



ADTECH

95 Mt. Read Blvd # 149
Rochester, New York 14611 USA
Phone: 1.585.698.1845
Fax: 1.585.697.0445

www.adtech-inst.com

500 SERIES FIELD SELECTABLE ALARMS GUIDE

Adtech 500 Series Field Selectable Alarms



FEATURES

- TYPES OF INPUTS: T/C, RTD, VDC/MADC, MVDC, AC VOLTS, AC AMPS
- SINGLE OR DUAL SET POINT MODELS
- CONTINUOUSLY ADJUSTABLE BLIND SET POINT POTENTIOMETERS
- UNIVERSAL RELAY ACTION- FAIL SAFE OR NON-FAIL SAFE, HIGH OR LOW ALARM
- LED INDICATION OF ALARM STATUS
- ADJUSTABLE TIME DELAY 0-30 SECONDS
- LATCHING ACTION
- SMART TOUCH™ PROGRAMMING AVAILABLE FOR THERMOCOUPLE ALARMS

TYPICAL APPLICATIONS

CRITICAL ALARM POINT MONITORING OF:

- TEMPERATURE (T/C & RTD'S)
- DC SIGNALS
- AC CURRENT
- AC VOLTAGE
- FLOW
- SPECIALTY SENSORS

ACA 514/515 SINGLE AND DUAL AC VOLTAGE AND CURRENT ALARM	DCA 514/515 SINGLE AND DUAL DC VOLTAGE AND CURRENT ALARM	MVA 514/515 SINGLE AND DUAL DC MILLIVOLT ALARM
INPUT/OUTPUT	INPUT/OUTPUT	INPUT/OUTPUT
INPUT SIGNALS AC CURRENT: ANY 0-1 TO 0-5 AMPS AC, BURDEN LESS THAN 0.5 VA (SELECTABLE AVERAGE OR TRUE RMS) AC VOLTAGE: ANY 0-0.25 TO 0-250 VAC, SELECTABLE RANGES OF 0.25, 2.5, 25 AND 250 VAC TRIP ADJUSTMENT: 0-100% OF SPAN DEAD BAND ADJUSTMENT: 1-100% OF SPAN ADJUSTABLE TIME DELAY: 0-30 SECONDS LED ON DURING ALARM CONDITION OUTPUT SIGNAL: SPDT CONTACT RATED AT 10AMPS, 30VDC OR 250VAC, RESISTIVE LOAD MODEL 514 - SINGLE SETPOINT/RELAY; MODEL 515 DUAL SETPOINT/RELAY RELAY ACTION – JUMPER CONFIGURABLE, FAIL SAFE OR NON FAIL SAFE. HIGH OR LOW ALARM	INPUT SIGNALS 4-20 MADC (Z = 10 OHMS) 0-20 OR ±20 MADC (Z = 10 OHMS) 0-10 OR ±10 MADC (Z = 20 OHMS) 0-1 OR ±1 MADC (Z = 200 OHMS) 1-5 VDC, 0-5 OR ±5 VDC, 0-10 OR ±10 VDC TRIP ADJUSTMENT: 0-100% OF SPAN DEAD BAND ADJUSTMENT: 1-100% OF SPAN ADJUSTABLE TIME DELAY: 0-30 SECONDS LED ON DURING ALARM CONDITION OUTPUT SIGNAL: SPDT CONTACT RATED AT 10AMPS, 30VDC OR 250VAC, RESISTIVE LOAD MODEL 514 - SINGLE SETPOINT/RELAY; MODEL 515 DUAL SETPOINT/RELAY RELAY ACTION – JUMPER CONFIGURABLE, FAIL SAFE OR NON FAIL SAFE. HIGH OR LOW ALARM	INPUT SIGNALS UP TO 100 mVDC INPUT SPANS TRIP ADJUSTMENT: 0-100% OF SPAN DEAD BAND ADJUSTMENT: 1-100% OF SPAN ADJUSTABLE TIME DELAY: 0-30 SECONDS LED ON DURING ALARM CONDITION OUTPUT SIGNAL: SPDT CONTACT RATED AT 10AMPS, 30VDC OR 250VAC, RESISTIVE LOAD MODEL 514 - SINGLE SETPOINT/RELAY; MODEL 515 DUAL SETPOINT/RELAY RELAY ACTION – JUMPER CONFIGURABLE, FAIL SAFE OR NON FAIL SAFE. HIGH OR LOW ALARM
