

4.3.15 Alarms Set Up Group

Introduction

If the recorder hardware supports outputs, one or both relays can be used for alarming. An alarm is an indication that an event that you have selected during configuration (process variable, for example) has exceeded one or more alarm limits. There are two alarms available for each pen (assuming no relay is being used for control). Each alarm has two setpoints. There are two alarm output selections, high and low. You can configure each setpoint to alarm either high or low. A single adjustable hysteresis of 0.0% to 100.0% is configurable for the alarm setpoint.

If the "OUTALG" function in the control group is set to "RLYD", both relays on the printed circuit assembly for the pen being configured are used for control, and the prompts in the alarm group will not be displayed. If "OUTALG" is "RLY", or if the recorder is a limit controller, then Relay 1 is used for control. In these cases only the prompts for the second alarm (Relay 2) will be displayed.

If "TIMER" is set to "ENAB", then Relay 2 is used by the timer and prompts for the second alarm will not be displayed.

Alarms group prompts

Table 4-14 lists all the function prompts in the alarms set up group and their definitions.

For a 2-pen recorder, the desired input channel is displayed on the left side of the operator interface.

Press **FUNC** to select channel.

Press **SETUP** key until "ALARMS" appears in the lower display.

Press **FUNC** key to select the parameters.

Table 4-14 Alarm Parameter Definitions

Lower Display Prompt	Upper Display Range of Setting or Selection	Parameter Definition
A1S1TY	NONE [factory setting] INP DEV	ALARM 1 SETPOINT 1 TYPE —Select what you want Setpoint 1 of Alarm 1 to represent. NO ALARM INPUT PV DEVIATION of input from setpoint
A1S2TY	Same as A1S1TY	ALARM 1 SETPOINT 2 TYPE —Select what you want Setpoint 2 of Alarm 1 to represent. The selections are the same as A1S1TY.
A1S1VA	-999 to 9999 [factory setting = 100]	ALARM 1 SETPOINT 1 VALUE —This is the value at which you want the alarm type chosen in prompt "A1S1TY" to actuate. The appropriate value depends on what the setpoint has been configured to represent.

Table 4-14 is continued on next page

Table 4-14 Alarms Parameter Definitions, Continued

Lower Display Prompt	Upper Display Range of Setting or Selection	Parameter Definition
A1S2VA	-999 to 9999 <i>[factory setting = 100]</i>	ALARM 1 SETPOINT 2 VALUE —This is the value at which you want the alarm type chosen in prompt "A1S2TY" to actuate. The appropriate value depends on what the setpoint has been configured to represent.
A1S1HL	HI LO <i>[factory setting]</i>	ALARM 1 SETPOINT 1 STATE —Select whether you want the alarm type chosen in prompt "A1S1TY" to alarm high or low. HI ALARM —Relay coil is de-energized when the PV is above the setpoint. LO ALARM —Relay coil is de-energized when the PV is below the setpoint.
A1S2HL	HI <i>[factory setting]</i> LO	ALARM 1 SETPOINT 2 STATE —Select whether you want the alarm type chosen in prompt "A1S2TY" to alarm high or low. HI ALARM —Relay coil is de-energized when the PV is above the setpoint. LO ALARM —Relay coil is de-energized when the PV is below the setpoint.
A2S1TY	Same as A1S1TY	ALARM 2 SETPOINT 1 TYPE —Select what you want Setpoint 1 of Alarm 2 to represent. The selections are the same as "A1S1TY".
A2S2TY	Same as A1S1TY	ALARM 2 SETPOINT 2 TYPE —Select what you want Setpoint 2 of Alarm 2 to represent. The selections are the same as "A1S1TY".
A2S1VA	-999 to 9999 <i>[factory setting = 100]</i>	ALARM 2 SETPOINT 1 VALUE —This is the value at which you want the alarm type chosen in prompt "A2S1TY" to actuate. The appropriate value depends on what the setpoint has been configured to represent.
A2S2VA	-999 to 9999 <i>[factory setting = 100]</i>	ALARM 2 SETPOINT 2 VALUE —This is the value at which you want the alarm type chosen in prompt "A2S2TY" to actuate. The appropriate value depends on what the setpoint has been configured to represent.

Table 4-14 continued on next page

Table 4-14 Alarms Parameter Definitions, Continued

Lower Display Prompt	Upper Display Range of Setting or Selection	Parameter Definition
A2S1HL	HI LO <i>[factory setting]</i>	ALARM 2 SETPOINT 1 STATE —Select whether you want the alarm type chosen in prompt "A2S1TY" to alarm high or low. HI ALARM —Relay coil is de-energized when the PV is above the setpoint. LO ALARM —Relay coil is de-energized when the PV is below the setpoint.
A2S2HL	HI <i>[factory setting]</i> LO	ALARM 2 SET POINT 2 STATE —Select whether you want the alarm type chosen in prompt "A2S2TY" to alarm high or low. HI ALARM —Relay coil is de-energized when the PV is above the setpoint. LO ALARM —Relay coil is de-energized when the PV is below the setpoint.
AL HYS	0.0 to 100.0% of input span <i>[factory setting = 0]</i>	ALARM HYSTERESIS —A single adjustable hysteresis is provided on alarms such that when the alarm is OFF it activates at exactly the alarm setpoint. When the alarm is ON, it will not deactivate until the variable is away from the alarm setpoint by a value equal to AL HYS. Configure the hysteresis as a % of input range span.