MODEL & SUFFIX CODE SELECTION

FDY–24❑❑

MODEL
SUPPLY OUTPUT
24: 24V DC
INPUT
4 – 20mA DC
OUTPUT SIGNAL
Current
A : 4 – 20mA DC
B : 2 – 10mA DC
C : 1 – 5mA DC
Voltage
1 : 0 – 10mV DC
2 : 0 – 100mV DC
3 : 0 – 1V DC
4 : 0 – 10V DC
5 : 0 – 5V DC
6 : 1 – 5V DC

POWER INPUT
AC Power
K : 85 – 132V AC
L : 170 – 264V AC
DC Power
R : 24V DC
P : 110V DC

INPUT & OUTPUT

SUPPLY OUTPUT
Output voltage: 24 – 28V DC with no load
Current rating: 22mA DC maximum

INPUT: 4 – 20mA DC; input resistor incorporated (2W)
Input resistance: 250Ω

OUTPUT SIGNAL
• DC Current
Load resistance

<table>
<thead>
<tr>
<th>Output</th>
<th>Load Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 – 20mA</td>
<td>500 (Ω maximum)</td>
</tr>
<tr>
<td>2 – 10mA</td>
<td>1000</td>
</tr>
<tr>
<td>1 – 5mA</td>
<td>2000</td>
</tr>
</tbody>
</table>

• DC Voltage
Load resistance

<table>
<thead>
<tr>
<th>Output</th>
<th>Load Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 10mV</td>
<td>10k (Ω minimum)</td>
</tr>
<tr>
<td>0 – 100mV</td>
<td>100k</td>
</tr>
<tr>
<td>0 – 1V</td>
<td>1000</td>
</tr>
<tr>
<td>0 – 10V</td>
<td>10k</td>
</tr>
<tr>
<td>0 – 5V</td>
<td>5000</td>
</tr>
<tr>
<td>1 – 5V</td>
<td>5000</td>
</tr>
</tbody>
</table>

DISCONTINUED MODEL
Replaced with Model FDY2

Functions & Features
• Powering a 4 – 20mA DC current loop
• Shortcircuit protection
• Applicable to smart transmitters
• High-density mounting

Typical Applications
• Various 2-wire transmitters

ORDERING INFORMATION
Specify code number. (e.g. FDY-246-R)

GENERAL SPECIFICATIONS
Construction: plug-in
Connection: M3.5 screw terminals (nickel-plated steel; torque ≤0.8 N·m)
Housing material: flame-resistant resin (black)
Isolation: input to output to power
Overrange output: approx. -10 – +120% at 1 – 5V
Front adjustments: zero and span; ±5%
**INSTALLATION**

**Power input**
- **AC:** 85 – 132V or 170 – 264V, 47 – 66 Hz, approx. 4.5VA
- **DC:** 24V ±10%, approx. 70mA
  - 85 – 150V for 110V rating, approx. 20mA (ripple 10% p-p max.)

**Operating temperature:** -5 to +55°C (23 to 131°F)

**Operating humidity:** 30 to 90% RH (non-condensing)

**Mounting:** surface or DIN rail; Standard Rack
- Mounting Frame BX-16H available

**Dimensions:** W26×H100×D137 mm (1.02”×3.94”×5.39”)
- See General Spec. Sheet Figure A.

**Weight:** 200 g (0.44 lbs)

**Terminal assignment:** See General Spec. Sheet Figure B-1.

**PERFORMANCE in percentage of span**

**Accuracy:** ±0.1%

**Temp. coefficient:** ±0.015%/°C (±0.008%/°F)

**Response time:** ≤0.5 seconds (0 – 90%)

**Line voltage effect**
- **Supply output:** ±3% over voltage range
- **Output signal:** ±0.1% over voltage range

**Insulation resistance:** ≥100MΩ with 500V DC

**Dielectric strength:**
- 1000V AC @1 minute (input to output)
- 2000V AC @1 minute (input or output or power to ground)
- 500V AC @1 minute (I/O to 24V power)
- 1500V AC @1 minute (I/O to power)

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**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**

[Diagram showing connections and terminal assignments]

Specifications subject to change without notice.