59615-4 MaxVU Rail Standard Controller Concise Manual

INSTALLATION

WARNING: This product can expose you to chemicals including arsenic, which is known to the State of California to cause cancer. For more information go to

Installation Guidance

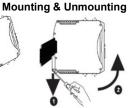
Installation should only be performed by technically competent personnel.

- Standards compliance shall not be impaired when fitting into the final installation
- It is the responsibility of the installing engineer to ensure that the configuration is safe.
- Local regulations regarding the electrical installation & safety must be observed. Impairment of protection occurs if product is used in a manner not specified by the
- Due to the low weight of this instrument there are no special lifting or carrying considerations.
- Designed to offer a minimum of Basic Insulation only. Ensure supplementary insulation suitable for Installation Category II is ac
- To avoid possible hazards, accessible conductive parts of the final installation should be
- protectively earthed in accordance with EN61010 for Class 1 equipment. Output wiring should be within a Protectively Earthed cabinet.
- Sensor sheaths should be bonded to protective earth or not be accessible
- Live parts should not be accessible without the use of a tool.
- When fitted to the final installation, an IEC/CSA APPROVED disconnecting device should be used to disconnect both LINE and NEUTRAL conductors simultaneously.
- Do not position the equipment so that it is difficult to operate the disconnecting device. Ventilation slots must not be covered, and adequate air circulation must be allowed.
- Use conductor sizes 30-12 AWG, minimum temp rating of cables to be 80°C.

Bus Connector (optional)







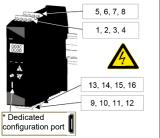
Serial

Terminal Wiring

CAUTION: Check information label on housing for correct operating voltage before connecting supply to Power Inputs. Diagrams show all possible option combinations, check your exact

1 RS485 A (Rx/Tx+)

product specification before connecting.



3 —	Relay COM / Linear +	Outmut 2
4 —	Relay NO / Linear -	Output 3
5 —	Relay COM / SSR -	Output 2
6 —	Relay NO / SSR +	Output 2
7	\simeq L+	Mains Power
8 8	\simeq N-	(24V optional)
9	 Volt-free or TTL 	Digital Input
10 ᠫ `	+ compatible	Digital Input
16	Relay NC	
11 ⊸∕	Relay COM / SSR -	Output 1
12	Relay NO / SSR +	
13	RTD	Input –
14	RTD / TC + / Linear +	thermocouple,
15 🖳 🦳	RTD / TC - / Linear -	RTD or linear

* NEVER DIRECTLY CONNECT DEDICATED CONFIGURATION SOCKET TO A USB PORT.

2. FRONT PANEL

Display shows PV (process variable), units, SP (setpoint), alarm/latch statuses, error & warning messages

Display turns off after 5, 15 or 30

Up 🔼 Select Down

LEDs show respective output state: 1 2 3

Navigation & Editing

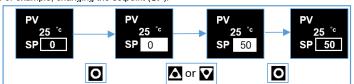
minutes without key press.

Press ⚠ or ☑ keys to navigate between parameters or menu items.

Press to highlight and edit a parameter value.

Press or to change the parameter value, then press within 60 seconds to confirm change.

For example, changing the setpoint (SP)



Navigating to Setup Mode or Advance Configuration from Operator Mode:

Setup Mode - press 2 & A.

Advanced Configuration - press • & .

Returning to Operator Mode:

Press **2** & **5** to move back one level. After 120 seconds without key presses the unit returns automatically to the first Operator Mode screen.

SETUP (& FIRST POWER UP)

Important Note: When powered up for the first time, or after a factory reset (default) the instrument enters Setup.

The device remains in Setup, or will keep powering up back into Setup, until all parameters have been reviewed and the user <u>exits</u> Setup.

Some parameters may be hidden depending on configuration & hardware

Alternatively press & to enter Setup from Operator mode and & to exit.

