$^{1}/_{16}$ - $^{1}/_{8}$ MAXVU EXTRUSION CONTROLLER CONCISE PRODUCT MANUAL (59578-5)

⚡ Risk of electric shock.	∿ Alternating or direct current could be present.
⚠️ Caution, refer to the manual.	▣ Equipment protected through-out by double insulation.

1. 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 www.P65Warnings.ca.gov

Installation Guidance

- Standards compliance shall not be impaired when fitted into the final installation.
- Installation should be only performed by technically competent personnel.
- It is the responsibility of the installing engineer to ensure that the configuration is safe.
- Local regulations regarding electrical installation & safety must be observed - e.g. US National Electrical Code (NEC) and/or Canadian Electrical Code.
- Impairment of protection will occur if product used in a manner not specified by the manufacturer.
- Designed to offer a minimum of Basic Insulation only
- Ensure supplementary insulation suitable for Installation Category II is achieved when installed.
- 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 to position the equipment so that it is difficult to operate the disconnecting device.

Panel-Mounting

The mounting panel must be rigid, and may be up to 6.0mm (0.25inch) thick. Cut-out sizes are:
- 1/16: Width = 45mm, Height = 45mm
- 1/8: Width = 45mm, Height = 92mm

For *n* multiple instruments mounted side-by-side, cut-out width W is 48*n*-4mm.

Tolerance +0.5, -0.0mm

❶ Insert instrument into the panel cut-out.

❷ Hold front bezel firmly (*without pressing on display area*), and fit mounting clamp. Push clamp forward, using a tool if necessary, until gasket is compressed and instrument is held firmly in position.

Labels: Mounting Panel ❶ ❷, Instrument Housing, Ratchets, Gasket
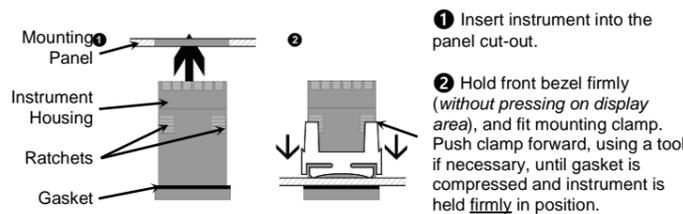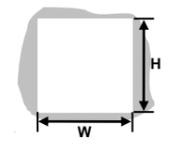
⚠️ **CAUTION:** For an effective IP65 seal against dust and moisture, ensure gasket is well compressed to the panel, with the 4 tongues located in the same ratchet.

Rear Terminal Wiring

The diagram shows all product options, check configuration before wiring.
CAUTION: Check information label on housing for correct operating voltage before connecting supply to Power Input

1/8 DIN size

Fuse: 100 – 240V AC – 1A anti-surge / 24V AC / DC – 315mA anti-surge

Not Fitted

A B C

N ∿, L ∿
100 - 240V AC / 24V AC / 24V DC

Power Input: A6 & B6
A5 & B5 - Output 3: Relay / SSR 3 +
A4 & B4 - Output 2: Relay / SSR 2 +
A3 & B3 - Output 1: Relay / SSR 1 +
Input: TC (A1 & A2) / RTD (A1, A2 & B2) / DC (A1 & A2)

6 C6 / 5 / 4 / 3 / 2 / 1

Use 80°C rate cables with copper conductors on all connections except thermocouple input.

Single Strand wire gauge max 1.2mm (18SWG).

B (Rx / Tx-) C1 & C2 / A (Rx / Tx+) — RS485 (if fitted)

NEVER DIRECTLY CONNECT DEDICATED CONFIGURATION SOCKET TO A USB PORT

2. FRONT PANEL

Displays & Indicators

Indicators for: Heat, Cool & Alarm

- Up / Increment ▲
- Enter / Confirm ✱
- Down / Decrement ▼
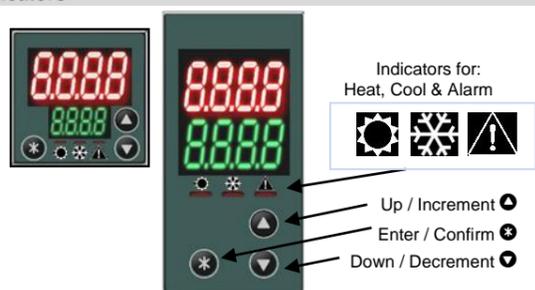
Keypad & General Navigation

