**DIS871-24 AND DIS971-24**

4/20 mA DC INPUT PROCESS INDICATOR WITH 24 VDC POWER SUPPLY FOR TWO-WIRE TRANSMITTER

**FEATURES**
- Provides 3½ Digit or 4½ Digit Display
- Display Calibrated in Engineering Units (°F, °C, %, PSI, etc.) Proportional to DC Input
- Mount, Wire and Calibrate from Front
- Fully Isolated Output and/or 0, 1, or 2 Alarms
- Alarm Setpoints Adjustable without Disturbing Transmitter Output
- Fail-Safe Alarm Operation
- LED Alarm Status Indicator
- Adjustable Deadband
- 24 VDC Power Supply for Two-Wire Transmitters
- 4/20 mA Input Range
- Unlimited* Choice of Input / Output Ranges
- Fits Standard ½ DIN Cutout
- Rated NEMA-4, Splashproof when Properly Installed
- 5 Year Warranty

**DESCRIPTION**

The DIS871-24 and DIS971-24 provide a display, optional isolated DC output voltage or current proportional to a DC input signal, and optional alarm setpoints. All Wilkerson products are designed with RFI filters and lightning protection to reduce susceptibility to electrical noise and damage by lightning. The digital display utilizes an auto-zero dual-slope integrating A/D converter for accuracy and stability. The instrument contains a 24 VDC transmitter power supply specifically designed for use with two-wire and other 24 VDC powered transmitters.

All controls are accessible by removing the gasketed front access panel. The display controls are wide-ranging so that they can be calibrated to display engineering units. Decimal point selection is made with a switch, also accessible from the front. A complete set of engineering unit labels is sent with each DIS. Once the display has been adjusted to read the correct engineering units, the alarm setpoints can be adjusted without test equipment and without disturbing the output voltage or current.

Either setpoint may be displayed by use of the SP CAL switch. Each setpoint has an LED to indicate alarm status. The alarms have adjustable deadbands. Terminations are made to a screw terminal connector on the rear of the case.

**TYPICAL APPLICATIONS**

DC process indication, control, monitoring, isolation, DC monitor/current limit, two-wire excitation.

**SPECIFICATIONS**

**INPUT RANGE**
4/20 mA

**INPUT IMPEDANCE**
61.9 ohms

**TRANSMITTER POWER SUPPLY**
24 VDC regulated, 30 mA max

**OPTIONS SA, DA SETPOINT**
each alarm 0 to 100% of span

**DEADBAND**
0.25% to 100% of span

**RELAY CONTACTS** (spdt)
- Resistive Load
  - 5 A max, 150 W max,
  - 240 VAC max
  - 30 VDC max
- Inductive Load
  - 1/8 HP max at 120/240 VAC

**OPTION TX OUTPUT RANGE**
Voltage
- select any range between ±10 V, 10 mA max load
  - (min span 0.2 V)
Current
- select any range from 0 to 20 mA max,
- >24V compliance
  - (1200 ohms max at 20 mA)
  - (min span 1 mA)

**OUTPUT RIPPLE** (Peak-to-Peak)
<0.1% of span

**ISOLATION**
- Output / Input
  - >500 megohms
- Breakdown Voltage
  - >600 VAC rms

**RESPONSE TIME**
(Range Dependent)
≤ 100 ms

**ACCURACY**
±0.1% of span

**LINEARITY**
- Display
  - ±0.01% of span
- Output
  - ±0.025% of span

**COMMON MODE REJECTION**
120 dB, DC to 60 Hz

**DISPLAY (971)**
Digit Size
0.56" LED, 4½ digits, ±19999
Decimal Point
±1.9.9.9.9
Control Range
Zero ±19999
Span  min span 100/max span 20000

**DISPLAY**
Update 3/sec

**OPERATING TEMPERATURE**
14°F to 140°F/-10°C to 60°C

**TEMPERATURE STABILITY**
±0.02% of span/°C max

**POWER**
115 VAC ±10%, 50 or 60 Hz
(4 W max)
230 VAC ±10%, 50 or 60 Hz
(4 W max)

* Within specified range limits.
DIS871-24 AND DIS971-24

ACCESSORIES

No accessories available at this time.

MOUNTING

The DIS is designed to be mounted from the front panel through a standard horizontal 3.62 X 1.77 inches (1/8 DIN) cutout. Two mounting cam-screws allow the securing of the DIS to the panel from the front.

DIMENSIONS

Inches [mm]

CONNECTIONS

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<tr>
<td>TERM 2</td>
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<td>24 VDC +</td>
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