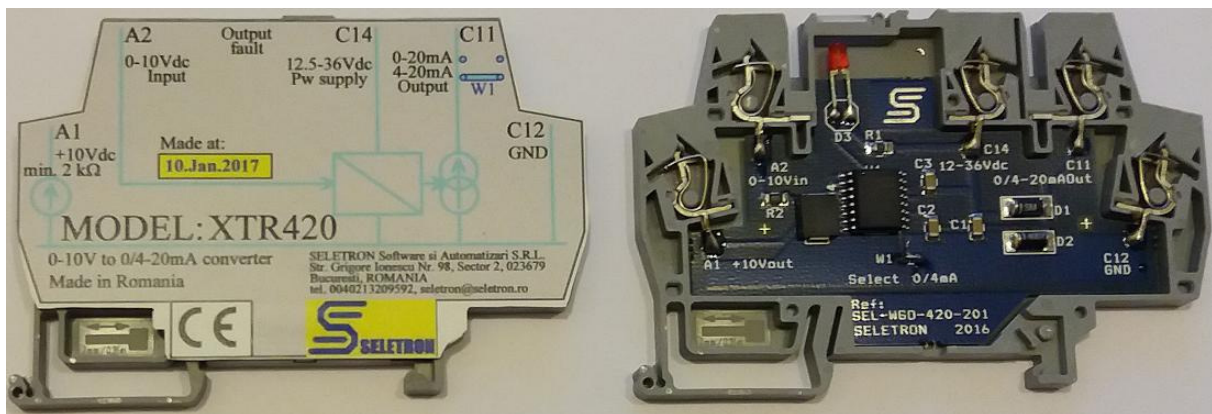


Features:

- 0÷20 mA or 4÷20 mA Output Ranges
- Precalibrated Input Range 0÷10 Vdc
- Precision Voltage Reference 10.00 V
- Single Supply Operation 12.5 ÷ 36 Vdc
- Protected Input and Outputs
- 0.002% Typical Nonlinearity
- 6 mm wide, 35 mm DIN Rail Terminal
- 5 Cage Clamp Connections



PRODUCT DESCRIPTION

The XTR420 module is a configurable signal converter from 0÷10 Vdc to either 0÷20 mA or 4÷20 mA signal. This signal can drive a wide selection of valves, actuators, frequency converters and other devices commonly used in process control. Also, it offers a 10 Vdc precision voltage reference able to drive a resistive load (e.g. a Variable Resistor). This output support a max. 5 mA, so the load have to be 2 kΩ minimum. A common 10 kΩ Panel Potentiometer is well supported.

The output mode selection is simply made by cutting a wire strap on the PCB. The module comes with wire strap closed, meaning it is a 4÷20 mA converter. By cutting the wire strap it becomes a 0÷20 mA converter.



XTR 420

0÷10 Vdc to 0/4÷20 mA
Signal Converter



XTR420 Specifications

	Min	Tip	Max	Unit
INPUT CHARACTERISTICS				
Input Voltage Range	-0.2	V _S -2.0	V _S -2.5	V
Input Bias Current				
o Input		1.5	5	nA
o Offset current drift		±1.0	±5.0	µA/°C
Input Impedance	5			kΩ
OUTPUT CHARACTERISTICS				
Operating Current Range	0		28	mA
Specified Performance	4		20	mA
Output Voltage Compliance	V _S -36V		V _S -2V	V
Output Impedance, 4÷20 mA	40	50		Ω
Slew Rate		1.3		mA/µs
SPAN AND ZERO ACCURACY				
0/4 mA Offset Error at 0 V Input		±10.0	±20.0	µA
Nominal Transfer Function		1.6 (2)		mA/V
Nonlinearity		±0.005	±0.015	%
VOLTAGE REFERENCE				
Output Voltage	9.960	10.000	10.040	V
Output current	5			mA
POWER REQUIREMENTS				
Specified Performance		24		V
Operating Range	12.5		36	V
Operating Temperature Range	-25		+60	°C
WIRING				
Cross section	0.08	0.5	2.5	mm ²
Cross Section, AWG	28		14	
Strip Length	5	6	8	mm

