

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 communications, 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 acquisition 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 $\pm .5\%$ 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)

ORDERING INFORMATION

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

FDC-PXR4

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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/30VDC **

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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