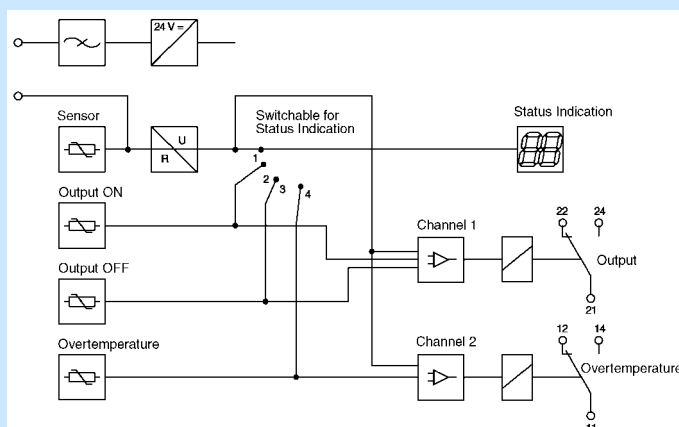
## Single-channel with adjustable ranges, 3-channel isolation Manual/automatic switch



	Microkon	Microkon
Type	<b>WNAA 6-518</b>	<b>WNAA 6-0519</b>
Article no.	<b>750518</b>	<b>750519</b>
<b>Input Side</b>		
Input source	adjustable: 0 – 10 V; 0 – 20 mA; 4 – 20 mA	adjustable: 0 – 10 V; 0 – 20 mA; 4 – 20 mA
Electrical I/O isolation	2-channel isolation	3-channel isolation
Input current	–	–
Input voltage	–	–
Input characteristic impedance	330 k $\Omega$ with voltage; 100 $\Omega$ with current input	330 k $\Omega$ with voltage; 100 $\Omega$ with current input
<b>Load Side</b>		
Output signal	adjustable: 0 – 10 V; 0 – 20 mA; 4 – 20 mA	adjustable: 0 – 10 V; 0 – 20 mA; 4 – 20 mA
Working resistance	55 $\Omega$ with voltage; 400 $\Omega$ with current output	55 $\Omega$ with voltage; 400 $\Omega$ with current output

<b>General Data</b>		
Rated Voltage	AC/DC 24 V	AC/DC 24 – 240 V
Rated voltage range	16,8 – 30 V with DC; 19,2 – 28,8 V with AC	16,8 – 264 V with DC; 19,2 – 264 V with AC
Charging rate	10 mA (auxiliary service)	10 mA (auxiliary service)
Accuracy	0.1% of final value at 23°C	0.1% of final value at 23°C
Transmission frequency	< 30 Hz	< 30 Hz
Temperature coefficient	0.02% of final value/K	0.02% of final value/K
Test voltage input/output	1500 V <sub>eff</sub> , 50 Hz, 1 min.	4000 V <sub>eff</sub> , 50 Hz, 1 min.
Operating temperature range	-25 °C – 60 °C	-25 °C – 60 °C
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	17,5 mm × 79 mm × 84 mm	17,5 mm × 79 mm × 84 mm
Weight	0,05 kg/pcs	0,05 kg/pcs
Approvals	cULus	cULus
CE conformity	yes	yes
Note	Also available with spring clamp.	Also available with spring clamp.

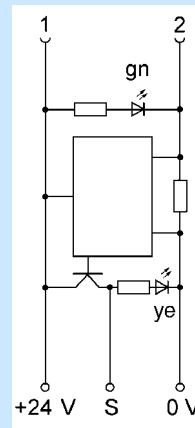
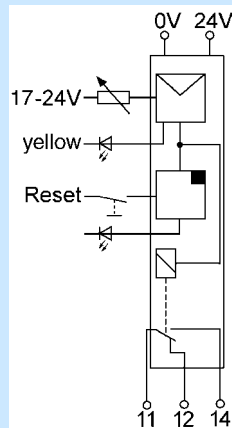
## Temperature sensor with display as threshold value switch



	Variocompact	Variocompact
Type	<b>TC3-0422</b>	<b>TC3-0420</b>
Article no.	<b>730422</b>	<b>730420</b>
<b>Input Side</b>		
Input source	PT100 2-wire connection	KTY81 110
Measuring input	0°C to + 99.9°C	0°C to + 99.9°C
Supply current	1 mA	–
<b>Load Side</b>		
Switching thresholds	Can be set using 3 potentiometers Channel 1: temperature threshold "On" and temperature threshold "Off" Channel 2: overtemperature threshold 1 SPDT per relay 250 V AC/120 V DC, 1250 VA/120 W	Can be set using 3 potentiometers Channel 1: temperature threshold "On" and temperature threshold "Off" Channel 2: overtemperature threshold 1 SPDT per relay 250 V AC/120 V DC, 1250 VA/120 W
Rated insulation voltage	300 V	300 V