Setup Lock	Enter code & press	Default 10
Parameter	Description	Default Value
	J Thermocouple *	
	-200 – 1200°C -128.8 – 537.7°C -328 – 2192°F -199.9 – 999.9°F	
	K Thermocouple *	
	-240 - 1373°C -128.8 - 537.7°C -400 - 2503°F -199.9 - 999.9°F	
	PT100 *	
	-199 – 800°C -128.8 – 537.7°C -328 – 1472°F -199.9 – 999.9°F	
	B Thermocouple	
	100 – 1824°C	
	211 – 3315°F C Thermocouple	
	0 – 2320°C	
	32 – 4208°F L Thermocouple *	
>Input	0 – 762°C 0.0 – 537.7°C	
Туре	32 – 1403°F 32.0 – 999.9°F	K Thermocouple
	N Thermocouple 0 – 1399°C	
	32 – 2551°F	
	R Thermocouple	
	32 – 3198°F	
	S Thermocouple 0 – 1762°C	
	0 – 1762°C 32 – 3204°F	
	T Thermocouple *	
	-240 – 400°C -128.8 – 400.0°C -400 – 752°F -199.9 – 752.0°F	
	Linear dc	
	0 - 20mA 4 - 20mA 0 - 50mV 10 - 50mV	
	0 - 5V 1 - 5V	
>Input	0 - 10V 2 - 10V	0.0
Units	°C or °F (hidden when a linear input is used)	
* Maximum	of 1 decimal place for temperature inputs man	rked.
>Input	000.0 *	0000
Decimal Place	00.00 0.000	0000
Scale Rang	e max & min only visible when input is a linear	type.
>Input	Maximum for application working range.	1000
Scale Range Maximum >Input		
Scale Range Minimum	Minimum for application working range.	0
	None	
>Input	Alarm Reset (clears latched alarms) Ctrl Enable/Disable (disables control)	Ctrl
Digital I/P Action	Ctrl Auto/Manual	Enable/Disable
	Pre-Tune Start/Stop Tune at SP Start/Stop	
	Heat	
>Output 1	Cool	
>Output 1 Usage	Alarm 1 Alarm 2	Heat
-	Alm. 1or2	
Control Loop Alarm tir	Loop Alarm me is 2x Integral (PID) or Loop Alarm Time (if r	mode is On Off)
>Output 2	Same options as Output 1 Usage	Alarm 1
Usage		Alarm 1
>Output 3	Same options as Output 1 Usage.	Alarm 2
Usage or	Heat	
>Linear Outp	Cool PV Retx	PV Retx
Usage	SP Retx	
	0-10V	
>Linear Outp	2-10V 0-20mA	0.40
Туре	4-20mA	0-10V
	0-5V 1-5V	
1	1	

>Control Automatic Tuning	Off, Start Pre-Tune or Start Tune at SP *	Off
>Coms Parity Odd, Even or None		None
>Coms Baud Rate 1200, 2400, 4800, 9600, 19200 & 38400		9600
>Coms Unit Address	oms Unit Address Modbus address from 1 to 255	
Setpoint	Target setpoint.	0
>Alarm 2 Value	Same options as Alarm 1. Default PV Low alarm type.	-240
>Alarm 1 Value	Range minimum to range maximum, or OFF (maximum +1). OFF disables alarm. Default PV High alarm type.	1373
>Linear Outp Scale Range Minimum	Minimum PV value corresponding to minimum linear output.	Input type Min
>Linear Outp Scale Range Maximum	· · · · · · · · · · · · · · · · · · ·	

When you exit if necessary, press and to clear Control is Enabled Pop Up Alert.

4. OPERATOR MODE

Name		Details
User Screen	PV °c 25 SP 37	PV - top SP - bottom Temperature Unit - right.
Manual control	PV 25 °° P% 50	Manual Power is shown as P% .
Transmitter view enabled	_ ·	Transmitter parameter = Enable, SP is hidden. Important: The device still functions as a controller, using the local Setpoint.

Alarm State	Alarm State Alarm 1 (4) Alarm 2 Loop –	To clear latch <u>es</u> press ⊡	[♠] Alarm active [♠] Alarm set, but not active [−] Alarm not set
Latch State	Latch State Out 1	then to select Yes. Press to accept.	Output Latched Latch set, but output not Latched Latch not set
Maximum PV	To clear press • the	en 🛆 to select	Screens show the

Important: Visibility for parameters below must be set to **Show** in **Operator** sub-menu.

	To clear press then to select	Screens show the Maximum & Minimu	
Minimum PV	Yes. Press	reached.	
Control Enable	OFF - Control output(s) disabled. (Ignored when in manual mode). ON - Control output(s) enabled.		
Manual Control Enable	OFF - Automatic control, PID or On-O ON - Manual control, Manual Power s		
	Visible when On	Timor is activo	

Time On Remaining See Ramp & Timers diagram. Visible when Delay Timer is active. Delay Timer Delay Time See Ramp & Timers diagram Remaining

Warnings & Error Messages

Caution: Do not continue your process until any issues are resolved.



