The DIS875 and DIS975 provide a display, optional isolated DC output voltage or current proportional to a frequency 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 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 output voltage or current.

The wide range input sensitivity allows the DIS to be driven from low level magnetic pickups as well as logic level signals. A choice of three input sensitivities allows the user to trade off sensitivity versus noise rejection. A built-in pullup resistor is connected to a spare input terminal to permit use with contact closure or open-collector inputs. 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:**
Flow, speed of motors, conveyors, etc., indication, control, HI/LO alarm.

**DIS875 AND DIS975**
**FREQUENCY INPUT**
**PROCESS INDICATORS**

**FEATURES**
- Provides 3½ Digit or 4½ Digit Display
- Display Calibrated in Engineering Units (rpm, fps, ips, mps, etc.) Proportional to Frequency Input
- Fully Isolated Output and/or 0, 1, or 2 Alarms
- 50 mV to 100 V Peak Input Sensitivity
- Selectable Sensitivity for Low Noise Level Rejection
- Frequency Limit 60 kHz
- Alarm Setpoints Adjustable Without Disturbing Transmitter Output
- Fail-safe Alarm Operation
- LED Alarm Status Indicator
- Adjustable Deadband
- Unlimited Choice of Input/Output Ranges
- Fits Standard ¼ DIN Cutout
- Rated NEMA-4, Splashproof When Properly Installed
- 5 Year Warranty

**INPUT RANGE**
Select any range from 0 to 10 Hz
min to 0 to 60 kHz max

**INPUT SENSITIVITY**
Any voltage from 15 mV to 250 V rms

**INPUT IMPEDANCE**
100 kilohms or greater

**PULLUP RESISTOR**
10 kilohms to 6.5 VDC

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

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

**RELAY CONTACTS**
Resistive Load
5 A max, 150 W max, 240 VAC max, 30 VDC max
Inductive Load
½ HP max at 120/240 VAC

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

**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)

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

**ACCURACY**
±0.1% of span

**LINEARITY**
±0.1% of span

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

**DISPLAY**
Update 3/sec

**DISPLAY (875)**
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 (975)**
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

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

*Within specified range limits.*
Wilkerson Instrument Co., Inc.

DIS875 AND 975

ORDERING INFORMATION

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

INPUT
Select Units
- Hz
- KHz
Enter Input

OUTPUT (Option TX)
Analog Output
- Yes
- No
Select Units
- VDC
- mADC
Enter Output

ACCESSORIES

DIS875 AND 975
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.

DIMENSIONS

Inches [mm]

DIS SERIES II
PROCESS INDICATORS

CONNECTIONS

PIN 1 Output -
PIN 2 Output +
PIN 3 Pullup Resistor A
PIN 4 Input B +
PIN 5 Input C -
PIN 6 Input Common
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

Recommended Input Amplitude
- Low: 25mV to 1V peak
- Med: 250mV to 10V peak
- High: 2.5V to 10V peak
- Contact Closure or Open-Collector

Threshold Sensitivity
- 15mV
- 150mV
- 1.5V

Connect Input To Terminals
- C and COM
- B and COM
- A to B

Jumper
- NONE
- C to COM
- A to B

tags

Specify Tag Numbers
Tag Number is typed on product label at no charge.

Enter Tag Number(s)