Menu navigation, parameter editing and keypad use are described below. *See the relevant manual sections for further information and exceptions.*

General keypad usage & parameter editing:

Press ▲ or ▼ keys to navigate between parameters
To edit a parameter, press ✱. The Parameter name (*lower display*) flashes when the parameter above can be edited / adjusted.
Press ▲ or ▼ to change the parameter value (*upper display*).
  Edited values stop changing at the parameters limits. A further press of ▲ or ▼ past the parameter limit "wraps" the value back to the start (e.g. 0, 1, 2… …98, 99,100 ▲ 0, 1, 2…)
To confirm the change, press ✱ *within 60s* otherwise the change is rejected.

To navigating to Setup or Advance Configuration from User Mode:

Press and hold down ✱ and press ▲ for setup Mode, or
Press and hold down ✱ and press ▼ for advanced configuration.

Returning to User Mode from other modes:

After 120 seconds without key activity the unit returns automatically to the 1st User mode screen, or
Press and hold down ✱ and press ▲ to move back up one level.

3. FIRST POWER-UP (SETUP MODE)

When first powered up or after a factory reset (default) the instrument enters Setup Mode.

Important Note: The device remains in Setup, or will keep powering up back into Setup Mode, until all parameters have been reviewed and the user exits the Setup Mode.

Setup mode lock code	S.Loc	Enter lock code to continue. Default is 10.	10

Screen Name	Lower Display	Upper Display	Adjustment Range & Description	Default Value
Input Type	tYPE	tC.J	J Thermocouple	tC.Y
			-200 – 1200°C / -328 – 2192°F	-128.8 – 537.7°C / -199.9 – 999.9°F
		tC.Y	K Thermocouple	
			-240 – 1373°C / -400 – 2503°F	-128.8 – 537.7°C / -199.9 – 999.9°F
		P100	PT100	
			-199 – 800°C / -328 – 1472°F	-128.8 – 537.7°C / -199.9 – 999.9°F
		tC.b	B Thermocouple	
			100 – 1824°C / 211 – 3315°F	
		tC.C	C Thermocouple	
			0 – 2320°C / 32 – 4208°F	
		tC.L	L Thermocouple	
			0 – 762°C / 32 – 1403°F	0.0 – 537.7°C / 32.0 – 999.9°F
		tC.n	N Thermocouple	
			0 – 1399°C / 32 – 2551°F	
		tC.r	R Thermocouple	
			0 – 1795°C / 32 – 3198°F	
		tC.S	S Thermocouple	
			0 – 1762°C / 32 – 3204°F	
		tC.t	T Thermocouple	
			-240 – 400°C / -400 – 752°F	-128.8 – 400°C / -199.9 – 752.0°F
		0..50	0 – 50mV DC	
Input Units	Unit	C	Temperature displayed as °C.	C
		F	Temperature displayed as °F.	
Process Display Resolution	dEc.P	0000	No decimal places	0000
		000.0	1 decimal place	
		00.00	2 decimal places	*Not available for temperature inputs.*
		0.000	3 decimal places	
Scaled Input Upper Limit	ScUL	Scale Input Lower Limit +100 display units to range maximum. (Only visible in Setup Mode when 0 to 50mV is selected)	Input max Lin=1000
Scaled Range Lower Limit	ScLL	Range minimum to Scale Input Upper Limit -100 display units. (Only visible in Setup Mode when 0 to 50mV is selected)	Input min Linear=0
Output 1 Usage	Out1	HEAt	Heat Power	HEAt
		COOL	Cool Power	
		nL.CL	Non-Linear Cooling	
		AL1	Alarm 1	
		AL2	Alarm 2	
		AL12	Alarm 1 or 2	
		LooP	Control loop alarm (2 x Integral time)	

