

# Quick Start Guide

## 600-R-D-O-O-x Programmable PID Controller



## Heat & Alarm

### GETTING STARTED

- Unpack Contents
- Verify model number and application
- Power Controller
- Program for your application

#### Note

Change all menu parameters by using the front panel buttons



### 1 What's Included



- 48x48 DIN 600-R-D-O-O-x Gefran Controller
- Mounting Bracket
- Panel Sealing Gasket
- Screw Terminal Cover
- Multi-Language Manual

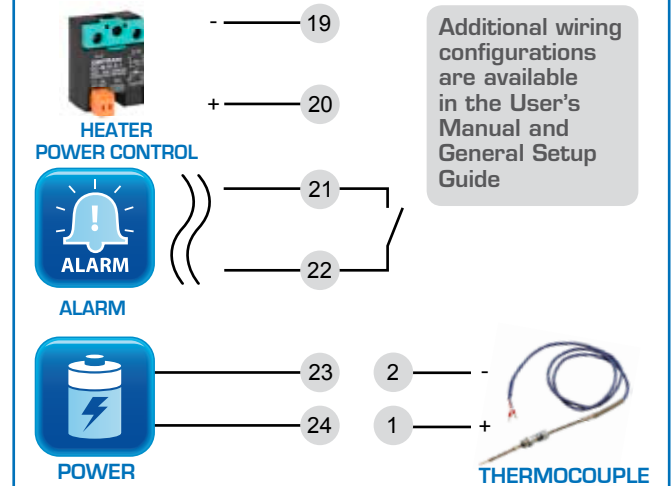
### 2 Program Your Gefran Controller

- Press and hold **F** until *PAS* appears — ENTER *99*
- Press **F** once, *Prd* appears — ENTER *128*
- Press **F** once, *PAS* appears — ENTER *99*
- Press and hold **F** until *Hrd* appears
- Press **F** repeatedly until *but* appears — ENTER *!*
- Press and hold **F** until *inp* appears
- Press **F** twice, *Lyp* appears — ENTER the Input Sensor number from the list
- Press **F** repeatedly until *Lo.S\** appears — ENTER the minimum Input Scale limit
- Press **F** once, *Hi.S\** appears — ENTER the maximum Input Scale limit
- Press **F** repeatedly until *Lo.L\** appears — ENTER the minimum Alarm Scale limit
- Press **F** once, *Hi.L\** appears — ENTER the maximum Alarm Scale limit
- Press and hold **F** until you return to the main process display. This is the display after *PAS* and will be indicated by the Process Variable if an input sensor is connected, or *Lo*, *Hi*, *Sbr*, *Err* if no input is connected.
- Use the **▲** and **▼** buttons to adjust the control setpoint (SV) from the main display.
- Press **F** once from the main display, *AL. 1* appears to adjust the Alarm 1 setpoint.
- Press the **⏻** button to switch between automatic and manual control modes from the main display. LED 1 (**L1**) will light while in manual mode.

| Input Sensor |  |              |  |
|--------------|--|--------------|--|
| Sensor Type  |  | Sensor Type  |  |
| 0 TC J °C    |  | 30 PT100 °C  |  |
| 1 TC J °F    |  | 31 PT100 °F  |  |
| 2 TC K °C    |  | 32 JPT100 °C |  |
| 3 TC K °F    |  | 33 JPT100 °F |  |
| 4 TC R °C    |  | 34 PTC °C    |  |
| 5 TC R °F    |  | 35 PTC °F    |  |
| 6 TC S °C    |  | 36 NTC °C    |  |
| 7 TC S °F    |  | 37 NTC °F    |  |
| 8 TC T °C    |  | 44 4...20 mA |  |
| 9 TC T °F    |  | 46 0...10 V  |  |

\* Parameter may be left at default value for input types 0...37

### 3 Connect Your Controller



#### If needed, automatic tuning (Self-Tune) can be enabled with the following steps

With the machine at ambient temperature and the control setpoint (SV) set...

