www.oemheaters.com

Tel:952-944-9797 Fax:952-944-7878

FDC-4300

FDC-4300 1/4 DIN Controller

4300 sets new standards for 1/4 DIN size controllers. Input sample rate of 5 scans per second and 3 Inputs (Universal, CT or analog input and event input) come standard on the 4300. 18 bit A/D and 15 bit D/A offer the highest accuracy for industrial control applications. The 4300 can be supplied with up to 2 control outputs, 2 alarms and communications (or analog retransmission). The 4300 can also be equipped with a 20VDC/25mA to supply power for remote field sensors.

Standard software functionality includes Fuzzy logic + PID, one Ramp/Soak segment , timer function, dual setpoint (event selectable), user programmable access prompts and more. With isolated inputs/outputs and UL/CE approvals, the 4300 can go anywhere and get the job done.

- Fuzzy Logic
- Fast Scan Rates
- Depth only 2.08”
- RS-485 Interface
- Optional Nema 4X/IP65
- Three Inputs Standard

FDC-4300 Specifications

Power

90-264VAC, 50/60Hz
11-26VAC/VDC

Input

Thermocouple (T/C): Type J,K,T,E,B,R,S,N,L
RTD: PT 100 ohm RTD (DIN 4370 or JIS)
Linear: 4-20, 0-20mA, 0-1, 0-5, .1-5, 0-10V,0-50mv
Range: Per instruction manual
Accuracy: Typically better than ± .25% of span
Cold Junction Compensation: 0.1˚C/˚C ambient typical
Sensor Break: Protection mode configurable
Common Mode Rejection: 120dB
Sample Rate: 5 times per second

Control

Proportional Band: 0.1-500˚C (0.1-900˚F)
Reset (Auto): 0-1000 seconds
Rate (Derivative): 0-360.0 seconds
Ramp Rate: 0-500˚C (900˚F)/minute or hour
Dwell: 0-6553.5 minutes
On-Off: with adjustable hysteresis (0.1-100.0˚F)
Control Action: Direct and reverse

Indication

Process Display: 0.55” red LED, 4 digits
Setpoint Display: 0.40” green LED, 4 digits
Status Indicator: Out1, Out2, ALM1, ALM2, ˚C, ˚F

Environmental and Physical

Operating Temperature: -10 to 50˚C
Storage Temperature: -40 to 60˚C
Humidity: 0-90% RH (non-condensing)
Insulation: 20M ohms minimum (500VDC)
Dielectric Strength: 2000VAC, 50/60Hz for 1 minute
Shock Resistance: 200m/s^2 (20G)
Vibration: 10-55Hz, 10m/s^2 for 2 hours
Moldings: Flame retardant polycarbonate
Dimensions: 3.77” (H) x 3.77” (W) x 2.08” (D)
Weight: 9.0 oz. (255 grams)

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Ordering Information

Enter a number in each box which corresponds to the specifications you want when ordering the FDC-4300.

FDC-4300 [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

Power Input

4: 90-264VAC 50/60 HZ
5: 11-26VAC/VDC
9: Special Order

Signal Input

1: ***Input 1*** - Universal
T/C, RTD or 4-20, 0-20mA
0-1V, 0-5V, 1-5V, 0-10VDC
Input 2 - CT and Analog input *
4-20, 0-20mA, 0-1V, 0-5V, 1-5V, 0-10VDC
CT: 0-50Amp AC current transformer
Input 3 - Event Input
9: Special Order

Output 1

0: None
1: Form A Relay 2A/240VAC resistive (N.O.)
2: SSR Drive rated at 30mA/5VDC
3: 4-20/0-20mA linear, Isolated, maximum load 500 ohms
4: 1-5/0-5VDC linear, Isolated, minimum impedance 10K ohms
5: 0-10VDC linear, Isolated, minimum impedance 10K ohms
6: Triac 1A/240VAC
9: Special Order

Output 2

0: None
1: Form A Relay 2A/240VAC resistive (N.O)
2: SSR Drive rated at 30mA/5VDC
3: 4-20/0-20mA linear, Isolated, maximum load 500 ohms
4: 1-5/0-5VDC linear, Isolated, minimum impedance 10K ohms
5: 0-10VDC linear, Isolated, minimum impedance 10K ohms
6: Triac 1A/240VAC
7: 20VDC/25mA PS, Isolated
8: 12VDC/40mA PS, Isolated
9: 5VDC/80mA PS, Isolated
A: Special Order

Alarm 1

0: None
1: Form C Relay 2A/240VAC resistive (N.O, N.C)
9: Special Order

Alarm 2

0: None
1: Form A Relay 2A/240VAC resistive (N.O)
9: Special Order

Communications

0: None
1: RS-485 Modbus RTU
2: RS-232 Modbus RTU
3: 0-20/4-20mA retransmission
4: 0-5/1-5VDC retransmission
5: 0-10VDC retransmission
9: Special Order

Options

0: None
1: Nema 4X

* Order CT94-1 if heater break function is required.

UL, CSA, CE