Screen Name	Lower Display	Upper Display	Adjustment Range & Description	Default Value
Output 2 Usage	Out2		As Output 1 Usage	AL1
Output 3 Usage	Out3		As Output 1 Usage	AL2
Alarm 1 Value	AL_1		Range minimum to range maximum. OFF disables the alarm. Default high alarm	1373
Alarm 2 Value	AL_2		Range minimum to range maximum. OFF disables the alarm. Default low alarm	-240
Setpoint Value	SP		Target setpoint adjustable between setpoint upper and lower limits	0
Automatic Tuning Start/Stop	tunE	OFF	Use current PID control terms or manually tune	OFF
		PrE	Start a pre-tune routine	
		AtSP	Start the tune at setpoint	

4. USER MODE

Screen Name	Lower Display	Upper Display	Screen Usage and Visibility
"Indicator" function enabled	Warnings/ Errors	Process Variable	If Indc parameter is enabled, setpoint is hidden but warnings or errors may still appear on Lower Display.
Basic Setpoint Control 1st Screen (*Automatic Mode*)	Effective Setpoint	Process Variable	Basic Setpoint Control enabled – automatic control. Press ▲ or ▼ to instantly adjust setpoint. If ramping, the target setpoint is shown while adjusting. OFF replaces the setpoint if control is disabled.
Basic Setpoint Control 1st Screen (*Manual Mode*)	Manual Power	Process Variable	Basic Setpoint Control enabled - manual control. Press ▲ or ▼ to instantly adjust manual power. The power value is shown as Pxxx

The following screens are not shown in Basic User Mode
(see the display sub-menu d iSP in Advance configuration – Section 6)

Screen Name	Lower Display	Upper Display	Screen Usage and Visibility
User 1st Screen (*Automatic Mode*)	Effective Setpoint	Process Variable	Available in automatic control mode. If ramping, the target setpoint is shown while adjusting. OFF replaces setpoint if control is disabled. dLY replaces setpoint if control delayed.
User 1st Screen (*Manual Mode*)	Manual Power	Process Variable	Available in manual control mode. Manual Power value is shown as Pxxx

Important: To appear in the User Mode the visibility setting for any of the parameters below must be SHUJ in the OPEr sub-menu.

Screen Name	Lower Display	Upper Display	Screen Usage and Visibility
Alarm Status	ALSt	Active Alarms	Active only when alarms are active. 1 = Alarm 1 active, 2 = Alarm 2 active, L = Loop Alarm active. Any combination can be displayed here
Latch Status	LAth	Latched Outputs	Active only when an output is latched on. 1 = Output 1, 2 = Output 2, 3 = Output 3. Clear by pressing ✱.
Maximum PV	MA	Value	Clear by pressing ✱.
Minimum PV	M in	Value	Clear by pressing ✱.
Control Enable	CntL	OFF	Control output(s) disabled. (except in manual mode)
		On	Control output(s) enabled. PID or On-Off control available.
Manual Control Enable	MCt	OFF	Instrument in automatic control mode (manual control OFF).
		On	Manual control ON. *Power is shown as Pxxx in 1st User screen.*

Warning Messages & Error Codes
Caution: *Do not continue with the process until the issue is resolved.*

Screen Name	Lower Display	Upper Display	Screen Meaning and Visibility
Alarm Active	Normal	-AL-	One or more alarms are active (alternates with PV). Optional – see d iSP
Output Latched	Normal	Ltch	One or more output are latched on (alternates with PV), and no alarm is active
Input Over Range	Normal	-HH-	Process variable input >5% over-range.
Input Under Range	Normal	-LL-	Process variable input >5% under-range.
Input Sensor Break	OFF	OPEN	Break detected in process variable input sensor or wiring.
Un-calibrated Input	OFF	Err	Selected input range has not been calibrated.
Manual Power	Pxxx	Normal	Manual power value replaces the setpoint.
Control Disabled	OFF	Normal	Control is disabled, control outputs are off.