<b>General Data</b>		
Rated Voltage	DC 24 V	DC 24 V
Rated voltage range	16,8 – 28,8 V with DC	16,8 – 28,8 V with DC
Charging rate	100 mA	250 mA
Accuracy	0.4% of final value	0.4% of final value
Test voltage input/output	4000 V <sub>eff</sub> , 50 Hz, 1 min.	4000 V <sub>eff</sub> , 50 Hz, 1 min.
Operating temperature range	0 °C – 60 °C	0 °C – 60 °C
Electrical I/O isolation	yes	yes
Type of protection	IP20	IP20
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	45 mm × 90 mm × 95 mm	35 mm × 90 mm × 95 mm
Weight	0,15 kg/pcs	0,146 kg/pcs
Approvals	–	–
CE conformity	yes	yes
Accessories	–	External temperature sensor, part no.: 730 421
Remark	–	If the external temperature sensor is fitted, the internal sensor must be removed.

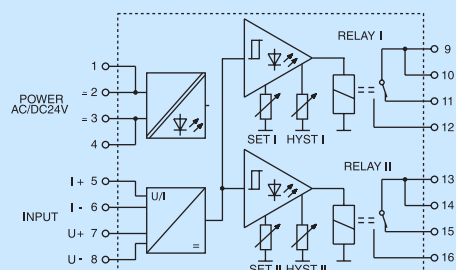
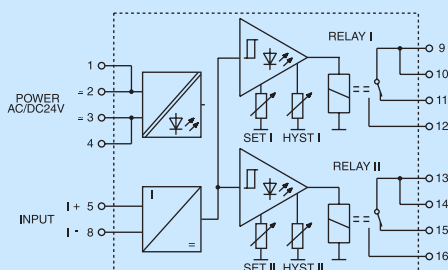
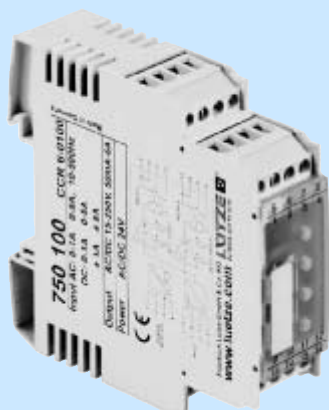
## Current and voltage limit switch



	Voltage monitoring	Current monitoring
Type	<b>NGUE-4-0411</b>	<b>LVUE 4-0866</b>
Article no.	<b>730411</b>	<b>730866</b>
<b>Input Side</b>		
Measuring input	17 – 24 V DC	up to max. 2,5 A
Input voltage	–	DC 18 V to 30 V
<b>Load Side</b>		
Switching thresholds	Undervoltage: 17 – 24 V can be set using the trimmer in the front panel	Measuring current at 250 mA
Protection device load side	–	Varistor
Rated insulation voltage	300 V	50 V

<b>General Data</b>		
Rated Voltage	DC 24 V (DC 12 – 35 V) Data double-throw contact DC 120 V/AC 250 V, DC 2 A/AC 5 A	DC 24 V
Charging rate	< 40 mA	–
Accuracy	–	± 10%
Operating temperature range	0 °C – 60 °C	0 °C – 60 °C
Electrical I/O isolation	yes	yes
Type of protection	IP20	IP20
Mount	can be snapped onto DINrail as per EN 50 022 and 32 mm G-rail (EN 50 035)	can be snapped onto DINrail as per EN 50 022 and 32 mm G-rail (EN 50 035)
Connection device	screw terminals/4 mm <sup>2</sup>	screw terminals/4 mm <sup>2</sup>
Dimensions (W x H x D)	22,5 mm x 70 mm x 60 mm	17,5 mm x 70 mm x 60 mm
Weight	0,052 kg/pcs	0,03 kg/pcs
CE conformity	yes	yes

