

LCDT Selectronic® Tattletale® System

The LCDT Selectronic Tattletale system is a compact fault annunciator with an electronic alarm/shutdown control system. It's designed to protect engine-driven or motor-driven compressors and pumps. The annunciator indicates the sensor, and hence the parameter, that causes an alarm or shutdown. In addition, a means is provided for testing the operation of each sensor without initiating an alarm or shutdown. Employing a liquid crystal display, the LCDT system gives a digital reading of the tripped sensor and the lockout timer countdown.

At the heart of the system, the basic annunciator component has two variations: the Model LCDT-NO, which accommodates normally open sensors; and the Model LCDT-NC, which accommodates normally closed sensors. These units are enclosed in an aluminum box having a brush finish. The LCDT system accommodates 47 NO or 45 NC sensor inputs, 15 of which may be locked out during start up by the start/run timer delay.

A separate power supply is provided with the model LCDT instrument. Power may be supplied by CD ignition, a 120 VAC line or by 12- or 24-VDC battery.

Intended for use with all Swichgag® instruments without OS option.

Features include:

- System alarm or shutdown for up to 47 NO or 47 NC sensors
- Timed start up override for up to 15 sensors
- Liquid Crystal Display of tripped sensors and the lockout timer countdown
- Test timer for shutdown override during sensor test
- Intrinsically safe annunciator unit: Class I, Division 1, Group D Hazardous Locations
- Explosion-proof power supply
- Battery power to maintain electronics while engine is not running
- Optional three-second time delay allows a fuel valve to close before grounding the ignition



Specifications

Power: Supplied by CD ignition of an engine, 120 VAC line or by 12- or 24-VDC battery

Power Inputs (Operating Voltage):

- LCDT-PS-CD (R)-P: 90-250 VDC, CD ignition, positive ground
- LCDT-PS-CD-N: 90-250 VDC CD ignition, negative ground
- LCDT-PS-120/24/12: 120 VAC (6 VA), 24 VDC (1 watt), 12 VDC (0.5 watts)

Sensor Inputs: Accepts up to 47 sensors (NC version only 45) via a ribbon cable. The LCDT system was designed to be used with sensor switches having normally open or normally closed contacts such as Murphy Swichgag instrument.

NOTE: An approved isolation barrier such as a thermocouple type barrier, must be used between sensor switch and input terminals if sensor outputs come from any energy storing device such as a relay or transistor.

Relay Outputs Ratings:

- LCDT-PS-CD (R)-P Contact rating: 4A, 1/20 HP, 125/250 VAC/3A, 30 VDC
- LCDT-PS-120/24/12 Contact Rating: 5A, 28 VDC. 120 VAC (resistive)

FET Outputs: LCDT-PS-CD-N rating (for fuel valve and ignition ground): 0.5A @ 250 V

Alarm Relay Contact Rating: 4A, 1/20 HP, 125/250 VAC/3A, 30 VDC

Operating Temperature: Module (head): -40° to 185°F (-40° to 85°C)

Power Supply: 0° to 158°F (-18° to 70°C)

Storage Temperature: -40° to 302°F (-40° to 150°C)

Case: LCDT-NO/NC (module): anodized aluminum.

Power Supply (all models): Explosion-proof aluminum

Multiplexer Scan Rate: Scans all 47 sensors in 0.7 sec.

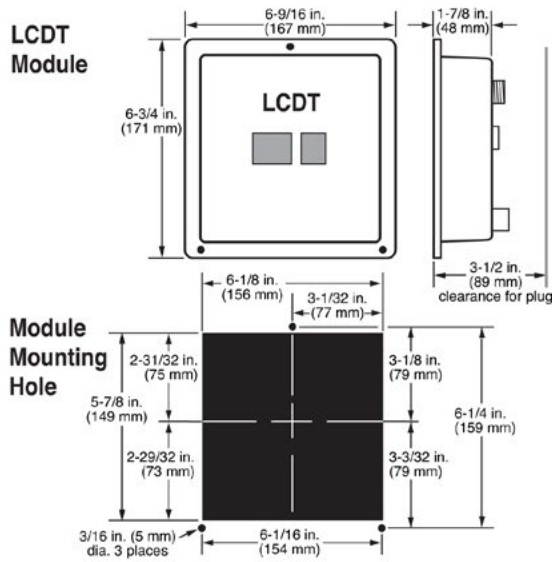
Start-Run/Test Timer: Standard 5 minutes, specify other, up to 7 minutes maximum (in 1 minute increments)