Screen Name	Lower Display	Upper Display	Screen Meaning and Visibility
Control Delayed	dLY	Normal	Visible if control delayed by Delayed Start Time (d.t i)
Automatic Tuning	tunE	Normal	Tuning is active (alternates with setpoint).
Automatic Tuning Errors			If the tune fails the display alternates between the tune error code and the setpoint. Remains visible until tune set to off.
	tEr1		PV is within 5% of scaled range from setpoint.
	tEr2		Setpoint is ramping
	tEr3		Control is ON/OFF
	tEr4		Control is manual
	tEr5	Normal	Tune at Setpoint not able to run
	tEr6		Sensor break
	tEr7		Timer running
	tEr8		Control is disabled

5. SPECIFICATIONS

UNIVERSAL INPUT

Thermocouple Calibration:	±0.25% of full range, ±0.4% of full range below 110°C with 1dp ranges, ±1LSD (±1°C for Thermocouple CJC). BS4937, NBS125 & IEC584.
PT100 Calibration:	±0.25% of full range, ±0.4% of full range above 520°C with 1dp ranges, ±1LSD. BS1904 & DIN43760 *(0.00385Ω/Ω/°C)*.
DC Calibration:	±0.2% of full range, ±1LSD.
Sampling Rate:	4 per second.
Impedance:	>10MΩ resistive.
Sensor Break Detection:	Thermocouple and RTD ranges only. *Control outputs turn off.*
Isolation:	Isolated from all outputs (except SSR driver) by at least BASIC isolation. Universal input must not be connected to operator accessible circuits if relay outputs are connected to a hazardous voltage source. Supplementary insulation or input grounding would then be required. Isolated from Mains Power Input by basic isolation.

OUTPUTS

RELAYS (OPTIONAL)
Contacts:	SPST Form A relay; current capacity 2A at 250VAC.
Lifetime:	>150,000 operations at rated voltage/current, resistive load.
Isolation:	Basic Isolation from universal input and SSR outputs.

SSR Drivers (OPTIONAL)
Drive Capability:	SSR drive voltage >10V at 20mA
Isolation:	Not isolated from universal input or other SSR driver outputs.

SERIAL COMMUNICATIONS (OPTIONAL)
Physical:	RS485, at 1200, 2400, 4800, 9600, 19200 or 38400 bps.
Protocols:	Modbus RTU.
Isolation:	Basic safety isolation from Universal input and SSR. Basic safety isolation to Mains and Relay Circuits.

OPERATING CONDITIONS
Usage	For indoor use only, mounted in suitable enclosure
Ambient Temp:	0°C to 55°C (Operating), −20°C to 80°C (Storage).
Relative Humidity:	20% to 95% non-condensing.
Altitude	<2000m
Supply Voltage & Power:	100 to 240VAC ±10%, 50/60Hz, 7.5VA (*for mains powered versions*), or 24VAC +10/-15% 50/60Hz 7.5VA or 24VDC +10/-15% 5W (*for low voltage versions*).

ENVIRONMENTAL
Standards:	CE, UL and cUL.
EMI:	Complies with EN61326-1:2013.
Safety Considerations:	Complies with UL61010-1 Edition 3, Pollution Degree 2, Installation Category II.
Front Panel Sealing:	Front to IP65 when correctly mounted, Rear of panel to IP20.

PHYSICAL
Front Bezel Size:	$^{1}/_{16}$ Din = 48 x 48 mm, $^{1}/_{8}$ Din = 48 x 96 mm
Depth Behind Panel:	67mm with sealing gasket fitted.
Weight:	0.20kg maximum.

6. ADVANCED CONFIGURATION

The advanced configuration gives access to all of the features of the unit.

Advanced Configuration Mode Navigation

Press ⊙ or ⊙ to navigate to the required sub-menu, then press ⊗ to enter.

Advanced Configuration Main Menu

Screen Name	Lower Display	Upper Display	Sub-Menu Usage and Visibility	
Advanced Configuration Mode Lock Code	A.Loc		Enter lock code to enter Advanced Configuration. Default code is 20.	20
User Settings		USEr	Provides access to Control and Manual Mode enable/disable. Only shown if Basic User mode is select in d.SP (see below).	
Input Setup		InPt	Configuration parameters for the process input.	
Input Calibration		CAL	Single or two point calibration adjustments for the process input.	
Output Setup		OUtP	Configuration parameters for the outputs.	
Control Setup		COnt	PID control tuning & configuration parameters. Hidden if no control output set.	
Setpoint Setup	Adu	SP	Setpoint settings.	
Alarm Setup		ALrM	Alarm configuration parameters.	
Communications Setup		CoM	Modbus communications settings. Only shown if RS485 option is fitted	
Display Settings		d.SP	Enable Basic Mode and change lock codes.	
Operator Setup		OPEr	Control what appears in User Mode screen.	
Product Information		InFo	View product serial number and manufacturing information.	