DIMENSIONS		
Height	56 mm	
Depth	91 mm	
Width	6 mm	



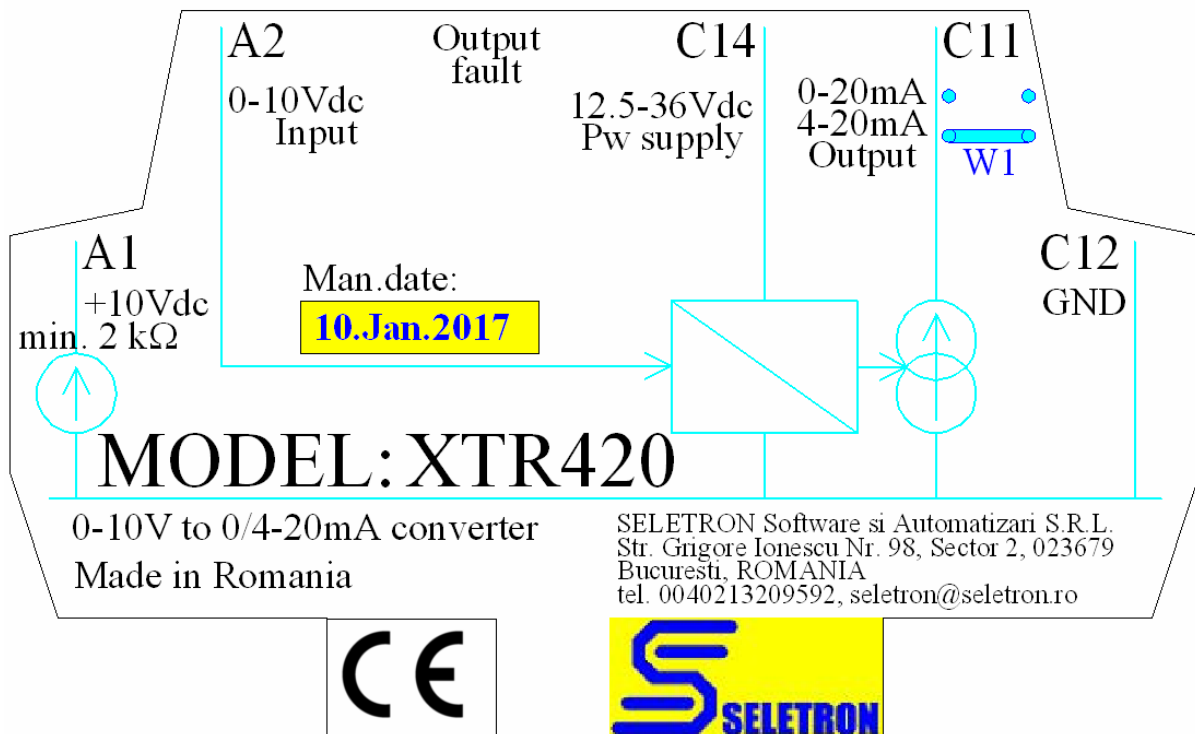
XTR 420

0÷10 Vdc to 0/4÷20 mA
Signal Converter



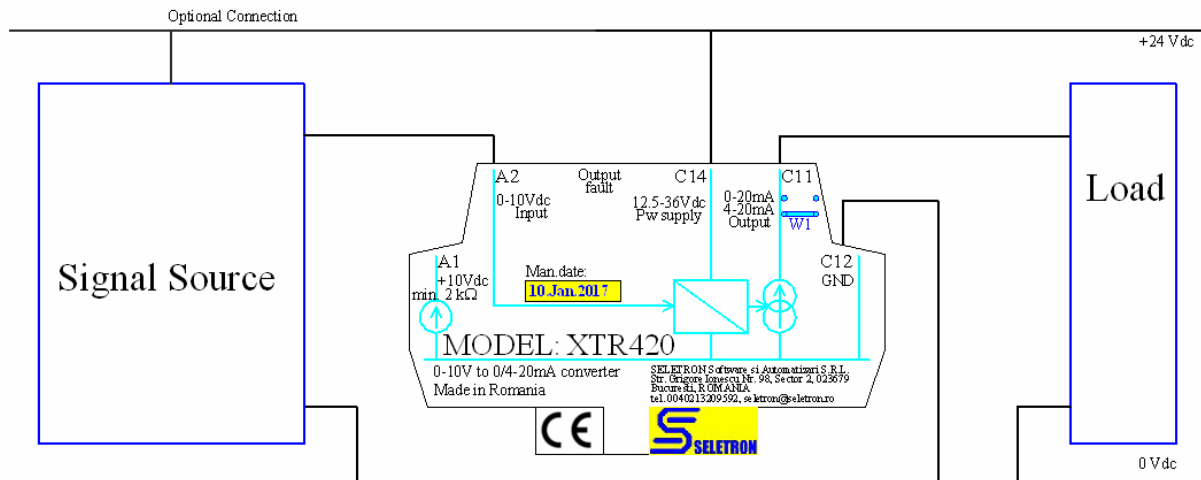
CONNECTIONS

The XTR420 is built as a 35 mm DIN Rail-Terminal Module. It has 5 Cage-Clamp Type Terminal points, notted A1, A2, C11, C12 and C14.

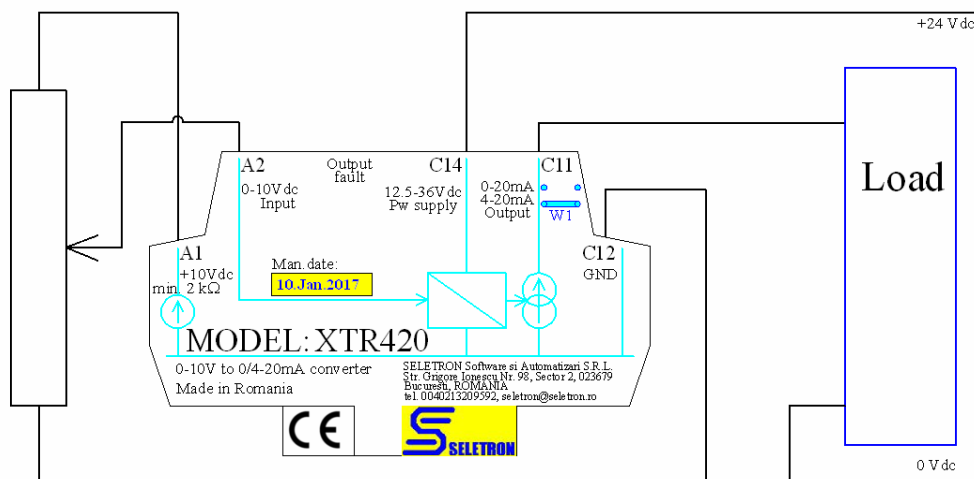


Terminal	Meaning	Type
A1	+10 Vdc Voltage Reference	Voltage Output
A2	0 ÷ 10 Vdc Input Signal	Voltage Input
C11	4 ÷ 20 mA / 0 ÷ 20 mA Output	Current Output
C14	Power Supply	Voltage
C12	Ground	0 V Reference

INPUT: The XTR420 can be driven by any device able to deliver 0÷10 Vdc at min. 2 mA, e.g. Sensors, PLC Analog Output Modules, Frequency Converters, etc. The Input Signal Source Module **Must Have** a common 0 V Reference with the XTR420 Module. It can be also (but not compulsory) powered from a common +24 Vdc Power Source. The electrical connections will be made as in the next figure.



The XTR420 can also power a potentiometer which drives the module like in the next figure.



OUTPUT: The XTR420 Module can drive any 0 ÷ 20 mA or 4 ÷ 20 mA device input, e.g. PLC Analog Input Module, Frequency Converter, Actuators, etc. The output wiring is exposed in the upper figures. The Output Load **Must Have** a common 0 V Reference with the XTR420 Module.

PRODUCER: SELETRON Software si Automatizari S.R.L.
Str. Grigore Ionescu Nr. 98, Sector 2, Bucuresti, Romania, 023679
website: www.seletron.ro;
e-mail: seletron@seletron.ro;
tel: 0040213209592