PERFORMANCE	PERFORMANCE	PERFORMANCE
ACCURACY: ±0.25% OF SPAN REPEATABILITY: ±0.1% OF SPAN STABILITY: TRIP POINT STABILITY ± 0.007%/°C TYPICAL, ±0.018%/°C MAXIMUM FOR A ± 25°C CHANGE FROM AMBIENT SET POINT ADJUSTMENT: TRIP POINT ADJUSTABLE 0-100% OF SPAN, CONTINUOUS BLIND ADJUSTMENT, INFINITE RESOLUTION DEADBAND: ADJUSTABLE 0-100% OF SPAN, CONTINUOUS BLIND ADJUSTMENT, INFINITE RESOLUTION TIME DELAY: ADJUSTABLE 0-30 SECONDS, CONTINUOUS BLIND ADJUSTMENT, INFINITE RESOLUTION RESPONSE TIME: < 200 MSEC TEMPERATURE RANGE: -15°C TO +60°C (+5°F TO +140°F) OPERATING -40°C/F TO +85°C (+185°F) STORAGE ISOLATION: INPUT TO OUTPUT TO POWER ≥ 1500 VAC 50/60 HZ, 2100 VDC HIPOT POWER SUPPLY EFFECT: ± 0.05% FOR A ±10% POWER SUPPLY VARIATION NOTE: ALL SPECS ARE STATED AS A PERCENT OF SPAN, AMBIENT TEMPERATURE IS 23°C	ACCURACY ±0.1% OF SPAN REPEATABILITY: ± 0.1% OF SPAN STABILITY: TRIP POINT STABILITY ± 0.007%/°C TYPICAL, ±0.018%/°C MAXIMUM FOR A ± 25°C CHANGE FROM AMBIENT SET POINT ADJUSTMENT: TRIP POINT ADJUSTABLE 0-100% OF SPAN, CONTINUOUS BLIND ADJUSTMENT, INFINITE RESOLUTION DEADBAND: ADJUSTABLE 0-100% OF SPAN, CONTINUOUS BLIND ADJUSTMENT, INFINITE RESOLUTION TIME DELAY: ADJUSTABLE 0-30 SECONDS, CONTINUOUS BLIND ADJUSTMENT, INFINITE RESOLUTION RESPONSE TIME: < 200 MSEC TEMPERATURE RANGE: -15°C TO +60°C (+5°F TO +140°F) OPERATING -40°C/F TO +85°C (+185°F) STORAGE ISOLATION: INPUT TO OUTPUT TO POWER ≥ 1500 VAC 50/60 HZ, 2100 VDC HIPOT POWER SUPPLY EFFECT: ± 0.05% FOR A ±10% POWER SUPPLY VARIATION NOTE: ALL SPECS ARE STATED AS A PERCENT OF SPAN, AMBIENT TEMPERATURE IS 23°C	ACCURACY ±0.1% OF SPAN REPEATABILITY: ± 0.1% OF SPAN STABILITY: TRIP POINT STABILITY ± 0.007%/°C TYPICAL, ±0.018%/°C MAXIMUM FOR A ± 25°C CHANGE FROM AMBIENT SET POINT ADJUSTMENT: TRIP POINT ADJUSTABLE 0-100% OF SPAN, CONTINUOUS BLIND ADJUSTMENT, INFINITE RESOLUTION DEADBAND: ADJUSTABLE 0-100% OF SPAN, CONTINUOUS BLIND ADJUSTMENT, INFINITE RESOLUTION TIME DELAY: ADJUSTABLE 0-30 SECONDS, CONTINUOUS BLIND ADJUSTMENT, INFINITE RESOLUTION RESPONSE TIME: < 200 MSEC TEMPERATURE RANGE: -15°C TO +60°C (+5°F TO +140°F) OPERATING -40°C/F TO +85°C (+185°F) STORAGE ISOLATION: INPUT TO OUTPUT TO POWER ≥ 1500 VAC 50/60 HZ, 2100 VDC HIPOT POWER SUPPLY EFFECT: ± 0.05% FOR A ±10% POWER SUPPLY VARIATION NOTE: ALL SPECS ARE STATED AS A PERCENT OF SPAN, AMBIENT TEMPERATURE IS 23°C
