

Edison ONGUARD®

INDUSTRIAL, HIGHLY RELIABLE, 4 CHANNEL RTD
TEMPERATURE MONITOR
NICKEL • COPPER • PLATINUM



The Edison model 1604 monitor is designed to provide simultaneous, continuous surveillance of RTD's to monitor motor or other equipment's temperature for overheating. The RTD temperature is compared to the pre-selected trip points set by the customer, and when the temperature equals or exceeds the pre-selected value, a dedicated RTD alarm relay will trip. The alarm detail can be viewed to identify the alarm location and details. Two temperature set-points are available. Each channel has a dedicated alarm relay for the higher temperature, and there is a common relay for the pre-alarm set-point.

Each channel allows a memo to be inserted in a field that can be displayed in the event of an alarm. Incoming alarms can be viewed in detail at the display, while the event results are saved in a history text file. The 1604 monitor accepts industrial standard RTD inputs for Nickel, Platinum and Copper characteristics. There is no calibration required for the monitor.

Programming is implemented by utilizing a standard USB PC keyboard, temporarily connected to the front bezel. Preset temperature values can be programmed into the monitor as well as RTD - specific messages. At completion of programming, a configuration report can be printed out for review. History reports are available and can be viewed on the monitor or printed via a USB memory stick.

Open or shorted RTD's will initiate a fault menu to identify exactly where the problem exists. When the monitor is entered program mode, a fault will be issued. A dedicated fault relay will change state upon a fault or when the monitor is in program mode.

- Process control
- Rotating equipment
- Nuclear power plants
- Large motor bearings
- Refrigeration systems
- Coal-fired power plants

TYPICAL APPLICATIONS

- Scientific and laboratory
- Infrastructure diagnostics
- Co-generation turbine plants
- Pipeline transmission facilities
- Remote gas pumping stations
- Temporary diagnostic monitoring

FUNCTIONS

- Enable/Disable control for each channel
- Selectable options for alarm on rising or falling
- Character field to allow naming of each RTD channel
- Selections available for latching or non-latching alarm relays
- Internal failsafe fault relay changes state on an open or shorted RTD

USER INTERFACE

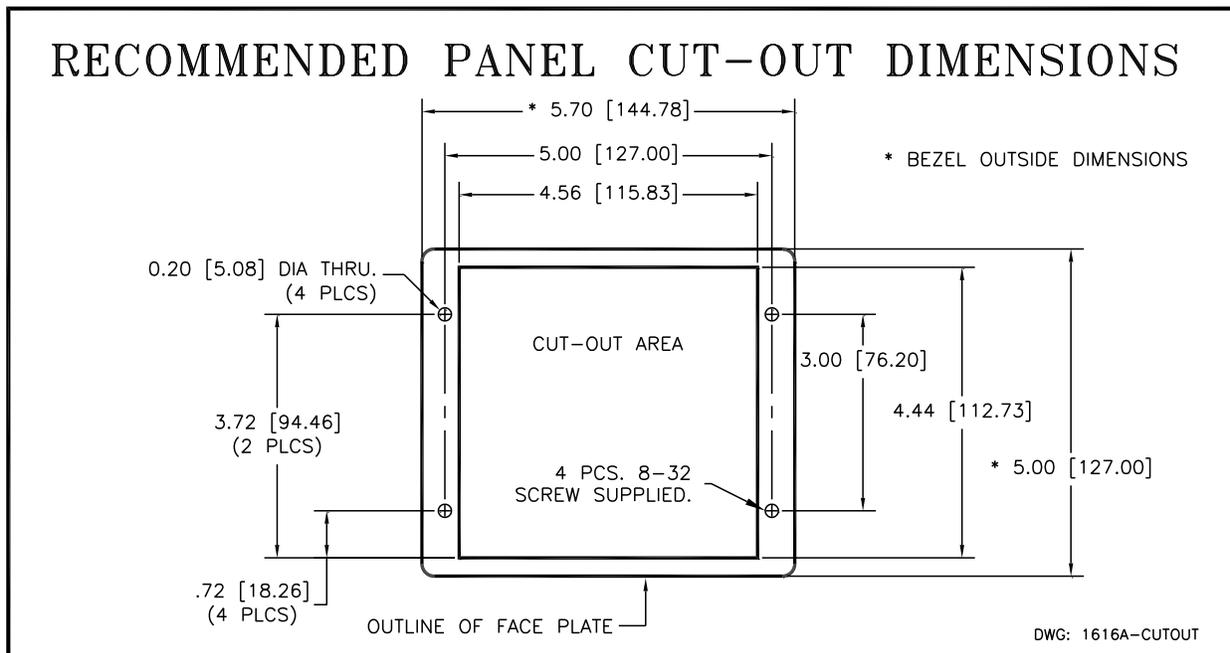
- Time and date calendar
- Security code required for accessing programming
- Custom messages appear on the display when an alarm occurs
- USB port allows history of events to be copied to a memory stick
- Easy to read blue 4-line X 20-character active matrix vacuum fluorescent display
- Monitor is programmed with a customer's USB keyboard temporarily connected to the front panel
- Optional connector for remote operation of panel keypads, to incorporate an explosion-proof housing

