

50 VA to 25 kVA

Applications

- For general loads, indoors or out, including lighting, industrial and commercial applications
- Units may be banked for 3-Phase operations
- For transformers to use with submersible fixtures, see page 7-5

Specifications

- NEMA3R-rated enclosures
- 60 Hz operation
- Aluminum windings
- 95°C temperature rise for 0.5 to 1 kVA
135°C temperature rise for 1.5 to 25 kVA
- Encapsulated with electrical grade resin
- Heat-cured ASA-61 gray powder coat finish
- Cores of high quality electrical steel
- Primary taps on some models

Features, Functions, Benefits

- Large connection compartment with knockouts for ease of wiring and installation
- Slotted mounting holes for quick and easy mounting
- Lifting hooks above 5 kVA
- Wall mount design through 25 kVA
- Many sizes in stock and available for immediate shipment
- Quiet operation for installation flexibility
- Seismic qualification certification for all units



Standards

- Built in accordance with NEMA, ANSI, UL and CSA standards
- International units are CE Marked

Options and Accessories

- 50/60 Hz optional
- Other sizes, voltages and temperature rises available
- Copper windings
- CE Marked units available as custom
- Class I Div 2 units available

Approvals



Enclosure Figures

Figure 2

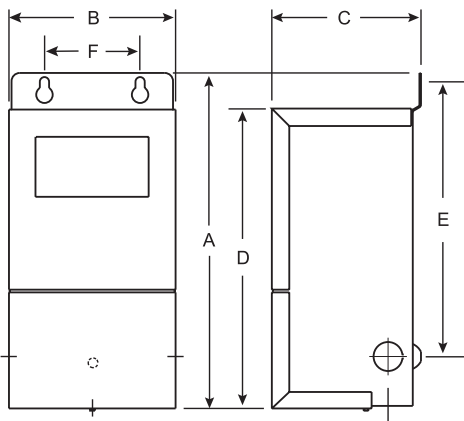


Figure 3

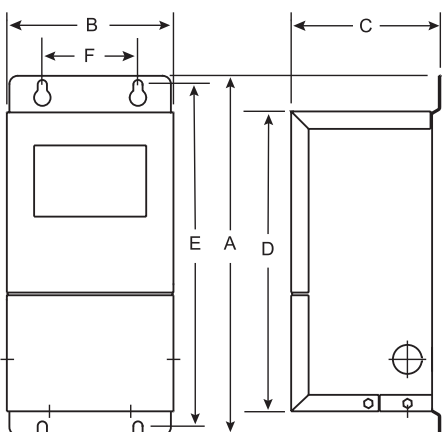
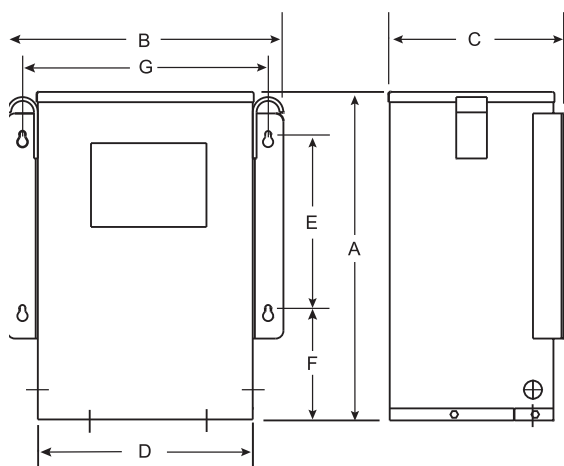


Figure 4



Model Numbers Defined

411-TXXY-ABC

Single-Phase, Encapsulated
Wall Mount

Standard 411
International 511

Type

Original style 0
Updated style 1
Class I, Div 2 2

kVA Rating / XX

0.5 05
0.75 06
1.0 07
1.5 08
2.0 09
3.0 10
5.0 11

kVA Rating / XX

6.0 12
7.5 13
9.0 14
10.0 15
15.0 16
20.0 17
25.0 18

Primary

120x240
208
240x480
277
600
600 Max
480

Secondary

120/240 1
120/240 2
120/240 3
120/240 4
120/240 5
120 Min 600 Max 6
120/240 7

Wiring

Default 0
Copper 8

Temperature Rise, Shields

135°C Rise*, no shield 0
135°C Rise*, with shield 1
95°C Rise*, no shield 2
95°C Rise*, with shield 3
80°C Rise*, no shield 4
80°C Rise*, with shield 5
115°C Rise#, no shield 6
115°C Rise#, no shield 7
* 25°C ambient # 40°C ambient

