Error／Fault Indication



GrEAP
 Unit thas notreceeved an in inut
signal for two seconds．


NoTE：The process variale must be more than $5 \%$
over－rangelinder－range tor the appoppriate isplay to appear．
Alarms
1．NOTE：Alarm values cannot be changed if Alarm Lock is enabled（see PROGRAM PROGRAM MODE


To enter Program Mode from Operator Mode：
NOTE：In Program Mode，the
 HOLD DOWN Use the same key action
FOR 3 SECONDS to retum to Operator Mode
Parameter Selection（Help Facility Enabled）


Parameter Selection（Help Facility Disabled）


Editing the Displayed Parameter（Edit Mode）
（1）Select required parameter display．

（5）Repeat Steps 3 and 4 for each digit，as required．
（6）Confirm new value or Abort Edit operation．
Program Mode Paramer

| Primary Display | 年 | Description | Adjustment Rang |
| :---: | :---: | :---: | :---: |
| －t Las | 1 | Re－transmission Scale Minimum：The lower end of th linear scale for the re－transmission output，expressed as the value corresponding to the minimumoutput signal． | －19999 to |
|  | B | Re－transmission Scale Maximum：The upper end of the linear scale for the re－transmission output，expressed as the value corresponding to the maximum output signal． | －19999 to 99999 |
| FF | 固 | Process Variable Offset：Corrects a known offset of the input in order to display more accurately the process | －19999 to 99999 |
| F，It | F | Input Filter Time Constant：Filters the input over a user－defineable time period to minimise the effect on the process variable of any extraneous impulses | 0.0 （OFF）to 100.0 |
| Haddr SEENOTE | 目 | Communications Address：The unique serial communications address of the instrument． | 1 to 99 |
|  | 图 | Baud Rate：Serial communications speed | 1200，2400， 4800 or 9600 |
| ［alar | － | Display Colour Change：Defines the colour of the primary and secondary displays prior to／after the preset value（e．g Alarm level）is reached． |  |
| $\mathrm{H}^{\prime}$ | F | Alarm Lock：Enables／disables the changing of alarm values via the front panel． | En Enabled |
| HELP | B | Help Prompt：Determines whether the Primary Display shows the parameter description for 3 seconds before a parameter value is shown． | $\begin{aligned} & \text { HLP 4iyes } \\ & \text { HLP MiNo } \end{aligned}$ |

NOTE 1：Only appears if relevant option fitted and configured．
SERIAL COMMUNICATIONS
For information on the serial communications option，consult your supplier．

1 All installation work should be performed only by personnel who are technically
competent and authorised to do so. Local Regulations regarding electrical installation
\& safety must be observed. Panel-Mounting
The mounting panel must be rigid and
nay be up to 6 mm ( 0.25 inches) thick The cut-out required for the Indicator is hown on the right. Several Indicators ay be mounted side-by-side in a multiple installation for which the cut-out dilimetres. The panel-mounting


Rear Terminals

| POWER SUPPLY | digital | OMMENDED Power connection |
| :---: | :---: | :---: |
|  |  | 13-000- - Lor + |
| $22-55 \mathrm{VDC}$ | $\square^{+\pi}$ | $14 \longrightarrow \mathrm{O}^{\mathrm{Nor}}$ |
| $\begin{gathered} 20-50 \mathrm{~V} 5\left(\begin{array}{l} \text { (oplon) } \\ \text { (option) } \end{array}\right. \end{gathered}$ | $\begin{gathered} \text { RS485 } \\ \text { COMMS. } \end{gathered}$ | Fuses: $\begin{aligned} & 100-240 \mathrm{Vac} 50 / 60 \mathrm{~Hz}-315 \mathrm{~mA} \text { antisurge } \\ & 24 \mathrm{Vac} / \mathrm{dc}-315 \mathrm{~mA} \text { antisurge }\end{aligned}$ |
| 00-240V $50 / 60 \mathrm{~Hz}$ L~ |  |  |


elay 1: $\quad$ Standard; used as Alarm 1 output
Linear output: Optional; provides a 10 -bit re-transmission output (process variable).
Digital Input: Optional: used for the Security Facility, The terminals may be connected to (a) voltage-free
Operation is

| Voltage-free | TTL-compatible | Security Facility Status |
| :---: | :---: | :---: |
| Contacts open | Sicnal >2.0V | Entry into Program Mode prohibited |
| Contacts closed | Sicnal <0.8V | Entry into Program Mode permitte |



