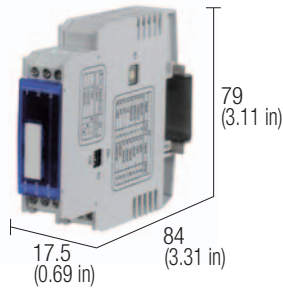


Temperature transducer

- Converters for PT100 sensors
- 3 ways galvanic isolation
- 8 programmable input range
- 3 programmable output range
- Simple programming
- Version with 24-240 Vac/dc supply voltage

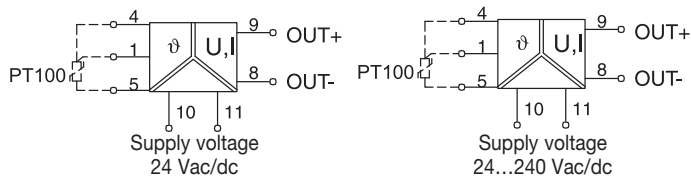


NOTES

The dimensions includes the DIN clamp.

- (1) Adjustable via rotary-switch
- (2) Adjustable via dip-switch
- (3) They can also be used with 2 wire PT100 sensor, connecting the terminals 1 and 4
- (4) range 16.8...30 Vdc / 19.2...28.8 Vac
- (5) range 16.8...264 Vdc / 19.2...264 Vac
- (6) 3-way isolation: IN/OUT/power supply

BLOCK DIAGRAM



VERSIONS

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

INPUT TECHNICAL DATA

Input signal
Temperature range (1)

Supply current

OUTPUT TECHNICAL DATA

Output signal (2)
Applicable load

GENERAL TECHNICAL DATA

Supply voltage
Rated current
Accuracy
Transmission frequency
Temperature coefficient
Isolation
ECM standards
Reference Standard
Overvoltage category/Pollution degree
Protection degree
Operating temperature range
Connection terminal
Housing material
Approx. weight
Mounting information

Cat. No. X756816

CWPT 6-0816

PT100 3 wires (3)
-50...+50°C (-58...+122°F)
-50...+100°C (-58...+212°F)
-50...+150°C (-58...+302°F)
0...+100°C (+32...+212°F)
0...+150°C (+32...+302°F)
0...+200°C (+32...+392°F)
0...+300°C (+32...+572°F)
0...+400°C (+32...+752°F)
0.5 mA

Cat. No. X756817

CWPT 6-0817

PT100 3 wires (3)
-50...+50°C (-58...+122°F)
-50...+100°C (-58...+212°F)
-50...+150°C (-58...+302°F)
0...+100°C (+32...+212°F)
0...+150°C (+32...+302°F)
0...+200°C (+32...+392°F)
0...+300°C (+32...+572°F)
0...+400°C (+32...+752°F)
0.5 mA

APPLICATIONS

The modules convert and isolate signals generated by 3 wire / 2 wire PT100 (RTD) sensors into analogue signals; the module can be set into 8 temperature ranges and for up to 3 most important analogue ranges. Set up is easily achieved by setting a dip-switch 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. Two wire sensors can be used by connecting a jumper wire between 1 and 4 terminal blocks.

MOUNTING ACCESSORIES

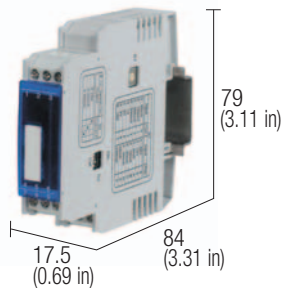
Mounting rail type according to IEC60715/TH35-7.5
Mounting rail type according to IEC60715/G32
Plug-in jumper
(16 poles, 16 A)

red
white
blue

PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB

Temperature transducer

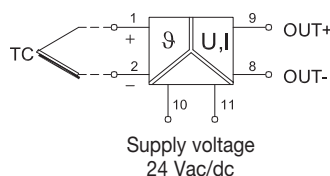
- Converters for sensors with thermocouples J and K type
- 3 ways galvanic isolation
- 8 programmable input range
- 3 programmable output range
- Simple programming



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



VERSIONS

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

INPUT TECHNICAL DATA

Input signal

Temperature range (1)

Supply current

Cat. No. X756844

CWTH 6-0844

thermocouples FeCuNi (J type) e NiCrNi (K type)
 according to DIN/IEC584-1
 -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)

—

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-switch 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.

