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**

<table>
<thead>
<tr>
<th>Input/Output</th>
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<tbody>
<tr>
<td><strong>Input Signals</strong></td>
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<tr>
<td>AC Current: Any 0-1 to 0-5 amps AC, burden less than 0.5 VA (selectable average or true RMS)</td>
<td>AC Current: Any 0-25 to 0-250 VAC, Selectable ranges of 0.25, 2.5, 25 and 250 VAC</td>
<td>AC Voltage: Any 0-25 to 0-250 VAC, Selectable ranges of 0.25, 2.5, 25 and 250 VAC</td>
</tr>
<tr>
<td>Trip Adjustment: 0-100% of span</td>
<td>Dead Band Adjustment: 1-100% of span</td>
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<tr>
<td>Adjustable Time Delay: 0-30 seconds</td>
<td>LED on during alarm condition</td>
<td>LED on during alarm condition</td>
</tr>
<tr>
<td>Output Signal: SPDT Contact rated at 10 amps, 30 VDC or 250 VAC</td>
<td>Resistive Load</td>
<td>Resistive Load</td>
</tr>
<tr>
<td>Model 514: Single Setpoint/Relay; Model 515 Dual Setpoint/Relay</td>
<td>Relay Action – jumper configurable, fail safe or non fail safe. High or Low Alarm</td>
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</tr>
</tbody>
</table>

### 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 | Dead Band Adjustment: Adjustable 0-100% of span, continuous blind adjustment, infinite resolution | Trip point stability ±0.007%/°C typical, ±0.018%/°C maximum for a ±25°C change from ambient |
| Temperature Range: -15°C to +60°C (+5°F to +140°F) Operating | Time Delay: Adjustable 0-30 seconds, continuous blind adjustment, infinite resolution | Set Point Adjustment: Trip point adjustable 0-100% of span, continuous blind adjustment, infinite resolution |
| Dead Band Adjustment: Adjustable 0-100% of span, continuous blind adjustment, infinite resolution | Response Time: < 200 msec | Dead Band Adjustment: Adjustable 0-100% of span, continuous blind adjustment, infinite resolution |
| Temperature Range: -15°C to +60°C (+5°F to +140°F) Operating | Isolation: Input to output to power ≥ 1500 VAC 50/60 Hz, 2000 VDC | Time Delay: Adjustable 0-30 seconds, continuous blind adjustment, infinite resolution |
| (+185°F) Storage | Isolation: Input to output to power ≥ 1500 VAC 50/60 Hz, 2000 VDC | Response Time: < 200 msec |
| Isolation: Input to output to power ≥ 1500 VAC 50/60 Hz, 2000 VDC | Millivolt Alarm | Temperature Range: -15°C to +60°C (+5°F to +140°F) Operating |
| Temperature Range: -15°C to +60°C (+5°F to +140°F) Operating | Volt Alarm | (+185°F) Storage |
| (+185°F) Storage | Volt Alarm | Isolation: Input to output to power ≥ 1500 VAC 50/60 Hz, 2000 VDC | Volt Alarm |
| Note: All specs are stated as a percent of span, ambient temperature is 23°C | Note: All specs are stated as a percent of span, ambient temperature is 23°C | Note: All specs are stated as a percent of span, ambient temperature is 23°C |

### Power

| 100-240 VAC, 0.7 PF Standard | 100-240 VAC, 0.7 PF Standard | 100-240 VAC, 0.7 PF Standard |

### Options

<table>
<thead>
<tr>
<th>Options</th>
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<tbody>
<tr>
<td>H15D5</td>
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<tr>
<td>Explosion Proof Housing Class I, Group B &amp; C</td>
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<tr>
<td>Two Inch Pipe Mount Kit</td>
<td>Two Inch Pipe Mount Kit</td>
<td>Two Inch Pipe Mount Kit</td>
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<tr>
<td>With Clamps</td>
<td>With Clamps</td>
<td>With Clamps</td>
</tr>
<tr>
<td>H27</td>
<td>H27</td>
<td>H27</td>
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<tr>
<td>Nema 4 Enclosure</td>
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</tr>
<tr>
<td>H29</td>
<td>H29</td>
<td>H29</td>
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<tr>
<td>T35 DIN T Rail 2 Ft Long</td>
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<td>T35 DIN T Rail 2 Ft Long</td>
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<tr>
<td>H30</td>
<td>H30</td>
<td>H30</td>
</tr>
<tr>
<td>T32 DIN G Rail 2 Ft Long</td>
<td>T32 DIN G Rail 2 Ft Long</td>
<td>T32 DIN G Rail 2 Ft Long</td>
</tr>
</tbody>
</table>
## RBA 514/515
**Single and Dual DC RTD and Resistance Alarm**

### Input/Output

**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

### Performance
- **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 Temperature:** -40°C/F to +85°C (+185°F)
- **Storage Temperature:** -15°C to +60°C (+5°F to +140°F)
- **Operating Temperature Range:** -40°C/F to +85°C (+185°F)
- **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

### Options
- **H15D5 Explosion Proof Housing Class 1. Group B & D**
  - H23 with Clamps
- **H27**
- **H29**
- **H30**

## TCA 514/515
**Single and Dual SMART TOUCH Thermocouple Alarm**

### Input/Output

**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

### Performance
- **Accuracy:** ±0.1% of Span of the mVDC Input
- **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 Temperature:** -40°C/F to +85°C (+185°F)
- **Storage Temperature:** -15°C to +60°C (+5°F to +140°F)
- **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

### Options
- **H15D5 Explosion Proof Housing Class 1. Group B & D**
  - H23 with Clamps
- **H27**
- **H29**
- **H30**

### Mechanical
- **Electrical Classification:** General Purpose
- **Connection:** Screw Compression Type, accepts up to 14AWG
- **Controls:** Individual Setpoint potentiometers. Deadband and time delay controls
- **Mounting:** DIN rail Standard. Surface Mount optional. Option H26. Nema 4 and 7 also available
- **Weight:** 9.0 OZ, 250 Grams

### Power
- **100-240 VAC. 0.77F Standard, P2 Optional 24 VDC Power Available**
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

<table>
<thead>
<tr>
<th>ACA</th>
<th>RBA</th>
<th>TCA/MVA/DCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- COM</td>
<td>1- +</td>
<td>1- - INPUT</td>
</tr>
<tr>
<td>2- VIN</td>
<td>2- -</td>
<td>2- +INPUT</td>
</tr>
<tr>
<td>3- I IN</td>
<td>3-REF</td>
<td>3- NOT USED</td>
</tr>
</tbody>
</table>
Outline and Mounting

**DIN Mount**

**NEMA 4**

**NEMA 7**

DIMENSIONS