**Quick Start Guide**

600-R-D-0-0-x Programmable PID Controller

**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.

**What’s Included**
- 48x48 DIN 600-R-D-0-0-x Gefran Controller
- Mounting Bracket
- Panel Sealing Gasket
- Screw Terminal Cover
- Multi-Language Manual

**Program Your Gefran Controller**
- Press and hold \( \mathcal{F} \) until \( PR5 \) appears — ENTER 99
- Press \( \mathcal{F} \) once, \( Pro \) appears — ENTER 128
- Press \( \mathcal{F} \) once, \( PR5 \) appears — ENTER 99
- Press and hold \( \mathcal{F} \) until \( H d \) appears
- Press \( \mathcal{F} \) repeatedly until \( but \) appears — ENTER 1
- Press \( \mathcal{F} \) twice, \( \mathcal{F} \) appears — ENTER the Input Sensor number from the list
- Press \( \mathcal{F} \) repeatedly until \( Lo . S \star \) appears — ENTER the minimum Input Scale limit
- Press \( \mathcal{F} \) once, \( Hi . S \star \) appears — ENTER the maximum Input Scale limit
- Press \( \mathcal{F} \) once, \( Lo . L \star \) appears — ENTER the minimum Alarm Scale limit
- Press \( \mathcal{F} \) once, \( Hi . L \star \) appears — ENTER the maximum Alarm Scale limit
- Press and hold \( \mathcal{F} \) until you return to the main process display. This is the display after \( PR5 \) 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 \( \mathcal{C} \) and \( \mathcal{D} \) buttons to adjust the control setpoint (SV) from the main display.
- Press \( \mathcal{F} \) once from the main display, \( AL \) appears to adjust the Alarm 1 setpoint.
- Press the \( \mathcal{F} \) button to switch between automatic and manual control modes from the main display. LED 1 \( \mathcal{L} \) will light while in manual mode.

**Connect Your Controller**

**Input Sensor**

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<thead>
<tr>
<th>Sensor Type</th>
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</tr>
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</tr>
<tr>
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<td>8 4...20 mA</td>
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<tr>
<td>9 TC T °F</td>
<td>9 0...10 V</td>
</tr>
</tbody>
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**If needed, automatic tuning (Self-Tune) can be enabled with the following steps**

- Press and hold \( \mathcal{F} \) until \( \mathcal{F} FG \) appears
- Press \( \mathcal{F} \) once, \( S.Tu \) appears — ENTER 2
- Press \( \mathcal{F} \) once
- Cycle power to the controller
- LED 3 \( \mathcal{L} \) will flash during the tuning process

Self-Tune will automatically save new PID values once complete.

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

GEFRAN SpA
Via Sebina, 74 - 25050 PROVAGLIO DI ISEO (BS) ITALY

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
GETTING STARTED

- Unpack Contents
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Program Your Gefran Controller

1 What’s Included

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- Panel Sealing Gasket
- Screw Terminal Cover
- Multi-Language Manual

2 Program Your Gefran Controller

- Press and hold until PR5 appears — ENTER 99
- Press once, Pr.o appears — ENTER 120
- Press once, PR5 appears — ENTER 99
- Press and hold until In.d appears
- Press twice, Clr appears — ENTER M
- Press once, Al.n appears — ENTER 0
- Press and hold until CFG appears
- Press and hold until O appears
- Press twice, Typ appears — ENTER the Input Sensor number
- Press repeatedly until Lo.S* appears — ENTER the minimum Input Scale limit
- Press once, Hi.S* appears — ENTER the maximum Input Scale limit
- Press once, Lo.L* appears — ENTER the minimum Alarm Scale limit
- Press and hold until Dck appears
- Press once, rl. appears — ENTER 1
- Press and hold return to the main process display. This is the display after PR5 and will be indicated by the Process Variable if an input sensor is connected, or Lo, Hi, 5br, 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.

3 Connect Your Controller

Input Sensor

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<tr>
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<tr>
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</tr>
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</table>

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

If needed, automatic tuning [Self-Tune] can be enabled with the following steps

- Press and hold until CFG appears
- Press once, S.tu appears — ENTER 2
- Press 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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GETTING STARTED
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Note
Change all menu parameters by using the front panel buttons

1 What’s Included
- 48x48 DIN 600-R-R-R-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 \( PRS \) appears — ENTER 99
- Press \( F \) once, \( Pro \) appears — ENTER 40
- Press \( F \) once, \( PRS \) appears — ENTER 99
- Press and hold \( F \) until \( H.d \) appears
- Press \( F \) twice, \( Ctr \) appears — ENTER 1
- Press and hold \( F \) until \( C.r \) appears
  - ENTER 0 cooling with Air
  - ENTER 1 cooling with Oil
  - ENTER 0 cooling with Water
- Press and hold \( F \) until \( L.p \) appears
- Press \( F \) twice, \( S.Tu \) appears — ENTER 2
- Press \( F \) once
- 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 \( F \) once, \( Lo.L \) 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 \( PRS \) and will be indicated by the Process Variable if an input sensor is connected, or \( L.a, H.s, S.b, E.r, r \) if no input is connected.

