



Option 9 — Setting Up Alarms

A Kurz thermal flow meter can be factory configured with up to two alarms. The alarms can be monitored on the display, via ASCII or Modbus commands, or through the HART interface. Additionally, the alarms can be setup to send a control signal (energize a relay output) when an alarm event occurs.

Notes: It is recommended that you start with the Option 8, Relay Output Setup, to avoid assigning conflicting relays. See Option 8 – Setting Up Relays for information. As the relays are optically isolated solid-state relays (SPST switching), their non-powered state is an open circuit and must be considered for fail-safe alarm logic configurations.

To access the Alarm Setup menu in Program mode:

1. Press **P**.
2. Enter your **Advanced** access password, and then press **E**.
3. Press **2** to invoke the Quick Jump option.
4. Press **9** for the **Alarm Setup** menu, and then press **E**.

The following information appears if the meter was not purchased with the alarm option:

```
ALARM FUNCTION
IS NOT INSTALLED
```

If the meter is configured with the alarm option, you are prompted for an alarm number.

```
SET ALARM #
>1
```

5. Use the numeric keys to enter either **1** or **2** for the alarm number, and then press **E**.

```
SET ALARM 1
>ON
```

You are prompted to turn the alarm ON or OFF.

6. Use the arrow keys to select **ON**, then press **E**.

```
ALARM 1 TRIGGER
>FLOW RATE  ^v
```

You are prompted to select an event that activates the alarm. The available events are:

```
FLOW RATE      Limits check
VELOCITY        Limits check
TEMPERATURE     Limits check
GLOBAL EVENT
ZERO/SPAN CHK
```



Select FLOW RATE, VELOCITY, or TEMPERATURE to monitor one of the meter's process variables with respect to a set point limit. Select GLOBAL EVENT if you want the alarm activated by any System Fault Event.

7. Use the arrow keys to scroll through the list, and then press **E**.

```
ALARM 1 TRIP
>LOW SETPOINT    ^v
```

If you select FLOW RATE, VELOCITY, or TEMPERATURE, the menu system prompts for the condition that activates the alarm. The condition can be LOW SETPOINT / HIGH SETPOINT / LO AND HI SP.

8. Use the arrow keys to scroll through the list, and then press **E**.

```
LO ALARM SETPT
>0.0000000      SFPM
```

```
HI ALARM SETPT
>10000.0000     SFPM
```

Depending on the activation condition you selected, you could be prompted for the LOW and/or HIGH set points. The following examples show the prompting for the FLOW RATE low and high alarm set points.

9. Use the numeric and decimal keys to enter the set point value, and then press **E**.

```
CONTINUE WITH
RELAY SETUP >YES
```

If the alarm condition energizes a relay output, the following example shows setting up the relay output assigned to the alarm.

10. Press **P** or **C** to advance to the next setup screen.

```
RELAY 1 STATE
NORMALLY OPN    ^v
```

After the relay selection is confirmed, a prompt for the normal (non-alarmed) state of the relay appears.

Use the arrow keys to select between:

- NORMALLY OPN is used if the contact is closed when the alarm is triggered.
- NORMALLY CLS is used if the contact is opened when the alarm is triggered.

11. Press **E** to accept the selection and exit the Alarm Setup menu.

If the meter is configured for multiple alarms, the alarm setup can be repeated for the other alarms.