Taps

No taps 0
2@2.5% FCBN 1
2@2.5% FCAN, 2@2.5 FCBN 2
4@2.5% FCBN 3
2@5% FCBN 4
1@5% FCAN, 1@5% FCBN 5
2@5% FCAN, 4@2.5 FCBN 6

Single-Phase Encapsulated General Purpose Transformers

.050 - 1 kVA, 95°C Temperature Rise, 1.5 - 25 kVA, 135°C Temperature Rise

| 120 x 240V — 120/240V • Taps: None | | | | | | | | | | | | |
|--|----------------|------------------|-------------------|------------------|------------------|------------|------------|------------|------------|--------------|--------|----------------|
| kVA | Catalog Number | Enclosure Figure | Height (A) inches | Width (B) inches | Depth (C) inches | (D) inches | (E) inches | (F) inches | (G) inches | Est Ship Wgt | Shield | Wiring Diagram |
| .50 | 411-0051-120 | 2 | 10.2 | 5.1 | 4.6 | 9.1 | 8.4 | 2.25 | | 15 | YES | S240A |
| 1.0 | 411-0071-120 | 2 | 10.2 | 5.1 | 4.6 | 9.1 | 8.4 | 2.25 | | 18 | YES | S240A |
| 2.0 | 411-0091-120 | 3 | 12.5 | 6.7 | 5.4 | 10.6 | 12 | 2.25 | | 41 | YES | S240A |
| 3.0 | 411-0101-120 | 3 | 14.6 | 7.6 | 7.2 | 12.7 | 14.1 | 3.5 | | 68 | YES | S240A |
| 5.0 | 411-0111-120 | 3 | 14.6 | 7.6 | 7.2 | 12.7 | 14.1 | 3.5 | | 98 | NO | S240A |
| 7.5 | 411-0131-120 | 4 | 16.1 | 13.5 | 8.6 | 10.6 | 8.25 | 5.5 | 12.0 | 130 | NO | S240A |
| 10 | 411-0151-120 | 4 | 16.1 | 13.5 | 8.6 | 10.6 | 8.25 | 5.5 | 12.0 | 155 | NO | S240A |
| 15 | 411-0161-120 | 4 | 21.1 | 16.5 | 10.1 | 13.7 | 12.5 | 6.25 | 15.0 | 255 | NO | S240A |
| 25 | 411-0181-120 | 4 | 21.1 | 16.5 | 10.1 | 13.7 | 12.5 | 6.25 | 15.0 | 291 | NO | S240A |
| 240 x 480V — 120/240V • Taps: None | | | | | | | | | | | | |
| 0.05 | 411-0001-000 | 2 | 8.1 | 3.3 | 3.1 | 6.8 | 6.2 | 2.3 | | 6 | YES | S480A |
| 0.10 | 411-0021-000 | 2 | 8.1 | 3.3 | 3.1 | 6.8 | 6.2 | 2.3 | | 6 | YES | S480A |
| 0.15 | 411-0031-000 | 2 | 8.1 | 3.3 | 3.1 | 6.8 | 6.2 | 2.3 | | 6 | YES | S480A |
| 0.25 | 411-0041-000 | 2 | 8.1 | 3.3 | 3.1 | 6.8 | 6.2 | 2.3 | | 7 | YES | S480A |
| 0.50 | 411-0051-000 | 2 | 10.2 | 5.1 | 4.6 | 9.1 | 8.4 | 2.3 | | 15 | NO | S480A |
| 0.75 | 411-0061-000 | 2 | 10.2 | 5.1 | 4.6 | 9.1 | 8.4 | 2.3 | | 18 | NO | S480A |
| 1.0 | 411-0071-000 | 2 | 10.2 | 5.1 | 4.6 | 9.1 | 8.4 | 2.3 | | 19 | NO | S480A |
| 1.5 | 411-0081-000 | 3 | 12.5 | 6.7 | 5.3 | 10.6 | 12.0 | 2.3 | | 33 | NO | S480A |
| 2.0 | 411-0091-000 | 3 | 12.5 | 6.7 | 5.3 | 10.6 | 12.0 | 2.3 | | 41 | NO | S480A |
| 3.0 | 411-0101-000 | 3 | 14.6 | 7.6 | 7.2 | 12.7 | 14.1 | 3.5 | | 68 | NO | S480A |
| 5.0 | 411-0111-000 | 3 | 14.6 | 7.6 | 7.2 | 12.7 | 14.1 | 3.5 | | 93 | | S480A |
| 7.5 | 411-0131-000 | 4 | 16.1 | 13.5 | 8.6 | 10.6 | 8.3 | 5.5 | 12.0 | 130 | | S480A |
| 10.0 | 411-0151-000 | 4 | 16.1 | 13.5 | 8.6 | 10.6 | 8.3 | 5.5 | 12.0 | 155 | | S480A |
| 15.0 | 411-0161-000 | 4 | 21.1 | 16.5 | 10.1 | 13.7 | 12.5 | 6.3 | 15.0 | 255 | | S480A |
| 25.0 | 411-0181-000 | 4 | 21.1 | 16.5 | 10.1 | 13.7 | 12.5 | 6.3 | 15.0 | 291 | | S480A |
| 240 x 480V — 120/240V • Taps: 2–2.5% FCAN + 2–2.5% FCBN | | | | | | | | | | | | |
| 3.0 | 411-0104-300 | 3 | 14.6 | 7.6 | 7.2 | 12.7 | 14.1 | 3.5 | | 68 | YES | S480B |
| 5.0 | 411-0114-300 | 3 | 14.6 | 7.6 | 7.2 | 12.7 | 14.1 | 3.5 | | 93 | YES | S480B |
| 7.5 | 411-0134-300 | 4 | 16.1 | 13.5 | 8.6 | 10.6 | 8.3 | 5.5 | 12.0 | 130 | YES | S480B |
| 10.0 | 411-0154-300 | 4 | 16.1 | 13.5 | 8.6 | 10.6 | 8.3 | 5.5 | 12.0 | 155 | YES | S480B |
| 15.0 | 411-0164-300 | 4 | 21.1 | 16.5 | 10.1 | 13.7 | 12.5 | 6.3 | 15.0 | 255 | NO | S480B |
| 25.0 | 411-0184-300 | 4 | 21.1 | 16.5 | 10.1 | 13.7 | 12.5 | 6.3 | 15.0 | 291 | NO | S480B |