For example, Pop Up Alert for Alarm 1

Pop Up Alerts need to be acknowledged. Press and to clear Pop Up Alert.

Pop up Alerts: Alarm 1, Alarm 2, Alarm 1 & 2, Starting Calibration, Calibration Ongoing, Calibration Fail, Control is Enabled, Tune Error messages, Tuning in progress, Setup not Completed & Offset in use (SP offset)

ALARM	Alternates with PV to show Alarm is active.	
LATCH	Alternates with PV.	
5	One or more outputs are latched on and no alarm is active.	
HIGH	Process variable input > 5% over-range.	
LOW	Process variable input > 5% under-range.	
OPEN	Break detected in process variable input sensor, wiring or wrong input type selected. Shows OPEN until resolved, control is off.	
ERROR	Selected input range is not calibrated.	
	Shows ERROR until resolved, control is off.	
TUNE	Alternates with SP. Auto-tuning is in progress.	
P%	Manual power value replaces setpoint, shows P% xxx of power.	
Ramp	Alternates with actual setpoint. Setpoint ramp is active.	
OFF	Control is disabled. Control output(s) are off.	
Control Delayed	Visible when Delay Timer is active. Control output(s) are off.	
Tuning in progress	Alternates with setpoint. Tuning is active.	

	Display	alternates between Tune Error & Setpoint.		
	Remains	s visible until Automatic Tuning is turned Off.		
	tErr1			
	tErr2	Setpoint is ramping		
F F	tErr3	Control is ON/OFF (not PID)		
Tune Errors	tErr4	Control is manual		
	tErr5	Tune at Setpoint not able to run		
	tErr6	Sensor Break		
Remains visible until Automatic Tun tErr1 PV within 5% of S tErr2 Setpoint is tErr3 Control is ON/o tErr4 Control is tErr5 Tune at Setpoint tErr6 Sensor tErr7 Timer R	Timer Running			
	tErr8	Control is Disabled		

SPECIFICATIONS

Important: Check your product code for exact hardware fitted.

PROCESS INPUT

Thermocouple Calibration:

 $\pm 0.25\%$ of full range, ± 1 LSD & ± 1 °C for Thermocouple CJC. Factory calibration is accurate 0.25% of span above -100°C, below -100°C accuracy is within +/- 0.9%. To meet 0.25% accuracy below -100°C

recalibrate using procedure in full manual. BS4937, NBS125 & IEC584.

 $\pm 0.25\%$ of full range, $\pm 1LSD$. PT100 Calibration: BS1904 & DIN43760 (0.00385Ω/Ω/°C).

DC Calibration: $\pm 0.25\%$ of full range, $\pm 1LSD$.

Sampling Rate: 4 per second.

Impedance: >1M Ω resistive, except dc mA (5 Ω) and V (47k Ω)

Sensor Break Detection: Thermocouple, RTD, 4 to 20mA, 10 to 50mV, 2 to 10V and 1 to 5V ranges only. Control outputs turn off at sensor break.

DIGITAL INPUT (Isolated or Non-Isolated version)

Functions: Reset Alarm, Control Enable/Disable, Auto/Manual, Pre-Tune Start/Stop or Tune at SP Start/Stop.

Non-isolated - Open or Close only.

Isolated - Open (2 to 24Vdc) or Closed (<0.8Vdc). Open to Closed transition = Reset, Enabled, Auto or Start.

OUTPUTS

Signal:

Relay Contacts Form C SPDT (Op 1) / Form A SPST relay (other), 2A @ 250Vac. Relay Lifetime: >150,000 operations at rated voltage/current, resistive load.

SSR Driver Capability: SSR drive voltage >10V at 20mA

DC Linear (Output 3 option only):

0 to 20mA, 4 to 20mA, 0 to 5V, 0 to 10V or 2 to 10V Types: Accuracy:

 $\pm 0.25\%$ (mA @ 250Ω , V @ $2k\Omega$). Degrades linearly to $\pm 0.5\%$ for

increasing burden (to specification limits).

Load Resistance: Current Output 500Ω max, Voltage Output 500Ω min. 8 bits in 250ms (10 bits in 1s typical, >10 bits in >1s typical). Resolution:

RS485 SERIAL COMMUNICATIONS (Modbus RTU)

1200, 2400, 4800, 9600, 19200 or 38400 bps. Data Rate

OPERATING CONDITIONS

For indoor use only, DIN-rail mounted in suitable enclosure. Usage: Ambient Temp: <95% humidity 0°C to 55°C (Operating), -10°C to 80°C (Storage).

