

# Quick Start Guide

## 401-R-R-R-x Programmable PID Controller



Heat - Cool - 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 401-R-R-R-x Gefran Controller
- Mounting Bracket
- Panel Sealing Gasket
- Screw Terminal Cover
- Multi-Language Manual

### 2 Program Your Gefran Controller

- Press and hold **F** until *InP* appears
- Press **F** once, *Clr* appears — ENTER **0**
- Press **F** once, *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** repeatedly until, *r.o.2* appears — ENTER **1**
- Press **F** once, *r.o.3* appears — ENTER **2**
- Press and hold **F** until *CFG* appears
- 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 *Sbr. Err.* *Lo. Hi.* if no input is connected.
- Press **F** once from the main display, *SP* appears to adjust the control setpoint (SV).
- Press **F** twice from the main display, *AL. 1* appears to adjust the Alarm 1 setpoint.
- Press **F** twice to return to the main display.
- Press the **ON/OFF** button to switch between automatic and manual control modes from the main display. The deviation LEDs (**ERR**) will flash while in manual mode.

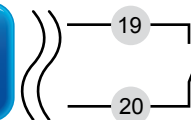
Input Sensor			
Sensor Type		Sensor Type	
0 TC J °C	30	PT100 °C	
1 TC J °F	31	PT100 °F	
2 TC K °C	32	JPT100 °C	
3 TC K °F	33	JPT100 °F	
4 TC R °C	34	PTC °C	
5 TC R °F	35	PTC °F	
6 TC S °C	36	NTC °C	
7 TC S °F	37	NTC °F	
8 TC T °C	44	4...20 mA	
9 TC T °F	46	0...10 V	

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

### 3 Connect Your Controller



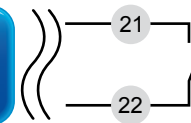
COOLING



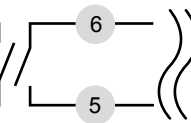
Additional wiring configurations are available in the User's Manual and General Setup Guide



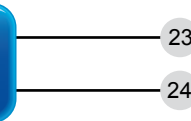
HEATER



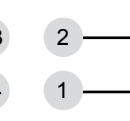
ALARM



POWER



THERMOCOUPLE



#### 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
- Cycle power to the controller The right-most decimal point will light 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 400 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)