

DR4200 EV Current Proportional Output Calibration

Introduction

Calibrate the recorder so that the output provides the proper amount of current over the desired range.

- The recorder can provide an output current range of from 0 to 20 milliamperes and can be calibrated at 4 mA for 0% of output and 20 mA for 100% of output or any other values between 0 and 20 mA.

Equipment needed

You will need a standard shop type milliammeter, with whatever accuracy is required, capable of measuring 0 to 20 milliamps.

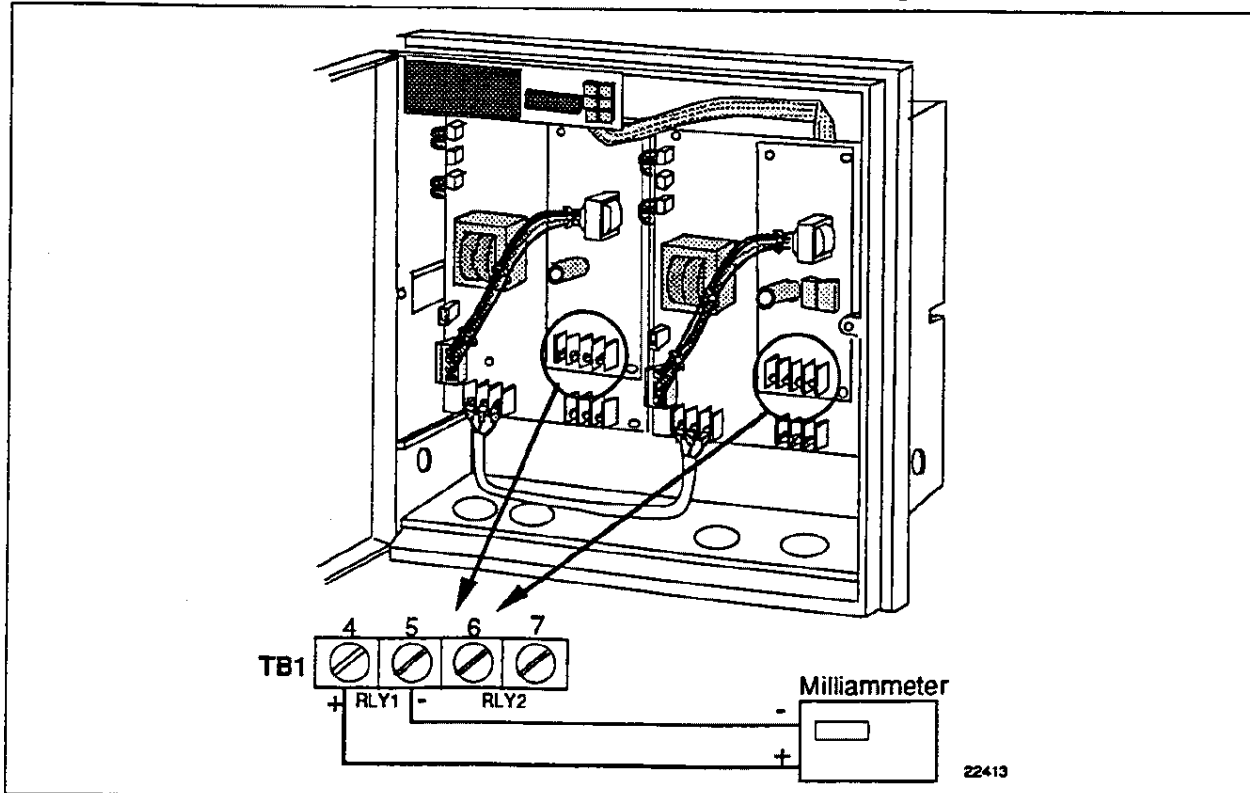
Calibrator connections

Refer to Figure 6-5 and wire the recorder according to the procedure given in Table 6-9.

Table 6-9 Set Up Wiring Procedure Current Proportional Output

Step	Action
1	With the power off, door open, and the chart plate swung out; tag and disconnect field wiring from RLY1 terminal on terminal block TB1 on output PCB for pen 1 or pen 2 as applicable (see Figure 6-4).
2	Observing polarity, connect a milliammeter's leads to RLY1 terminals.
3	Close the chart plate; apply power and allow the recorder to warm up 15 minutes before you calibrate.

Figure 6-5 Test Equipment Connections for Calibrating Current Output







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Current Proportional Output Calibration, Continued

Procedure

The procedure for calibrating the Current Proportional Output is listed in Table 6-10. Make sure "LOCK" in the Set Up group is set to "NONE." For display recorders with 2 pens, be sure the correct input is - INP1 or INP2 indicator lit. Press **FUNC** key to change input on display to agree with the control loop output to be calibrated. See *Section 4 - Configuration*.

Table 6-10 Current Proportional Output Calibration Procedure

Step	Description	Press	Action/Result
1	Enter Calibration Mode	SET UP until you see	Upper Display CAL Lower Display CURRENT ATTENTION If "CAL" doesn't appear or prompt across is denied, check the "LOCK" configuration. See <i>Section 4 - Configuration</i> .
2	Calibrate 0%	FUNC	You will see: Upper Display [] ← a value (approx. 730) Lower Display ZERO
		 or 	Until the desired 0% output is read on the milliammeter. Use the values shown below depending on the action of your recorder. 4 mA For 4 to 20 mA Direct Action 20 mA For 4 to 20 mA Reverse Action
3	Calibrate 100%	FUNC	Stores the 0% value and, you will see: Upper Display [] ← a value (approx. 3600) Lower Display SPAN
		 or 	Until the desired 100% output is read on the milliammeter. Use the values shown below depending on the action of your recorder. 20 mA For 4 to 20 mA Direct Action 4 mA For 4 to 20 mA Reverse Action
4	Exit the Calibration Mode	FUNC	The recorder stores the span value. Repeat procedure for control loop on other pen. Remove power from recorder and disconnect the milliammeter and connect output wiring.
		DISP or SET UP	To exit the calibration mode.