

#### **Unlock Codes**

The **ULoc** screen is seen before entry is allowed to Configuration, Setup and Automatic Tuning modes.

An unlock code must be correctly selected using the  $\nabla$  or  $\triangle$  keys to enter the required mode. An incorrect entry results in a return to Select Mode. The value of the lock codes only can be changed from within the modes that they apply to.

Table 7. Lock Code – Entry and Default Values

Description	Upper/Main Display	Lower Display (or 1 <sup>st</sup> Legend)*	<sup>1</sup> / <sub>8</sub> DIN Indicator Units Display
Default values are: Automatic Tune Mode = <b>0</b>	0	ULoc	С
Set-up mode = 10 Configuration Mode = 20.			

<sup>\*</sup>Note:

On Indicators (single line display), this legend is shown for approx 1 second before the Main display value.

### **Automatic Tune Mode**

Automatic Tune Mode is selected when it is desired to use the Pre-tune and Self-tune facilities on a controller to assist the user in setting up Proportional band, Integral and Derivative parameter values. Refer to the following Automatic Tune Mode table.

Pre-tune can be used to set Controller PID parameters approximately. Self-tune may then be used to optimise the tuning. Pre-tune can be set to run automatically after every power-up using the Auto Pre-Tune **FPL** parameter in Setup Mode.

The **AT** indicator will flash while pre-tune is operating, and is continuously on whilst Self-tune is operating. If both Pre-tune and Self-tune are engaged the **AT** indicator will flash until Pre-tune is finished, and is then continuously on.

### **Navigating in Automatic Tune Mode**

Press  $\bigcirc$  to select the next parameter in the table and  $\bigcirc$  or  $\triangle$  to set the value required.

#### Note:

If there is no key activity for 2 minutes the controller automatically returns to operator mode



Table 8	Automatic :	Tune Mode	Parameters
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Parameter	Upper Display Adjustment Range	Lower Display	Default Value	When Visible
Pre-tune	On or OFF.  Indication remains OFF if Pre-Tune cannot be used at this time. This applies if:  a). The setpoint is ramping b). The process variable is less than 5% of span from the setpoint c). The primary or secondary output proportional bands = 0	Ptun	OFF	Controller models only
Self-tune	On or OFF. Indication remains OFF if Self-Tune cannot be used at this time. This applies if either proportional band = 0.	Stun	OFF	Controller models only
Automatic tune mode lock code	0 to 9999	tLoc	0	Controller models only

## **Product Information Mode**

This is a read only mode describing the instrument and the options fitted to it.

# **Navigating in the Product Information Mode**

Press to view each parameter in turn.

Hold Down 🕤 and press 🛆 to return to Select Mode.

#### Note:

If there is no key activity for 2 minutes the controller automatically returns to operator mode

Table 9. Product Information Mode Parameters

Parameter	Possible Values	Upper/Main Display	Lower Display (or 1 <sup>st</sup> Legend)*	<sup>1</sup> / <sub>8</sub> DIN Indicator Units Display
Input type	Universal input	Un i	In_ I	٤
Option 1 module type	No option fitted	nonE	OPn I	ł
	Relay	LFA		
	SSR drive	55r		
	Triac	Er i		
	Linear voltage / current output	Lin		