Laboratory Approvals: CSA* and Factory Mutual System† Listed for Class I, Division 1, Group D, Hazardous Locations

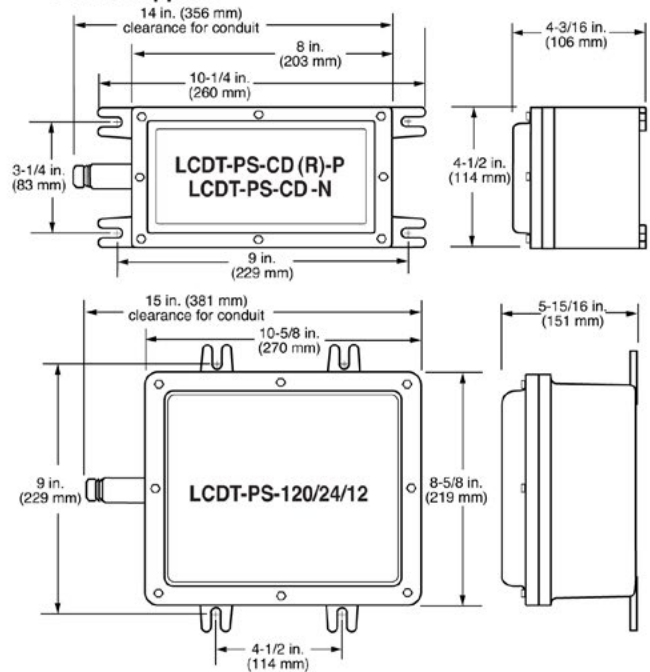
* When used with approved ignition A. Contact Enovation Controls for details.

† When installed per Murphy drawings HC-9450-A (50-08-0021) or HC-9450-AA (50-08-0019).

Dimensions



Power Supplies



LCDT System

The basic LCDT system consists of the LCDT module, the terminal strip and cable assembly and the power supply.

Terminal Strip and Cable Assembly

The plug-in type Terminal Strip has 50 screw-type connections for normally open sensors and 100 connections for normally closed sensors. The terminal strip can be connected to the LCDT module with the 36 in. (914 mm) flat ribbon cable.

Power Supply

You have a choice of input power supplies: LCDT-PS-CD (R)-P and LCDT-PS-CD-N for CD ignition or LCDT-PS-120/24/12 for 120 VAC or 12 or 24 VDC. Each power supply includes control Inputs/Outputs and an intrinsically safe barrier. They were designed for Class I, Divisions 1 and 2, Group D Hazardous Locations. FM and CSA listed.

How to Order

Part Number	Model and Description	Notes
	LCDT-NO, LCDT Normally Open	LCDT Module
	LCDT-NC, LCDT Normally Closed	
Specify Model Number	LCDT-50CA-36, Normally Open	Terminal Strip and Cable Assembly
	LCDT-100CA-36, Normally Closed	
Specify Model Number	LCDT-PS-CD (R)-P, CD Ignition Positive Ground	Power Supply
	LCDT-PS-CD-N, CD one or two ignitions negative ground	
	LCDT-PS-120/24/12, Voltage: 120 AC, 12/24DC	

Shipping Dimensions:

LCDT-NO/NC module: 8-1/2 x 9-1/2 x 5-1/2 in. (216 x 241 x 140 mm)
 LCDT-PS-CD-N and LCDT-PS-CD (R)-P: 4-1/2 x 15-1/2 x 5-1/2 in. (114 x 394 x 140 mm)
 LCDT-PS-120/24/12: 11-1/2 x 18-1/4 x 13-1/2 in. (291 x 464 x 343 mm)
 LCDT-50CA-36 or 100CA-36: 7-1/4 x 12 x 5-1/2 in. (184 x 305 x 140 mm)

Shipping Weights:

LCDT-NO/NC Head: 5 lbs. (2.2 kg)
 LCDT-PS-CD (R)-P: 9 lbs. (4.08 kg)
 LCDT-PS-120/24/12: 21 lbs. (9.5 kg)
 LCDT-50CA-36 or 100CA-36: 3 lbs. (1.3 kg)