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XALIS 9200U1/PT100 Kit



AC DC Universal power supply

Sensor power supply

Mod BUS ModBus RTU

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Presentation

The XALIS 9200U1/PT100 kit includes:

- a XALIS 9200U1 digital indicator with a universal input, 1 analog output, 2 relay outputs allowing analog and digital transmission of various signals.



- Push-in RTD temperature probe with connection line and stainless steel protection tube, allowing measures temperatures in liquids and gases.



XALIS 9200U1

Factory Settings

Input	Output	Relays (2 RT)
4-20mA	4-20mA	Alarm: high
Display: 0.00 -100.0	Display: 0.00 -100.0	Threshold: 50

Communication speed: 9600 bauds, Slave address: n°1

Inputs - Outputs

Input gauges

Current (continuous)	Standard scales: 0-1mA ; 0-10mA ; 0-20mA ; 4-20mA ; ±1mA ; ±10mA ; ±20mA Adjustable scales: From -22mA to 22mA
Voltage (continuous)	Standard scales: 0-100mV ; 0-1V ; 0-5V ; 1-5V ; 0-10V ; 2-10V ; 0-50V ; 0-100V ; 0-250V ; 0-500V ; 0-1000V ; ±100mV ; ±1V ; ±5V ; ±10V ; ±50V ; ±100V ; ±250V ; ±500V ; ±1000V Adjustable scales: From -110mV to 110mV, de -2V to 11V
Variable resistance thermometer	Standard scales: CU50 ; CU53 ; CU100 PT10 ; PT100 ; PT1000 ; Ni100 ; Ni1000 2 or 3 wires Adjustable scales: CU50 ; CU53 ; CU100 PT10 ; PT100 ; PT1000 ; Ni100 ; Ni1000 2 or 3 wires
Resistance 2 wires	Standard scales: 1KΩ - 5KΩ - 10KΩ- 50KΩ
Thermocouple	Standard scales: J, K, R, S, T, E, B, N, W3/D, W5/C, Mo, P Adjustable scales: J, K, R, S, T, E, B, N, W3/D, W5/C, Mo, P Unit: °C or °F Cold-Junction Compensation: internal or external
Potentiometer	Adjustable scales: From 0% to 110%
Special table for NTC PTC	Adjustable scales: 1KΩ, 5KΩ, 10KΩ, 50KΩ Programmable with **IXLOG** software Unit: °C or °F
Sensor Supply	Sensor 2 or 3 wires - Sensor power supply: 24V - 26mA max

Output gauges

Output Current	Standard scales: 0-10mA ; 0-20mA ; 4-20mA Adjustable scales: from 0 to 22mA
Output Voltage	Standard scales: 0-10V ; 0-5V ; 1-5V ; 2-10V Adjustable scales: from 0 to 11V
Output Relay	2 Relays 1RT: 2A-250Vac
Communication	Isolated USB in Rear Panel / isolated RS485 Modbus RTU

Characteristics

Display	
Type	Two-color digital and alphanumeric display
Color	Choice of color for the numeric or alphanumeric line
Number of characters	5 in numeric and 9 in alphanumeric
Number of lines	2
Programming keys	4 keys
Input Characteristics	
Current input impedance	5.6Ω
Voltage input impedance	U<10V and thermocouple: >10MΩ U±10V or >10V: 6MΩ
Current input CU50 ; CU53 ; CU100 ; PT10 ; PT100 ; Ni100	Current: <1mA
Current input PT1000 ; Ni1000	Current: <0.8mA
Current input Resistance 2 wires R=200Ω ; R=1kΩ	Current: <1mA
Current input Resistance 2 wires R=10kΩ	Current: <0.2mA
Output characteristics	
Permissible impedance on the current output	<950Ω
Permissible impedance on the voltage output	>700Ω
Isolation	
Supply / Input-Output(s)-Relay-RS485-USB	4200Vrms, 50Hz, 1mn
Input / relay / RS485 / USB-output	2500Vrms, 50Hz, 1mn
USB / Output	Without

Auxiliary source	
Voltage supply	22-240Vdc or 90-230Vac 50/60Hz
General characteristics	
Precision class	0.1
Input analog / digital conversion	24 bits
Output analog / digital conversion	16 bits
Response time	Process input, thermocouple, 2 wires resistor: <150ms RTD input, potentiometer: <350ms
Thermal drift	<25ppm
Residual ripple on current output	<20µA
Residual ripple on voltage output	<10mV
Maximum of consumption	<11.3VA
Operating temperature	-10°C … +60°C
Storage temperature	-25°C … +80°C
Relative humidity	<80% HR (non-condensing)
Protection factor	IP65 (front Panel) Self-extinguishing ABS enclosure V0

