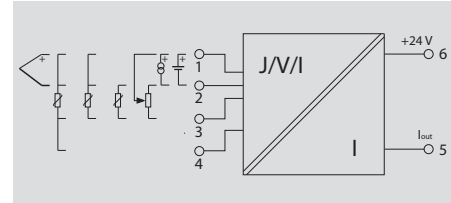


Passive Converter, Universal

- Output loop powered
- Programmable with PC, download software on www.ab.com
- Pluggable connection terminals
- Compact housing

931U-C9A2C-OP



Specifications	Passive Converter, Universal	
Standards Compliance	UL 61010B-1, CSA C22.2 No. 61010-1-2004, EN 50178:1997, EN 61000-6-1:2007, EN 61000-6-2: 2005, EN 61000-6-4:2007	
Certifications	cULus (PICQ/7.E345550), CE	
Input Ratings		
Type	Universal signal isolator/amplifier, thermocouple, RTD	
Type, Thermocouple	B / C / E / J / K / L / N / R / S / T / W3 / W5 -200...+ 2300 °C depending on thermocouple	
Type, RTD	PT100/ 200, Ni100, CU100 (all 2-, 3-, 4-wire) -200...+850 °C depending on RTD	
Current	-10...+20 mA (min. span 1 mA)	
Voltage	-5...+10 V / -100...+200 mV (min. span 0.5 V / 4 mV)	
Input Resistance (voltage/current)	2 MΩ/ 40 Ω	
Input	Passive	
Output Ratings		
Type	Current output	
Current	4...20 mA	
Residual Ripple	< 20 mV	
Step Response Time	Typically 200 ms (10...90%)	
Temperature Coefficient	Typically 0.02% / °C	
Load Resistance	[(Vs - 10) / 0.02] Ω (Typically 700 Ω @ 24V DC)	
Transmit Function	Linear, x _{1/2} , x _{3/2} , x _{5/2} or user defined curve (101 points)	
Accuracy	Thermo: < ± 1%; RTD: < ± 0.5%; Resistance: < ± 0.1% of end value; DC < ± 0.1% of end value	
Output	Passive	
General Specifications		
Supply Voltage	10...40 V DC, powered by loop current	
Power Type	Output Loop Powered	
Operating Temperature	-10 °C...+70 °C	
Storage Temperature	-20 °C...+70 °C	
Long-term drift	0.1% / 10,000 h	
Cycle Time	20...200 ms	
Digital Filter Factor	1...100	
Interference Radiation	< ± 0.5%	
Rated Insulation Voltage	300V _{eff}	
Impulse Withstand Voltage	4 kV (1.2/50 μs)	
Isolation Voltage	2 kV between ports	
Transmit Function	direct or reverse	
Connection Type	Screw	
L x W x D (mm)	92.4 x 12.5 x 112.4	
Signal Conditioner	Cat. No.	Pkg. Quantity
	931U-C9A2C-OP	1

Connections

Terminal	Signal	
5	Loop -ve	
6	Loop +ve	Supply voltage
1	Signal + Power supply Sensor	
2	Signal + Power supply Storage (only for programming)	Thermocouple
1	A-Sense	
3	A	4-wire PT100/RTD (or resistance)
2	B	
4	B-Sense	
1	A-Sense	
3	A	3-wire PT100/RTD (or resistance)
2	B	
3	A	2-wire PT100/RTD (or resistance)
2	B	
1	Signal +	Voltage (mV or V)
2	Signal -	
1	Signal +	Current (mA)
2	Signal -	
3	A	
1	Wiper	Potentiometer
2	B	