

## 50 to 5,000 VA

### Applications

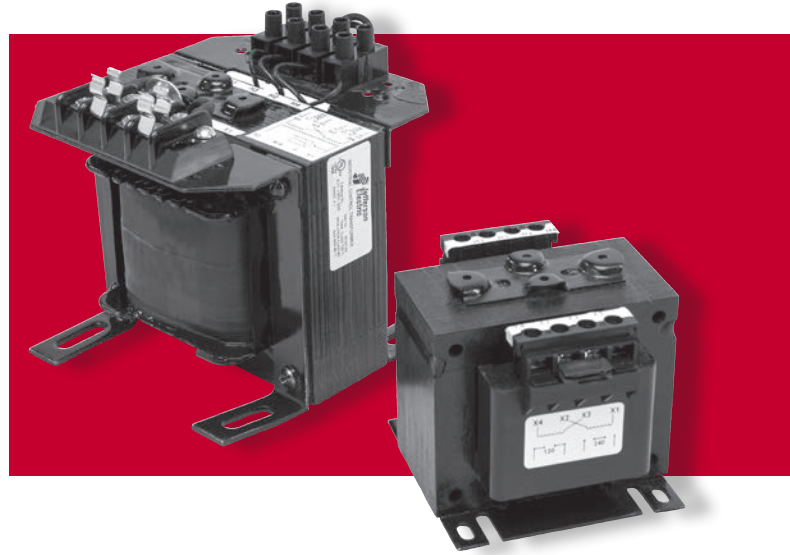
- For commercial and industrial control applications including; control panels, conveyor systems, machine tool equipment, pump systems, and commercial air conditioning applications

### Specifications

- Core and coil
- 50/60 Hz operation
- Machine wound copper coils
- Cores of high grade silicon steel
- 55°C temperature rise for 50 – 100 VA, insulation class of 105°C
- 80°C temperature rise for 150 – 750 VA, insulation class of 130°C
- 115°C temperature rise for 1,000 – 5,000 VA, insulation class of 180°C
- Phil-Slot-Hex head terminal screws
- Cores of high quality electrical steel
- Finger safe terminals on <=2kVA units (without secondary fuse clips)

### Features, Functions, Benefits

- Permanently affixed wiring diagram
- Finger safe terminals on units 350 VA and below
- Slotted mounting holes for quick and easy mounting
- Secondary fuse clips standard on most units. The fuse clip is for a 13/32 x 1-1/2 midget fuse. The secondary fuse style is a matter of customer preference usually either time delay or fast acting.
- Wall mount design through 25 kVA
- Many sizes in stock and available for immediate shipment
- Units 2,000 VA and less are UPS shippable



### Standards

- Built in accordance with ANSI, and UL standards
- UL and cUL listed

### Options and Accessories

- Other sizes and voltages available
- Units can be ordered with primary fuse blocks and covers factory installed
- Optional primary fuse block for 3/32 x 1-1/2 class cc rejection fuse available
- CE Marked units available

### Approvals



## Enclosure Figures

Figure 30

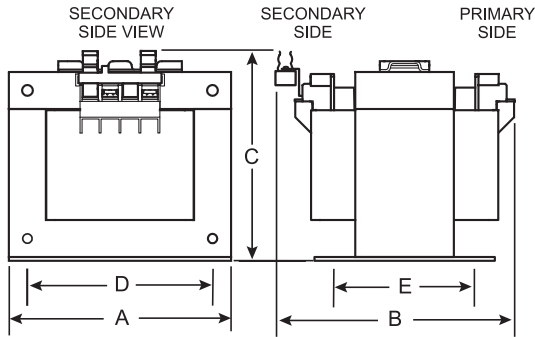
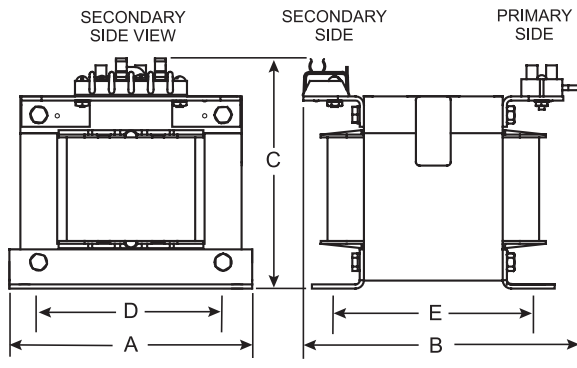


Figure 31



**NOTE:** Models with catalog numbers ending in “301” do not have a secondary fuseclip

## Model Numbers Defined

631-XXYY-ABC

Single-Phase, Encapsulated

| kVA Rating / XX |    | kVA Rating / XX |    |
|-----------------|----|-----------------|----|
| 0.050           | 11 | 0.500           | 19 |
| 0.075           | 12 | 0.750           | 20 |
| 0.100           | 13 | 1.000           | 21 |
| 0.150           | 14 | 1.500           | 22 |
| 0.200           | 15 | 2.000           | 23 |
| 0.250           | 16 | 3.000           | 24 |
| 0.300           | 17 | 4.000           | 25 |
| 0.350           | 18 | 5.000           | 26 |

| Primary                                 | Secondary                |    |
|---|--------------------------|----|
| none                                    | none                     | 00 |
| 220/230/240<br>x440/460/480             | 110/115/120              | 01 |
| 240x480                                 | 24                       | 02 |
| 120x240                                 | 24                       | 03 |
| 550/575/600                             | 110/115/120              | 04 |
| 277x208                                 | 120                      | 05 |
| 460x230x208                             | 115                      | 06 |
| 230x460x575                             | 95, 115                  | 07 |
| 380x400x415                             | 110x220                  | 08 |
| 200/208<br>x220/230/240<br>x440/460/480 | 23/24/25,<br>110/115/120 | 09 |
| 240x480                                 | 120x240                  | 10 |
| 208-600                                 | 85-130                   | 11 |
| 220/230/240                             | 110/115/120              | 12 |
| x440/460/480<br>240x347x380             | x220/230/240<br>120x240  | 13 |

