Temperature Limit Switches
These devices are intended to be used with industrial heating equipment to prevent excess temperature if the temperature-controlling equipment fails. It is preferable that temperature-limit switch action automatically shut down the heating system, and to do this, switch contacts that are closed during normal operation of the equipment are generally used.

In the event of excess temperature, a manual action is required to restore the switch contacts.

Temperature Limit Switches - Indicating

Model FDC L91

FDC L-91 Temperature limit controls. Model FDC L91-a1bcdd. Temperature range -418°F (-250°C) to 3214°F (1768°C) using applicable thermocouple, RTD, or mV inputs. Operate at 90-264 V ac or 11-26 V ac or dc. Output 1 and 2: relay contacts rated for 2 A at 240 V ac, solid state relay 1 A at 240 V ac, pulsed solid state relay drive 30 mA at 5Vdc.

a = Input power: 4, 5.
b = Output 1: 1, 2, 6.
c = Output 2 (Options): 0, 1, 2, 6, 7, 8, 9, A, B, H.
dd = Customer Specials (AA through ZZ). Fuji Electric Systems Co Ltd, 1 Funi-machi, Hino-shi, Tokyo 191-8502, Japan

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>Future Design Controls</th>
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<tbody>
<tr>
<td>Company Address:</td>
<td>7524 West 98th Place, Bridgeview, Illinois 60455, USA</td>
</tr>
<tr>
<td>Company Website:</td>
<td><a href="http://www.futuredesigncontrols.com">http://www.futuredesigncontrols.com</a></td>
</tr>
<tr>
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**Temperature Limit Switches - Indicating**

**FDC-L41**

FDC-L41 Temperature Limit Controller

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**FDC-L41 – Series Designator**

1. **Power Input**
   - 4 = 90-250VAC, 47-63Hz.
   - 5 = 11-26VAC or VDC

2. **Signal Input Options**
   - 1 = Universal Input T/C, RTD, mV (0 - 60mV)
   - 2 = Voltage DC: 0 - 1
   - 3 = Voltage DC: 0 - 10
   - 4 = mA: 4-20, 0 - 20
   - 5 = Voltage DC: 0 - 5

3. **Output 1 Options**
   - 1 = Form C relay (SPDT) - 2A @ 240VAC resistive
   - 2 = SSR drive - 5VDC @ 30mA
   - 6 = Triac - 1A @ 240VAC, Solid State Relay
   - C = SSR drive - 14V @ 40mA

4. **Output 2 Options**
   - 1 = Form C relay (SPDT) - 2A @ 240VAC resistive
   - 2 = SSR drive - 5VDC @ 30mA
   - 6 = Triac - 1A @ 240VAC, Solid State Relay
   - 7 = Isolated PS Supply 20VDC @ 25mA
   - 8 = Isolated PS Supply 12VDC @ 40mA
   - 9 = Isolated PS Supply 5VDC @ 80mA
   - C = SSR drive - 14V @ 40mA

5. **Communications Options**
   - 0 = None
   - 1 = RS-485 Modbus RTU
   - 2 = RS-232 Modbus RTU
   - 3 = Retransmit 0-20/4-20mA, isolated, 500 ohm load
   - 3 = Retransmit 0-20/4-20mA, isolated, 500 ohm load
   - 4 = Retransmit 0-5/1-5VDC, isolated, 10K ohm load
   - 5 = Retransmit 0-10VDC, isolated, 10K ohm load

6. **Protective Class**
   - 0 = IP50 standard
   - 1 = IP65 (NEMA 4X)

7. **Options**
   - Blank = Standard

8. **Options**
   - Blank = Standard
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