The DIS872 and DIS972 provide a display, optional isolated DC output voltage or current proportional to an AC 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. All controls are accessible by removing a 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**

AC process indication, control, monitoring of electrical devices such as motors, pumps or heaters, etc.

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**DESCRIPTION**

- Provides 3½ Digit or 4½ Digit Display
- Display Calibrated in Engineering Units (V, mA, %, etc.)
- Proportional to AC Input
- Fully Isolated Output and/or 0, 1, or 2 Alarms (Optional)
- Alarm Setpoints Adjustable Without Disturbing Transmitter Output
- Fail-Safe Alarm Operation
- LED Alarm Status Indicator
- Adjustable Deadband
- 50 mV or 1 mA Minimum Input Span
- Unlimited* Choice of Input / Output Ranges
- Fits Standard 1/8 DIN Cutout
- Rated NEMA-4X, Splashproof and Corrosion Resistant when Properly Installed
- 5 Year Warranty

**SPECIFICATIONS**

**INPUT RANGE**
- Voltage: select any range from 0 to 250 V rms max (min span 50mV)
- Current: select any range from 0 to 5 A rms max (min span 1 mA, internal shunt)

**INPUT FREQUENCY**
- 40 Hz to 1 kHz sine wave

**INPUT IMPEDANCE**
- Voltage: 200 kilohms
- Current: 100 microamp input shunt value
  - 100 microamp: 1000 ohm
  - 1 mA: 100 ohm
  - 10 mA: 10 ohm
  - 100 mA: 1 ohm
  - 1 mA: 0.1 ohm
  - 5 mA: 0.01 ohm

**OPTION 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
- Current: select any range from 0 to 20 mA max, >24 V compliance
  - (1200 ohms max at 20 mA)

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

**RESPONSE TIME**
- 1 sec typical

**ISOLATION OUTPUT / INPUT**
- Output / Input
  - >500 megohms

**ACCURACY**
- ±0.5% of span

**LINEARITY**
- ±0.05% of span

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

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

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

**DISPLAY (872)**
- Digit Size .56" LED, 3½ digits, ±1999
- Decimal Point ±1.999
- Control Range ±1999
- Zero ±1999
- Span min span 10/max span 2000

**DISPLAY (972)**
- Digit Size .56" LED, 4½ digits, ±19999
- Decimal Point ±1.9999
- Control Range ±19999
- Zero ±1999
- Span min span 100/max span 20000

**DISPLAY**
- Update 3/sec

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

* Within specified range limits.
**POWER**
- 115 VAC, 50/60 Hz Power
- 230 VAC, 50/60 Hz Power

**INPUT**
Select Units
- VAC
- mA AC
- AAC

Enter Input
- Zero Scale
- Full Scale

**OUTPUT (Option TX)**
Analog Output
- Yes
- No

Select Units
- VDC
- mA DC

Enter Output
- Zero Scale
- Full Scale

**DIS872 AND DIS972**
No accessories available at this time.

**MOUNTING**
The DIS is designed to be mounted from the front of the 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.

**ACCESSORIES**

**DIMENSIONS**
Inches [mm]

**CONNECTIONS**
- PIN 1: Output -
- PIN 2: Output +
- PIN 4: Input
- PIN 5: Input Common
- PIN 6: Shield
- PIN 7: Alarm 1 NC
- PIN 8: Alarm 1 C
- PIN 9: Alarm 1 NO
- PIN 10: Alarm 2 NC
- PIN 11: Alarm 2 C
- PIN 12: Alarm 2 NO
- PIN 13: Power AC L1
- PIN 14: Power AC L2

**DISPLAY**
Select Digits
- 3.5 Digits (DIS872)
- 4.5 Digits (DIS972)

Enter Display
- Zero Scale
- Full Scale

Select Display Logic
- Normal Acting
- Reverse Acting

**ALARMS (Option SA, DA)**
Alarm Output
- Yes
- No

Alarm Selection - Quantity
- Single (SA)
- Dual (DA)

**OPTIONS**
- Conformal Coating

**TAGS**
Specify Tag Numbers
Tag number is typed on product label at no charge.

**Enter Tag Number(s)**