OUTPUT TECHNICAL DATA

Output signal (2)

Applicable load

0...10 V
 0...20 / 4...20 mA
 >1 kΩ with output voltage,
 <400 Ω with output current

GENERAL TECHNICAL DATA

Supply voltage

Rated current

Accuracy

Transmission frequency

Temperature coefficient

Isolation

ECM standards

Reference Standard

Overvoltage category/Pollution degree

Protection degree

Operating temperature range

Connection terminal

Housing material

Approx. weight

Mounting information

24 Vac/dc (3)
 ≤ 35 mA ± 10% @ 24 Vdc
 <0.5% FS
 <30 Hz
 0.015% / K FS
 1.5 kVac / 60 s (5)
 EN 50081-2, EN 50082-2
 IEC 664-1, DIN VDE
 III / 2
 IP20
 -20...+60°C
 2.5 mm² fixed screw type
 Noryl UL94V-0
 65 g (2.29 oz)
 vertical on rail adjacent without gap

MOUNTING ACCESSORIES

Mounting rail type according to IEC60715/TH35-7.5

Mounting rail type according to IEC60715/G32

Plug-in jumper

(16 poles, 16 A)

red
 white
 blue

PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB

Temperature transducer

- For PT100, PT1000 sensors, thermocouples, potentiometers
- 3 ways I/O 2.5 kV isolation
- 145 programmable input ranges via dip-switch and customizable via software FDT/DTM
- 5 programmable output ranges via dip-switch and customisable via software FDT/DTM
- Compact dimension, 6.2 mm pitch

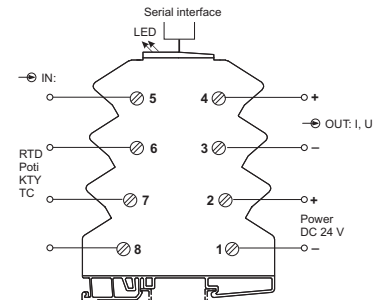
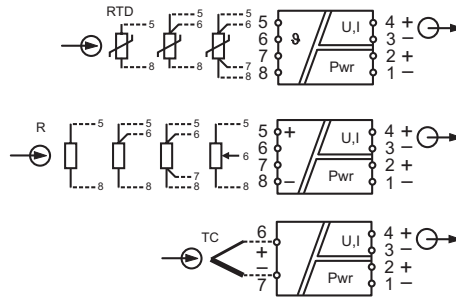


Programming tool X756894

NOTES

The dimensions includes the DIN clamp.
 (1) Version with spring-clamp terminals available on request
 (2) Input temperature ranges, and output signals, can be set via dip switch, or adjustable via FDT/DTM software.
 (3) 3-way isolation: IN / OUT/ supply

BLOCK DIAGRAM



VERSIONS

With screw terminals (standard)

With spring terminals

Programming tool

INPUT TECHNICAL DATA

Input signal

Temperature range

OUTPUT TECHNICAL DATA

Output signal

Applicable load

Display signals

Cod. X756340

Cod. X756894

LCONTADFDT

(1)

LCONZBUSB

PT100, PT1000 sensor
 potenziometro 0...600k Ω
 thermocouple B, C, E, J, K, N, R, S, T type
 -200...+1400°C, according to sensor type (2)

0...10 / -10...+10 V, (max. 10.25 V)
 0...20 / 4...20 mA, (max 21 mA) (2)
 >2 k Ω with output voltage
 <650 Ω with output current
 green LED = OK, flashing red LED = error

GENERAL TECHNICAL DATA

Supply voltage	24 Vdc (16.8...30 Vdc)
Rated current	18 mA max. @ 24 Vdc
Accuracy	10K/span(K) + 0.2% FS (for RTD) / 10K/span(K) + 0.4% FS (for TE)
Data processing	24 bit
Linearity error	$\pm 0.05\%$ FS - $\pm 0.1\%$ FS (for TE)
Temperature coefficient	<100 ppm/°C
Response time	5...500 ms (regolabile, default 30 ms)
Isolation	2.5 kVac / 60 s (3)
ECM standards	EN 61000-6-2, EN 61000-6-4
Reference Standard	IEC 664-1, DIN VDE
Overvoltage category / Pollution degree	III / 2
Protection degree	IP 20 IEC 529 EN60529
Operating temperature	-40...+70°C
Connection terminal	1.5 mm ² fixed screw ty'e
Housing material	PPE
Approx. weight	40 g (1.41 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 white blue
	CWBK 7-0802 cod. X766802 CWBK 7-0803 cod. X766803 CWBK 7-0804 cod. X766804

APPLICATIONS

CSWTPR 7-0340 is a temperature to analog signal conversion module that provides high accuracy measurement and that can be connected to a wide range of temperature sensors. The module can be used for a temperature range from -200 to + 1.400°C.

With resistive sensors it is possible to select among 2, 3, 4 wire connections. Input and output ranges can be modified with a FDT/DTM software and an USB interface.

Range*	S1	S2
Start	7 8 1 2	End 3 4 5 6 7 8
-200°C	●	0°C
-150°C	●	50°C
-100°C	●	100°C
-50°C	●	150°C
0°C	●	200°C
	●	250°C
	●	300°C
	●	350°C
	●	400°C
	●	450°C
	●	500°C
	●	550°C
	●	600°C
	●	650°C
	●	700°C
	●	750°C
	●	800°C
	●	850°C
	●	900°C
	●	950°C
	●	1000°C
	●	1050°C
	●	1100°C
	●	1150°C
	●	1200°C
	●	1250°C
	●	1300°C
	●	1350°C
	●	1400°C
	●	● → Switch On

S1-S2 1-8 off:
 FDT/DTM