ELECTRICAL / ELECTRONIC

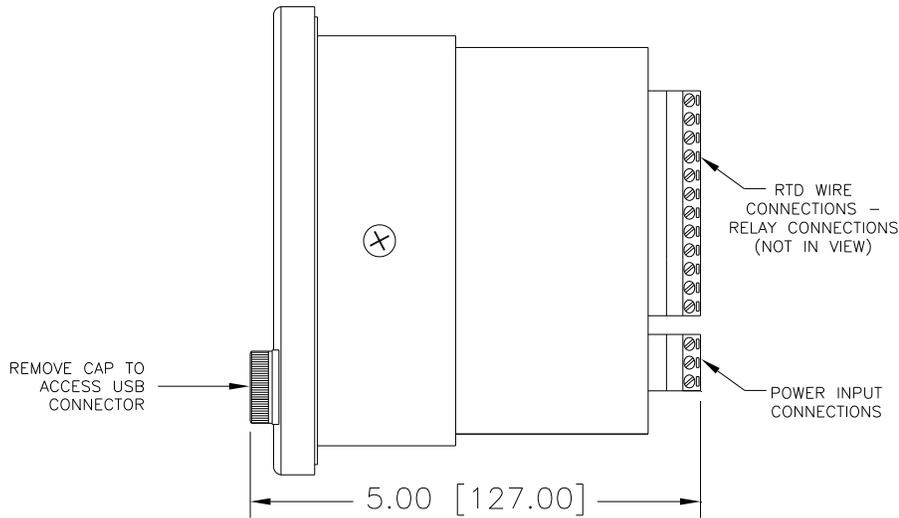
- 110V - 230 VAC or 24 VDC power supplies are available
- Selection for Nickel, Platinum 8 or 11 and Copper RTDs
- RTD linearization is implemented within the microprocessor
- Powerful 24bit microprocessor-based monitor reads field RTDs
- All electrical connections are accessible from rear terminal strips

MECHANICAL

- Dust and splash-proof front bezel assembly is IP66 rated
- Robust, aircraft-quality 5052 alodine electroplated aluminum housing

