



# ADTECH

95 Mt. Read Blvd # 149  
Rochester, New York 14611 USA  
Phone: 1.585.698.1845  
Fax: 1.585.697.0444  
www.adtech-inst.com

## LOOP-POWERED TRIP ALARM/ CURRENT LOOP ALARM MODEL NO. CLA 114

THE ADTECH CLA 114 LOOP-POWERED TRIP ALARM ACCEPTS 4-20 mA DC INPUT AND PROVIDES A RELAY CONTACT OUTPUT. THE CLA LOOP-POWERED ALARM DOES NOT REQUIRE A SEPARATE DC OR AC POWER SUPPLY SOURCE AS CONVENTIONAL ALARMS DO.

IT ACCEPTS THE STANDARD PROCESS CURRENT SIGNAL OF 4-20 mA DC AND PROVIDES A SPDT CONTACT OUTPUT, OR OPTIONALLY, A DPDT CONTACT OUTPUT. BOTH ARE RATED 4 AMPS, 30 VDC OR 250 VAC RESISTIVE FOR EITHER HIGH-OR LOW ALARM CONFIGURATION.

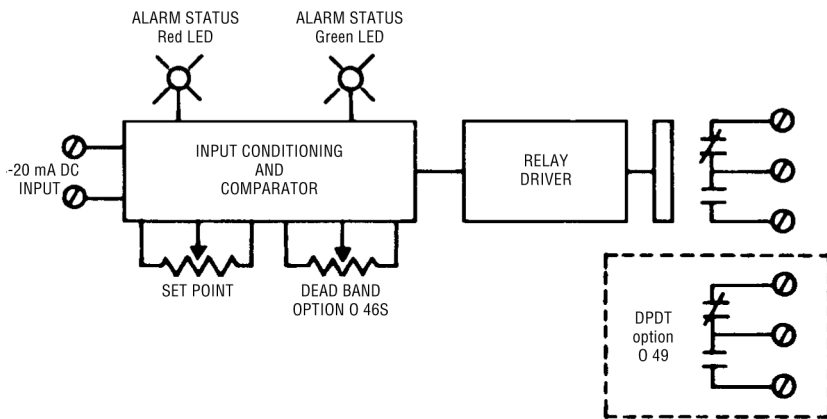
THE CLA 114 HAS 0-100% ADJUSTABLE SET POINT AND A 0.5% FIXED DEADBAND. OPTION O 46S PROVIDES A 1-100% ADJUSTABLE DEAD BAND.

IT HAS AN INPUT VOLTAGE DROP OF 7 VDC, WHICH REPRESENTS A 350 OHM INPUT IMPEDANCE TO A 4-20 mA SIGNAL AT FULL SCALE.

TWO INDICATING LEDs ARE STANDARD TO THE CLA. WHEN THE INPUT SIGNAL EXCEEDS THE SET POINT, A RED PULSING LED COMES ON.

A PULSING GREEN LED INDICATES THE MAGNITUDE OF THE INPUT SIGNAL. THE PULSE RATE INCREASES WITH AN INCREASING INPUT SIGNAL. THIS UNIQUE FEATURE PROVIDES A VISUAL INDICATION OF THE RELATIVE SIGNAL LEVEL AT A GLANCE. WHEN THE INPUT EXCEEDS THE SET POINT, THE GREEN LED TURNS OFF, AND THE RED LED TURNS ON.

DIN MOUNTING IS SUPPLIED AS STANDARD. SURFACE MOUNT(OPTION H26) AND SNAP TRACK (OPTION H 25) ARE AVAILABLE AT NO EXTRA COST. SPECIFY.



