FUTUREDESIGN
CONTROLS

Future Design's PXR4 controller is packed with features, to meet a wide variety of needs in the process industries. Low-cost options include RS485 communi-cations, digital input, timer function, heater burnout alarm, dual outputs, and programmable alarms.

The standard 8-segment ramp/soak feature is included and provides two patterns that can be linked to create a 16-step profile. The PXR4 accepts temperature and process inputs, and offers two control outputs and two programmable alarms.

Remote monitoring of up to 31 controllers at a time is possible with the RS485 option using Future Design's MultiView data acquistion software (includes CFR21 part 11 functions).

FDC-PXR4 1/16 Ramp/Soak Controller

- Fuzzy Logic PID Temperature Control
- Large LED Display
- Heater Burnout Alarm
- 16 Ramp/Soak Segments
- Timer Function
- Nema4/IP66 protection
- FREE Data Acquisition Software – Multiview
  Includes CFR21 Part 11 Functions!

FDC-PXR4 Specifications

Power
100-240VAC, 50/60Hz

Input
Thermocouple (T/C): Type J,K,T,E,B,R,S,N,PL2
RTD: PT 100 ohm RTD (JIS)
Linear: 4-20, 0-20mA, 0-5, .1-5
Range: Per table in order matrix
Accuracy: Typically better than ± .5% of span
Cold Junction Compensation: 0.1˚C/˚C ambient typical
Sensor Break: Protection mode configurable
Sample Rate: .5 seconds

Control
Proportional Band: 0-999% of measuring range.
Reset (Auto): 0-3200 seconds
Rate (Derivative): 0-999.9 seconds
On-Off: with hysteresis of .5% of measuring range common to heat and cool.
Control Action: Direct and reverse

Profiler
two 8 segment profiles/one 16 segment profile

Indication
Display: Process/setpoint values displayed individually. 4 digits, 7 segment LED.
Status Indicator: Out1/2, ALM1, ALM2, ALM3

Environmental and Physical
Operating Temperature: -10 to 50˚C
Storage Temperature: -20 to 60˚C
Humidity: 0-90% RH (non-condensing)
Insulation: 20M ohms minimum (500VDC)
Dielectric Strength: 1500VAC, 50/60Hz for 1 minute
Moldings: Flame retardant Plastic
Dimensions: 1.89" (H) x 1.89" (W) x 3.10" (D)
Weight: 7.05 oz. (200 grams)

Enter a number in each box which corresponds to the specifications you want when ordering the FDC-PXR4.

FDC-PXR4

PANEL SIZE

4:   1/16 Din screw terminal type

SIGNAL INPUT

T: Thermocouple °C
R: Thermocouple °F
N: RTD (PT100) °C
S: RTD (PT100) °F
B: 4-20mA DC, 1-5VDC
A: 0-20mA DC, 0-5VDC

CONTROL OUTPUT 1

A: Relay (SPDT) reverse action. 3A AT 220VAC/30VDC
B: Relay (SPDT) direct action. 3A AT 220VAC/30VDC
C: SSR driver (reverse action). 17 TO 25VDC, 20MA OR LESS.
D: SSR driver (direct action). 17 TO 25VDC, 20MA OR LESS.
E: 4-20MA linear (reverse action), 600 ohms resistance or less *
F: 4-20MA linear (direct action), 600 ohms resistance or less *

CONTROL OUTPUT 2

Y: None
A: Relay (SPST) reverse action. 3A AT 220VAC/30VDC **
B: Relay (SPST) direct action. 3A AT 220VAC/30VDCC **

ALARM OPTONS

3:   Heater break alarm w/process alarm (1 point). SPST 1A AT 220VAC/30VDC ***
4:   None
5:   Process Alarm (2 points). SPST 1A AT 220VAC/30VDC

ADDITIONAL OPTIONS

        None (leave blank)
R: RS-485 Modbus
DI   Digital Input (1 point)
DI-R: RS-485 Modbus + digital Input (1 point)

*   Not available with heater break alarm.
**   Not available with heater break alarm w/ process alarm (1 point) or process alarm (2 points)
***   Not available with RS485 + digital input (1 point). Current transformer required.
        #CTL-6-S (1-30A)/#CTL-12 (20-50A)

UL, c_UL, CE

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