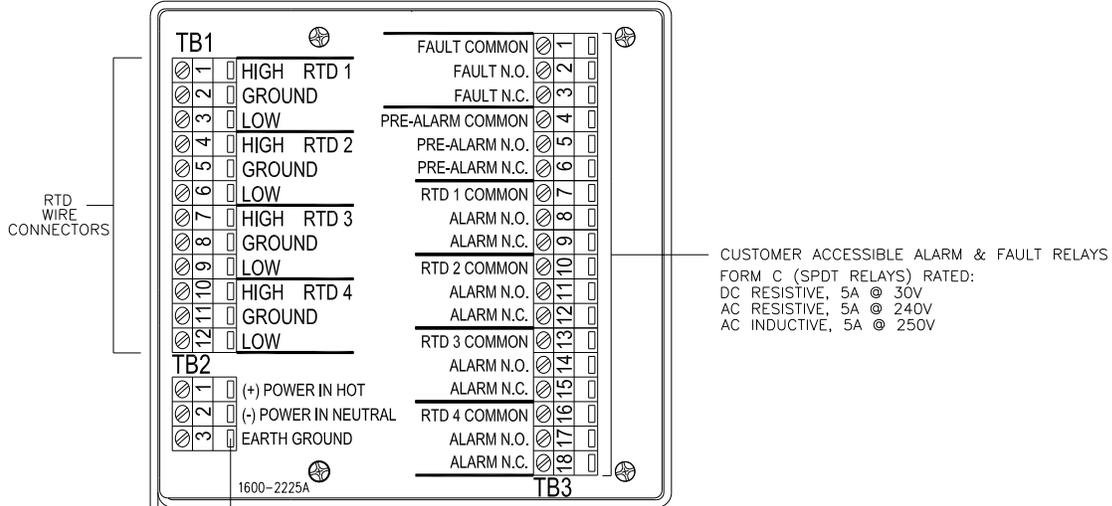


MONITOR RIGHT SIDE VIEW



DWG:1601-4A-RHVIEW

REAR VIEW MODEL 1604



NOTES:

1. FAULT RELAY CONTACTS SHOWN UNPOWERED – CHANGES STATE WHEN MONITOR IS POWERED UP.
2. CONNECT MONITOR TO EARTH GROUND PER ARTICLE 760 OF THE NATIONAL ELECTRIC CODE.
3. RTD INPUTS ARE FACTORY DEFAULT DISABLED.
4. WHEN UTILIZING 2-WIRE RTD, WIRE STRAP THE GROUND AND LOW TERMINALS TOGETHER.
5. WHEN UTILIZING A 3-WIRE RTD, THE RED IS HIGH AND TWO WHITE WIRES GO TO GROUND & LOW.
6. TB1 GROUND DESIGNATION IS SPECIFICALLY FOR THE RTD.

DWG:1604A-WIRECON

Refer to allestec.com and procure a PDF manual of this product. Distributors that honor the Edison Onguard products are also listed.

SPECIFICATIONS



ELECTRICAL

MONITOR REQUIREMENTS 95-260 VAC, 50-440 Hz @ 9 watts quiescent, maximum 14.5 watts, all relays energized.

ACCURACY @ 72 ° F, 22 ° C
SPECIFIED FROM SENSOR
INPUT TO DISPLAY OUTPUT

Sensor Style	Accuracy	Degrees F	Degrees C
Platinum #8	+/- 1%	-202 to 1544	-130 to 840
Platinum #11	+/- 0.5%	-202 to 1364	-130 to 740
Nickel #1	+/- 0.5%	-94 to 572	-70 to 300
Nickel #7	+/- 0.25%	-94 to 572	-70 to 300
Copper #15	+/- 1%	-58 to 482	-50 to 250

DC OHMS SCALE RANGE
0-512 OHMS RANGE

Allows measurement of RTD resistance within the specified RTD characteristic temperature scale as indicated in the manual.

RESOLUTION

1° Displayed

CLOCK / CALENDAR / DATA

Memory retained for 48 hours if input power is lost.

MEMORY

Configuration and history data retained in nonvolatile memory.

REMOTE KEYPAD

Optional connection for remote keypad operation.

OUTPUT RELAY RATINGS
ALARM & FAULT

DC Resistive 5 A @ 30 VDC
AC Resistive 8 A @ 277 VAC
AC Inductive 7 A @ 125 VAC, 3 A @ 277 VAC

DISPLAY

4-character high X 20-character wide vacuum fluorescent, blue display (active ambience).

ACTION

Display remains at 80% of luminescence after 15 minutes of inactivity, and returns to full intensity with any alarm action.

MECHANICAL

IP-66 Rating in front of mounting panel.

MOUNTING ORIENTATION

Any axis.

CASE

Aircraft-quality 5052 1/16" thick aluminum, gold alodine electroplated. Polycarbonate bezel.

ENVIRONMENT

OPERATING TEMPERATURE

0 to 150 ° F, -18 to 65 ° C, 0 to 90% humidity, non-condensing.

CASE

Aircraft-quality 5052 1/16" thick aluminum, gold alodine electroplated. Polycarbonate bezel.

WEIGHT

3.1 lbs (1.405 kg), 50 oz.



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