### Variations

|  |     |
|--|-----|
| Secondary fuseclip included                              | 300 |
| No secondary fuseclip possible                           | 301 |
| Primary fuse kit installed<br>with secondary fuseclip    | 500 |
| Primary fuse kit installed<br>without secondary fuseclip | 501 |

**Industrial Control Transformers**

| Primary: 220/230/240x440/460/480 V Secondary:110/115/120 V |                |                  |                   |                  |                  |            |            |              |           |            |                |
|--|----------------|------------------|-------------------|------------------|------------------|------------|------------|--------------|-----------|------------|----------------|
| kVA  | Catalog Number | Enclosure Figure | Height (A) inches | Width (B) inches | Depth (C) inches | (D) inches | (E) inches | Est Ship Wgt | Temp Rise | Insulation | Wiring Diagram |
| 0.05   | 631-1101-300   | 30               | 3.64              | 3                | 3.46             | 2          | 2.5        | 2.6          | 55        | 180°C      | Group AA       |
| 0.075  | 631-1201-300   | 30               | 4.1               | 3                | 3.46             | 2.5        | 2.5        | 3.5          | 55        | 180°C      | Group AA       |
| 0.1  | 631-1301-300   | 30               | 4.1               | 3.31             | 3.46             | 2.38       | 2.81       | 4.2          | 55        | 180°C      | Group AA       |
| 0.15   | 631-1401-300   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 6.7          | 80        | 180°C      | Group AA       |
| 0.2  | 631-1501-300   | 30               | 4.37              | 4.5              | 4.46             | 2.5        | 3.75       | 8.5          | 80        | 180°C      | Group AA       |
| 0.25   | 631-1601-300   | 30               | 4.87              | 4.5              | 4.47             | 2.88       | 3.75       | 10           | 80        | 180°C      | Group AA       |
| 0.3  | 631-1701-300   | 30               | 4.87              | 4.5              | 4.47             | 3.25       | 3.75       | 11.3         | 80        | 180°C      | Group AA       |
| 0.35   | 631-1801-300   | 30               | 5.6               | 4.5              | 4.47             | 3.75       | 3.75       | 13.6         | 80        | 180°C      | Group AA       |
| 0.5  | 631-1901-300   | 31               | 5.53              | 5.25             | 5.66             | 3.88       | 4.38       | 19.2         | 80        | 180°C      | Group AA       |
| 0.75   | 631-2001-300   | 31               | 6.77              | 5.25             | 5.66             | 5.38       | 4.38       | 28.1         | 80        | 180°C      | Group AA       |
| 1  | 631-2101-300   | 31               | 6.02              | 6.37             | 6.57             | 4          | 6.13       | 28.1         | 115       | 180°C      | Group AA       |
| 1.5  | 631-2201-300   | 31               | 7.16              | 6.75             | 6.57             | 4.5        | 6.13       | 30           | 115       | 180°C      | Group AA       |
| 2  | 631-2301-300   | 31               | 8.01              | 7.0              | 6.64             | 5.37       | 6.13       | 38           | 115       | 180°C      | Group AA       |
| 3  | 631-2401-301   | 31               | 7.01              | 9                | 8.94             | 4.25       | 6.5        | 53           | 115       | 180°C      | Group AA       |
| 5  | 631-2601-301   | 31               | 8                 | 9                | 8.94             | 7.25       | 7.5        | 89           | 115       | 180°C      | Group AA       |
| Primary: 240 x 480 V Secondary: 24 V                       |                |                  |                   |                  |                  |            |            |              |           |            |                |
| 0.05   | 631-1102-300   | 30               | 3.64              | 3                | 3.46             | 2          | 2.5        | 2            | 55        | 180°C      | Group BB       |
| 0.075  | 631-1202-300   | 30               | 4.1               | 3                | 3.46             | 2.5        | 2.5        | 2.5          | 55        | 180°C      | Group BB       |
| 0.1  | 631-1302-300   | 30               | 4.1               | 3.31             | 3.46             | 2.38       | 2.81       | 2.38         | 55        | 180°C      | Group BB       |
| 0.15   | 631-1402-300   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 2.88         | 80        | 180°C      | Group BB       |
| 0.2  | 631-1502-300   | 30               | 4.37              | 4.5              | 4.46             | 2.5        | 3.75       | 2.5          | 80        | 180°C      | Group BB       |
| 0.25   | 631-1602-300   | 30               | 4.87              | 4.5              | 4.47             | 2.88       | 3.75       | 2.88         | 80        | 180°C      | Group BB       |
| 0.3  | 631-1702-300   | 30               | 4.87              | 4.5              | 4.47             | 3.25       | 3.75       | 3.25         | 80        | 180°C      | Group BB       |
| 0.35   | 631-1802-300   | 30               | 5.6               | 4.5              | 4.47             | 3.75       | 3.75       | 3.75         | 80        | 180°C      | Group BB       |
| 0.5  | 631-1902-300   | 31               | 5.53              | 5.25             | 5.66             | 3.88       | 4.38       | 3.88         | 80        | 180°C      | Group BB       |
| 0.75   | 631-2002-301   | 31               | 6.77              | 5.25             | 5.66             | 5.38       | 4.38       | 5.38         | 80        | 180°C      | Group BB       |
| Primary: 120 x 240 V Secondary: 24 V                       |                |                  |                   |                  |                  |            |            |              |           |            |                |
| 0.05   | 631-1103-300   | 30               | 3.64              | 3                | 3.46             | 2          | 2.5        | 2            | 55        | 180°C      | Group CC       |
| 0.075  | 631-1203-300   | 30               | 4.1               | 3                | 3.46             | 2.5        | 2.5        | 2.5          | 55        | 180°C      | Group CC       |
| 0.1  | 631-1303-300   | 30               | 4.1               | 3.31             | 3.46             | 2.38       | 2.81       | 2.38         | 55        | 180°C      | Group CC       |
| 0.15   | 631-1403-300   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 2.88         | 80        | 180°C      | Group CC       |
| 0.2  | 631-1503-300   | 30               | 4.37              | 4.5              | 4.46             | 2.5        | 3.75       | 2.5          | 80        | 180°C      | Group CC       |
| 0.25   | 631-1603-300   | 30               | 4.87              | 4.5              | 4.47             | 2.88       | 3.75       | 2.88         | 80        | 180°C      | Group CC       |
| 0.3  | 631-1703-300   | 30               | 4.87              | 4.5              | 4.47             | 3.25       | 3.75       | 3.25         | 80        | 180°C      | Group CC       |
| 0.35   | 631-1803-300   | 30               | 5.6               | 4.5              | 4.47             | 3.75       | 3.75       | 3.75         | 80        | 180°C      | Group CC       |
| 0.5  | 631-1903-300   | 31               | 5.53              | 5.25             | 5.66             | 3.88       | 4.38       | 3.88         | 80        | 180°C      | Group CC       |
| 0.75   | 631-2003-301   | 31               | 6.77              | 5.25             | 5.66             | 5.38       | 4.38       | 5.38         | 80        | 180°C      | Group CC       |

