**A9000Px Power/Signal Adapter Installation Drawing**
for Emerson Transmitters

### Entity Parameters

<table>
<thead>
<tr>
<th>Connection</th>
<th>Power In</th>
<th>Power Out</th>
<th>Bottom Plug</th>
<th>Sensor Out*</th>
<th>Sensor In</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminals</td>
<td>Power and Ground</td>
<td></td>
<td></td>
<td>SIG1 / SIG2 &amp; COM</td>
<td></td>
</tr>
<tr>
<td>Marking</td>
<td>Ex ia IIC T4 Ga</td>
<td>Ex ia IIC T4 Ga</td>
<td>Ex ia IIC T4 Ga</td>
<td>Ex ia IIC T4 Ga</td>
<td>Ex ia IIC T4 Ga</td>
</tr>
<tr>
<td>Parameters</td>
<td>Ul = 28 V</td>
<td>Ul = 28 V</td>
<td>Ul = 7.65 V</td>
<td>Ul = 7.65 V</td>
<td>Ul = 25.2 V</td>
</tr>
<tr>
<td>Ul = 120 mA</td>
<td>li = 170 mA</td>
<td>li = 106 mA</td>
<td>li = 106 mA</td>
<td>li = 127 mA</td>
<td>li = 127 mA</td>
</tr>
<tr>
<td>Pe = 0.84 W</td>
<td>Pe = 1.19 W</td>
<td>Pe = 813 mW</td>
<td>Pe = 813 mW</td>
<td>Pe = 0.8 W</td>
<td>Pe = 0.8 W</td>
</tr>
<tr>
<td>Ci = 9 µF</td>
<td>Ci = 9 µF</td>
<td>Co = 9 µF</td>
<td>Co = 9 µF</td>
<td>Co = 75 µF</td>
<td>Co = 11.1 µF</td>
</tr>
<tr>
<td>Li = 80 µF</td>
<td>Li = 80 µF</td>
<td>Lo = 3.2 mH</td>
<td>Lo = 7.1 mH</td>
<td>Lo = 2.2 mH</td>
<td>Lo = 41.1 mH</td>
</tr>
</tbody>
</table>

**Model A9000PA:**

- **CSA-c/us 17CA70101643**
  - Class I, Div. 1, Groups A, B, C & D, T4;
  - Class II, Div. 1, Groups E, F & G;
  - Class I, Zone 0, A/Ex ia IIC T4 Ga

- **SIRA/ATEX 17ATEX2323X**
  - Ex ia IIC T4 Ga

- **IECEx CSA 17.0038X**
  - Ex ia IIC T4 Ga

**Model A9000PS:**

- **CSA-c/us 17CA70101643**
  - Class I, Div. 1, Groups C & D, T4;
  - Class II, Div. 2, Groups A, B, C & D T4;
  - Class I, Zone 0, A/Ex ia IIB T4 Ga;
  - Class I, Zone 2, A/Ex ic IIC T4 Gc

- **SIRA/ATEX 17ATEX2323X**
  - Ex ia IIC T4 Ga

- **SIRA/ATEX 17ATEX4375X**
  - Ex ia IIC T4 Ga

- **IECEx CSA 17.0038X**
  - Ex ia IIC T4 Ga

*Entity parameters for sensor out terminals S1+ / S1- & S2+ / S2- reflect total combined limitations for both channels.

**Note:** An appropriate I.S. Barrier shall be used to power the Emerson Transmitter.

**Conditions of Safe Use**

- A9000Px shall be installed inside of an enclosure with a minimum IP rating of IP64.
- Field wiring using multiconductor cable shall either have each conductor enclosed in grounded metal shield or each conductor have a minimum of 0.25mm (0.01") insulation thickness.
- If an earth connection is made inside the transmitter housing, it should be made through the same enclosure entry as the external sensors.

**Emerson**

835 Innovation Drive
Knoxville, TN 37932
USA

Agency approved drawing. No changes without prior agency approval.
A9000Px Power/Signal Adapter for Accel Input to the
AMS 9420 Low Power Accel (25 mV/g)

<table>
<thead>
<tr>
<th>1 Sensor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal 1 = Both Red Wires</td>
</tr>
<tr>
<td>Terminal 2 = 1 White Wire</td>
</tr>
<tr>
<td>Terminal 3 = 1 White Wire</td>
</tr>
<tr>
<td>Terminal 4 = Both Black Wires</td>
</tr>
<tr>
<td>Chassis Ground Point = Both Cable Shields</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sensor Connections 2 Sensors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal 1 = Red Wire</td>
</tr>
<tr>
<td>Terminal 2 = 1 White Wire</td>
</tr>
<tr>
<td>Terminal 3 = 1 White Wire</td>
</tr>
<tr>
<td>Terminal 4 = Both Black Wires</td>
</tr>
<tr>
<td>Chassis Ground Point = Both Cable Shields</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 Sensor with Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal 1 = Red Wire</td>
</tr>
<tr>
<td>Terminal 2 = White Wire</td>
</tr>
<tr>
<td>Terminal 3 = Green Wire</td>
</tr>
<tr>
<td>Terminal 4 = Black Wire</td>
</tr>
<tr>
<td>Chassis Ground Point = Cable Shield</td>
</tr>
</tbody>
</table>

**Note:**
Sensors are mounted to equipment being monitored.

**Wiring internal to Transmitter**

**Field Wiring**

**Hazardous-area terminals**

**Safe-area terminals**

**Shield**

**I.S. Barrier**

**24VDC Nom.**

**Field Wiring**

**Note:**
V- will be tied to Earth ground if Barrier is mounted to Din Rail that is connected to Earth Ground.
Sensor Connections

1 Sensor
S1+ = Red Wire (Power)
S1- = Blue Wire (Signal)
Shield = Green Wire (Chassis Ground)

2 Sensors
S2+ = Red Wire (Power)
S2- = Blue Wire (Signal)
Shield = Green Wire (Chassis Ground)

From A9000PS to AMS 9420
Sig 1 to Term Block Terminal 2 = Gray Wire
Sig 2 to Term Block Terminal 3 = Blue Wire
Com to Term Block Terminal 4 = Black Wire

Wiring internal to Transmitter

Field Wiring

Chassis Ground Point
Ground Lug

Note:
- V- will be tied to Earth ground if Barrier is mounted to Din Rail that is connected to Earth Ground.
- Sensors are mounted to equipment being monitored.
A9000PS-V Power/Signal Adapter for Volts Input
External Device with equivalent Entity Parameters

Sensor Connections

1 Sensor
S1+ = Red Wire (Power)
S1- = Green Wire (Chassis Ground)
S2- = Blue Wire (Signal)

2 Sensors
S1+ = Red Wire (Power)
S2+ = Blue Wire (Signal)
S2- = Green Wire (Chassis Ground)

From A9000 to AMS 9420
Sig 1 to Term Block Terminal 2 – Gray Wire
Sig 2 to Term Block Terminal 3 – Blue Wire
Com to Term Block Terminal 4 – Black Wire

Wiring internal to Transmitter

Field Wiring

Note:
V+ will be tied to Earth ground if Barrier is mounted to Din Rail that is connected to Earth Ground.

Note:
VOLTS input must maintain the entity parameters listed on Page 1.
A9000Px Power Adapter for Emerson Transmitters

Sensor Connections
Sensors are internal to the transmitter

Wiring internal to Transmitter

Field Wiring

Note:
V- will be tied to Earth ground if Barrier is mounted to Din Rail that is connected to Earth Ground.