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100-240 VAC, 0.7PF STANDARD, P2 OPTIONAL 24 VDC POWER AVAILABLE	100-240 VAC, 0.7PF STANDARD, P2 OPTIONAL 24 VDC POWER AVAILABLE	100-240 VAC, 0.7PF STANDARD, P2 OPTIONAL 24 VDC POWER AVAILABLE
MECHANICAL	MECHANICAL	MECHANICAL
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<p align="center">RBA 514/515 SINGLE AND DUAL DC RTD AND RESISTANCE ALARM</p>	<p align="center">TCA 514/515 SINGLE AND DUAL SMART TOUCH™ THERMOCOUPLE ALARM</p>
<p align="center">INPUT/OUTPUT</p>	<p align="center">INPUT/OUTPUT</p>
<p>INPUT SIGNALS RTD TYPES: 2,3 AND 4 WIRE RTD'S RANGE 1 TO 400 OHMS RESISTANCE TRIP ADJUSTMENT: 0-100% OF SPAN DEAD BAND ADJUSTMENT: 1-100% OF SPAN ADJUSTABLE TIME DELAY: 0-30 SECONDS LED ON DURING ALARM CONDITION OUTPUT SIGNAL: SPDT CONTACT RATED AT 10AMPS, 30VDC OR 250VAC, RESISTIVE LOAD MODEL 514 - SINGLE SETPOINT/RELAY; MODEL 515 DUAL SETPOINT/RELAY RELAY ACTION - JUMPER CONFIGURABLE, FAIL SAFE OR NON FAIL SAFE. HIGH OR LOW ALARM</p>	<p>INPUT SIGNALS T/C TYPES: J, K, T, E, R, S, B RANGE: -20 TO 100 MVDC RANGEABILITY: USES SMART TOUCH™ PROGRAMMING TO SET THE MAJOR ALARM RANGE TRIP ADJUSTMENT: 0-100% OF SPAN DEAD BAND ADJUSTMENT: 1-100% OF SPAN ADJUSTABLE TIME DELAY: 0-30 SECONDS LED ON DURING ALARM CONDITION OUTPUT SIGNAL: SPDT CONTACT RATED AT 10AMPS, 30VDC OR 250VAC, RESISTIVE LOAD MODEL 514 - SINGLE SETPOINT/RELAY; MODEL 515 DUAL SETPOINT/RELAY RELAY ACTION - JUMPER CONFIGURABLE, FAIL SAFE OR NON FAIL SAFE. HIGH OR LOW ALARM</p>
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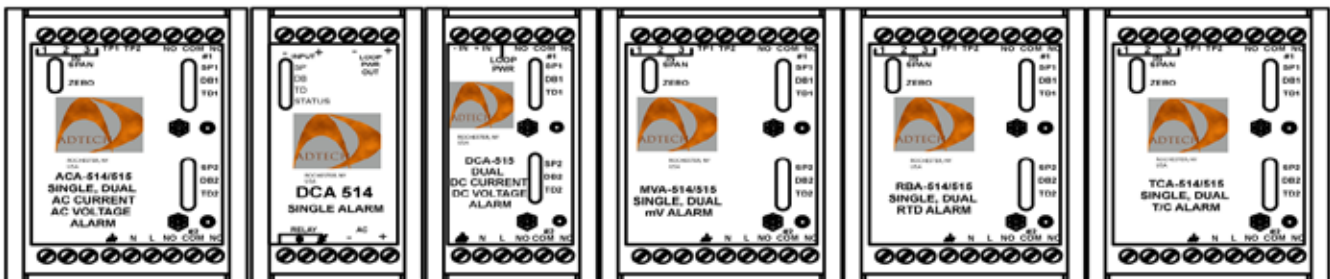
THE ADTECH 500 SERIES ALARM MODULES PROVIDE A FULL FEATURED ALARM MODULE IN A COMPACT, EASY TO WIRE, DIN CASE. ALL MODULES COME WITH ONE OR TWO FULLY ADJUSTABLE SETPOINTS. OTHER STANDARD FEATURES INCLUDE ADJUSTABLE DEADBAND, ADJUSTABLE TIME DELAY, LATCHING ACTION AND LED INDICATION OF ALARM STATUS. ALARMS CAN BE CONFIGURED FOR BOTH FAIL SAFE AND NON-FAIL SAFE CONDITIONS.

