

Future Design's 9090 series 1/16 DIN controllers take advantage of the latest SMD technology. Software has been refined and offers logical menu structures and advance noise immunity. By using the unique "SEL" function, the user has the flexibility of assigning the parameters to be shown at the operator level. The 9090 offers a wide variety of options to meet your control needs.

Manual control of the output is standard with offset and shift functions to allow process values to be corrected for intrinsic offsets and in-site calibrations. The alarm function can be independently configured as process alarm, deviation alarm, deviation band alarm or latching alarm.

- Fuzzy Logic
- Timer Function
- Ramp rate function
- Security Config
- cUL/UL/CE
- Nema 12
- 3 scans/second

## FDC-9090 Specifications

### Power

90-264VAC, 50/60Hz 20-32VAC/VDC

### INPUT

Thermocouple (T/C): Type J,K,T,E,B,R,S,N RTD: PT 100 ohm RTD (DIN 4370 or JIS) Linear: -10 to 60mV Range: User configurable Accuracy: Typically better than ± .25% of span Cold Junction Compensation: 0.1°C/°C ambient typical Sensor Break: Protection mode configurable External Resistance: 100 ohms maximum Normal Mode Rejection: 60 dB Common Mode Rejection: 120 dB Sample Rate: 3 times per second

### CONTROL

Proportional Band: 0-200°C (0-360°F) Reset (Auto): 0-3600 seconds Rate (Derivative): 0-1000 seconds Ramp Rate: 0-200.0°C (0-360.0°F)/minute Dwell: 0-3600 minutes



DC-9090

FDC-9090

1/16 DIN CONTROLLER

## Cycle Time: 0-120 seconds **On-Off:** with adjustable hysteresis (0-20% of span) Control Action: Direct and reverse

## INDICATION

Process Display: 0.4" red LED, 4 digits Setpoint Display: 0.3" green LED, 4 digits Status Indicator: Control Out, ALM.

## CONSUMPTION Less than 5VA

**ENVIRONMENTAL AND PHYSICAL** Operating Temperature: -10 to 50°C Humidity: 0-90% non-condensing Insulation: 20M ohms minimum (500VDC) Breakdown: AC 2000V, 50/60Hz, 1 minute Vibration: 10-55Hz, amplitude 1mm *Shock:* 200m/s<sup>2</sup> (20G) Weight: 6.0 oz. (170 grams) Dimensions: 1.89" (H) x 1.89" (W) x 3.70" (D)

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# ORDERING INFORMATION

Enter a number in each box which corresponds to the specifications you want when ordering the FDC-9090.

## FDC-9090 **POWER INPUT** 90-264VAC 4: 5: 20-32VAC/VDC 9: Special Order SIGNAL INPUT Configurable 5: 9: Special Order **RANGE CODE** Configurable 1: 9: Other **CONTROL MODE** 3: PID/On-Off Control **OUTPUT 1 OPTION** 0: None Relay 3A/240VAC resistive 1: 2: SSR Drive rated 20mA/24V 3: 4-20mA linear, maximum load 500 ohms 4: 0-20mA linear, maximum load 500 ohms 5: 0-10VDC linear, minimum impedance 500K ohms 9: Other **OUTPUT 2 OPTION** 0: None **ALARM OPTION** 0: None Relay 2A/240VAC resistive 1: Other 9: COMMUNICATIONS

0: None





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