- Press and hold **F** until *CFG* appears
- Press **F** once, *S.Tu* appears — ENTER *2*
- Press **F** once
- Cycle power to the controller
- LED 3 (**L3**) will flash during the tuning process

Self-Tune will automatically save new PID values once complete

This Quick Start Guide provides basic information on setting up the Gefran 600 controller for the application referenced above. Additional software and hardware configuration information can be found in the User's Manual included with this controller or online at [www.gefran.com](http://www.gefran.com)

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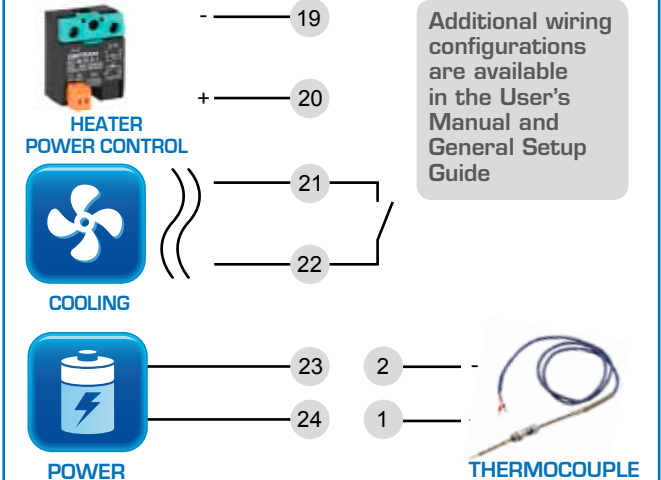
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- Press **F** once, *Pro* appears — ENTER *128*
- Press **F** once, *PAS* appears — ENTER *99*
- Press and hold **F** until *Hrd* appears
- Press **F** twice, *Clr* appears — ENTER *14*
- Press **F** once, *ALn* appears — ENTER *0*
- Press and hold **F** until *CFG* appears
- Press and hold **F** until *C.Me* appears
  - ENTER *0* cooling with Air
  - ENTER *1* cooling with Oil
  - ENTER *0* cooling with Water
- Press and hold **F** until *inp* appears
- Press **F** twice, *LYP* appears — ENTER the Input Sensor number
- Press **F** repeatedly until *Lo.S\** appears — ENTER the minimum Input Scale limit
- Press **F** once, *Hi.S\** appears — ENTER the maximum Input Scale limit
- Press **F** repeatedly until *Lo.L\** appears — ENTER the minimum Alarm Scale limit
- Press **F** once, *Hi.L\** appears — ENTER the maximum Alarm Scale limit
- Press and hold **F** until *Out* appears
- Press **F** once, *rl. l* appears — ENTER *1*
- Press and hold **F** until you return to the main process display. This is the display after *PAS* and will be indicated by the Process Variable if an input sensor is connected, or *Lo*, *Hi*, *Sbr*, *Err* if no input is connected.
- Use the **▲** and **▼** buttons to adjust the control setpoint (SV) from the main display.
- Press the **⏻** button to switch between automatic and manual control modes from the main display. LED 1 (**L1**) will light while in manual mode.

