FUTUREDESIGN CONTROLS

The FDC-L41 1/4 DIN Limit Control provides up to three discreet setpoints, two control outputs, communication options, fast scan rates and user friendly prompts making it the right choice for safety protection.

The L41 offers Remote Reset as standard and offers a full range of universal high resolution (18 bit) inputs; T/C, RTD and linear mA/VDC inputs. Power requirement of either 90-250 VAC or optional 11-26 VAC/VDC allows the L41 to be used virtually anywhere.

Control outputs offer Form C Relay, SSR Drive or Triac with the optional Output #2 configurable as latching, non-latching or with alarm silence logic. Output #2 may also be specified as a transmitter power supply.

Communication options offer a variety of analog retransmission or serial RS232/485 Modbus RTU.

- Dual Display
- Latching outputs
- Remote Reset
- Shallow Panel Depth
- Communications
- Agency Approvals

FDC-L41

FDC-L41 LIMIT CONTROL

http://www.futuredesigncontrols.com/L41.html

FDC-L41 Specifications

Power

90-250 VAC, 47-63Hz, 10VA, 5W Maximum

11-26 VAC/VDC, 10VA, 5W Maximum

Input

Thermocouple: Type J, K, T, E, B, R, S, N, L, C & P

RTD: PT 100 ohm DIN and PT 100 JIS

Linear: 4-20mA, 0-20mA, 0-60mV, 0-1, 0-5, & 0-10VDC

Range: Per Table in manual

Accuracy: Typically better than +/- 0.25%; see table in manual

Sensor Break: 4 seconds for T/C & RTD inputs; 0.1 second for linear mA & VDC inputs

Common Mode Rejection: 120dB

Sample Rate: 5 times per second

Remote Reset: Standard

Limit Output Types

Relay: Form C 2.0 Amp/240VAC

SSR Drive: 5 VDC@30mA, 14 VDC@40mA

Triac: 1.0 Amp/240VAC

Indication

Dual LED 4 Digit Displays: Process 0.56" and Setpoint 0.4"

Display Logic:

- Upper Display: Process (temperature) is always shown
- Lower Display: Configurable; non-Alarm condition display SAFE or Setpoint value; when in alarm Setpoint is shown.

Status Indicator: Output #1, Output #2, °F, °C, Lock

Options

Second Output:
Relay Form C 2.0 Amp @240VC
SSR Drive 5VDC @30mA, 14VDC @40mA
Triac 1.0 Amp @240VAC

Second Output Alarm Types:
Latching, non-latching and alarm silence

Second Output as DC Isolated Power Supply:
20VDC @25mA, 12VDC @40mA, 5VDC @80mA

Communication:
Serial Modbus RTU RS-232 or RS-485
Retransmit 0-20/4-20mA, 0-5/1-5/0-10VDC (15 bit)
Configurable for PV, HSP1 or HSP2

Environmental and Physical

Operating Temperature: -10 to 50C

Storage Temperature: -40 to 60C

Humidity: 0-90% RH (non-condensing)

Insulation: 20M ohms Minimum (500VDC)

Dielectric Strength: 2000 VAC, 50/60 Hz, @ 1 minute

Vibration Resistance: 10-55 Hz, 10 m/s for 2 hours

Shock Resistance: 200m/s (20g)

Molding: Flame retardant polycarbonate

IP Panel Rating: IP50 (IP65 optional)

Dimension\Weight:
3.77" (H) x 3.77" (W) x 2.08" (D) \ 8.84 oz (250g)
96mm (H) x 96mm (W) x 53mm (D)

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Ordering Information

Enter a number in each box which corresponds to the specifications you want when ordering the FDC-L41.

FDC L41 [ ] [ ] [ ] [ ] [ ] [ ]

Power Input

4: 90-250 VAC 50/60 HZ
5: 11-26VAC/VDC
9: Special Order

Signal Input

See note at bottom right on FM Approval & VDC/mA inputs
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: 1-5, 0-5*
9: Special Order*

Output 1

1: Form C Relay (SPDT) - 2 Amps @ 240VAC resistive
2: SSR drive - 5 VDC@ 30 mA
6: Triac - 1 Amp @ 240VAC solid state relay
C: SSR drive - 14 VDC@ 40 mA
9: Special Order

Output 2

0: None
1: Form C Relay - 2A@240 VAC resistive (SPDT)
2: SSR Drive - 5 VDC @ 30 mA
6: Triac - 1 Amp @ 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 - 14VDC @ 40mA
H: Special Order

Communications

0: None
1: RS-485 Modbus RTU
2: RS-232 Modbus RTU
3: Retransmission: 0-20/4-20mA, isolated, 500 ohm load
4: Retransmission: 0-5/1-5VDC, isolated, 10k ohm load
5: Retransmission: 0-10VDC, isolated, 10k ohm load
9: Special Order

Protective Class

0: IP50 Standard
1: IP65 (Nema 4X)

*Signal Input: Note: Instruments ordered with signal inputs 2, 3, 4, 5 & 9 are not FM Approved.

FM, CE Approved
UL / cUL QUYX-QUYX7