Primary
Display
BPEn
Option Selection: determines the opt.
fitted and the function of that option
nont None
CoIT5 Serial Communications
5 5EE - Digital Input-
nput Range Codes

| Thermocouple Inputs |  |  |  |
| :---: | :---: | :---: | :---: |
| Input Type | $\begin{aligned} & \text { Range } \end{aligned}$ | $\begin{aligned} & \text { Range } \\ & \text { Min. } \end{aligned}$ | $\begin{aligned} & \text { Range } \\ & \text { Max. } \end{aligned}$ |
| J | 100 ( ${ }^{\circ}$ ) | -200 | 1200 |
|  | $\left.\left.101{ }^{(0}\right)^{\circ}\right)$ | -328 | ${ }_{5}^{2192}$ |
|  | 110 ( ${ }^{\circ} \mathrm{C}$ ) | $-128.0$ | 537.0 |
|  | $\left.111{ }^{(\circ} \mathrm{F}\right)$ | -198.4 | 998.6 |
| T | 200 ( ${ }^{\circ}$ ) | -240 | 400 |
|  | $\left.201{ }^{\circ} \mathrm{F}\right)$ | -400 | 752 |
|  | $\left.210{ }^{\circ} \mathrm{C}\right)$ | -128.0 | 400.0 |
|  | $211{ }^{\text {(\%) }}$ | -198.4 | 752.0 |
| k | $\left.300{ }^{\circ} \mathrm{C}\right)$ | -240 | ${ }^{1372}$ |
|  | 301 (\%) | -400 | 2502 |
|  | $310{ }^{\circ} \mathrm{C}$ C) | $-128.0$ | 537.0 |
|  | $311{ }^{(6)}$ | -198.4 | 998.6 |
| N | 400 ( ${ }^{\circ}$ ) | 0 | 1399 |
|  | $\left.401{ }^{(\circ} \mathrm{F}\right)$ | 32 | 2550 |
| B |  |  | 1824 |
|  | 501 (\%) | 212 | 3315 |
| R | $600\left({ }^{\circ} \mathrm{C}\right)$ | 0 | 1760 |
|  | 601 (\%) | 32 | 3200 |
| s | $700{ }^{\circ} \mathrm{C}$ ) | 0 | 1760 |
|  |  |  |  |



| Range | Range |
| :---: | :---: |
| Min. | Max. |
| -200 | 800 |
| -128 | 1472 |
| -128.0 | 537 |
| -198.4 | 998 |
| -200 | 80 |
| -328 | 147 |
| -128.0 | 5372 |
| -1984 | 998 |

The input range can be trimmed using the Ghi and rnGLo parameters (see Param.
Sequence) - minimum span $=100^{\circ} \mathrm{C}$.

SPECIFICATION
Type:
Height
SENSOR INPUT
18 mgreen, 7 -segment LED, 5 -digit primary display, 1 -digit secondary display.
18 mm ( 0.7 1in) primary display, 7 mm ( 0.3 iin ) secondary display..
$\begin{array}{ll}\text { Types: } & \text { Thermocouple (Types B, J, K, N, R, S and T) or R } \\ \text { Accuracy }\end{array}$
Sample Rate: Every 250 ms
Resolution: 14 bits.
ensor Break Detection: Detected within two seconds. All alarms become active
input Impedance:
VIGITAL INPUT (OPTION)
TL-Compatible Operation: $\quad \begin{aligned} & \text { Max. Contact Resistance (Closure) }=50 \Omega \\ & \text { Min Contact Resistance (Open) }=5000\end{aligned}$
TRANSISTOR OUTPUTS Max. Voltage for "0" $=0.8 \mathrm{~V}$, Min. Voltage for " "o" $=-0.6 \mathrm{~V}$
Min. Votage for "1" $=2 . \mathrm{VV} ;$ Max. Voltage for " $1=24.0 \mathrm{~V}$
ype: NPN open collector. Output 1 tied to Alarm 1 , Output 2 tied to Alarm 2 RELAY 1 OUTPUT (STANDARD) AND RELAY 2 OUTPUT (OPTION)
Contact Type/Rating: $\quad$ Single pole double throw. 5A resistive @ 120 V AC ; 3 A resistive @ $\mathrm{A}_{20 \mathrm{~V}}$
Líetime: $>500,000$ operations at rated voltage/Current. Isolation - inherent.
INEAR (RE-TRANSMITTED PV) OUTPUT (OPTION)
ccuracy: $\quad \pm 0.5 \%$ max.
8 bits in 250 mS ( 10 bits in 1 second typically)

Ambient Temperature (Operating): $\quad 0^{\circ} \mathrm{C}$ to 5
Ambient Temperature (Storage): $\quad 20 \%-95 \%$ non-condensing
Relative Humidity:
 $20-50 \mathrm{VAC}$ (option) 7.5 VA ; $22-55 \mathrm{~V}$ DC (option) 5 W

Approvals:
EMC Immunity
EMC Emission:

Safery Considerations:
Front Panel Seaing:
PHYSICAL
Dimension
Weight:

CE UL \& CUL
EN61326-1:2013 Table 2
EN61326-1:2013 Class A.
This is a class A product. In a domestic environment this produc
may cause radio interference in which case the user may be may cause radio interference in which
required to take adequate measures.

L61010-1 Edition 3 \& EN61010 version 2010 To IP66

- 1 - War 0.21 kg max