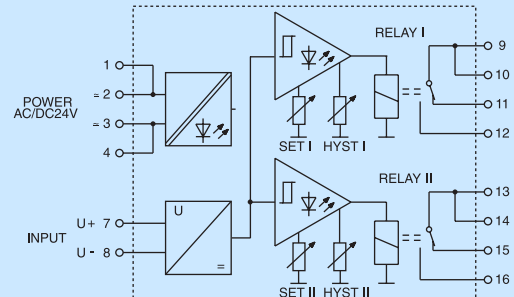
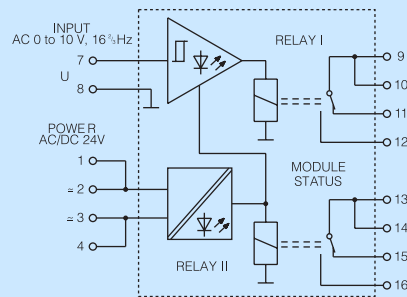
## Current and voltage limit switch



	Current monitoring	Standard signal monitoring
Type	<b>CCR 6-0100 AC/DC24V</b>	<b>CNAR 6-0110 AC/DC24V</b>
Article no.	<b>750100</b>	<b>750110</b>
<b>Input Side</b>		
Measuring input	DC: 0 – 1 A, 0 – 5 A, ±1 A, ±5 A AC: 0 – 1 A, 0 – 5 A, sinusoidal Overload capability: 2 x nominal current, continuous, 100 A for 1 s	DC: 0 (4) – 20 mA, ±20 mA AC: 0 – 20 mA <sub>eff</sub> sinusoidal Overload capability: AC/DC ≤200 mA DC: 0 – 10 V, ±10 V AC: 0 – 10 V <sub>eff</sub> sinusoidal Overload capability: AC/DC ≤250 V
Input voltage	–	–
<b>Load Side</b>		
Switching thresholds	0 – 100 % for each switch contact, independently adjustable Switching hysteresis: 0 – 60 % full scale (each case 12-turn pot.)	0 – 100 % for each switch contact, independently adjustable Switching hysteresis: 0 – 60 % full scale (each case 12-turn pot.)
Rated insulation voltage	AC/DC 600 V for monitoring category III and degree of contamination 2 as per DIN EN 50178 between input, auxiliary power and switching output circuits. Also AC/DC 300 V between the switching output circuits.	AC/DC 600 V for monitoring category III and degree of contamination 2 as per DIN EN 50178 between input, auxiliary power and switching output circuits. Also AC/DC 300 V between the switching output circuits.

<b>General Data</b>		
Rated Voltage	AC/DC 24 V	AC/DC 24 V
Rated voltage range	AC/DC 24 V ± 15 %, 48 – 62 Hz	AC/DC 24 V ± 15 %, 48 – 62 Hz
Charging rate	–	–
Accuracy	Repeat accuracy 0,2 % (full scale)	Repeat accuracy 0,2 % (full scale)
Test voltage input/output	4 kV, 50 Hz, 1 min., input against all other circuits 4 kV, 50 Hz, 1 min., auxiliary power against all other circuits 2,5 kV, 50 Hz, 1 min., relay switching circuit I against II	4 kV, 50 Hz, 1 min., input against all other circuits 4 kV, 50 Hz, 1 min., auxiliary power against all other circuits 2,5 kV, 50 Hz, 1 min., relay switching circuit I against II
Operating temperature range	-20 °C – 60 °C	-20 °C – 60 °C
Electrical I/O isolation	3-channel isolation	3-channel isolation
Type of protection	IP20	IP20
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 x ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 x ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W x H x D)	22,5 mm x 84 mm x 79 mm	22,5 mm x 84 mm x 79 mm
Weight	0,09 kg/pcs	0,09 kg/pcs
Approvals	cULus in preparation	cULus in preparation
CE conformity	yes	yes

