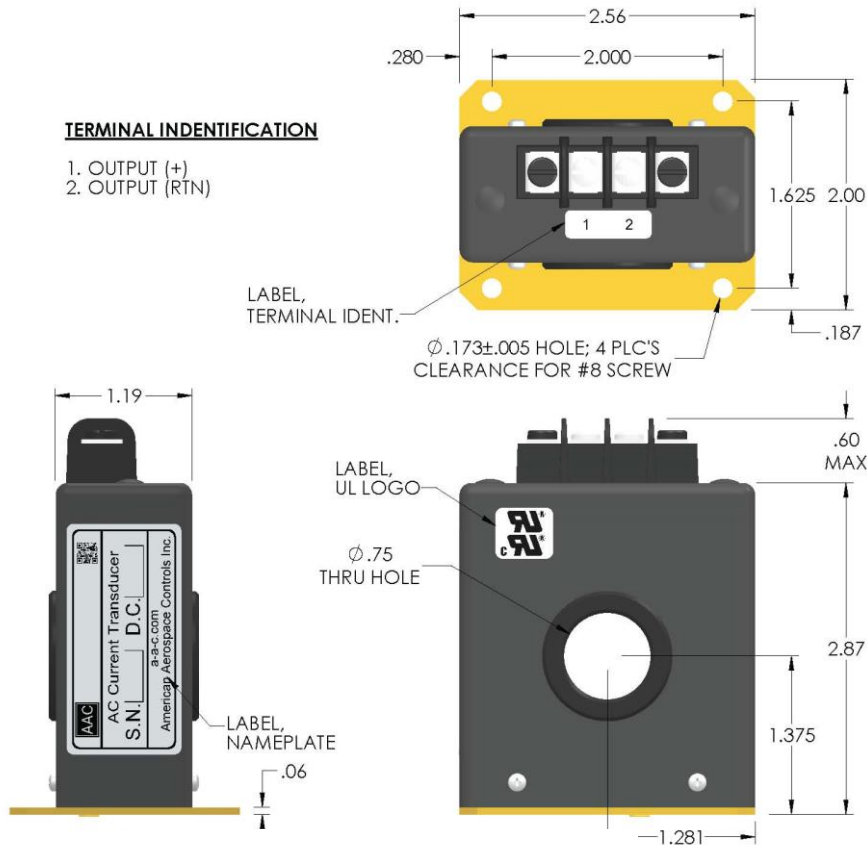


Dimensions in Inches, Tolerances: .XX ± .03 .XXX ± .010

**AC CURRENT TRANSDUCER  
SERIES S383  
4 TO 20mA 2 WIRE LOOP OPERATION**

**TERMINAL IDENTIFICATION**

1. OUTPUT (+)
2. OUTPUT (RTN)



| <u>PART NO.</u> | <u>INPUT RANGE</u> | <u>PART NO.</u> | <u>INPUT RANGE</u> |
|-----------------|--------------------|-----------------|--------------------|
| S383-2A .....   | 0 to 2Aac          | S383-40A .....  | 0 to 40Aac         |
| S383-3A .....   | 0 to 3Aac          | S383-50A .....  | 0 to 50Aac         |
| S383-5A .....   | 0 to 5Aac          | S383-75A .....  | 0 to 75Aac         |
| S383-10A .....  | 0 to 10Aac         | S383-100A ..... | 0 to 100Aac        |
| S383-15A .....  | 0 to 15Aac         | S383-150A ..... | 0 to 150Aac        |
| S383-20A .....  | 0 to 20Aac         | S383-200A ..... | 0 to 200Aac        |
| S383-25A .....  | 0 to 25Aac         | S383-250A ..... | 0 to 250Aac        |
| S383-30A .....  | 0 to 30Aac         |                 |                    |

**INPUT**

|                           |                              |
|---------------------------|------------------------------|
| RANGE .....               | Aac See Table                |
| FREQUENCY .....           | 50 to 60 Hz                  |
| OVERLOAD CONTINUOUS ..... | 500Aac                       |
| OVERLOAD TRANSIENT .....  | 10 Times Range For 250m-sec. |

**OUTPUT**

|                                 |  |
|---------------------------------|--|
| CURRENT SIGNAL .....            | 4 to 20mAac FS (Full Scale)                      |
| ACCURACY .....                  | ±0.5% FS or ±0.1mA max. (Over Temperature Range) |
| RIPPLE .....                    | 10mV RMS max.                                    |
| RESPONSE (10 to 90%) .....      | 100mS max.                                       |
| LOAD RESISTANCE (RL) .....      | 250 Ohms Nominal                                 |
| LOAD RESISTANCE RANGE .....     | 0 to 1400 Ohms (See Note)                        |
| CURRENT SIGNAL @ OVERLOAD ..... | 30mA TYP.  |
| PROTECTION .....                | Reverse Polarity Protected                       |

**POWER SUPPLY (PS)**

|                            |               |
|----------------------------|---------------|
| SUPPLY VOLTAGE .....       | 15Vdc Nominal |
| CURRENT DRAIN .....        | 20mA          |
| SUPPLY VOLTAGE RANGE ..... | 5 to 35Vdc    |

**ENVIRONMENTAL AND PHYSICAL CHARACTERISTICS**

|                               |   |
|-------------------------------|---|
| OPERATING TEMPERATURE RANGE   | -40° to +85°C   |
| STORAGE TEMPERATURE RANGE ... | -40° to +85°C   |
| ISOLATION .....               | Input/Output/Case   |
| INSULATION RESISTANCE .....   | 200 M-Ohms @ 500Vdc   |
| INPUT CONDUCTOR VOLTAGE ..... | 1.5KV max. (5KV max. with insulated cable)                                      |
| CASE ** .....                 | Aluminum type 1100-0 (finish corvel lava black 20-7042HY polyester powder coat) |
| WEIGHT .....                  | 10 oz. Max.   |



**NOTE:**

MINIMUM DC SUPPLY VOLTAGE =  $V_x + .02 (RL)$   
 RL = ANY VALUE BETWEEN 0 AND 1400 OHMS.  
 $V_x = 7V$  FOR P/N S383-2 AND S383-5  
 $V_x = 5V$  FOR P/N S383-10 THRU S383-250

**TERMINAL SCREWS:**

5-40 SCREWS, 3/8" CENTER TO CENTER  
 SPACING ACCEPTS WIRE SIZES UP TO 14 AWG.  
 AND WIRE LUGS UP TO 9/32 WIDE.

**AAC**

**Drawing Number  
S383-1003AM2**

**Rev.  
P**