See website for additional kVA, copper windings and temperature options.

Housing dimensions subject to change without notice. Consult website or factory where dimensions are critical.

Use the "Find a Product" tool for detailed specification sheets.

For further information, contact an Application Engineer at 800-892-3755, [technical\\_services@jeffersonelectric.com](mailto:technical_services@jeffersonelectric.com)



**Industrial Control Transformers**

| Primary: 550/575/600 V Secondary: 110/115/120 V |                |                  |                   |                  |                  |            |            |              |              |            |                |
|---|----------------|------------------|-------------------|------------------|------------------|------------|------------|--------------|--------------|------------|----------------|
| kVA   | Catalog Number | Enclosure Figure | Height (A) inches | Width (B) inches | Depth (C) inches | (D) inches | (E) inches | Est Ship Wgt | Temp Rise °C | Insulation | Wiring Diagram |
| 0.05  | 631-1104-300   | 30               | 3.64              | 3                | 3.46             | 2          | 2.5        | 2.6          | 55           | 180°C      | Group EE       |
| 0.075   | 631-1204-300   | 30               | 4.1               | 3                | 3.46             | 2.5        | 2.5        | 3.5          | 55           | 180°C      | Group EE       |
| 0.1   | 631-1304-300   | 30               | 4.1               | 3.31             | 3.46             | 2.38       | 2.81       | 4.2          | 55           | 180°C      | Group EE       |
| 0.15  | 631-1404-300   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 6.7          | 80           | 180°C      | Group EE       |
| 0.2   | 631-1504-300   | 30               | 4.37              | 4.5              | 4.46             | 2.5        | 3.75       | 8.5          | 80           | 180°C      | Group EE       |
| 0.25  | 631-1604-300   | 30               | 4.87              | 4.5              | 4.47             | 2.88       | 3.75       | 10           | 80           | 180°C      | Group EE       |
| 0.3   | 631-1704-300   | 30               | 4.87              | 4.5              | 4.47             | 3.25       | 3.75       | 11.3         | 80           | 180°C      | Group EE       |
| 0.35  | 631-1804-300   | 30               | 5.6               | 4.5              | 4.47             | 3.75       | 3.75       | 13.6         | 80           | 180°C      | Group EE       |
| 0.5   | 631-1904-300   | 31               | 5.53              | 5.25             | 5.66             | 3.88       | 4.38       | 19.2         | 80           | 180°C      | Group EE       |
| 0.75  | 631-2004-300   | 31               | 6.77              | 5.25             | 5.66             | 5.38       | 4.38       | 28.1         | 80           | 180°C      | Group EE       |
| Primary: 208 x 277 V Secondary: 120 V           |                |                  |                   |                  |                  |            |            |              |              |            |                |
| 0.05  | 631-1105-300   | 30               | 3.64              | 3                | 3.46             | 2          | 2.5        | 2.6          | 55           | 180°C      | Group FF       |
| 0.075   | 631-1205-300   | 30               | 4.1               | 3                | 3.46             | 2.5        | 2.5        | 3.5          | 55           | 180°C      | Group FF       |
| 0.1   | 631-1305-300   | 30               | 4.1               | 3.31             | 3.46             | 2.38       | 2.81       | 4.2          | 55           | 180°C      | Group FF       |
| 0.15  | 631-1405-300   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 6.7          | 80           | 180°C      | Group FF       |
| 0.2   | 631-1505-300   | 30               | 4.37              | 4.5              | 4.46             | 2.5        | 3.75       | 8.5          | 80           | 180°C      | Group FF       |
| 0.25  | 631-1605-300   | 30               | 4.87              | 4.5              | 4.47             | 2.88       | 3.75       | 10           | 80           | 180°C      | Group FF       |
| 0.3   | 631-1705-300   | 30               | 4.87              | 4.5              | 4.47             | 3.25       | 3.75       | 11.3         | 80           | 180°C      | Group FF       |
| 0.35  | 631-1805-300   | 30               | 5.6               | 4.5              | 4.47             | 3.75       | 3.75       | 13.6         | 80           | 180°C      | Group FF       |
| 0.5   | 631-1905-300   | 31               | 5.53              | 5.25             | 5.66             | 3.88       | 4.38       | 19.2         | 80           | 180°C      | Group FF       |