### FEATURES

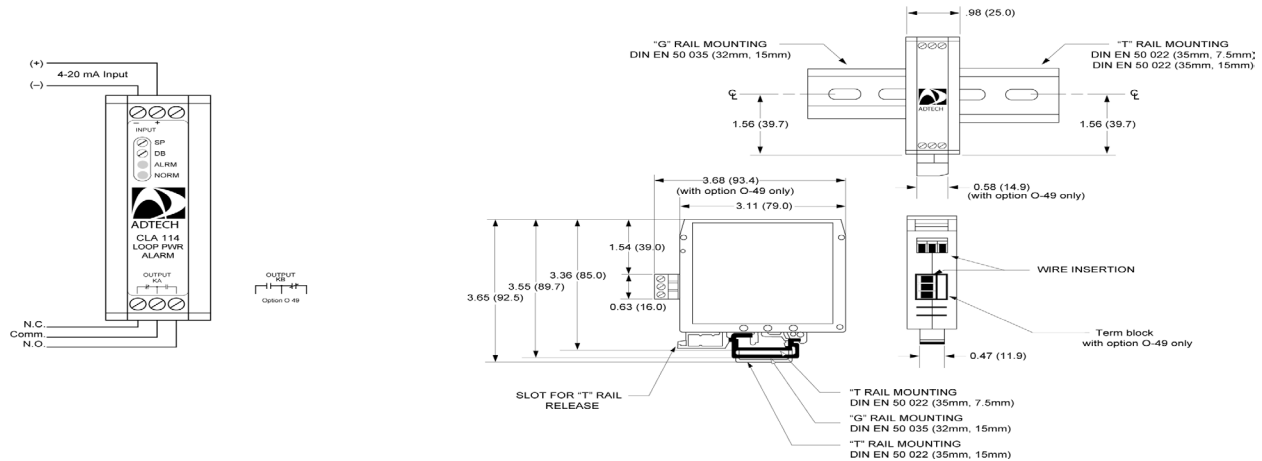
- NO EXTERNAL POWER SOURCE: LOOP POWERED, 28 MW AT 4 MA FROM INPUT LOOP
- DC CURRENT INPUTS: 4-20 MA
- REPEATABILITY: 0.1% OF SPAN
- RELAY ACTION: HIGH - OR LOW-TRIP
- OUTPUT CONTACTS: 4 AMP, SPDT-STANDARD  
4 AMP, DPDT-OPTIONAL
- INPUT SIGNAL STATUS: GREEN LED
- ALARM STATUS: RED LED
- ADJUSTABLE DEAD BAND: 1-100%-OPTIONAL
- ISOLATION: 1,500 VAC INPUT TO OUTPUT CONTACTS

### TYPICAL APPLICATIONS

- GENERAL LIMIT DETECTOR OF DC CURRENT SIGNAL INPUTS
- ON/OFF CONTROLLER
- ALARM OR SHUTDOWN OF PROCESS VARIABLES
- MACHINE AND PROCESS PROTECTION
- CONTACT INPUTS TO ANNUNCIATORS, LIGHTS, AND HORNS
- TANK-FILLING APPLICATIONS WITH DEAD BAND OPTION



# CONNECTIONS / DIMENSIONS



## INPUT/OUTPUT

INPUT SIGNALS: 4-20 mA DC

OUTPUT SIGNALS:

STANDARD: SPDT OUTPUT CONTACT, RATED 4 AMPS AT 30 VDC OR 250 VAC RESISTIVE

OPTIONAL: DPDT OUTPUT CONTACT, RATED 4 AMPS AT 30 VDC OR 250 VAC RESISTIVE (OPTION O 49)

## PERFORMANCE

REPEATABILITY:  $\pm 0.1\%$  OF SPAN

TRIP POINT STABILITY: ZERO AND SPAN  $\pm 0.005\%$  / °F TYPICAL,

$\pm 0.01\%$  / °F MAXIMUM FOR A 50°F CHANGE FROM AMBIENT

TRIP ADJUSTMENT: 0-100% OF SPAN CONTINUOUSLY ADJUSTABLE; BLIND SET: INFINITE RESOLUTION

FIXED DEAD BAND: FACTORY SET AT 0.5% OF SPAN OR SETTING (SPECIFY)

ADJUSTABLE DEAD BAND: 1% TO 100% OF SPAN (SPECIFY), CONTINUOUSLY ADJUSTABLE; BLIND SET

RESPONSE TIME: LESS THAN 200 MILLISECONDS

TEMPERATURE RANGE: 0° TO 140°F (-18° TO 60°C) OPERATING; -40° TO 185°F (-40° TO 85°C) STORAGE

INPUT VOLTAGE DROP: 7 VOLTS NOMINAL

NOTE: ALL ACCURACIES ARE GIVEN AS A PERCENTAGE OF SPAN.

## POWER

EXTERNAL POWER: NONE

## MECHANICAL

ELECTRICAL CLASSIFICATION: GENERAL PURPOSE  
CONNECTION: SCREW COMPRESSION TYPE ACCEPTS  
UP TO 14 AWG

CONTROLS: MULTITURN SETPOINT, (OPTIONAL)  
DEADBAND AND JUMPERS FOR RELAY  
ACTION

MOUNTING: DIN: OPTIONAL SURFACE, SNAP TRACK OR  
NEMA 4 & 7

WEIGHT: NET UNITS: 4 OZ (115 GRAMS)

SHIPPING: 7 OZ. (200 GRAMS)

## OPTIONS

OPTION NUMBER

DESCRIPTION

O 46S

ADJUSTABLE BLIND SET DEAD BAND

O 49

DPDT CONTACTS

H 15D

EXPLOSION PROOF: CLASS 1, GROUP B, C & D

H 25

SNAP-TRACK MOUNT (SPECIFY)

H 26

SURFACE MOUNTING (SPECIFY)

H 27

NEMA 4 ENCLOSURE

H 29

T 35 DIN "T" RAIL - 2 FT. LONG

H 30

T 32 DIN "G" RAIL - 2 FT. LONG

### Ordering Information

- Model number
- High or low alarm
- Electrical options
- Housing and miscellaneous options

Please refer to the Housing and/or Option Section for more specific and detailed information.