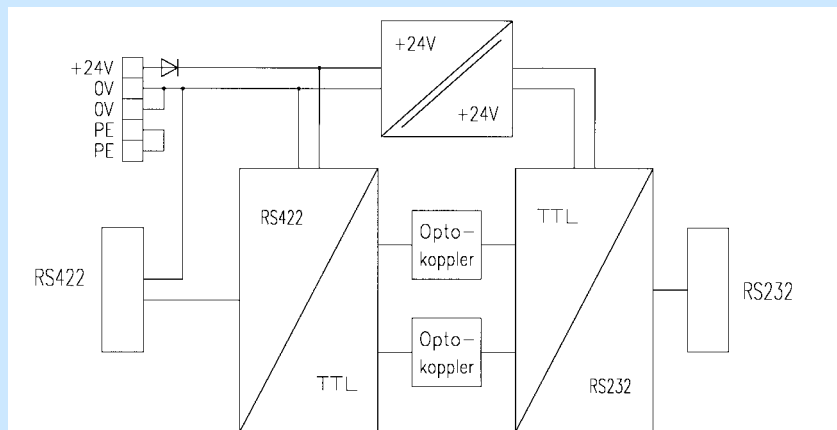
## Current and voltage limit switch



	Voltage monitoring	Voltage monitoring
Type	<b>CV 6-0150 AC/DC24V</b>	<b>CVR 6-0120 AC/DC24V</b>
Article no.	<b>750150</b>	<b>750120</b>
<b>Input Side</b>		
Measuring input	AC 10 V <sub>eff</sub> sinusoidal Overload capability: AC/DC 250 V ( 16 2/3 Hz)	AC/DC 0 – 24 V, 0 – 48 V, 0 – 100 V, 0 – 120 V, 0 – 250 V, 0 – 500 V (AC: sinusoidal) DC: ± 24 V, ± 48 V, ± 100 V, ± 120 V, ± 250 V, ± 500 V Overload capability: AC/DC ≤ 600 V
Input voltage	–	–
<b>Load Side</b>		
Switching thresholds	Trip value 9,5 V <sub>eff</sub> , dropout value 9,0 V <sub>eff</sub>	0 – 100 % for each switch contact, independently adjustable Switching hysteresis: 0 – 60 % full scale (each case 12-turn pot.)
Rated insulation voltage	AC/DC 600 V for monitoring category III and degree of contamination 2 as per DIN EN 50178 between input, auxiliary power and switching output circuits. Also AC/DC 300 V between the switching output circuits.	AC/DC 600 V for monitoring category III and degree of contamination 2 as per DIN EN 50178 between input, auxiliary power and switching output circuits. Also AC/DC 300 V between the switching output circuits.

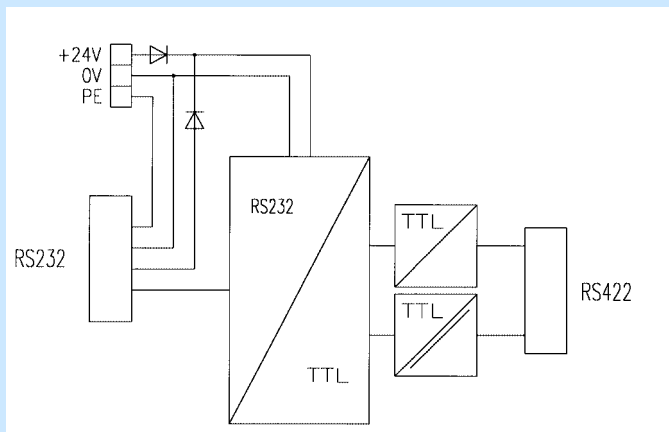
<b>General Data</b>		
Rated Voltage	AC/DC 24 V	AC/DC 24 V
Rated voltage range	AC/DC 24 V ± 15 %, 48 – 62 Hz	AC/DC 24 V ± 15 %, 48 – 62 Hz
Charging rate	–	–
Accuracy	Repeat accuracy 0,2 % (full scale)	Repeat accuracy 0,2 % (full scale)
Test voltage input/output	4 kV, 50 Hz, 1 min., input against all other circuits 4 kV, 50 Hz, 1 min., auxiliary power against all other circuits 2,5 kV, 50 Hz, 1 min., relay switching circuit I against II	4 kV, 50 Hz, 1 min., input against all other circuits 4 kV, 50 Hz, 1 min., auxiliary power against all other circuits 2,5 kV, 50 Hz, 1 min., relay switching circuit I against II
Operating temperature range	-20 °C – 60 °C	-20 °C – 60 °C
Electrical I/O isolation	3-channel isolation	3-channel isolation
Type of protection	IP20	IP20
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule	Screw terminals, 1 × ( 0,5 to 2,5 ) mm <sup>2</sup> fine strand without or with ferule
Dimensions (W × H × D)	22,5 mm × 84 mm × 79 mm	22,5 mm × 84 mm × 79 mm
Weight	0,09 kg/pcs	0,09 kg/pcs
Approvals	cULus in preparation	cULus in preparation
CE conformity	yes	yes

