APPLICATION

The AEM-8120 series and AEM-8240 series transformers are the only recommended transformers for use with the CPM-8000 Series Controller, MPC-8000 Series Controller and the ADM-8304 MPC-8000 Repeater. These transformers provide low voltage power sources from 50 to 100 Va. Table 1 indicates the number of DLC modules that can be used with each of the transformers.

SPECIFICATIONS

Ambient Temperature Limits:
  Shipping and Storage, -40 to 140°F (-40 to 60°C) 10% to 90% RH (non-condensing)
  Operating, -40 to 135°F (-40 to 57°C) 10% to 90% RH (non-condensing)
Dimensions: See Figure 1 and Table 1.
Mounting: On surface free of vibration.
Shipping Weight: See Table 1.

OPTIONS

None

ACCESSORIES

None

PRE-INSTALLATION

Inspection

Visually inspect the carton for damage. If damaged, notify the appropriate carrier immediately. If undamaged, Open the carton and visually inspect the device for obvious defects. Return damaged or defective products.

Required Installation Items

- Tools (not provided):
  Volt-Ohm meter
  Appropriate screwdriver for mounting screws
  Appropriate drill and drill bit for mounting screws
- Wire nuts (not provided)
- Mounting screws (not provided)
On October 1st, 2009, TAC became the Buildings business of its parent company Schneider Electric. This document reflects the visual identity of Schneider Electric, however there remains references to TAC as a corporate brand in the body copy. As each document is updated, the body copy will be changed to reflect appropriate corporate brand changes.

### INSTALLATION

**Caution:**

1. Installer must be a qualified, experienced technician.
2. Disconnect power supply before installation to prevent electrical shock and equipment damage.
3. Make all connections in accordance with the job wiring diagram, and in accordance with national and local electrical codes.
4. Do not exceed ratings of the device.

#### Mounting

**Location:** This transformer must be mounted on a vibration free surface. Holes are provided on the base for surface mounting. The transformer should be mounted in close proximity of the CPM/MPC Controller or MPC-8000 Repeater (within 10 feet). For dimensions, see Table 1 and Figure 1.

#### Wiring

A separate AEM series 24 Vac transformer must be provided for each CPM-8000 Series Controller, each MPC-8000 Series Controller and each ADM-8304 MPC-8000 Repeater. The secondary of each transformer can only be connected to the CPM, MPC or Repeater that it serves. The supply to the transformer should be provided with a circuit breaker or disconnect (does not have to be dedicated). Class 1 wiring must be used for the transformer wiring. The primary voltages are 120 or 240 Vac. Secondary voltage is 24 Vac. The enclosed connections are pigtails for primary wiring, and the screw terminals are for secondary wiring.

#### Checkout

If secondary voltage is not present, check the primary voltage as shown in Table 1.

### CALIBRATION

Not applicable.

### Table 1

<table>
<thead>
<tr>
<th>Part Number</th>
<th>No. of Modules on DLC Line</th>
<th>Electrical Primary Voltage</th>
<th>Secondary Volts</th>
<th>VA</th>
<th>A</th>
<th>B</th>
<th>Physical Dimensions</th>
<th>Shipping Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEM-8120-005</td>
<td>1-20*</td>
<td>120 50/60 Hz</td>
<td>24</td>
<td>50</td>
<td>5-1/2 (140)</td>
<td>4-3/8 (111)</td>
<td>4.6 lbs. (2.09 kg)</td>
<td></td>
</tr>
<tr>
<td>AEM-8240-005</td>
<td>1-20*</td>
<td>240 50/60 Hz</td>
<td>24</td>
<td>50</td>
<td>5-1/2 (140)</td>
<td>4-3/8 (111)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AEM-8120-010</td>
<td>21-40*</td>
<td>120 50/60 Hz</td>
<td>24</td>
<td>100</td>
<td>5-15/16 (151)</td>
<td>4-11/16 (119)</td>
<td>5.5 lbs. (2.5 kg)</td>
<td></td>
</tr>
<tr>
<td>AEM-8240-010</td>
<td>21-40*</td>
<td>240 50/60 Hz</td>
<td>24</td>
<td>100</td>
<td>5-15/16 (151)</td>
<td>4-11/16 (119)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Each ADM-8304 MPC-8000 Repeater counts as one module. Each CCM-8204 four output DO module counts as two modules. The total length of the DLC line, along with the wire gauge, must also be considered when calculating the number of DLC modules that can be used with each transformer. Refer to the CPM and MPC wiring instructions for selection requirements.

![Figure-1 Mounting Dimensions.](image)