



## ELC-ASD1

Plug-in Signal Conditioners <i>M-UNIT</i>	
<b>DC ALARM</b> (thumbwheel switch adjustment)	MODEL <b>ASD1</b>

### MODEL & SUFFIX CODE SELECTION

MODEL \_\_\_\_\_ ASD1-□□□□□□□□

INPUT \_\_\_\_\_

Current	Voltage
A : 4 – 20mA DC	4 : 0 – 10V DC
	5 : 0 – 5V DC
	6 : 1 – 5V DC

SETPOINT 1 OUTPUT \_\_\_\_\_

1 : Hi (coil energized at alarm)  
 2 : Hi (coil de-energized at alarm)  
 3 : Lo (coil energized at alarm)  
 4 : Lo (coil de-energized at alarm)

SETPOINT 2 OUTPUT \_\_\_\_\_

1 : Hi (coil energized at alarm)  
 2 : Hi (coil de-energized at alarm)  
 3 : Lo (coil energized at alarm)  
 4 : Lo (coil de-energized at alarm)

ON DELAY TIME \_\_\_\_\_

0 : 0.5 seconds	3 : 3 seconds
1 : 1 second	4 : 4 seconds
2 : 2 seconds	

POWER ON DELAY TIME \_\_\_\_\_

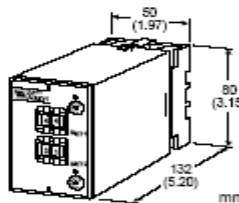
1 : 1 second  
 2 : 2 seconds  
 5 : 5 seconds


POWER INPUT \_\_\_\_\_

K3 : 100 – 120V AC  
 L3 : 200 – 240V AC\*      \*Option /UL not selectable

OPTIONS \_\_\_\_\_

/UL: UL approval





**Functions & Features**

- Providing SPDT relay outputs at preset DC input levels
- Dual trip
- Latching or non-latching output
- Thumbwheel switch setpoint adjustments
- Enclosed relays
- Relays can be powered 110V DC
- Isolation up to 2000V AC
- High-density mounting

**Typical Applications**

- Annunciator
- Various alarm applications

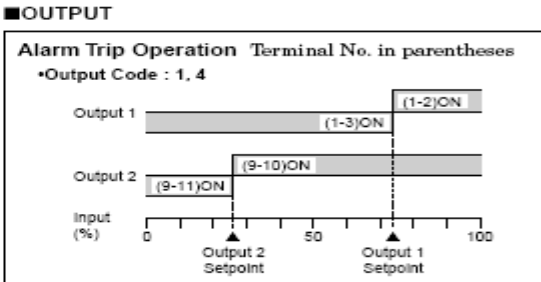
Front LEDs: red light turns on when the coil for output 1 is energized.  
 green light turns on when the coil for output 2 is energized.

### INPUT & OUTPUT

■ **INPUT**

- DC Current: 4 – 20mA DC; shunt resistor attached to input terminals (0.5W)
- Input resistance: 250Ω
- DC Voltage: 0 – 10V DC, 0 – 5V DC or 1 – 5V DC
- Input resistance: 1MΩ minimum

■ **OUTPUT**



### ORDERING INFORMATION

Specify code number and variables.  
 • Code number (e.g. ASD1-61302-K3/UL)

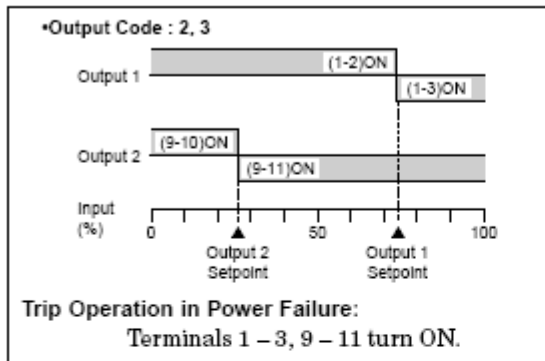
### GENERAL SPECIFICATIONS

Construction: plug-in  
 Connection: M3.5 screw terminals  
 Housing material: flame-resistant resin (black)  
 Isolation: input to output to power  
 Setpoint adjustments: thumbwheel switches (front); 0 – 99% independently; 1% increments  
 Deadband and latching control: 16-position rotary switches (front)

Deadband: 0.5, 1 – 14% independently; 1% increments (SW position 0 = 0.5, A thr. E = 10 thr. 14); [Lo SP + Deadband] ≤ 102

Latching: enabled at the position "F." For resetting, turn the power supply off or set the switch position to other than "F."

Specifications subject to change without notice.



- Relay Contact: 120V AC @5A (cosφ=1)  
240V AC @2.5A (cosφ=1)  
30V DC @5A (resistive load)  
electrical life 10<sup>5</sup> cycles (rate 30/min.)
- Maximum switching voltage: 300V AC or 125V DC
- Maximum switching power: 600VA or 150W
- Minimum load: 5V DC @10mA
- Mechanical life: 5 × 10<sup>7</sup> cycles

**INSTALLATION**

- Power input: operational voltage range for K3: 90 – 132V, L3: 180 – 264V, 47 – 66 Hz, approx. 3VA
- Operating temperature: -5 to +60°C (23 to 140°F)
- Operating humidity: 30 to 90% RH (non-condensing)
- Mounting: surface or DIN rail
- Dimensions: W50×H80×D132 mm (1.97"×3.15"×5.20")  
See General Spec. Sheet Figure C-2.
- Weight: 300 g (0.66 lbs)
- Terminal assignment: See General Spec. Sheet Figure D-2.

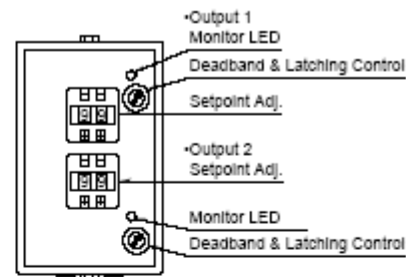
**PERFORMANCE in percentage of span**

- Setpoint accuracy: ±0.5%
- Deadband setpoint accuracy: ±0.3%
- ON delay time accuracy: (0 – 100% at 90% setpoint)  
Code 0: 0.5 ±0.2 sec.  
Code 1, 2, 3, 4: rating ±20%
- Power ON delay time accuracy: rating ±35%
- Trip point repeatability: ±0.05%
- Temp. coefficient: ±0.015%/°C (±0.008%/°F)
- Line voltage effect: ±0.1% over voltage range
- Insulation resistance: ≥100MΩ with 500V DC
- Dielectric strength: 2000V AC @1 minute  
(input to output to power to ground)

**STANDARDS & APPROVALS**

- CE conformity: EMC Directive (89/336/EEC)  
EMI EN50081-2  
EMS EN50082-2 (EN61000-6-2)
- Low Voltage Directive (73/23/EEC)  
Installation category II  
Pollution degree 2  
Max. operating voltage 300V  
Input to output to power – Basic insulation
- Approval: UL/C-UL general safety requirements  
(UL 3111-1, CAN/CSA-C22.2 No.1010-1)

**FRONT PANEL CONFIGURATION**



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**