| 0.75  | 631-2005-300   | 31               | 6.77              | 5.25             | 5.66             | 5.38       | 4.38       | 28.1         | 80           | 180°C      | Group FF       |
| Primary: 208 x 230 x 460 V Secondary: 115 V     |                |                  |                   |                  |                  |            |            |              |              |            |                |
| 0.05  | 631-1106-300   | 30               | 3.64              | 3                | 3.46             | 2          | 2.5        | 2.6          | 55           | 180°C      | Group GG       |
| 0.075   | 631-1206-300   | 30               | 4.1               | 3.31             | 3.46             | 2.38       | 2.81       | 4.2          | 55           | 180°C      | Group GG       |
| 0.1   | 631-1306-300   | 30               | 4.1               | 3.31             | 3.46             | 2.38       | 2.81       | 4.2          | 55           | 180°C      | Group GG       |
| 0.15  | 631-1406-300   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 6.7          | 80           | 180°C      | Group GG       |
| 0.2   | 631-1506-300   | 30               | 4.87              | 4.5              | 4.47             | 2.88       | 3.75       | 10           | 80           | 180°C      | Group GG       |
| 0.25  | 631-1606-300   | 30               | 4.87              | 4.5              | 4.47             | 3.25       | 3.75       | 11.3         | 80           | 180°C      | Group GG       |
| 0.3   | 631-1706-300   | 30               | 5.6               | 4.5              | 4.47             | 3.75       | 3.75       | 13.6         | 80           | 180°C      | Group GG       |
| 0.35  | 631-1806-300   | 30               | 5.6               | 4.5              | 4.47             | 4.75       | 3.75       | 15.6         | 80           | 180°C      | Group GG       |
| 0.5   | 631-1906-300   | 31               | 6.53              | 5.25             | 5.66             | 4.38       | 4.38       | 21.5         | 80           | 180°C      | Group GG       |
| 0.75  | 631-2006-300   | 31               | 7.25              | 5.25             | 5.66             | 5.88       | 4.38       | 30           | 80           | 180°C      | Group GG       |
| 1   | 631-2106-300   | 31               | 6.02              | 6.37             | 6.57             | 4          | 6.13       | 28.1         | 115          | 180°C      | Group GG       |
| 1.5   | 631-2206-300   | 31               | 6.02              | 6.37             | 6.57             | 4          | 6.13       | 28.1         | 115          | 180°C      | Group GG       |
| 2   | 631-2306-300   | 31               | 7.79              | 6.37             | 6.57             | 5.13       | 6.13       | 38           | 115          | 180°C      | Group GG       |
| 3   | 631-2406-301   | 31               | 7.01              | 9                | 8.74             | 4.25       | 6.5        | 53           | 115          | 180°C      | Group GG       |
| 5   | 631-2606-301   | 31               | 8                 | 9                | 8.74             | 7.25       | 7.5        | 89           | 115          | 180°C      | Group GG       |
| Primary: 230 x 460 x 575 V Secondary: 95, 115 V |                |                  |                   |                  |                  |            |            |              |              |            |                |
| 1   | 631-2107-301   | 31               | 6.02              | 6.37             | 6.57             | 4          | 6.13       | 28.1         | 115          | 180°C      | Group HH       |
| 1.5   | 631-2207-301   | 31               | 7.79              | 6.37             | 6.57             | 5.13       | 6.13       | 38           | 115          | 180°C      | Group HH       |
| 2   | 631-2307-301   | 31               | 7.01              | 9                | 8.74             | 4.25       | 6.5        | 53           | 115          | 180°C      | Group HH       |
| 3   | 631-2407-301   | 31               | 8                 | 9                | 8.74             | 7.25       | 7.5        | 89           | 115          | 180°C      | Group HH       |
| 5   | 631-2607-301   | 31               | 9                 | 9                | 8.74             | 8.25       | 7.5        | 100          | 115          | 180°C      | Group HH       |

See website for additional kVA, copper windings and temperature options.  
 Housing dimensions subject to change without notice. Consult website or factory where dimensions are critical.  
 Use the "Find a Product" tool for detailed specification sheets.  
 For further information, contact an Application Engineer at 800-892-3755, [technical\\_services@jeffersonelectric.com](mailto:technical_services@jeffersonelectric.com)