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| 0            | TC J °C     | 30 | PT100 °C    |
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| 3            | TC K °F     | 33 | JPT100 °F   |
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| 5            | TC R °F     | 35 | PTC °F      |
| 6            | TC S °C     | 36 | NTC °C      |
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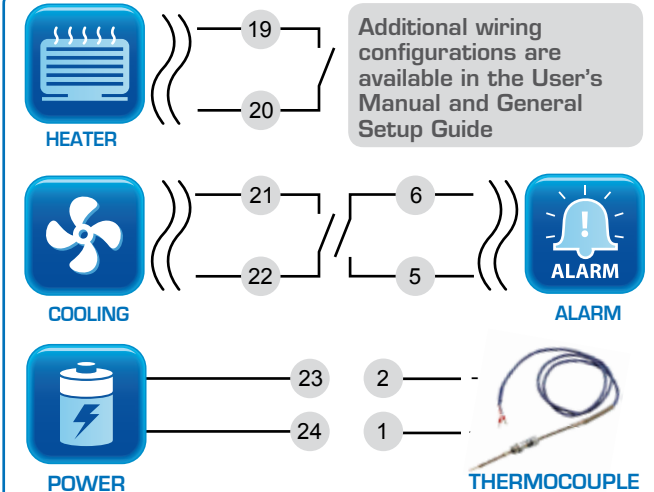
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- Press and hold **F** until *Hrd* appears
- Press **F** twice, *Clr* appears — ENTER *14*
- Press **F** twice, *but* appears — ENTER *1*
- Press and hold **F** until *CFG* appears
- Press and hold **F** until *C.Me* appears
  - ENTER *0* cooling with Air
  - ENTER *1* cooling with Oil
  - ENTER *0* cooling with Water
- Press and hold **F** until *inp* appears
- Press **F** twice, *Lyp* appears — ENTER the Input Sensor number from the list
- Press **F** repeatedly until *Lo.S\** appears — ENTER the minimum Input Scale limit
- Press **F** once, *Hi.S\** appears — ENTER the maximum Input Scale limit
- Press **F** repeatedly until *Lo.L\** appears — ENTER the minimum Alarm Scale limit
- Press **F** once, *Hi.L\** appears — ENTER the maximum Alarm Scale limit
- Press and hold **F** until *Out* appears
- Press **F** three times, *rl. 1* appears — ENTER *1*
- Press **F** twice, *rl. 3* appears — ENTER *2*
- Press and hold **F** until you return to the main process display. This is the display after *PRG* and will be indicated by the Process Variable if an input sensor is connected, or *Lo*, *Hi*, *Sbr*, *Err* if no input is connected.
- Use the **▲** and **▼** buttons to adjust the control setpoint (SV) from the main display.
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| 5            | TC R °F | 35          | PTC °F    |
| 6            | TC S °C | 36          | NTC °C    |
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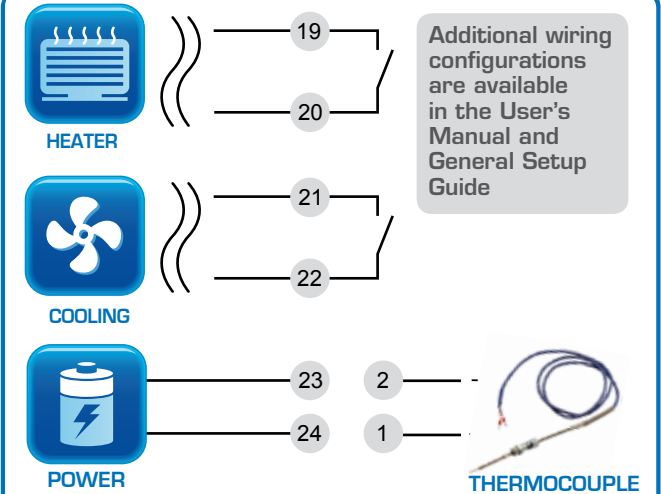
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- Press and hold **F** until *Hrd* appears
- Press **F** twice, *Clr* appears — ENTER *14*
- Press **F** once, *ALn* appears — ENTER *0*
- Press and hold **F** until *CFG* appears
- Press and hold **F** until *C.Me* appears
  - ENTER *0* cooling with Air
  - ENTER *1* cooling with Oil
  - ENTER *0* cooling with Water
- Press and hold **F** until *InP* appears
- Press **F** twice, *LSP* appears — ENTER the Input Sensor number
- Press **F** repeatedly until *Lo.S\** appears — ENTER the minimum Input Scale limit
- Press **F** once, *Hi.S\** appears — ENTER the maximum Input Scale limit
- Press **F** repeatedly until *Lo.L\** appears — ENTER the minimum Alarm Scale limit
- Press **F** once, *Hi.L\** appears — ENTER the maximum Alarm Scale limit
- Press and hold **F** until *Out* appears
- Press **F** once, *rl. l* appears — ENTER *1*
- Press and hold **F** until you return to the main process display. This is the display after *PRG* and will be indicated by the Process Variable if an input sensor is connected, or *Lo*, *Hi*, *Sbr*, *Err* if no input is connected.
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| 4            | TC R °C | 34          | PTC °C    |
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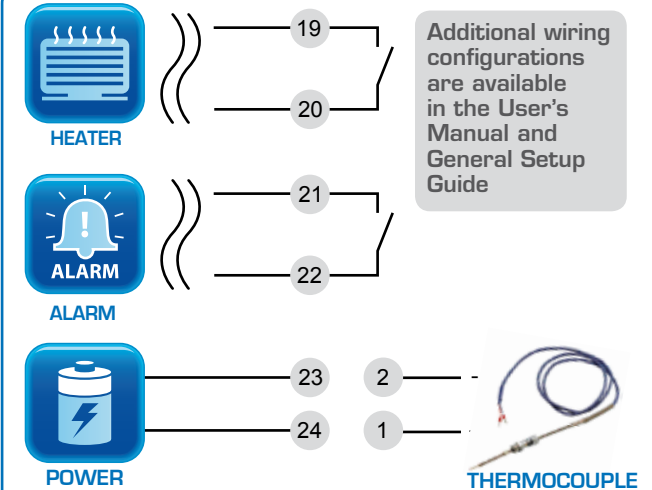
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- Press and hold **F** until *Hrd* appears
- Press **F** repeatedly until *but* appears – ENTER *!*
- Press and hold **F** until *InP* appears
- Press **F** twice, *LTP* appears – ENTER the Input Sensor number from the list
- Press **F** repeatedly until *Lo.S\** appears – ENTER the minimum Input Scale limit
- Press **F** once, *Hi.S\** appears – ENTER the maximum Input Scale limit
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| 5            | TC R °F     | 35 | PTC °F      |
| 6            | TCS °C      | 36 | NTC °C      |
| 7            | TCS °F      | 37 | NTC °F      |
| 8            | TCT °C      | 44 | 4...20 mA   |
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#### If needed, automatic tuning (Self-Tune) can be enabled with the following steps