- Use the \( \Delta \) and \( \nabla \) 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 \( \langle \) button to switch between automatic and manual control modes from the main display. LED 1 (\( \langle \)) will light while in manual mode.

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

3 Connect Your Controller

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

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 \( C.FG \) appears
- Press \( F \) once, \( S.Tu \) appears — ENTER 2
- Press \( F \) once
- Cycle power to the controller
- LED 3 (\( \langle \)) will flash during the tuning process

Self-Tune will automatically save new PID values once complete

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**Program Your Gefran Controller**

1. Press and hold \( \text{F} \) until \( \text{PR} \) appears — ENTER 99
2. Press \( \text{F} \) once, \( \text{Pr} \) appears — ENTER 428
3. Press \( \text{F} \) once, \( \text{PR} \) appears — ENTER 99
4. Press and hold \( \text{F} \) until \( \text{Hd} \) appears
5. Press \( \text{F} \) twice, \( \text{Cl} \) appears — ENTER 41
6. Press \( \text{F} \) once, \( \text{Pl} \) appears — ENTER 0
7. Press \( \text{F} \) and hold until \( \text{CF} \) appears
8. Press \( \text{F} \) and hold until \( \text{Hd} \) appears
9. Press \( \text{F} \) and hold until \( \text{CF} \) appears

**Input Sensor**

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**Connect Your Controller**

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

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

1. Press and hold \( \text{F} \) until \( \text{CF} \) appears
2. Press \( \text{F} \) once, \( \text{S.Tu} \) appears — ENTER 2
3. Press \( \text{F} \) once
4. Cycle power to the controller

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

- Press and hold \( \text{F} \) until \( \text{CF} \) appears
- Press \( \text{F} \) once
- Cycle power to the controller
- LED 3 (\( \text{L3} \)) will flash during the tuning process

Self-Tune will automatically save new PID values once complete

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- Panel Sealing Gasket
- Screw Terminal Cover
- Multi-Language Manual

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**2 Program Your Gefran Controller**
- Press and hold $ until **PAS** appears — ENTER 99
- Press $ once, **Pro** appears — ENTER 28
- Press $ once, **PAS** appears — ENTER 99
- Press and hold $ until **Hrd** appears
- Press $ repeatedly until **bulp** appears — ENTER 1
- Press and hold $ until **lnP** appears
- Press $ twice, **LYP** appears — ENTER the Input Sensor number from the list
- Press $ repeatedly until **Lo.S** appears — ENTER the minimum Input Scale limit
- Press $ once, **Hi.S** appears — ENTER the maximum Input Scale limit
- Press $ repeatedly until **Lo.L** appears — ENTER the minimum Alarm Scale limit
- Press $ once, **Hi.L** appears — ENTER the maximum Alarm Scale limit
- Press and hold $ 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.

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- Use the $ and $ buttons to adjust the control setpoint (SV) from the main display.
- Press $ 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 will light while in manual mode.

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

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

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

Self-Tune will automatically save new PID values once complete

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2 Program Your Gefran Controller
• Press and hold F until PRS appears — ENTER 99
• Press F once, Pro appears — ENTER 40
• Press F once, PRS appears — ENTER 99
• Press and hold F until H.d appears
• Press F twice, Clr appears — ENTER M
• Press F twice, but appears — ENTER 1
• Press and hold F until CFG appears
  • ENTER 0 cooling with Air
  • ENTER 1 cooling with Oil
  • ENTER 0 cooling with Water
• Press and hold F until LnP appears
• Press F twice, LnP appears — ENTER the Input Sensor number from the list
• Press F repeatedly until L.o.S* appears — ENTER the minimum Input Scale limit
• Press F once, H.o.S* appears — ENTER the maximum Input Scale limit
• Press F repeatedly until L.o.L* appears — ENTER the minimum Alarm Scale limit
• Press F once, H.o.L* appears — ENTER the maximum Alarm Scale limit
• Press and hold F until C.oL appears
• Press F three times, cl. 1 appears — ENTER 1
• Press F twice, cl. 3 appears — ENTER 2
• Press and hold F until you return to the main process display. This is the display after PRS and will be indicated by the Process Variable if an input sensor is connected, or Lo, H., 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.

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

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• 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

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

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

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