CAL MAXVU RAIL

Temperature Controller / Transmitter
Datasheet

WEST
Control Solutions

Overview

MAXVU Rail temperature and process controller is a behind panel DIN-rail mounted device that's easy to install and fast to setup with an easy to read OLED display.

MAXVU Rail provides an affordable solution where essential temperature controller is required, it offers a universal input and up to 3 outputs.

The unit also has a transmitter mode disabling control for temperature and process measurement applications.

At a Glance

- **DIN rail mounted**
- **PID or ON/OFF control**
- **Universal input**
- **Up to 3 outputs**
- **Digital Input**
- **RS485 communications option**
- **Transmitter mode**
- **Fast configuration**
- **Clear OLED display**
- **22.5mm module width**

Specification

Input

Thermocouple	J, K, C, R, S, T, B, L, N.
RTD	3 Wire PT100
DC Linear	0 to 20mA, 4 to 20mA, 0 to 50mV, 10 to 50mV, 0 to 5V, 1 to 5V, 0 to 10V, 2 to 10V. Scalable -1999 to 9999, with adjustable dec point
Accuracy	Thermocouple ±0.25% of full range ±1 LSD (±1°C for thermocouple CJC). PT100 ±0.25% of full range, ±1LSD, Linear±0.25% of full range, ±1LSD.
Sampling	4 per second
Impedance	>10MΩ resistive, except DC mA (5Ω) and V (47KΩ)
Sensor Break Detection	<2 seconds (except zero based DC ranges), high alarms activate for T/C, RTD and mV ranges, low alarms activate for mA or V ranges
Digital Input	Reset Alarm, Control enable/disable, Auto/Manual control, Tune start/stop. Volt Free or TTL compatible, 24VDC

Outputs & Options

Relay	OUT1 SPDT Form C, OUT2 / 3 SPST Form A relay; current capacity 2A at 250V. >150,000 operations at rated voltage/current,resistive load
SSR	Drive capability >10V DC @ 20mA
Linear DC	0 to 20mA, 4 to 20mA, 0 to 5V, 0 to 10V or 2 to 10V Current output 500Ω max, Voltage output 500Ω min
Serial Communications	2 Wire RS485, 1,200 to 38,400 baud, Modbus RTU

Key Features

- **Text / Icon matrix display**
- **Quick setup menu with main configuration parameters**
- **Thermocouple, PT100 or linear DC sensor input**
- **Up to 3 outputs; relay, SSR or Linear DC**
- **Isolated Digital input**
- **High/low, deviation or band alarms**
- **3 button operation**
- **3 status LEDs**
- **Front panel configuration or via PC configuration software**
- **RS485 Modbus RTU communications**
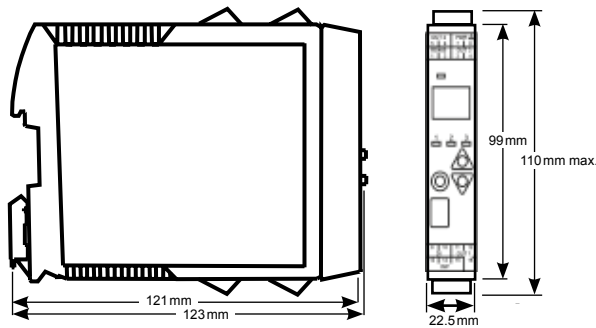- **Spring terminal option available**

Specification

Operating and Environmental

Temperature & RH	0 to 55°C (-20 to 80°C storage), 20% to 95% RH non-condensing
Altitude	<2000m
Power Supply	100 to 240V ±10%, 50/60Hz, 9VA(mains powered version)
	24V DC/AC +10%/-15%, AC 50/60Hz, 5W (low voltage version)
Enclosure Protection	IP20
Standards	CE, UL* & cUL*
EMI	Complies with EN61326-1 (Susceptibility & Emissions)
Safety	Complies with EN61010-1 & UL61010-1
Considerations	Pollution Degree 2, Installation Category II
Weight	0.20kg excluding packaging
Communications	RS485 Modbus RTU communication option

*UL not valid for Spring Terminal version

Dimensions

99 mm
110 mm max.
121 mm
123 mm
22.5 mm

Ordering Code

MVR - 1 x x - x x x x - 5 x xx

Digital Input

Isolated 1

Variant

Standard 0
Extrusion E

Supply Voltage

110 to 240V AC M
24V AC / DC L

Output

Out 1	Out 2	Out 3			
C/O Relay	SSR	None	Z	A	0
C/O Relay	Relay	None	Z	R	0
SSR	SSR	None	A	A	0
C/O Relay	SSR	Relay	Z	A	R
C/O Relay	Relay	Relay	Z	R	R
SSR	SSR	Relay	A	A	R
C/O Relay	SSR	Linear	Z	A	L
C/O Relay	Relay	Linear	Z	R	L
SSR	SSR	Linear	A	A	L

Terminal Type

U0	Screw Terminals
00 - S419	Spring Terminals

Manual / HMI Language

1 English
2 French
3 German

Option

0 Not Fitted
C RS485 Communications

MAXVU Configuration software

For PC setup MAXVU configuration software is available free of charge from www.west-cs.com.

A USB configuration cable is also available from your local WCS distributor.

MAXVU configuration software is simple to use for fast set up of MAXVU devices.

Set-up wizard simplifies the set-up further.

Provides step-by-step guidance to device configuration with detailed assistance on each setting.

Clear and logical side tabs make it easy to find parameter settings in tabular form.

Simple icon driven taskbar along top for all main functions

Each parameter shows current setting and can easily be changed by drop-down menus or entering values.

Allowable setting range is shown for guidance.

A useful help box provides additional assistance.

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