

LIEBERT® LIQUI-TECT™ 460 KIT

ZONE LEAK DETECTION SENSOR WITH CABLE

Product Specification/Installation Guide



The Liebert® Liqui-Tect™ 460 (LT460) provides zone detection of leaks, protecting equipment by constantly monitoring the area for leaking liquids. The LT460 is the ideal solution for perimeter sensing or serpentine coverage of areas requiring up to 100 feet of cable.

Selectable modes of operation provide flexible alarming options and protection for the cable. The LT460 constantly monitors a zone for leaks, internal faults, and power failures and warns of any abnormal conditions. Top cover LEDs provide status indication and also ensure that the cable is properly installed and operational under raised floors.

Two independent outputs provide a signal to a local alarm panel, Liebert cooling unit, and a remote building management system, or external equipment, such as motorized water shutoff valves.

LT460 APPLICATIONS

The LT460 is ideally suited for:

- Glycol and chilled water cooling,
- Humidification supply water piping,
- Condensate pumps and drains,
- Unit and ceiling auxiliary drip pans,
- Overhead piping troughs.

LOCATIONS/PLACEMENT

The LT460 is an excellent choice for:

- Large scale network control centers,
- Data centers,
- MRI and CAT scan rooms
- Server rooms and closets,
- Unattended, remote shelters,
- Mechanical equipment rooms,
- Sensitive areas with overhead piping,
- Industrial process control rooms.

COMPONENTS

Liqui-Tect™ 460 Module

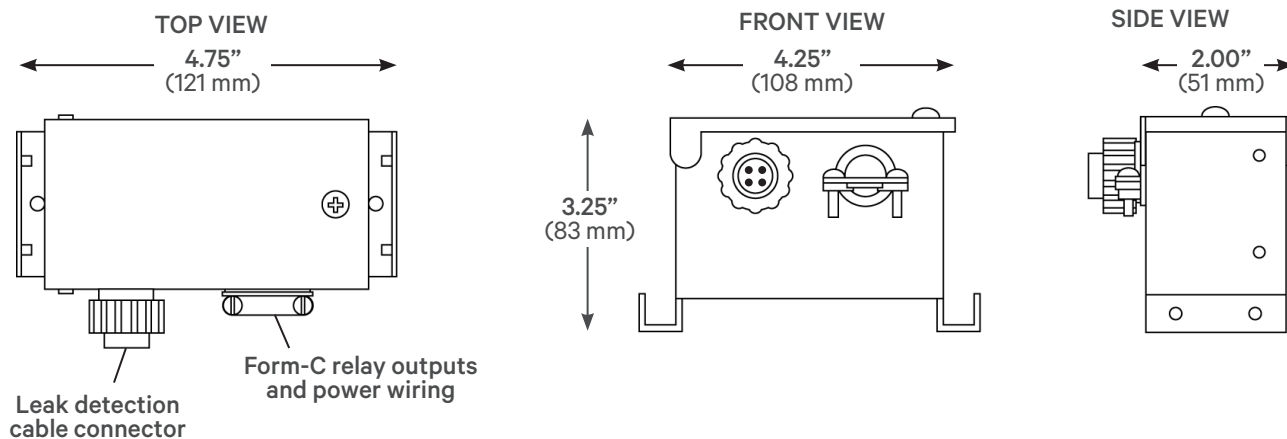
The LT460 consists of a metal enclosure with a hinged top door providing access to the internal circuit board for wiring termination and configuration of DIP switches. The LT460 will monitor up to 100 feet of connected LT500Y leak detection cable.

LT500Y Leak Detection Cable

The cable material and construction allow the cable to lie flat when used with hold down clips. The LT500Y is plenum-rated and UL listed for safe operation.

- If purchased separately, cables are available in lengths of 15, 35 and 50 feet. These cables can be connected incrementally to monitor from 15 feet up to 100 feet. An end terminator and hold-down clips (two clips required for each 6-8 feet of cable) must be ordered separately.
- If included in a kit, cables are available in lengths of 20, 25, 30, 35 and 45 feet. Cables in kits cannot be lengthened. Hold down clips are provided.

DIMENSIONS - TOP, FRONT AND SIDE



SPECIFICATIONS

| | |
|-------------------------------------|---|
| Power Requirements | 24 VAC 120 mA, 50/60 Hz, 3 VA (max.) |
| Dimensions, W x D x H | 5.35 in. x 3.23 in. x 3.5 in. (135.9 mm x 82 mm x 88.9 mm) Mounting-holes require #8 screws. |
| Weight (assembled) | 2.0 lb. (0.9 kg) |
| Leak-detection Cable Compatibility | All Liebert LT500 sensing cables |
| Maximum Leak-detection Cable Length | 100 ft. (30.5 m) |
| Metal Enclosure | NEMA 1, IP 30 |

ENVIRONMENTAL CONDITIONS

| | |
|-----------------------------|---|
| Operating Temperature | 50°F to 104°F (10°C to 40°C) |
| Operating Humidity | 10% to 95% relative humidity (non-condensing) |
| Operating Altitude | 0 to 10,000 ft. (0 to 3,048 m) |
| Output Relay Contact Rating | 2 Form-C; 3 A rating at 24 VAC |

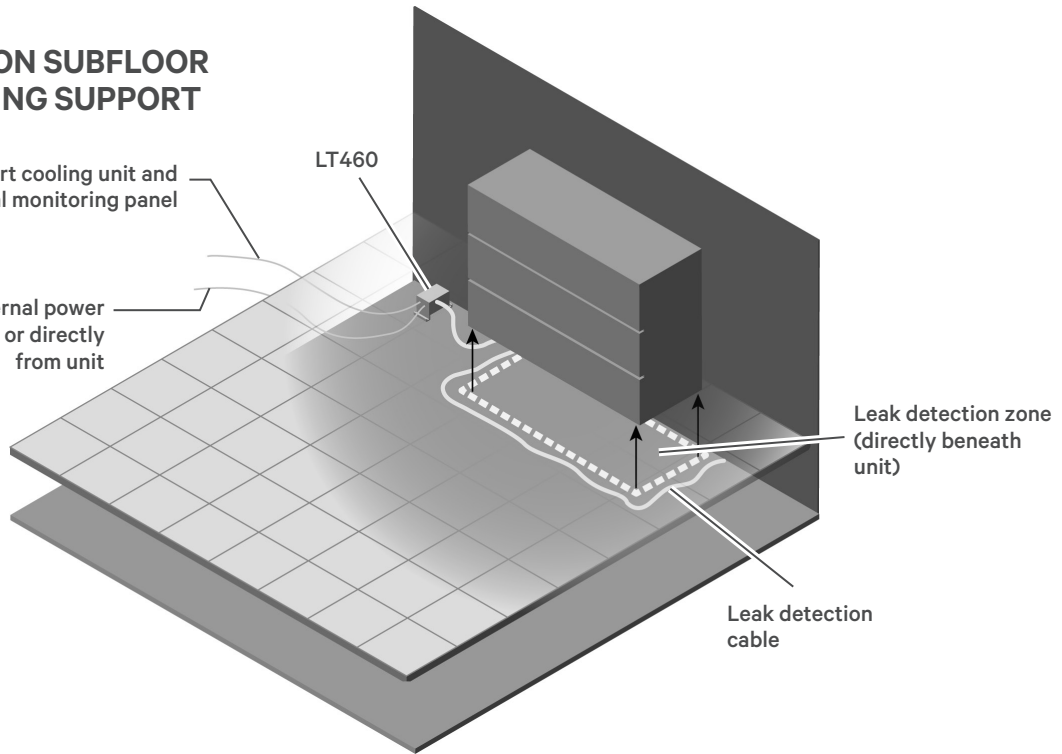
AGENCY LISTINGS

| | |
|----------------|----------------------|
| UL | UL916 |
| C-UL | C22.2, No. 205-M1983 |
| CE | Yes |
| FCC Compliance | 47 CFR, Part 15 |

PLACEMENT ON SUBFLOOR UNDER COOLING SUPPORT EQUIPMENT

To a Liebert cooling unit and an optional monitoring panel

To external power supply or directly from unit



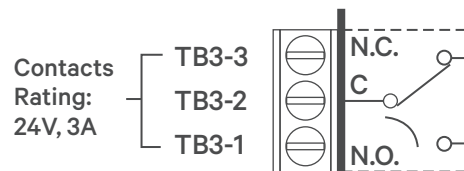
CONFIGURATION-SWITCH SETTINGS

A four position DIP switch selects two alarm (filter) delays and three mutually exclusive alarm modes. The switches are located next to the wiring termination blocks.

| SWITCH SETTINGS | OFF | ON |
|-----------------------|--------|-------|
| 1. Leak Detect Filter | 10 sec | 2 min |
| 2. Alarm Latch | No | Yes |
| 3. Alarm Retest Delay | No | 1 hr |
| 4. Not Used | - | - |

ALL CIRCUITS: CLASS 2

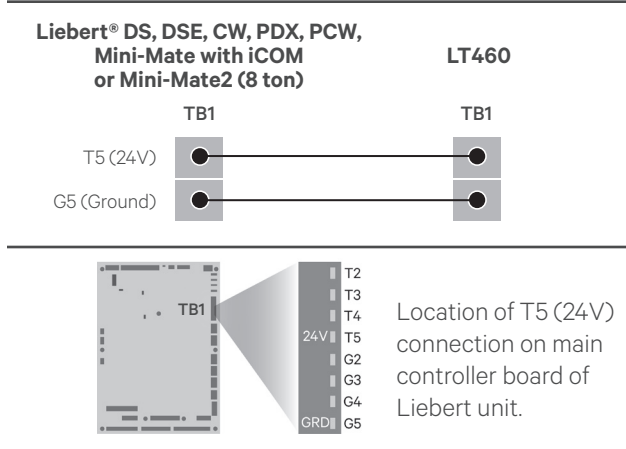
Contacts shown in POWERED, NON-ALARM state



CONNECT ENCLOSURE TO EARTH GROUND

POWER WIRING

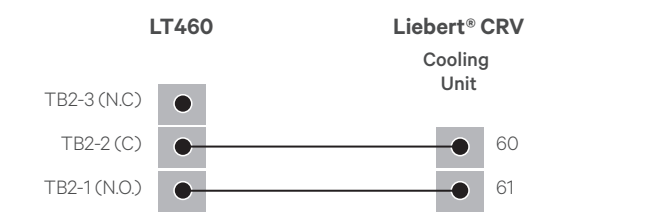
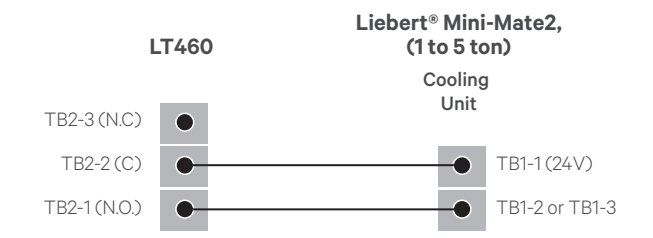
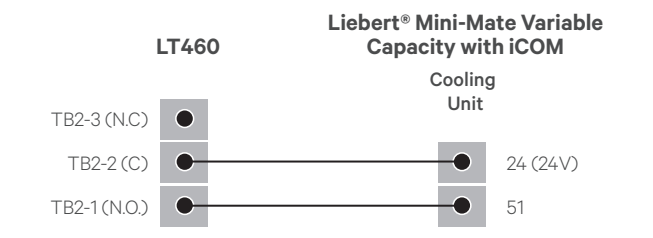
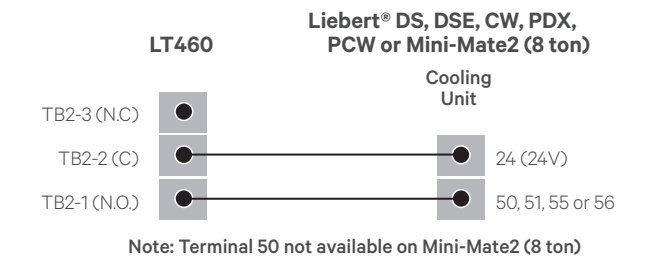
The LT460 is rated for 24 VAC, 50/60 Hz, and 0.12 A.



WIRING TO COOLING UNIT

The LT460 has two Form-C dry-contact alarm-output contacts (TB2 and TB3). Each contact is rated for 24 VAC at 3 amp.

NOTE: In Liebert® iCOM™, use the Service Options menu to add that the Liqui-Tect™ is installed



WIRING TO AUXILIARY ALARM PANELS