**Industrial Control Transformers**

| <b>Primary: 380 x 400 x 415 V Secondary: 110 x 220 V</b>  |                |                  |                   |                  |                  |            |            |              |              |            |                |
|---|----------------|------------------|-------------------|------------------|------------------|------------|------------|--------------|--------------|------------|----------------|
| kVA   | Catalog Number | Enclosure Figure | Height (A) inches | Width (B) inches | Depth (C) inches | (D) inches | (E) inches | Est Ship Wgt | Temp Rise °C | Insulation | Wiring Diagram |
| 0.05  | 631-1108-301   | 30               | 3.64              | 3                | 3.46             | 2          | 2.5        | 2.6          | 55           | 180°C      | Group II       |
| 0.075   | 631-1208-301   | 30               | 4.1               | 3                | 3.46             | 2.5        | 2.5        | 3.5          | 55           | 180°C      | Group II       |
| 0.1   | 631-1308-301   | 30               | 4.1               | 3.31             | 3.46             | 2.38       | 2.81       | 4.2          | 55           | 180°C      | Group II       |
| 0.15  | 631-1408-301   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 6.7          | 80           | 180°C      | Group II       |
| 0.2   | 631-1508-301   | 30               | 4.37              | 4.5              | 4.46             | 2.5        | 3.75       | 8.5          | 80           | 180°C      | Group II       |
| 0.25  | 631-1608-301   | 30               | 4.87              | 4.5              | 4.47             | 2.88       | 3.75       | 10           | 80           | 180°C      | Group II       |
| 0.3   | 631-1708-301   | 30               | 4.87              | 4.5              | 4.47             | 3.25       | 3.75       | 11.3         | 80           | 180°C      | Group II       |
| 0.35  | 631-1808-301   | 30               | 5.6               | 4.5              | 4.47             | 3.75       | 3.75       | 13.6         | 80           | 180°C      | Group II       |
| 0.5   | 631-1908-301   | 31               | 5.53              | 5.25             | 5.66             | 3.88       | 4.38       | 19.2         | 80           | 180°C      | Group II       |
| 0.75  | 631-2008-301   | 31               | 6.77              | 5.25             | 5.66             | 5.38       | 4.38       | 28.1         | 80           | 180°C      | Group II       |
| <b>Primary: 200/208x220/230/240x440/460/480 V Secondary: 23/24/25 (Full Load),110/115/120 V</b> |                |                  |                   |                  |                  |            |            |              |              |            |                |
| 0.05  | 631-1109-301   | 30               | 4.6               | 3                | 3.46             | 2.88       | 2.5        | 4.2          | 55           | 180°C      | Group JJ       |
| 0.075   | 631-1209-301   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 6.7          | 55           | 180°C      | Group JJ       |
| 0.1   | 631-1309-301   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 6.7          | 55           | 180°C      | Group JJ       |
| 0.15  | 631-1409-301   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 6.7          | 80           | 180°C      | Group JJ       |
| 0.2   | 631-1509-301   | 30               | 4.87              | 4.5              | 4.47             | 2.88       | 3.75       | 10           | 80           | 180°C      | Group JJ       |
| 0.25  | 631-1609-301   | 30               | 5.6               | 4.5              | 4.47             | 3.75       | 3.75       | 13.6         | 80           | 180°C      | Group JJ       |
| 0.3   | 631-1709-301   | 31               | 5.53              | 5.25             | 5.66             | 3.88       | 4.38       | 19.2         | 80           | 180°C      | Group JJ       |
| 0.35  | 631-1809-301   | 31               | 5.53              | 5.25             | 5.66             | 3.88       | 4.38       | 19.2         | 80           | 180°C      | Group JJ       |
| 0.5   | 631-1909-301   | 31               | 6.53              | 5.25             | 5.66             | 4.38       | 4.3        | 21.5         | 80           | 180°C      | Group JJ       |
| <b>Primary: 240 x 480 V Secondary: 120/240 V</b>  |                |                  |                   |                  |                  |            |            |              |              |            |                |
| 0.05  | 631-1110-301   | 30               | 3.64              | 3                | 3.46             | 2          | 2.5        | 2.6          | 55           | 180°C      | Group KK       |
| 0.075   | 631-1210-301   | 30               | 4.1               | 3                | 3.46             | 2.5        | 2.5        | 3.5          | 55           | 180°C      | Group KK       |
| 0.1   | 631-1310-301   | 30               | 4.1               | 3.31             | 3.46             | 2.38       | 2.81       | 4.2          | 55           | 180°C      | Group KK       |
| 0.15  | 631-1410-301   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 6.7          | 80           | 180°C      | Group KK       |
| 0.2   | 631-1510-301   | 30               | 4.37              | 4.5              | 4.46             | 2.5        | 3.75       | 8.5          | 80           | 180°C      | Group KK       |
| 0.25  | 631-1610-301   | 30               | 4.87              | 4.5              | 4.47             | 2.88       | 3.75       | 10           | 80           | 180°C      | Group KK       |
| 0.3   | 631-1710-301   | 30               | 4.87              | 4.5              | 4.47             | 3.25       | 3.75       | 11.3         | 80           | 180°C      | Group KK       |
| 0.35  | 631-1810-301   | 30               | 5.6               | 4.5              | 4.47             | 3.75       | 3.75       | 13.6         | 80           | 180°C      | Group KK       |
| 0.5   | 631-1910-301   | 31               | 5.53              | 5.25             | 5.66             | 3.88       | 4.38       | 19.2         | 80           | 180°C      | Group KK       |
| 0.75  | 631-2010-301   | 31               | 6.77              | 5.25             | 5.66             | 5.38       | 4.38       | 28.1         | 80           | 180°C      | Group KK       |
| 1   | 631-2110-301   | 31               | 5.78              | 6.75             | 5.57             | 4          | 6.13       | 28.1         | 115          | 180°C      | Group KK       |
| 1.5   | 631-2210-301   | 31               | 6.79              | 6.75             | 6.57             | 4.5        | 6.13       | 30           | 115          | 180°C      | Group KK       |
| 3   | 631-2410-301   | 31               | 6.01              | 9                | 8.75             | 4.25       | 6.25       | 53           | 115          | 180°C      | Group KK       |
| <b>Primary: 208-600 V Secondary: 85 - 130 V</b>   |                |                  |                   |                  |                  |            |            |              |              |            |                |
| 0.05  | 631-1111-301   | 30               | 4.1               | 3.31             | 3.46             | 2.38       | 2.81       | 4.2          | 55           | 180°C      | Group LL       |
| 0.1   | 631-1311-301   | 30               | 4.54              | 3.75             | 3.94             | 2.88       | 3.13       | 6.7          | 55           | 180°C      | Group LL       |
| 0.15  | 631-1411-301   | 30               | 4.87              | 4.5              | 4.47             | 2.88       | 3.75       | 10           | 80           | 180°C      | Group LL       |
| 0.25  | 631-1611-301   | 30               | 5.53              | 5.25             | 5.66             | 3.88       | 4.38       | 19.2         | 80           | 180°C      | Group LL       |
| 0.35  | 631-1811-301   | 31               | 6.53              | 5.25             | 5.66             | 4.38       | 4.38       | 21.5         | 80           | 180°C      | Group LL       |
| 0.5   | 631-1911-301   | 31               | 7.25              | 5.25             | 5.66             | 5.88       | 4.38       | 30           | 80           | 180°C      | Group LL       |
| 0.75  | 631-2011-301   | 31               | 6.02              | 6.37             | 6.57             | 4          | 6.13       | 28.1         | 80           | 180°C      | Group LL       |