AVAILABLE ALARM MODULES CAN ACCEPT INPUTS FROM AC VOLTAGE, AC CURRENT, DC VOLTAGE, DC CURRENT, MILLIVOLT, RTD AND THERMOCOUPLE SOURCES. STANDARD POWER SUPPLY IS OUR UNIVERSAL AC INPUT SUPPLY THAT CAN ACCEPT AC POWER INPUTS FROM 100-240 VAC. A 24VDC OPTIONAL POWER IS ALSO AVAILABLE. UNITS ARE ISOLATED INPUT TO OUTPUT TO POWER. STANDARD UNITS ARE BUILT TO A WORK IN MOST INDUSTRIAL ENVIRONMENTS. FOR UNUSUALLY HARSH ELECTRICAL AREAS, MODULES CAN BE ORDERED WITH ADDITIONAL TRANSIENT AND NOISE IMMUNITY CIRCUITRY.

THE STANDARD HOUSING IS MADE OF CORROSION RESISTANT KRILEN PLASTIC AND IS DESIGNED FOR DIN RAIL MOUNTING. UNITS CAN ALSO BE ORDERED IN NEMA 4 OR NEMA 7 ENCLOSURES. ELECTRICAL CONNECTION IS BY A VERY RELIABLE SCREW COMPRESSION TERMINAL.

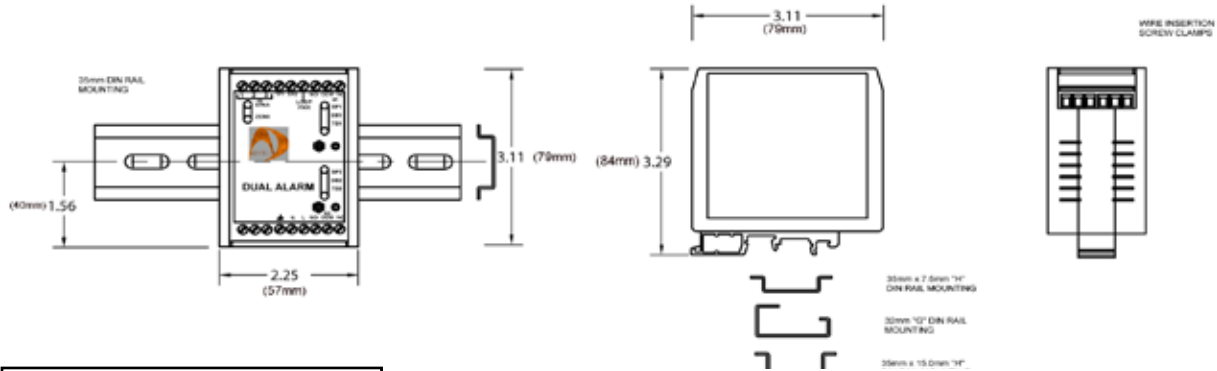
Connections

<u>ACA</u>	<u>RBA</u>	<u>TCA/MVA/DCA</u>
1- COM	1 - +	1- - INPUT
2- VIN	2 - -	2- +INPUT
3- I IN	3-REF	3-NOT USED

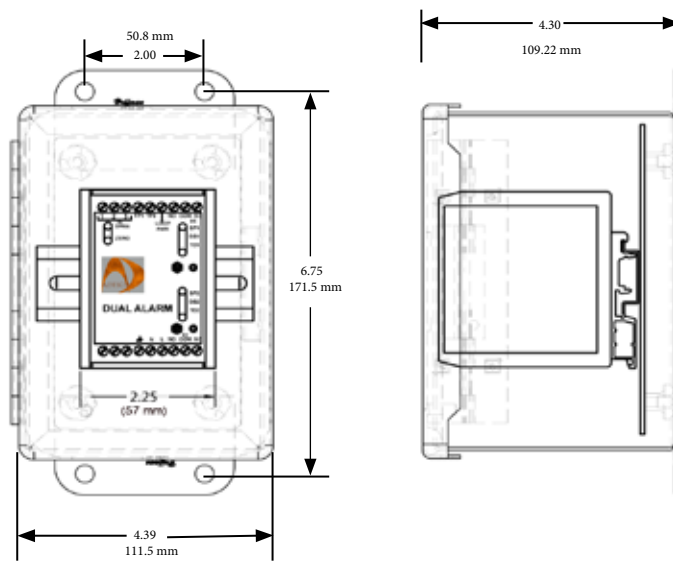


Outline and Mounting

DIN Mount



NEMA 4



DIMENSIONS

NEMA 7