User Sub-Menu: USEr

Provides access to Control Enable/Disable.

Screen Name	Lower Display	Upper Display Adjustment Range & Description		Default Value
Alarm Status	ALSt	Active Alarms	Visible when alarms are active - L2 I are active. 1 = Alarm 1 active 2 = Alarm 2 active 3 = Loop Alarm active	Blank
Latch Status	LAth	Latched Alarms	Active when an output is latched - 123 are active. 1 = Output 1 2 = Output 2 3 = Output 3	Blank
Maximum PV	MA		Max/Min PV recorded whilst powered up or since last reset. To clear press ⊗ then to select YES. Press ⊗ to accept.	
Minimum PV	M.in			
Control Enable	CntL	OFF	Control output(s) disabled.	On
		On	Control output(s) enabled. PID or On-Off control available.	
Manual Control Enable	MCt	OFF	Instrument in automatic control mode (manual control OFF).	OFF
		On	Manual control ON. Power is shown as Pxxx in 1st User screen.	

Input Sub-Menu: InPt

Screen Name	Lower Display	Upper Display Adjustment Range & Description		Default Value
Input Type	tYPE	Options available same as in setup mode (section 3)		tC_Y
Input Units	Un.it	C	Temperature displayed as °C	C
		F	Temperature displayed as °F	
Process Display Resolution	dEc.P	0000	No decimal places	0000
		000.0	1 decimal place	
		00.00	2 decimal places	Not available for temperature inputs.
		0.000	3 decimal places	
Scaled Range Upper Limit	ScUL	Scale Input Lower Limit +100 display units to range maximum		Input max Lin=1000
Scaled Range Lower Limit	ScLL	Range minimum to Scale Input Upper Limit - 100 display units		Input min Linear=0
Input Filter Time	F.iLt	OFF or 0.5 to 100.0 seconds in 0.5 increments		2.0
Cold Junction Compensation	CJC	On	Enables the internal thermocouple CJC.	On
		OFF	Disables the internal CJC. External compensation must be provided for thermocouples.	

Input Calibration Sub-Menu: CAL

Single or two point calibration adjustments for the process input.
If the error is not constant across the sensor range, measure the error at a low point and high point in the process, and use two point calibration to correct it.

Screen Name	Lower Display	Upper Display Adjustment Range & Description	Default Value
Single Point Offset	OFFS	Shifts the input value up or down by the offset amount across the entire range.	0
Low Calibration Point	L.CAL	The value at which the low point error was measured.	Lower Limit
Low Offset	L.OFF	Enter an equal, but opposite offset value to the observed low point error.	0
High Calibration Point	H.CAL	The value at which the high point error was measured.	Upper Limit
High Offset	H.OFF	Enter an equal, but opposite offset value to the observed high point error.	0

Output Setup Sub-Menu: OUtP

Screen Name	Lower Display	Upper Display Adjustment Range & Description		Default Value
Output 1 Usage	OUt 1	HEAt	Heat Power	HEAt
		COOL	Cool Power	
		NL.CL	Non-Linear Cooling	
		AL 1	Alarm 1	
		AL2	Alarm 2	
		AL 12	Alarm 1 or 2	
		LooP	Control loop alarm (2 x Integral time)	
Output 1 Alarm Action	Act 1	d.r	Output changes with the alarm	d.r
		rEu	Output changes in opposition to alarm	
Output 1 Alarm Latching	LAc 1	OFF	Latching off	OFF
		On	Latching on	
Output 2 Usage	OUt2	As Output 1 Usage	AL 1
Output 2 Alarm Action	Act2	As Output 1 Alarm Action	d.r
Output 2 Alarm Latching	LAc2	As Output 1 Alarm Latching	OFF
Output 3 Usage	OUt3	As Output 1 Usage	AL2
Output 3 Alarm Action	Act3	As Output 1 Alarm Action	d.r
Output 3 Alarm Latching	LAc3	As Output 1 Alarm Latching	OFF