See website for additional kVA, copper windings and temperature options.  
 Housing dimensions subject to change without notice. Consult website or factory where dimensions are critical.  
 Use the "Find a Product" tool for detailed specification sheets.  
 For further information, contact an Application Engineer at 800-892-3755, [technical\\_services@jeffersonelectric.com](mailto:technical_services@jeffersonelectric.com)



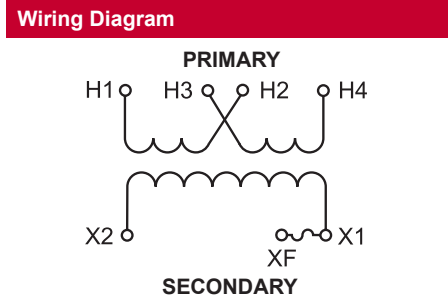
### Industrial Control Transformers

| Primary: 220/230/240x440/460/480 V Secondary: 110/115/120x220/230/240 V |                |                  |                   |                  |                  |            |            |              |              |            |                |
|---|----------------|------------------|-------------------|------------------|------------------|------------|------------|--------------|--------------|------------|----------------|
| kVA   | Catalog Number | Enclosure Figure | Height (A) inches | Width (B) inches | Depth (C) inches | (D) inches | (E) inches | Est Ship Wgt | Temp Rise °C | Insulation | Wiring Diagram |
| 1   | 631-2112-301   | 31               | 6.77              | 5.25             | 5.66             | 5.38       | 4.38       | 28.1         | 115          | 180°C      | Group MM       |
| 1.5   | 631-2212-301   | 31               | 6.02              | 6.37             | 6.57             | 4          | 6.13       | 28.1         | 115          | 180°C      | Group MM       |
| 2   | 631-2312-301   | 31               | 7.79              | 6.37             | 6.57             | 5.13       | 6.13       | 38           | 115          | 180°C      | Group MM       |
| 3   | 631-2412-301   | 31               | 7.01              | 9                | 8.74             | 4.25       | 6.5        | 53           | 115          | 180°C      | Group MM       |
| 5   | 631-2612-301   | 31               | 8                 | 9                | 8.74             | 7.25       | 7.5        | 89           | 115          | 180°C      | Group MM       |
| Primary: 240 x 347 x 380 V Secondary: 120/240 V                         |                |                  |                   |                  |                  |            |            |              |              |            |                |
| 1   | 631-2113-301   | 31               | 6.02              | 6.37             | 6.57             | 4          | 6.13       | 28.1         | 115          | 180°C      | Group NN       |
| 1.5   | 631-2213-301   | 31               | 6.02              | 6.37             | 6.57             | 4          | 6.13       | 28.1         | 115          | 180°C      | Group NN       |
| 2   | 631-2313-301   | 31               | 7.79              | 6.37             | 6.57             | 5.13       | 6.13       | 38           | 115          | 180°C      | Group NN       |
| 3   | 631-2413-301   | 31               | 7.01              | 9                | 8.74             | 4.25       | 6.5        | 53           | 115          | 180°C      | Group NN       |
| 5   | 631-2613-301   | 31               | 8                 | 9                | 8.74             | 7.25       | 7.5        | 89           | 115          | 180°C      | Group NN       |

See website for additional kVA, copper windings and temperature options.  
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### Wiring Diagrams

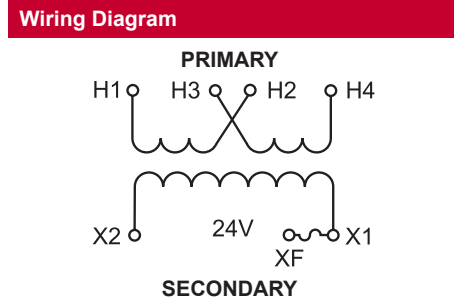
#### Group AA Wiring Diagram & Connections



