# Operating Instructions Summary B 130/B 150/B 180/C 280/P 300/P 310/P 330

This operating instruction summary explains the most important steps for operation of the controller. See the enclosed controller instructions for more detailed information about the controllers.
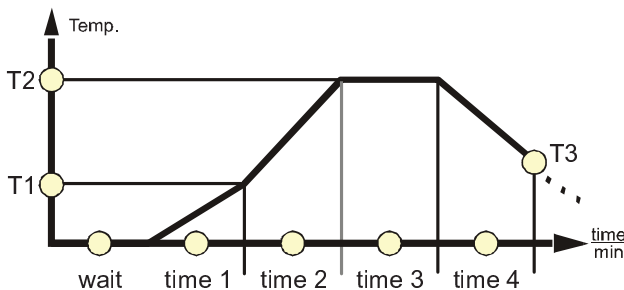
See Section 6 for a description of Controllers B 130 and C 280

See Sections 7 ff for a description of Controllers B 150, B 180, P 300, P 310, and P 330

## 1    Turning on the Controller

- Turn the controller on with ![switch] and wait until the furnace chamber temperature is shown in the display.

## 2    Entering the Program



The small lamp in the overview diagram shows whether you are in a **time segment** *(time 1, time2. time3, time4, or wait)* or a **temperature segment** *(T1, T2, T3).*

The diagram shows a typical program, split into different segments.

Entering the Program Values for Each Segment:

- Click ![arrow] to select the segment

- Enter the time in minutes with ![plusminus] (time entry for B 180/P 300/P 310/P 330 directly with the numerical block ![numblock]).

- Use ![arrow] to enter the temperature. Enter the temperature for this segment in °C with ![plusminus] (temperature entry for B 180/P 300/P 310/P 330 directly with the numerical block ![numblock]).

- Select the next segment with ![arrow] (repeat the steps to enter the time and temperature for all the other segments as described above). An illuminated lamp in the diagram shows the respective position in program entry.

**Extra function** (only Controllers C 280, P 300, P310, and P 330):
- If an extra function, such as automatic supply air valve or fan are to be activated in a **time segment**, while you are entering the program, in the respective segment press ![Extra1] or ![Extra2]. Your selection is confirmed in the display with **"rel1"** or **"rel2"**. The serial acoustic signal in Controller P 330 is set in the same way by pressing ![Extra1].

**Delayed Start of the Furnace**
- If the furnace is to be started later, e.g. in 30 minutes, you must enter a time in the "wait" segment. Press ![arrow] for the "wait" segment". Enter the time in minutes with ![plusminus] (time entry for B 180/P 310/P 300 directly with the numerical block ![numblock]).

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**Delayed Start of Furnace with Controller P 330**

Controller P330 has a real time clock with autotimer to start the furnace with a delay. To set the time, read the Controller Instructions in Section 7.3

- If the furnace is to be started later, e.g. Thursday at 8:00 a.m., you must enter the day and the time in the "wait" segment. Press ⏭ for the "wait" segment. Enter the day and time directly via the numerical block ⊞. Each weekday has a different number. 1=Mon, 2=Tue, 3Wed, **4=Thu**, 5=Fri, 6=Sat, 7=Sun. Enter the time as four digits at the end of the combination, e.g. **0800** for **8:00 a.m.**, 1800 for 6:00 p.m. Confirm your entry with ▦.

**Starting the Furnace**

- When you have entered all the required times and temperatures, you can start the furnace with the [start stop] key (press [start stop] for approx. 2 seconds).

## 3 Saving Programs

- When you have entered all times and temperatures, press ▦. In the display you will see *S1* (Program slot no. 1). Select the required program slot in which the program is to be saved with ± (for B 180/P 310/P 300/P 330 use the numerical block ⊞) (B 150/B 180 has only one program slot), and confirm with ▦. The program is now saved in the slot you selected.

  **Note:**
  The delayed start is not saved; you must enter this each time you start the program if required.

## 4 Starting the Program

- Press [P] and select the required program number (Program slot no.) that is to be started with ± (for B 180/P 310/P 300/P 330, use the numerical block ⊞).
- Press ⏭ several times to check whether the values entered in the individual segments are suitable for your firing sequence.
- If the furnace is to start later, enter the respective waiting time in the "wait" segment (see "Delayed Start of the Furnace").
- Press [start stop] and the controller then starts the program you entered (press [start stop] for approx. 2 seconds).

The controller now controls the complete firing sequence automatically and switches the heating off after the firing. After the firing, you can still read the furnace chamber temperature on the controller.

**NOTE:** Do **not** switch off a program that is running with [ 0 I ].

If you have to stop the program for whatever reason, you must **first** press [start stop] (This key has to be pressed for approx. 4 seconds). Otherwise , when you switch the furnace on again, error message "F90" will be displayed on the controller.