20% to 95% non-condensing. Relative Humidity:

Altitude < 2000m

Mains power version - 100 to 240Vac ±10%, 50/60Hz, 9VA Power Supply: Low voltage version - 24Vac +10/-15% 50/60Hz 9VA or 24Vdc +10/-15% 5W.

ENVIRONMENTAL Standards:

CF UI & cUI EN61326-1:2013, Table 2 & Class A.

Warning: This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

UL61010-1 Edition 3, EN61010-1 Version 2010,

Pollution Degree 2 & Installation Class 2. Protection Rating:

PHYSICAL

Height - 99mm: Width - 22.5mm: Depth - 121mm Unit Size: Ventilation: A space of 80mm must be allowed above & below each unit.

Weight: 0.20kg maximum

ISOLATION

	PSU	Universal Input	Relay	SSR	Linear	RS485 Comms	Non- Isolated Digital Input	Isolated Digital Input	Config Port
PSU									
Universal Input									
Relay									
SSR									
Linear									
RS485 Comms									
Non-Isolated Digital Input									
Isolated Digital Input									
Configuration Port									
Not Applicable			No Is	olatio	n		Reinfor	ced Isolation	on



Risk of electric shock.

Alternating or direct current could be present.

Caution, refer to the manual.

Equipment protected through-out by double insulation.

7. ADVANCED CONFIGURATION

Advanced Configuration gives access to all possible parameters; however, the device hides parameters that are irrelevant to your exact product specification & configuration.

Advanced Configuration Navigation

Enter by pressing **②** & **☑**. Press **△** or **☑** to navigate to the required menu, then press

Press 2 & to exit up 1 level. Depending upon which menu you enter it may be necessary to exit 2 or 3 levels for Operator Mode.

Advanced Configuration menus

Advanced Lock	Enter code & press ⊡	Default 20			
Menus	Description				
User	Includes Status, Control & Manual Mode er	nable/disable.			
Input	Configure the process input.				
User Calibration	Single or two-point calibration adjustments for t	the process input.			
Outputs	Configuration parameters for the outputs.				
Control	PID control tuning & configuration parameters.				
Setpoint & Timer	Setpoint & timer settings.				
Alarms	Alarm configuration.				
Communication	Modbus communications settings.				
Display	Lock codes and Factory Default.				
Operator Screens	Control what appears in Operator Mode.				
Information	View serial number & manufacturing	details.			

User menus

Parameter	Descr	ription	Default Value
Alarm State	Alarm State Alarm 1 (4) Alarm 2 & Loop –		n/a
Latch State	Latch State Out 1 & Out 2 & Out 3 _	Output Latched Latch set but output not Latched Latch not set Latch not set To clear press □ then to select Yes. Press □ to accept.	
Maximum PV Minimum PV	whilst powered up To clear press th	Maximum and Minimum PV recorded whilst powered up or since last reset. To clear press then to select Yes. Press to accept.	
Control Enable	OFF - Control output(s) disabled. (Ignored when in manual mode) SP replaced by OFF. ON - Control output(s) enabled. Setpoint visible in User screen.		ON
Manual Control Enable	(PID or On-	utomatic control mode Off control). ON. Power shown as mode, in place of SP.	OFF

Input menu

Parameter	De	escription	Default Value
Input Type	See Input Type table in SETUP (& FIRST POWER UP).		K Thermocouple
Units		Displayed as °C or °F (Units are hidden when a linear input is used)	
		0000	
Decimal Place		000.0	0000
Decimal Place	00.00	Not for temperature.	0000
	0.000		
Scale Range Maximum	Maximum for ap	Max allowed for Input Type.	
Scale Range Minimum	Minimum for ap	Min allowed for Input Type.	
Filter Time	OFF or 0.5 to	2.0	
CJC Enable	Enable Enables to CJC (Cold Jur	Enable	
	Disable Disables the internal CJC. External compensation must be provided for thermocouples.		

Parameter	Description	Default Value
Digital I/P Action	None	Ctrl
	Alarm Reset (clears latched alarms)	Enable/Disable
	Ctrl Enable/Disable	
	Ctrl Auto/Manual	
	Pre-Tune Start/Stop	
	Tune at SP Start/Stop (not available for	
	heat/cool)	

User Calibration menu

Single-point offset or two-point calibration adjustment for process input. Can be used together, if required.