**Connections**

| Primary Volts   | Interconnect               | Primary Lines Connect To |
|-----------------|----------------------------|--------------------------|
| 240/230/220     | H1-H3, H2-H4               | H1, H4                   |
| 480/460/440     | H2-H3                      | H1, H4                   |
| Secondary Volts | Secondary Lines Connect To |                          |
| 120/115/110     | X2, XF                     |                          |

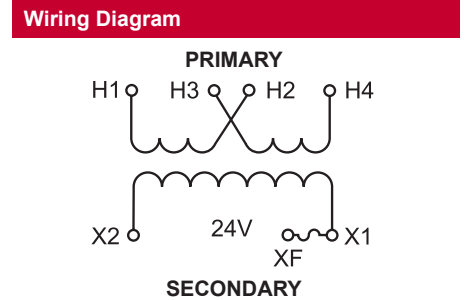
#### Group BB Wiring Diagram & Connections



**Connections**

| Primary Volts   | Interconnect               | Primary Lines Connect To |
|-----------------|----------------------------|--------------------------|
| 480             | H2-H3                      | H1, H4                   |
| 240             | H1-H3, H2-H4               | H1, H4                   |
| Secondary Volts | Secondary Lines Connect To |                          |
| 24              | X2, XF                     |                          |

#### Group CC Wiring Diagram & Connections



**Connections**

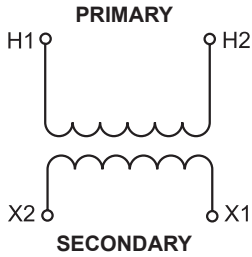
| Primary Volts   | Interconnect               | Primary Lines Connect To |
|-----------------|----------------------------|--------------------------|
| 240             | H2-H3                      | H1, H4                   |
| 120             | H1-H3, H2-H4               | H1, H4                   |
| Secondary Volts | Secondary Lines Connect To |                          |
| 24              | X2, XF                     |                          |

More wiring diagrams can be found in catalog's appendix, section 15.  
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 For further information, contact an Application Engineer at 800-892-3755, technical\_services@jeffersonelectric.com

## Wiring Diagrams

### Group EE Wiring Diagram & Connections

#### Wiring Diagram

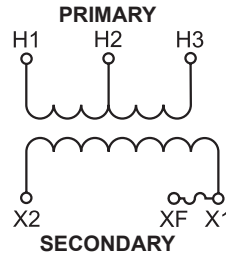


#### Connections

| Primary Volts   | Primary Lines Connect To   |
|-----------------|----------------------------|
| 600/575/550     | H1, H2                     |
| Secondary Volts | Secondary Lines Connect To |
| 120/115/110     | X2, X1                     |

### Group FF Wiring Diagram & Connections

#### Wiring Diagram

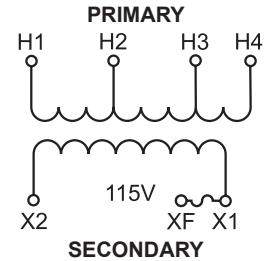


#### Connections

| Primary Volts   | Primary Lines Connect To   |
|-----------------|----------------------------|
| 277             | H1, H3                     |
| 208             | H2, H3                     |
| Secondary Volts | Secondary Lines Connect To |
| 120             | X2, XF                     |

### Group GG Wiring Diagram & Connections

#### Wiring Diagram

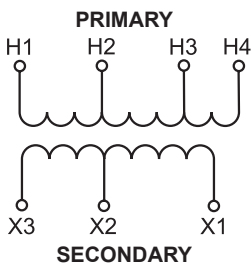


#### Connections

| Primary Volts   | Primary Lines Connect To   |
|-----------------|----------------------------|
| 460             | H1, H4                     |
| 230             | H2, H4                     |
| 208             | H3, H4                     |
| Secondary Volts | Secondary Lines Connect To |
| 115             | X2, XF                     |

### Group HH Wiring Diagram & Connections

#### Wiring Diagram

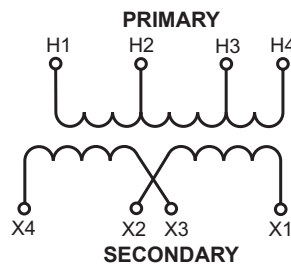


#### Connections

| Primary Volts   | Primary Lines Connect To   |
|-----------------|----------------------------|
| 575             | H1, H4                     |
| 460             | H2, H4                     |
| 230             | H3, H4                     |
| Secondary Volts | Secondary Lines Connect To |
| 115             | X1, X3                     |
| 95              | X2, X3                     |

### Group II Wiring Diagram & Connections

#### Wiring Diagram

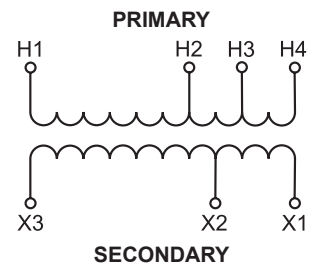


#### Connections

| Primary Volts   | Primary Lines Connect To   |
|-----------------|----------------------------|
| 415             | H1, H4                     |
| 400             | H2, H4                     |
| 380             | H3, H4                     |
| Secondary Volts | Secondary Lines Connect To |
| 110             | X1-X3, X2-X4               |
| 220             | X2-X3                      |

