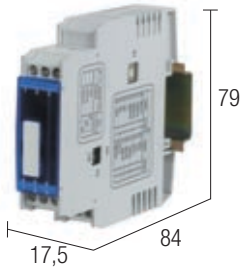
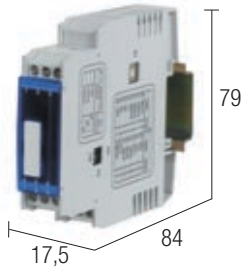
Thermocouple converters and isolators

- Suitable for J and K thermocouple
- IN / OUT / supply galvanic isolation
- 8 programmable temperature ranges
- 3 programmable output ranges
- Simple programming, self calibrating
- Availabe version with 24-240 Vac/dc supply voltage



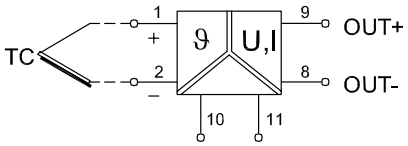


Wide range input voltage 24-240 Vac/dc

NOTES

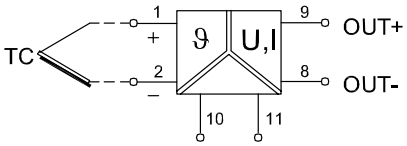
(1) Adjustable via rotary-switch
(2) Adjustable via dip-switch

BLOCK DIAGRAM



Input voltage
24 Vac/dc

BLOCK DIAGRAM



Wide range input
voltage 24-240 Vac/dc

APPLICATIONS

The modules convert and isolate signals generated by thermocouples type J (FeCuNi) or K (NiCrNi) into an analogue signal; can be set into 8 temperature input ranges, and can be set for up to 3 most importante analog ranges. The set up is possible by setting a dip-witch on one side of the module.
The modules provide input and output isolation, assuring high signal accuracy, and can be used with isolated and not isolated sensors.

VERSIONS

24 Vac/dc supply voltage
24-240 Vac/dc supply voltage

	CWTH 6-0844 cod. X756844	**CWTH 6-0847** cod. X756847
INPUT TECHNICAL DATA		
Input signal	FeCuNi (J type) and NiCrNi (K type) thermocouple according to DIN/IEC584-1	FeCuNi (J type) and NiCrNi (K type) thermocouple according to DIN/IEC584-1
Temperature range (1)	-50…+200°C (-58…+392°F) -50…+350°C (-58 …+662°F) 0…+200°C (+32…+392°F) 0…+400°C (+32…+752°F) 0…+600°C (+32…+1112°F) 0…+800°C (+32…+1472°F) 0…+1000°C (+32…+1832°F) 0…+1200°C (+32…+2192°F)	-50…+200°C (-58…+392°F) -50…+350°C (-58 …+662°F) 0…+200°C (+32…+392°F) 0…+400°C (+32…+752°F) 0…+600°C (+32…+1112°F) 0…+800°C (+32…+1472°F) 0…+1000°C (+32…+1832°F) 0…+1200°C (+32…+2192°F)
	–	–
OUTPUT TECHNICAL DATA		
Output signal (2)	0–10 V 0–20 / 4–20 mA	0–10 V 0–20 / 4–20 mA
Applicable load	55 Ω with output voltage, 400 Ω with output current	55 Ω with output voltage, 400 Ω with output current
APPROVALS	c UL us LISTED pending	c UL us LISTED pending
GENERAL TECHNICAL DATA		
Supply voltage	**24 Vac/dc** (16.8 – 30 Vdc / 19.2 – 28.8 Vac)	**24-240 Vac/dc** (16.8 – 264 Vdc / 19.2 – 264 Vac)
Max. rated current	35 mA ± 10% @ 24 Vdc	35 mA ± 10% @ 24 Vdc
Accuracy	<0.5% + 2K full range	<0.5% + 2K full range
Transmission frequency	<0.1% full range	<0.1% full range
Temperature coefficient	0.015% / K full range	0.015% / K full range
Isolation	1.5 kVac / 60 s (IN / OUT / supply volatage)	4 kVac / 60 s (IN / OUT / supply volatage)
EMC Standard	EN 50081-2, EN 50082-2	EN 50081-2, EN 50082-2
Reference Standard	IEC 664-1, DIN VDE	IEC 664-1, DIN VDE
Overvoltage category	III	III
Pollution degree	2	2
Protection degree	IP20	IP20
Operating temperature	-25 … +60°C (-13 … +140°F)	-25 … +60°C (-13 … +140°F)
Connection terminal blocks	2.5 mm^2, screw type	2.5 mm^2, screw type
Housing material	Noryl UL94 V-0	Noryl UL94 V-0
Approximative weight	600 g (21.16 oz)	600 g (21.16 oz)
Mounting information	on rail adjacent without gap	on rail adjacent without gap
Mounting rail according to IEC60715/TH35-7,5	**PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB**	**PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB**