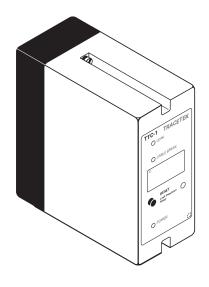
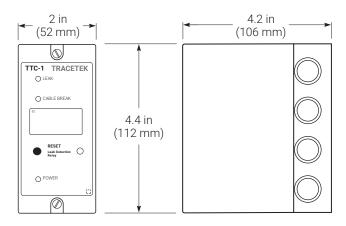
## TTC-1



# SENSING MODULE WITH RELAY CONTACTS





#### **PRODUCT OVERVIEW**

The nVent RAYCHEM TraceTek TTC-1 module offers a low cost option for liquid leak detection. It is designed for use with any RAYCHEM TraceTek sensing cable, and can be integrated into a variety of monitoring systems. The TTC-1 module includes three sets of relay contacts which can be used for remote annunciation and equipment control. An optional remote annunciation device is available.

#### **EASY SETUP**

All field wiring connections are easily made to a terminal strip molded into the base of the module. The module can be configured to reset automatically when a leak clears, or to require a manual reset using the button provided. The TTC-1 module includes adjustments for sensitivity to leaks, and for the time delay before the leak alarm relay trips. These adjustments can be made in the field.

#### **VERSATILE DESIGN**

The TTC-1 module provides separate relays for leak alarms and trouble alarms. The Leak relay has two sets of contacts so it can be used both to annunciate the alarm and to provide direct control linkage to local devices. However, the system is not designed for constant switching applications. The Cable Break alarm monitors the integrity of the sensing cable and jumper cable, and will trip if continuity is lost. This trouble relay is normally energized, so it will also signal if there is a loss of power.

The TTC-1 module may be installed in nonhazardous indoor locations. Its small size allows for mounting in or on walls, or on DIN 1 rail systems.

#### **APPLICATIONS**

The TTC-1 is ideally suited to be easily integrated into centralized monitoring systems for large facilities. Typical applications include monitoring for leaks from individual pieces of equipment such as air-handling units, water-cooled machinery, single tanks, pumps, sumps, or other locations where a single length of RAYCHEM TraceTek sensing cable is used.

#### **TECHNICAL INFORMATION**

Sensing cable compatibility

Maximum length of sensing cable (per channel)

Temperature rating

Plastic enclosure

Weight

Power supply requirement (transformer not included)

Terminal block wiring

RAYCHEM TraceTek jumper cable wiring

Relays

All RAYCHEM TraceTek sensing cables and probes

250 ft (76 m)

32°F to 122°F (0°C to 50°C)

**NEMA 1, IP 20** 

0.77 lb (0.35 kg)

12 Vac to 24 Vac; 50/60 Hz 0.25 A

15 Vdc to 24 Vdc 0.15 A

14 AWG (maximum 2.5 mm<sup>2</sup>)

18 AWG (1 mm<sup>2</sup>)

Leak: 1 DPDT, Form C

3 A rating at 30 Vdc or 250 Vac

Trouble: 1 SPDT, Form C

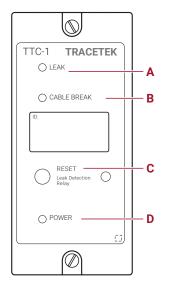
3 A rating at 30 Vdc or 120 Vac

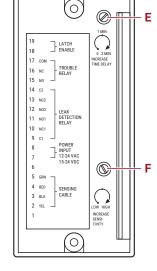
Normally energized

#### **ORDERING INFORMATION**

Catalog Number		Part Number	Description
TTC-1		698897-000	TTC-1 alarm module with relay contacts
Accessories:	TTE-XAL	418569-000	External audible alarm
	TTC-DRC	062825-000	DIN 1 rail mounting clip

#### **MODULE FUNCTIONS**





#### A LEAK indicator (red LED)

Indicates system has detected a leak.

#### **B** CABLE BREAK indicator (yellow LED)

Indicates system has detected a break in the sensing circuit.

### C RESET switch and indicator (red LED)

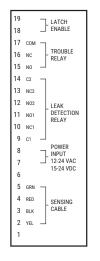
Indicates leak relay has been activated. Push to reset manually.

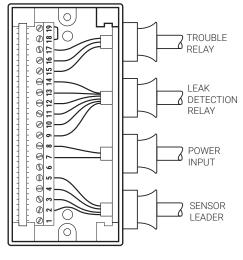
#### D POWER monitor (green LED)

Indicates the system is on.

- **E** Adjusts leak alarm time delay (0−2 minutes).
- F Adjusts leak alarm sensitivity.

#### **TERMINAL BLOCK WIRING**





18-19	Latch enable (jumper enables leak alarm relay to latch)*	
15-17	Trouble relay (SPDT)	
9-14	Leak Detection relay (DPDT)	
7-8	Power input, 12–24 volts AC or 15–24 volts DC	
6	Open; do not use	
2-5	Sensing cable (2-yellow, 3-black, 4-red, 5-green)	
1	Open; do not use	
*Note:	If latch enable jumper is removed, leak relay	

automatically resets when cable dries

RaychemTraceTek-DS-H53587-TTC1-EN-1805 nVent.com | 2

TYPE NM



The TTC-1 module is UL Listed for use in nonhazardous locations.

**North America** 

Tel +1.800.545.6258 Fax +1.800.527.5703 thermal.info@nvent.com **Europe, Middle East, Africa** 

Tel +32.16.213.511 Fax +32.16.213.604 thermal.info@nvent.com **Asia Pacific** 

Tel +86.21.2412.1688 Fax +86.21.5426.3167 cn.thermal.info@nvent.com **Latin America** 

Tel +1.713.868.4800 Fax +1.713.868.2333 thermal.info@nvent.com



Our powerful portfolio of brands:

CADDY ERICO HOFFMAN RAYCHEM SCHROFF

**TRACER**