

DIS871 AND DIS971

DC INPUT PROCESS INDICATORS



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 (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 (10 mV available)
- Unlimited* Choice of Input / Output Ranges
- Wide Range Input Available
- Fits Standard 1/8 DIN Cutout
- Rated NEMA-4, Splashproof when Properly Installed
- 5 Year Warranty

DESCRIPTION

The DIS871 and DIS971 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.

All controls are accessible by removing the gasketed front access panel.

The display controls are wide-ranging so that it 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 transmitter output. 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, voltage/current scaling, isolation, buffering, noise reduction, driving, DC monitor/current limit, level/position control, HI/LO pressure alarm, power demand warning.

SPECIFICATIONS

INPUT RANGE

Voltage

select any range between
±250 V max (min span 50 mV)
typical inputs: 0-1 V, 0-5 V, 0-10 V

Current

select any range between
±5 A max
(min span 1 mA, internal shunt)

Low Input (Option S)

select any range between
±20 V max (min span 10 mV)

INPUT IMPEDANCE

Voltage

200 kilohms

Current

Current Input Current Shunt Value

1 mA	100 Ohm
10 mA	10 Ohm
20 mA	5 Ohm
4/20 mA	61.9 Ohm
100 mA	1 Ohm
1 A	0.1 Ohm
5 A	0.01 Ohm

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,
>24 V Compliance
(1200 ohms max at 20 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

WR ≤ 200 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 (871)

Digit Size

.56" LED, 3½ digits, ±1999

Decimal Point

±1.9.9.9

Control Range

Zero

±1999

Span

min span 10/max span 2000

DISPLAY (971)

Digit Size

.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 +30 μV)/°C max

Low Input (Option S)

±(0.02% of span + 1.3 μV)/°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.

ORDERING INFORMATION

POWER

- 115 VAC, 50/60 Hz Power
- 230 VAC, 50/60 Hz Power

INPUT

Select Units

- VDC mADC

Enter Input

Zero Scale

Full Scale

OUTPUT (Option TX)

Analog Output

- Yes No

Select Units

- VDC mADC

Enter Output

Zero Scale

Full Scale

Select Output Logic

- Normal Acting
- Reverse Acting

DISPLAY

Select Digits

- 3.5 Digits (DIS871)
- 4.5 Digits (DIS971)

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)

Alarm Action

- Alarm 1 High Low
- Alarm 2 High Low

Alarm Logic

- Normal - De-energize on Alarm
- Reverse - Energize on Alarm

Enter Setpoint Input Level

Setpoint 1

Setpoint 2

OPTIONS

- Conformal Coating

TAGS

Specify Tag Numbers

Tag number is typed on product label at no charge.

Enter Tag Number(s)

ACCESSORIES

DIS871 AND DIS971

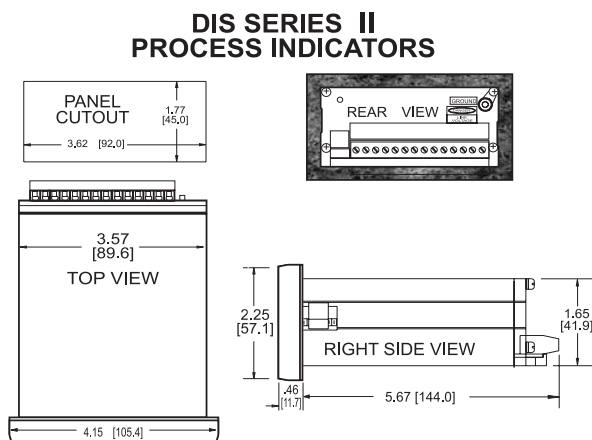
No accessories available at this time.

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

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



2915 Parkway Street
 Lakeland, FL 33811-1391 · USA
800-234-1343
 Tel: 863-647-2000 · Fax: 863-644-5318
 www.wici.com · Email: sales@wici.com