



Certificate Number: 1018011-1

Date: 2008-08-20

### UL CONDITIONS OF ACCEPTABILITY

**Company Name:** FUTURE DESIGN CONTROLS INC

**File-CCN:** E197216-QUYX2

**Product Description:** Component - Process Control Equipment, Electrical

**Models:** FDC-9300

**Conditions Of Acceptability:**

When installed in the final use equipment, etc., the following are among the considerations to be made:

1. The device shall be installed in compliance with the enclosure, mounting, spacing, and segregation requirements of the ultimate application. Device shall be installed so that only the face of the enclosure is exposed in the end product.
2. The spacings, ratings, etc., recorded herein shall be judged in the ultimate application.
3. The terminals are not acceptable for field connection. The acceptability of connections to these terminals, including temperature and secureness, shall be determined in the ultimate application.

**Ratings:**

Electrical

Supply Input:	Minimum 90, Maximum 264 V ac, 47-63 Hz, 7 W maximum or 15 VA maximum, Minimum 11, Maximum 26 V ac or dc, SELV, Limited Energy, 7 W maximum or 15 VA maximum
Control Sensor:	SELV, Limited Energy
Load Output:	See Designation System

Environmental:

Maximum operating temperature, 50°C

## Nomenclature:

Example:	Model FDC-9300 -	X	X	X	X	X	X
	I	II	III	IV	V	VI	VII

### I - Basic System

### II - Power Input

- 4 90-264 V ac, 47-63 Hz
- 5 11-26 V ac/V dc, SELV, Limited Energy

### III - Signal Input

- 1 Standard Input
  - Input 1 - Universal Input
    - Thermocouple: J, K, T, E, B, R, S, N, L
    - RTD: PT100 DIN, PT100 JIS
    - Current: 4-20 mA, 0-20 mA
    - Voltage: 0-1V, 0-5 V, 1-5 V, 0-10 V
  - Input 2 – CT : 0-50 A
    - Voltage Input: 0-1 V, 0-5 V, 1-5 V, 0-10 V
  - Input 3 - Event Input (EI)

### IV - Output 1

- 0 None
- 1 Relay rated 2 A/240 V ac
- 2 Pulse voltage to drive SSR, 5 V/30 mA
- 3 Isolated 4-20 mA/0-20 mA
- 4 Isolated 1-5 V/0-5 V
- 5 Isolated 0-10 V
- 6 Triac Output 1 A/240 V ac, SSR
- C Pulsed Voltage to drive SSR, 14 V/40 mA

### V - Output 2/Alarm 2

- 0 None
- 1 Form A Relay 2 A/240 V ac
- 2 Pulse voltage to drive SSR, 5 V/30 mA
- 3 Isolated 4-20 mA/0-20 mA
- 4 Isolated 1-5 V/0-5 V
- 5 Isolated 0-10 V
- 6 Triac Output 1 A/240 V ac, SSR
- 7 Isolated 20 V/25 mA DC Output Power Supply
- 8 Isolated 12 V/40 mA DC Output Power Supply
- 9 Isolated 5 V/80 mA DC Output Power Supply
- C Pulsed Voltage to drive SSR, 14V/40mA

## VI - Alarm 1

- 0 None
- 1 Form A Relay 2 A/240 V ac
- 2 Form A Relay 2 A/240 V ac

## VII - Communications

- 0 None
- 1 RS-485
- 2 RS-232
- 3 Retransmit 4-20 mA/0-20 mA
- 4 Retransmit 1-5 V/0-5 V
- 5 Retransmit 0-10 V