Control Sub-Menu: COnt

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

Screen Name	Lower Display	Upper Display Adjustment Range & Description	Default Value
Heat Proportional Band	H_Pb	In display units. 0.0 (ON.OF) and range: 0.5 to 999.9 units.	16 1
Cool Proportional Band	C_Pb	In display units. 0.0 (ON.OF) and range: 0.5 to 999.9 units.	16 1
Automatic reset (integral time)	In.t	1 second to 99 minutes 59 seconds and OFF	5.00
Rate (derivative time)	dEr.t	OFF 0 seconds to 99 minutes 59 seconds	1.15
Overlap/ Deadband	O_d	In display units, range -20 to +20% of Heat and Cool Proportional Band	0
ON/OFF differential	d.iFF	In display units, centred about the setpoint, range: 0.1% to 10.0% of input span	8
Loop Alarm Time	LAt.i	Visible when using On/Off control (i.e. when H_Pb or C_Pb = On.OF) Sets the time to wait before the loop alarm becomes active.	99.59
Manual Reset (Bias)	b.iAS	0 to 100% (-100% to 100% if heat/cool control)	25
Soft Start Time	SSt.i	0 (OFF) to 60 hours	OFF
Soft Start Setpoint	SSSP	Soft start target setpoint adjustable between scale input upper and lower limit	-240
Heat Cycle Time	HcYc	0.1 to 5 12.0 seconds 0.1 to 5 12.0 seconds	32.0
Cool Cycle Time	CcYc		32.0
Heat and Cool output Inhibit	OPLC	Inhibits simultaneous switching of both heat and cool outputs.	OFF
Heat Power Limit	HPL	% power upper limit 0 to 100%	100
Cool Power Limit	CPL	% power upper limit 0 to 100%	100

Setpoint Sub-Menu: SP

Screen Name	Lower Display	Upper Display Adjustment Range & Description	Default Value
Ramp Rate	rAtE	The rate (in units / hour) from current PV to setpoint following power-up or control enable. From 0.00 1 to 9999 or OFF Setpoint changes also follow this rate.	OFF
Setpoint Upper Limit	SPuL	The maximum allowed setpoint value, from current setpoint to scaled upper limit.	Upper Limit
Setpoint Lower Limit	SPLL	The minimum allowed setpoint value, from setpoint to scaled lower limit.	Lower Limit

Alarm Sub-Menu: ALrM

Screen Name	Lower Display	Upper Display Adjustment Range & Description		Default Value
Alarm 1 Type	AL 1t	nonE	None	P_h.i
		P_h.i	Process High Alarm	
		P_Lo	Process Low Alarm	
		dEu	Deviation Alarm	
		bAnd	Band Alarm	
Alarm 1 Value	AL_1	Range minimum to range maximum OFF disables the alarm.	1373
Alarm 1 Hysteresis	HYS 1	0 to full span.	1
Alarm 2 Type	AL2t	As Alarm 1.	P_Lo
Alarm 2 Value	AL_2	Range minimum to range maximum OFF disables the alarm.	-240
Alarm 2 Hysteresis	HYS2	0 to full span.	1
Alarm Inhibit	inh.i	Inhibit these alarms if active at power-up and on change in setpoint.	nonE
		nonE	None	
		1	Alarm 1	
		2	Alarm 2	
		1 2	Alarm 1 and Alarm 2	

Screen Name	Lower Display	Upper Display Adjustment Range & Description		Default Value
Cooling Minimum	COOL	Minimum temperature at which water cooling will activate. Range minimum to range maximum.	120
Impulse Length	t.on	1 to 9999 seconds	10
Minimum off time	t.oFF	1 to 9999 seconds	20
Non-linear cooling adjust	C.Adj	0 to 9999	5
Power Up Action	PUP	LASt	Powers up with control enable in the same state as on power fail	LASt
		On	Control enabled at power-up	
		OFF	Control disabled at power-up	
Automatic Tuning Start/Stop	tunE	OFF	Use current PID control terms or manually tune	OFF
		PrE	Start a pre-tune routine	
		AtSP	Start the tune at setpoint	

Soft Start
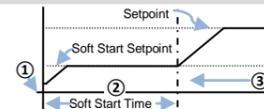
① At power on the unit will control to the Soft Start Setpoint, SSSP. ② Then remain at this value for the time defined by the Soft Start Time, SSt.i. During this period the control cycle time is a ¼ of the value entered and the heat power limit, HPL, is used. ③ When soft start timer expires the unit returns to normal operation. The unit controls to the normal setpoint and from this point the heat power limit is not used by the controller.

