Temperature Converter
XCONTA819P

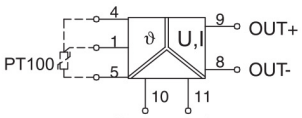
Your Source for Automation Components

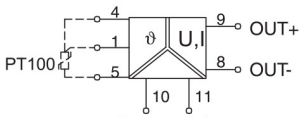
- **Input: PT100 2/3-wire**
- **Output: 3 selectable ranges**
- **Insulation: 4 kVac, 3-way isolation**

NOTE

(1) May also be used with the 2-wire PT100, connecting terminal blocks 1 and 4 together

(2) New model, available starting from November 2020





APPLICATIONS

The module converts and isolates signals deriving from three-wire PT100 (RTD) sensors into a proportional analogue signal and is programmable in 8 input temperature ranges and into the three main standard output signals. Configuration is obtained by setting the DIP-switches located on the side.
The converters are galvanically isolated, which ensures more precise signal reading, and can be used both with isolated and non-isolated sensors.
Two-wire sensors can be used by connecting terminal blocks 4 and 1 together.

CODE TYPE	X756816 CWPT 6-0816	XCONTA819P CON-TA-819P (2)
INPUT TECHNICAL DATA		
Signal type IN	PT100 2/3-wire (1)	PT100 2/3-wire (1)
Input range IN	8 programmable ranges (see tab. 1)	8 programmable ranges (see tab. 1)
Maximum voltage current signal IN	—	—
Input impedance IN	—	>1 MΩ (2-wire) / >500 kΩ (3-wire)
Parametrization IN	DIP switch	DIP switch
OUTPUT TECHNICAL DATA		
Signal type OUT	analogue	analogue
Output range OUT	0...10 V / 0...20 mA / 4...20 mA	0...10 V / 0...20 mA / 4...20 mA
Maximum output signal OUT	21 mA (voltage input)	16 V (voltage output) / 5 mA (current output)
Load impedance OUT	>1 kΩ (voltage output) / <400 Ω (current output)	>2 kΩ (voltage output) / <500 Ω (current output)
Ripple OUT	<5 mV	<20 mV
Status indication OUT	LED	LED
Parametrization OUT	DIP switch	DIP switch
GENERAL TECHNICAL DATA		
Power supply voltage	24 Vac/dc (16.8...30 Vdc / 19.2...28.8 Vac)	24 Vac/dc (18.0...31.2 Vdc / 19.2...26.4 Vac)
Current consumption	10 mA	13 mA (24 Vdc) / 22 mA (24 Vac)
Accuracy	0.3% FSR (23°C)	0.3% FSR (23°C)
Linearity error	0.1% FSR	0.1% FSR
Temperature coefficient	<150 ppm / K FSR	<150 ppm / K FSR
Setting time	5...500 ms (adjustable, default 30 ms)	—
Transmission frequency	10 Hz	10 Hz 3dB
Resolution	—	—
Rise time	30 ms	—
Operating temperature range	-25...+60°C	-25...+60°C
Insulation	4 kVac / 60 s	2.5 kVac / 60 s
Insulation type	3-way (IN / OUT1 / power)	3-way (IN / OUT1 / power)
Standard approvals	EN 60721-3-3, EN 50178	EN 60947-5-1
EMC Standards	EN 55011, EN 61000-4-2/6	—
Overvoltage category / Pollution degree	II / 2	II / 2
Protection degree	IP 20	IP 20
Connection terminal IN / OUT	2.5 mm² / 2.5 mm² (screw)	2.5 mm² / 2.5 mm² (push-in)
Housing material	UL94V-0 plastic material	UL94V-0 plastic material
Dimensions	17.5x79x84 mm	17.5x93x73 mm
Approximate weight	70 g	30 g
Mounting informations	on a rail, side by side	on a rail, side by side
APPROVALS	CE cULus	CE cULus
ACCESSORIES		
Mounting rail (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

Tab. 1 - Input temperature ranges

-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)