## Converter RS232 – RS422 with 3-channel isolation



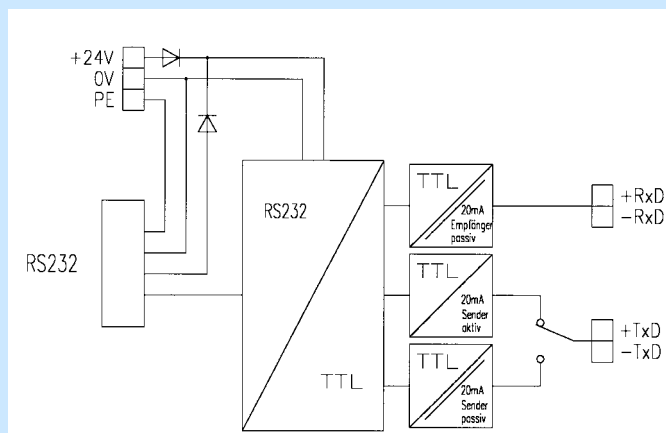
Type	<b>CTS-RS 232/RS 422-0230</b>
Article no.	<b>750230</b>
<b>Input Side</b>	
Input source	9-pin SUB-D multiple contact strip for RS 232
Electrical I/O isolation	Optocoupler in the transmission and reception circuit
Transfer rate	max. 50 kBaud
Transfer protocol	any
<b>Load Side</b>	
Output signal	9-pin SUB-D pin connector for RS 422
Working resistance	
Transmission length	max. 1200 m
<b>General Data</b>	
Rated Voltage	DC 24 V
Charging rate	max. 80 mA
Test voltage input/output	4 kV
Operating temperature range	0 °C – 60 °C
Mount position/mode	any
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminal: fine strand 2.5 mm <sup>2</sup> , one-wire 4 mm <sup>2</sup> , 2 x SUB-D connector
Dimensions (W x H x D)	45 mm x 95 mm x 95 mm
Remark	DTE/DCE operating mode changes by means of sliding switch, suitable for point-to-point connections

## Converter RS232 – RS422

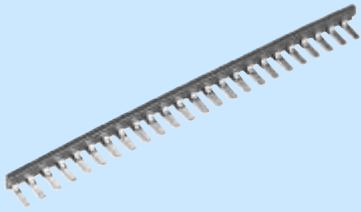


Type	<b>CTS-RS 232/RS 422-0206</b>
Article no.	<b>750206</b>
<b>Input Side</b>	
Input source	9-pin SUB-D multiple contact strip for RS 232
Electrical I/O isolation	Optocoupler in the reception circuit
Transfer rate	max. 50 kBaud
Transfer protocol	any
<b>Load Side</b>	
Output signal	9-pin SUB-D pin connector for RS 422
Working resistance	
Transmission length	max. 1200 m
<b>General Data</b>	
Rated Voltage	DC 24 V (DC 12 V – 30 V)
Charging rate	max. 80 mA
Test voltage input/output	2.5 kV
Operating temperature range	0 °C – 60 °C
Mount position/mode	any
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminal: fine strand 2.5 mm <sup>2</sup> , one-wire 4 mm <sup>2</sup> , 2 x SUB-D connector
Dimensions (W x H x D)	45 mm x 95 mm x 95 mm
Remark	DTE/DCE operating mode changes by means of sliding switch, suitable for point-to-point connections

## RS232 – 4 – 20 mA



Type	<b>CTS-RS 232/20mA-0135</b>
Article no.	<b>750135</b>
<b>Input Side</b>	
Input source	9-pin SUB-D multiple contact strip for RS 232
Electrical I/O isolation	Optocoupler in the reception and passive transmission circuit
Transfer rate	max. 50 kBaud with active transmission circuit, 20 kBaud with passive transmitter
Transfer protocol	any
<b>Load Side</b>	
Output signal	5-pin screw terminal for 20 mA
Working resistance	max. 150 Ω
Transmission length	max. 1000 m
<b>General Data</b>	
Rated Voltage	DC 24 V (DC 12 V – 30 V)
Charging rate	max 60 mA
Test voltage input/output	2.5 kV
Operating temperature range	0 °C – 60 °C
Mount position/mode	any
Mount	Can be snapped onto top hat profile TS35 (EN 50 022)
Connection device	Screw terminal: fine strand 2.5 mm <sup>2</sup> , one-wire 4 mm <sup>2</sup> , 2 × SUB-D connector
Dimensions (W × H × D)	45 mm × 95 mm × 95 mm
Remark	DTE/DCE operating mode changes by means of sliding switch



Type	BK 7-0802	BK 7-0803	BK 7-0804
Article no.	760802	760803	760804
<b>Technical Data</b>			
Number of terminations	16	16	16
Pin spacing	6,2 mm	6,2 mm	6,2 mm
Max. sum current	16 A	16 A	16 A
Colour of the insulation	red	white	blue
Packing units	5 pcs	5 pcs	5 pcs

