DIS873 AND DIS973

RTD INPUT

PROCESS INDICATORS

FEATURES
- Provides 3½ Digit or 4½ Digit Display
- Display Calibrated in Engineering Units (°C, °F, °K, etc.) Proportional to an RTD Input
- 3-Wire or 2-Wire, 10 ohms to 2000 ohms RTDs
- Linearized for Platinum RTDs
- 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
- Unlimited* Choice of Input / Output Ranges
- Fits Standard 1/8 DIN Cutout
- Rated NEMA-4, Splashproof when Properly Installed
- 5 Year Warranty

DESCRIPTION
The DIS873 and DIS973 provide a display, optional isolated DC output voltage or current proportional to an RTD 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.

Options SA, DA Setpoint
Each alarm 0 to 100% of span

Deadband
0.25% to 100% of span

Excitation Current
| 10 ohms | 10 mA |
| 100 ohms | 5 mA |
| 1000 ohms | 0.5 mA |
| 2000 ohms | 0.2 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

Open Sensor Output ≥ full scale

Accuracy ±0.1% of span

Linearity
(Pt RTD, output vs temp)
±0.05% of span
(temp ≥32°F /0°C)
±0.15% of span
(temp <32°F/0°C)
(others, output vs res)
±0.01% (display)
±0.05% (transmitter output)

Common Mode Rejection 120 dB, DC to 60 Hz

Display (873)
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 (973)
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 or 0.025°C/°C, whichever is greater

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.

The DIS873 and DIS973 provide a display, optional isolated DC output voltage or current proportional to an RTD 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.

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
Temperature indication, control, monitoring, data acquisition and warning for HVAC, pumps, motors, etc.
DIS873 AND DIS973

ORDERING INFORMATION

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

INPUT
- Select Units
  - Deg C
  - Deg F
- Enter Input
  - Zero Scale
  - Full Scale

Select Sensor
- 100 ohm Pt., .00385 Alpha
- 100 ohm Pt., .00392 Alpha
- 100 ohm Pt., .00375 Alpha
- 1000 ohm Pt., .00385 Alpha
- 1000 ohm Pt., .00392 Alpha
- 10 ohm Cu.
- Other - Specify in “Notes”

Open Sensor Response
- Upscale
- Downscales

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 (DIS873)
  - 4.5 Digits (DIS973)
- Enter Display
  - Zero Scale
  - Full Scale

Select Display Logic
- Normal Acting
- Reverse Acting

ALARMS (Options 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

DIS873 AND DIS973
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]

CONNECTIONS

TERM 1
- Output - (Optional)
TERM 2
- Output + (Optional)
TERM 4
- RTD Input +
TERM 5
- RTD Input -
TERM 6
- RTD Lead Compensation
TERM 7
- Alarm 1 NC (Optional)
TERM 8
- Alarm 1 C (Optional)
TERM 9
- Alarm 1 NO (Optional)
TERM 10
- Alarm 2 NC (Optional)
TERM 11
- Alarm 2 C (Optional)
TERM 12
- Alarm 2 NO (Optional)
TERM 13
- Power AC L1
TERM 14
- Power AC L2