=		
Parameter	Description	Default Value
Offset	Shifts the input value up or down by a single offset amount across the entire range.	0
Low Point	Enter value at which the low point error was measured.	Lower Limit
Low Offset	Enter equal, but opposite offset value to the observed low point error.	0
High Point	Enter value at which the high point error was measured.	Upper Limit
High Offset	Enter an equal, but opposite offset value to the observed high point error.	0

Outputs menu

Parameter		Default Value
>Output 1		
Usage	Heat Cool Alarm 1 Alarm 2 Alm. 1or2 Loop Alarm	Heat
Control Loop Alarm is	set as 2x Integral (PID) or Loop Alarm Time (On.C	Off control)
Alarm Action	Direct - Output active when alarm triggers Reverse - Output active when alarm is not triggered	Direct
Latching	Off - Alarm doesn't latch On – Alarm latches & needs to be cleared	Off
LED Indicator	Direct - LED Indicator lit when output is active Reverse - LED Indicator lit when output is inactive	Direct
>Output 2		
Usage	Same options as Output 1 - Usage	Alarm 1
Alarm Action	Same options as Output 1 - Alarm Action	Direct
Latching	Same options as Output 1 - Alarm Latching	Off
LED Indicator	Same options as Output 1 - LED Indicator	Direct
>Output 3 or >Linear Outp	3 rd output - either Relay/SSR driver (Output 3)	or Linear.
>Output 3 Usage	Output 3 - same options as Output 1 - Usage	Output 3: Alarm 2
>Linear Outp Usage	Heat Cool PV Retransmit SP Retransmit	Linear: PV Retransmit
>Output 3 Alarm Action	Same options as Output 1 - Alarm Action	Direct
>Output 3 Alarm Latching	Same options as Output 1 - Alarm Latching	Off
>Output 3 LED Indicator	Same options as Output 1 - LED Indicator	Direct
>Linear Outp Type	0-10V 2-10V 0-20mA 4-20mA 0-5V 1-5V	0-10V
>Linear Outp Scale Range Maximum	Display value for maximum output, -1999 to 9999	Input type Max
>Linear Outp Scale Range Minimum	Display value for minimum output, -1999 to 9999	Input type Min
Control menu		

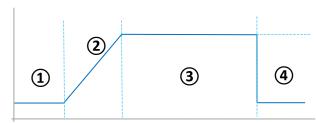
PID control tuning & configuration & Loop Alarm. Hidden if no control outputs are set.

Parameter	Description	Default Value
Proportion Heat Band	ON/OFF (0.0) or PID control in display units. 1 to 9999 - 0 decimal places 0.1 to 999.9 - 1 decimal place	161
Proportion Cool Band	0.01 to 99.99 - 2 decimal places 0.001 to 9.999 - 3 decimal places	161
Auto Reset (Integral)	0.01 to 99.59. and OFF (0.00) (minutes & seconds).	5.00

Parameter	Description	Default Value
Rate (Derivative)	0.01 to 99.59 or OFF (0.00) (minutes & seconds).	1.15
Overlap/ Deadband	In display units, range -20 to +20% of Heat & Cool Proportional Band. 0 is Off.	0
Differential (On/Off)	Visible when using On/Off control. In display units centred about the setpoint. Range: 0.1% to 10.0% of input span	8
Loop Alarm Time	Visible when On/Off control & Loop Alarm assigned to an output. Sets time before the loop alarm triggers. (minutes & seconds)	99.59
Manual Rst (Bias)	Manual Reset 0 to 100% (-100% to 100% if heat/cool control)	25%
Heat Cycle Time	0.4 / 540.0	
Cool Cycle Time	0.1 to 512.0 seconds	32.0
Output Interlock	Prevents simultaneous activation of both heat & cool outputs. On / Off Only set to On if Overlap/Deadband = 0.	Off
Heat Power Limit	% power upper limit 0 to 100%	100%
Cool Power Limit	% power upper limit 0 to 100%	100%
Power Up Action	Last - Powers up with control enable in the same state as on power off or power failure. On - Always powers up with control enabled. Off - Always powers up with control disabled.	Last
Automatic Tuning	Off Start Pre-Tune Start Tune at SP *	Off
*Start	Tune at SP not available for Heat & Cool process.	