With the machine at ambient temperature and the control setpoint (SV) set...

- Press and hold **F** until *CFG* appears
- Press **F** once, *Stu* appears – ENTER *2*
- Press **F** once
- Cycle power to the controller
- LED 3 (**L3**) will flash during the tuning process

Self-Tune will automatically save new PID values once complete

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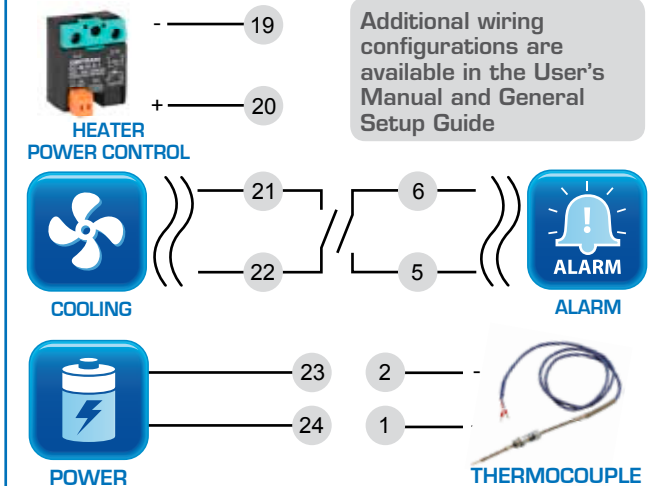
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- Press **F** twice, *but* appears — ENTER *1*
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- Press **F** twice, *Lyp* appears — ENTER the Input Sensor number from the list
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