Non-linear Cooling
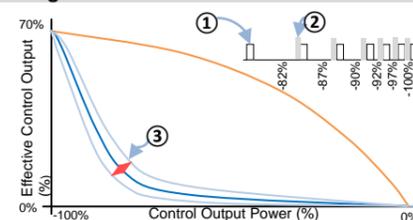
With non-linear cooling, the cooling curve adjusts the output power so that the effective power over 0% to -70% is weaker. ① The length of time the output will be on for is set by the parameter t.on. ② The minimum time the output will be off for is set by the parameter t.oFF. ③ When C.Adj is set to a value greater than 0 the cooling is non-linear and the curve adjusts the characteristics of the curve.

Screen Name	Lower Display	Upper Display Adjustment Range & Description		Default Value
Alarm Notification	NotE	Alternating indication -AL- shown when these alarms are active.	1 2
	nonE	None	
	1	Alarm 1	
	2	Alarm 2	
	1 2	Alarm 1 and Alarm 2	
Alarm LED Indicator selection	A.Ind	Select the alarms that will show on the alarm LED indicator	1 2
	nonE	None	
	1	Alarm 1	
	2	Alarm 2	
	1 2	Alarm 1 and Alarm 2	
Sensor Break Alarm	SbAc	On activates both alarms when a sensor break is detected.	OFF

Communications Sub-Menu: CoM

Modbus communications settings. Only shown if RS485 option is fitted

Screen Name	Lower Display	Upper Display Adjustment Range & Description	Default Value
Modbus Address	Add	The device network address from 1 to 255	1
Baud Rate	bAud	The communications data rate in kbps from 1.2 (1200), 2.4 (2400), 4.8 (4800), 9.6 (9600), 19.2 (19200), 38.4 (38400).	9.6
Parity	PrtY	Parity checking: Odd, EuEn or nonE	nonE

Display Sub-Menu: d.SP

Enable Basic Setpoint Control & change lock codes. ** Refer to the User Mode section 4.

Screen Name	Lower Display	Upper Display Adjustment Range & Description	Default Value
Setup Lock Code	S.Loc	View and adjust lock code to allow entry to the Setup Mode. Adjustable from 1 to 9999 or OFF to allow unrestricted access	10
Advanced Configuration Lock Code	A.Loc	View and adjust lock code to allow entry to the Advanced Configuration. Adjustable from 1 to 9999 or OFF to allow unrestricted access	20
Basic Setpoint Control Enable/Disable	bASc	Basic Setpoint Control allows user to only change the setpoint or manual power. **	d.iSA
Indicator Enable/Disable	Indc	When enabled hides the lower display. **	d.iSA
Reset to Defaults	dFLt	Reset all parameters back to their factory defaults Reset by pressing ⊗ and selecting YES	

Operator Sub-Menu: OPEr

Controls what appears in the User Mode when Basic Setpoint Control is disabled.

Screen Name	Lower Display	Upper Display	Sub-Menu Usage and Visibility	
PV Maximum	MA			HidE
PV Minimum	M.in			HidE
Alarm Status	ALSt	HidE	Hide or show parameters in User Mode when Basic Mode is disabled.	HidE
Latch Status	LAth	ShuJ		ShuJ
Control Enabled	CntL			HidE
Manual Control Enabled	MCt			HidE

Product Information Sub-Menu: InFo (Read-Only view)

Screen Name	Lower Display	Description
Product Revision	PrL	The hardware/software revision level.
Firmware Type	FtYP	The firmware code type.
Firmware Issue	ISS	The firmware version number
Serial Number 1	SEr 1	First four digits of serial number
Serial Number 2	SEr2	Middle four digits of serial number
Serial Number 3	SEr3	Last four digits of serial number
Manufacture Date	dOM	Date of Manufacture (mmyy)