Setnoint menu

Setpoint menu			
Parameter		Description	Default Value
Enable Timer	Enabled	Enables the Delay and On Timers. Applies at next power- up / control enable.	Disabled
	Disabled	Delay and On Timers ignored. (Setpoint ramping <u>still</u> functions.)	
Delayed Start Time	Time from power-up begins from 00.01 to or OFF (0.00 . (hours If OFF control starts	s & minutes)	OFF
Ramp Rate	target setpoint follow From 0.001 to 9999 or OFF (10 000) (Ur	<u>=</u> "	OFF
On Time	reached, from 00.0° or Off (00.00) (hours		Infinite
Upper Limit	Used to limit the Ma	ximum setpoint value.	Scale Range Maximum
Lower Limit	Used to limit Minimu	um setpoint value.	Scale Range Minimum
Offset	slave applications.	. For use in multi-zone setpoint pappears when SP is changed.	0



Ramp & Timers diagram – delay, ramp and timer

- ① From power up or control enable the unit delays process control until the Delay Timer expires (time set by Delayed Start Time).
- ② Setpoint ramps from the current PV to the target setpoint at Ramp Rate (Ramp indicates ramping). If Ramp Rate is **OFF** the active setpoint steps directly to target
- ③ When the active setpoint reaches the target setpoint, the On Timer counts down (time set by On Time).
- 4 When the On Timer finishes the control switches off. If On Time is set to INF then the control stays on.

Alarms menu

Parameter	Description	Default Value
>Alarm 1		
	None	
	PV High	
Туре	PV Low	PV High
	Deviation	_
	Band	

Parameter	Description	Default Value
Value	Range minimum to range maximum, or OFF (maximum +1). OFF disables alarm.	1373
Hysteresis	0 to full span.	1
>Alarm 2		
Туре		PV Low
Value	Same options as Alarm 1	-240
Hysteresis		1

activates alarms at power-up & on chang	e in setpoint.
None Alarm 1 Alarm 2 Alarm 1 & 2	None
None Alarm 1 Alarm 2 Alarm 1 & 2	Alarm 1 & 2
On - activates both alarms, if configured, when a sensor break is detected.	Off
	Alarm 1 Alarm 2 Alarm 1 & 2 None Alarm 1 Alarm 2 Alarm 1 Alarm 2 Alarm 1 & 2 On - activates both alarms, if configured, when a sensor break is

Communications menu

Modbus communications settings, only shown when RS485 option is fitted.

Parameter Name	Description	Default Value
Unit Address	Modbus address from 1 to 255	1
Baud Rate	Coms data rate in kbps 1200, 2400, 4800, 9600, 19200 & 38400.	9600
Parity	Parity checking: Odd, Even or None	None

Display menu

Lock codes & Factory Defaults.

	,	
Parameter Name	Description	Default Value
Setup Unlock Code	View & adjust Setup lock code.	10
	From 1 to 9999 or Off for no lock code.	
Advanced Unlock	View & adjust Advanced lock code.	20
Code	From 1 to 9999 or Off for no lock code.	
Screen Timeout	Screensaver time 5, 15 or 30 mins.	5
Selected language	Display language, 2 available – English plus either German or French .	English
Transmitter	Important: The device still functions as a controller even though SP is hidden. For transmitter function, Linear Outp – Usage must be PV Retransmit or SP Retransmit.	Disable
Reset to Defaults	Reset parameters back to factory defaults. To clear press then to select Yes . Press to accept.	

Operator Screens menu

Controls what appears in Operator Mode.

Parameter Name	Description	Default Value
Control Enabled	Hide or Show parameters in Operator Mode.	Hide
Manual Ctrl Enabled		Hide
Alarm State		Hide
Latch State		Show
Maximum PV		Hide
Minimum PV		Hide
Remaining On Time		Hide
Remaining Delay Time		Hide

Information menu (Read-Only)

Parameter Name	Description
PRL	The hardware/software revision level.
DOM	Date of manufacture (mmyy).
FW Version	The firmware version number & code type.
FW Type	
Serial	Instrument serial number.
Out1	SSR (SSR driver) or Relay
Out2	SSR (SSR driver) or Relay.
Out3	None, SSR (SSR driver), Relay or Linear.
Comm	Comms option - Fitted or None.
DI	Digital Input options – Iso (isolated) or NonIs (non-isolated).

Please refer to the full manual for further information on any topic.