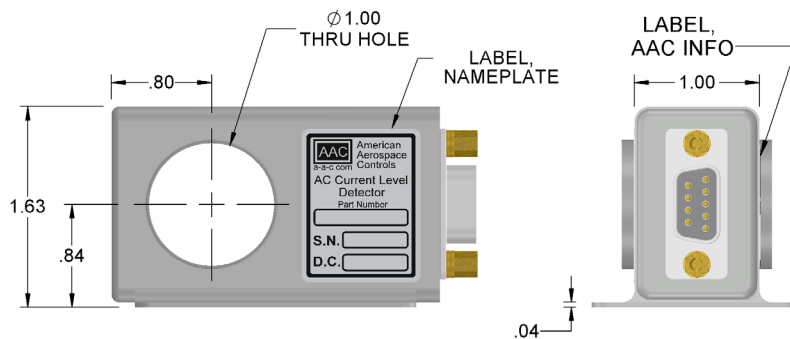
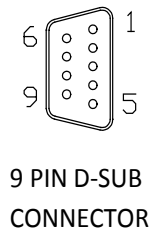
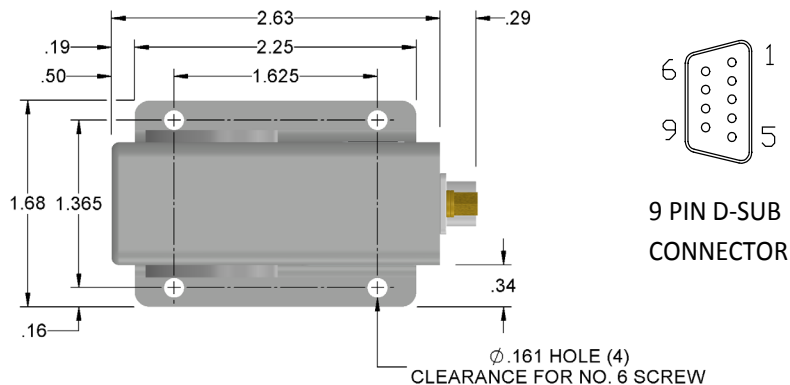


Dimensions in Inches, Tolerances: .XX ± .03 .XXX ± .010

**AC CURRENT LEVEL DETECTOR  
SERIES S1028**



**Crash Safety (Sustained) Test Performed IAW  
RTCA DO-160G, Section 7 at below levels**

Test Levels	FWD	AFT	LAT	UP	DOWN
Sustained	27.21g	N/A	6.8g	4.54g	N/A

**Operational Shock & Crash Safety (Impulse) Test  
Performed IAW RTCA DO-160G, Section 7, Category E**

**Constant Acceleration Test Performed IAW  
Mil-Std-810G Method 513 at below levels**

**Propeller Aircraft Environment**

Test Levels	FWD	AFT	LAT	UP	DOWN
Operational	1.7g	2.9g	5.75g	4.25g	11.5g
Structural	2.55g	4.35g	8.65g	6.37g	17.25g

**Helicopter Environment - Operating @ Structural Levels**

Test Levels	FWD	AFT	LAT	UP	DOWN
Operating	4.0g	4.0g	6.0g	10.5g	4.5g

**ORDERING INFORMATION**

**S1028** - \_\_\_\_\_  
 SERIES —▲——▲—— TRIP POINT AMPS AC  
 Trip point option from 1A to 250Aac, in 1 amp increments.

ie: **S1028-100** Current Level Detector trips  
 @ 100Aac and reset @ 80Aac

**INPUT**

RANGE..... 0 to 250Aac  
 FREQUENCY RANGE..... 360Hz to 900Hz  
 OVERLOAD CURRENT CONTINUOUS..... 500Aac  
 OVERLOAD CURRENT SURGE..... 1000Aac for 6 cycles.

**OUTPUT RELAY**

RELAY CONTACT (SPST)..... Energized at & above trip point  
 CONTACT RATING ..... 1 Amp Resistive, @ 28Vdc. 100mA @28V Lamp  
 200mA Inductive @28Vdc (320mH)  
 250mA @ 115Vac 60 Hz to 400Hz

TRIP POINT (AS CURRENT INCREASES) ..... 1Aac to 250Aac (See Ordering Information)  
 TRIP POINT ACCURACY..... ±1% of trip point. (See note 1)  
 CURRENT CABLE POSITIONING ERROR..... ±0.1% of trip point max. for cable Dia. of .25 inch  
 RESET..... Automatic @ 20% below trip point.  
 RESPONSE TIME (@110% of trip point)..... 100 m-sec max.  
 OUTPUT ISOLATION ..... 350V RMS

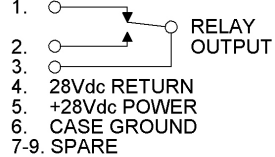
**POWER SUPPLY**

SUPPLY VOLTAGE ..... 28Vdc, Nominal  
 SUPPLY VOLTAGE RANGE ..... 20.5Vdc to 32.2Vdc max  
 CURRENT DRAIN ..... 20mA max.  
 REVERSE POLARITY PROTECTION..... 100µA max. current drain without damage

**ENVIRONMENTAL AND PHYSICAL CHARACTERISTICS**

OPERATING & STORAGE TEMP RANGE..... -55°C to +85°C  
 DIELECTRIC STRENGTH..... 350V DC MIL-STD-202 Method 301  
 MOUNTING ..... Rigid in any position  
 INSULATION RESISTANCE (Test Condition A) ..... 200 M-Ohms min. MIL-STD-202 Method 302  
 WEIGHT ..... 9 oz. Max.  
 FINISH..... Fuse tin plate (lead alloy 4% to 12% max.)

**TERMINAL IDENTIFICATION**



CONTACTS SHOWN WITH INPUT  
 CURRENT ABOVE TRIP POINT  
 (RELAY ENERGIZED)

**Additional Vibration Compliance:**  
**Category 13 Propeller Aircraft**  
 Vibration Exposure Performed I.A.W  
 MIL-STD-810G, Method 514.6,  
 Figure 514.6 D2, Procedure I

**DO-160G ENVIRONMENT**

TEMPERATURE & ALTITUDE  
 TEMPERATURE VARIATION  
 HUMIDITY  
 SHOCK & CRASH SAFETY  
 VIBRATION  
 EXPLOSION PROOFNESS  
 WATER PROOFNESS  
 SAND & DUST  
 FUNGUS RESISTANCE  
 SALT FOG  
 ICING  
 MAGNETIC EFFECT  
 POWER INPUT  
 FIRE FLAMMABILITY  
 VOLTAGE SPIKES  
 AUDIO FREQUENCY CONDUCTED  
 INDUCED SIGNAL SUSCEPTIBILITY  
 RF SUSCEPTIBILITY  
 EMISSION OF RADIO FREQUENCY  
 LIGHTNING INDUCED TRANSIENT  
 ELECTROSTATIC DISCHARGE (ESD)

**SECTION**

4  
5  
6  
7  
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9  
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12  
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**CATEGORY**

B2 & D2  
A & B  
B  
D & E  
U2  
H  
Y  
D  
F  
S  
A  
Z  
B & Z  
C  
A  
B  
ZC  
R  
M  
A3G33  
A

**Note 1:** Specified accuracy includes the combined worst case effects of Current Cable Positioning, Voltage Range, Temperature Range and Input Frequency Range.

<b>AAC</b>	<b>Drawing Number</b> <b>1028-850</b>	<b>Rev.</b> <b>G</b>
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