Functions

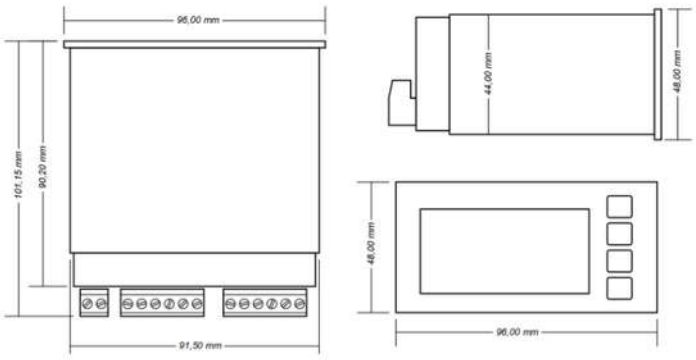
Display functions	
Display	Two-colour digital and alphanumeric display. Possibility of switching off each of the display lines independently
Color	Choice of color for the numeric or alphanumeric line
Color change	Possibility of automatic color change when a defined threshold is reached
Programming	Programming via keys on the front panel, or via USB with **IXLOG** software
Unit	Choice from a list of units
Memory Mini / Maxi	Storage of the maximum and minimum value of the measurement on each input channel
Customizing the display	Resolution, Comma, Display off
Input	
Inputs display	The display allows to visualize the input in physical value and in programmed value
Adjustable input scale	Allows to zoom on the input either in manual or automatic mode
Offset	Manual adjustment of the input offset
Taring	Taring function at process input (by validation)
Cut-off	Threshold below which the input is considered as null

Smart functions	
Sensor signal loss	Translates the sensor signal loss on: • the display, • each of the analog outputs, • the digital output, • the status of the relays
Filtering	Integration of the measurement over the defined time (in seconds)
Absolute value	The output(s) are a function of the absolute value of a bidirectional input
Pilot function/simulation	The pilot function makes it possible to act on the display value influencing the output(s), independently of the input The Pilot function is activated either by the digital link (RS485 or USB) or by keys on the front panel
Segmentation in 99 points	Linearization in 99 points (free choice for each point), allows to create an output function by segmentation of the signal of each input channel
Segmentation PTC-NTC resistive	Allows to create the PTC or NTC curve by segmentation of the input signal (programmable only by the **IXLOG** software)
CJC	Cold junction compensation by 16 bit digital sensor
Outputs	
Visualization of the outputs	The display allows to visualize the outputs, in physical value and percentage; as well as the status of the relays
Outputs assignment	Assignment of outputs to inputs or to the control function, independently for each channel
Adjustable output scale	Allows you to zoom in on the outputs
Outputs limitation	Possibility to limit the value of the outputs - High limit and Low limit
Relays assignment	Assignment of relays to inputs or to the control function, independently for each channel
Thresholds	Single or band mode, with positive or negative safety Adjustment of thresholds, hysteresis and time delay (independent on rise or fall) Direct access to the thresholds
Acknowledgement of alarms	Independently for each alarm
Storage of alarms and/or relay status	Independently for each alarm

Links and communication	
RS485 MODBUS RTU	RS485 MODBUS RTU bidirectional digital link allowing to: • recover the measurements and transmit them in digital format • configure and control the device
Digital bus	Access to the digital bus via the USB socket
USB rear	USB rear panel to connect directly to the USB port of a PC for programming via the **IXLOG** software
Mapping of Modbus addresses	Mapping of Modbus addresses, allowing you to choose your own variable address

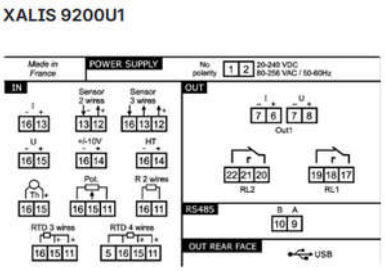
Dimensions and wiring

Dimensions



Dimensions: 48mm x 96mm x 85mm

Wiring



PT100 probe 3-wire mounting

Characteristics

Operating temperature	-50 to +180°C
Measuring insert	1× Pt100 in 3-wire circuit
Tolerance class according to DIN EN IEC 60751	Class B (standard)
Response times	In water 0.4m/s: $t_{0,5} \approx 4s$, $t_{0,9} \approx 10s$, Ø 6mm In air 3.0m/s: $t_{0,5} \approx 32s$, $t_{0,9} \approx 98s$, Ø 6mm
Connection line end	Tin-plated connection wires
Protection tube material	Stainless steel
Connection line insulation material	Silicone
Connection line	Strain-relieved

Dimensions



- D Protection tube diameter: 6mm
- EL Insertion length: 50mm
- AL Connection line length: 2500mm