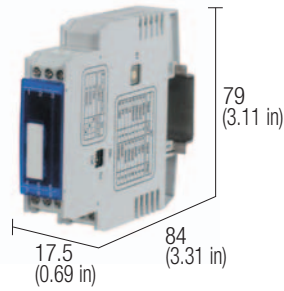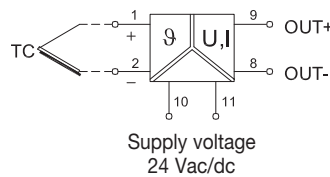# Temperature transducer

• Converters for sensors with thermocouples J and K type

• 3 ways galvanic isolation

• 8 programmable input range

• 3 programmable output range

• Simple programming

79 (3.11 in)

17.5 (0.69 in)   84 (3.31 in)

c(UL)us LISTED CE

NOTES

The dimensions includes the DIN clamp.
(1) Adjustable via rotary-switch
(2) Adjustable via dip-switch
(3) range 16.8…30 Vdc / 19.2…28.8 Vac
(4) range 16.8…264 Vdc / 19.2…264 Vac
(5) "3-way isolation: IN/OUT/power supply

BLOCK DIAGRAM

TC

| 1 + | 𝜗 | U,I | 9 | OUT+ |
| 2 − | | | 8 | OUT- |

10   11

Supply voltage
24 Vac/dc

VERSIONS	Cat. No. X756844	-
24 Vac/dc supply voltage	**CWTH 6-0844**	
24-240 Vac/dc supply voltage		-
INPUT TECHNICAL DATA		
Input signal	thermocouples FeCuNi (J type) e NiCrNi (K type) 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)	
Supply current	—	
OUTPUT TECHNICAL DATA		
Output signal (2)	0…10 V	
	0…20 / 4…20 mA	
Applicable load	>1 kΩ with output voltage,	
	<400 Ω with output current	
GENERAL TECHNICAL DATA		
Supply voltage	24 Vac/dc (3)	
Rated current	≤ 35 mA ± 10% @ 24 Vdc	
Accuracy	<0.5% FS	
Trasmission frequency	<30 Hz	
Temperature coefficient	0.015% / K FS	
Isolation	1.5 kVac / 60 s (5)	
ECM standards	EN 50081-2, EN 50082-2	
Reference Standard	IEC 664-1, DIN VDE	
Overvoltage category/Pollution degree	III / 2	
Protection degree	IP20	
Operating temperature range	-20…+60°C	
Connection terminal	2.5 mm² fixed screw type	
Housing material	Noryl UL94V-0	
Approx. weight	65 g (2.29 oz)	
Mounting information	vertical on rail adjacent without gap	

MOUNTING ACCESSORIES

Mounting rail type according to IEC60715/TH35-7.5	**PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB**
Mounting rail type according to IEC60715/G32	—
Plug-in jumper red	—
(16 poles, 16 A) white	—
blue	—

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 important analogue 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.