### Group JJ Wiring Diagram & Connections

#### Wiring Diagram



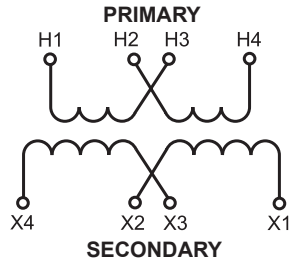
#### Connections

| Primary Volts   | Primary Lines Connect To   |
|-----------------|----------------------------|
| 480/460/440 V   | H1, H4                     |
| 240/230/220 V   | H2, H4                     |
| 208/200 V       | H3, H4                     |
| Secondary Volts | Secondary Lines Connect To |
| 120/115/110 V   | X1, X3                     |
| 25/24/23 V      | X2, X3                     |

## Wiring Diagrams

### Group KK Wiring Diagram & Connections

#### Wiring Diagram

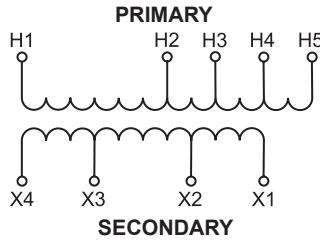


#### Connections

| Primary Volts   | Interconnect | Primary Lines Connect To   |
|-----------------|--------------|----------------------------|
| 480             | H2-H3        | H1, H4                     |
| 240             | H1-H3, H2-H4 | H1, H4                     |
| Secondary Volts | Interconnect | Secondary Lines Connect To |
| 120             | X1-X3, X2-X4 | X1, X4                     |
| 240             | X2-X3        | X1, X4                     |

### Group LL Wiring Diagram & Connections

#### Wiring Diagram

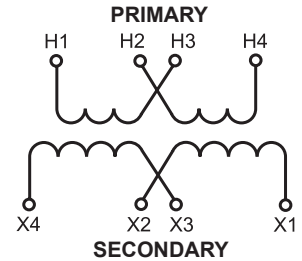


#### Connections

| Primary Volts   | Primary Lines Connect To   |
|-----------------|----------------------------|
| 240/230/220/208 | H2, H1                     |
| 416/400/380     | H3, H1                     |
| 480/460/440     | H4, H1                     |
| 600/575/550/500 | H5, H1                     |
| Secondary Volts | Secondary Lines Connect To |
| 130/125/120/110 | X4, X1                     |
| 120/115/110/100 | X3, X1                     |
| 99/95/91/85     | X2, X1                     |

### Group MM Wiring Diagram & Connections

#### Wiring Diagram

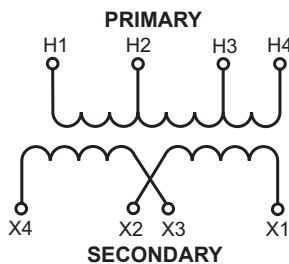


#### Connections

| Primary Volts   | Interconnect | Primary Lines Connect To   |
|-----------------|--------------|----------------------------|
| 480/460/440     | H2-H3        | H1, H4                     |
| 240/230/220     | H1-H3, H2-H4 | H1, H4                     |
| Secondary Volts | Interconnect | Secondary Lines Connect To |
| 120/115/110     | X1-X3, X2-X4 | X2, X4                     |
| 240/230/220     | X2-X3        | X1, X4                     |

### Group NN Wiring Diagram & Connections

#### Wiring Diagram



#### Connections

| Primary Volts   | Primary Lines Connect To   |
|-----------------|----------------------------|
| 380             | H1, H4                     |
| 347             | H2, H4                     |
| 240             | H3, H4                     |
| Secondary Volts | Secondary Lines Connect To |
| 120             | X1-X3, X2-X4               |
| 240             | X2-X3                      |

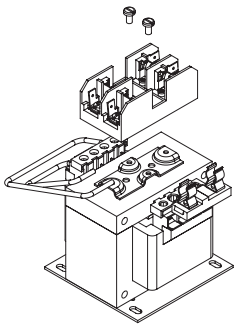
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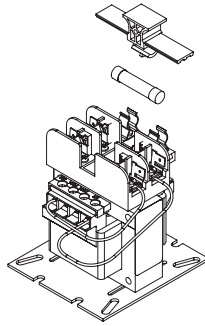
**Accessories**

| Item                                   | Catalog Number | Figure | Dimensions   | Estimated Shipping Wgt | Description  |
|--|----------------|--------|--|------------------------|--|
| Primary Fuse Kit<br>(Maximum 2,000 VA) | 631-0000-301   | 16     | Adds approx 1.38" to C dimension                               | 0.35 lbs.              | Fuse kit for one transformer                               |
| Primary Fuse Covers +                  | 631-0000-302   | 17     | Adds approx .25" to C dimension<br>(1.65" total with fuse kit) | 0.10 lbs.              | Cover for one fuse kit                                     |
| Finger Safe Terminal Covers            | 631-0000-303   | 32     | Adds approx .25" to C dimension                                | 0.10 lbs.              | Covers for one transformer<br>for units larger than 350 VA |
| Secondary Fuse Cover                   | 631-0000-307   |        | Adds approx .25" to C dimension                                | 0.10 lbs.              | Cover for one transformer<br>350 VA and smaller            |

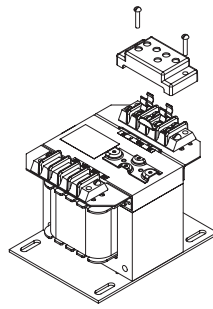
**Figure 16**



**Figure 17**



**Figure 32**



- The optional primary fuse block is for a 13/32 x 1-1/2 class cc rejection fuse. The primary fuse should always have a time delay, slow blow properly sized for the application.
- The standard secondary fuse clip is for a 13/32 x 1-1/2 midget fuse. The secondary fuse style is a matter of customer preference usually either time delay or fast acting.