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.

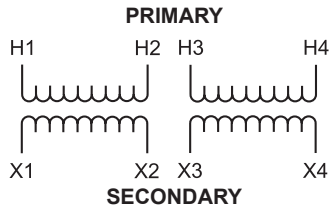
For further information, contact an Application Engineer at 800-892-3755, technical_services@jeffersonelectric.com

Wiring Diagrams

S240A Wiring Diagram & Connections

Wiring Diagram

Primary: 120 x 240 Volts Delta
Secondary: 120/240 Volts



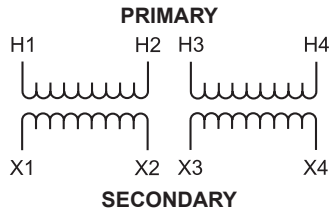
Connections

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

S480A Wiring Diagram & Connections

Wiring Diagram

Primary: 240 x 480 Volts Delta
Secondary: 120/240 Volts



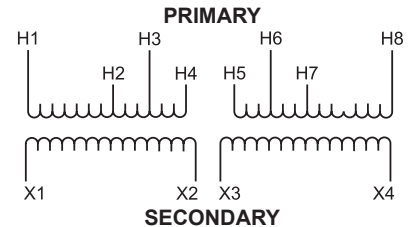
Connections

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

S480B Wiring Diagram & Connections

Wiring Diagram

Primary: 240 x 480 Volts Delta
Secondary: 120/240 Volts



Connections

| Primary Volts | Interconnect | Primary Lines Connect To |
|-----------------|----------------------|----------------------------|
| 504 | H4 to H5 | H1 and H8 |
| 492 | H3 to H5 | H1 and H8 |
| 480 | H3 to H6 | H1 and H8 |
| 468 | H2 to H6 | H1 and H8 |
| 456 | H2 to H7 | H1 and H8 |
| 252 | H1 to H5 H4 to H8 | H1 and H8 |
| 240 | H1 to H6 H3 to H8 | H1 and H8 |
| 228 | H1 to H7 H2 to H8 | H1 and H8 |
| Secondary Volts | Interconnect | Secondary Lines Connect To |
| 240 | X2 to X3 | X1 and X4 |
| 120/240 | X2 to X3 | X1, X2, X4 |
| 120 | X1 to X3 X2 to X4 | X1, X4 |

More wiring diagrams can be found in catalog's appendix, section 15. Use the "Find a Product" tool on our website for detailed specification sheets. For further information, contact an Application Engineer at 800-892-3755, technical_services@jeffersonelectric.com

Pool and Spa Lighting

100-1000 Watts

Applications

- For use with submersible fixtures including swimming pools, water fountains, low voltage circuits near water or other shock hazards
- Transformers themselves are not submersible

Specifications

- NEMA3R-rated enclosures
- 60 Hz operation
- Aluminum windings
- Cores of high quality electrical steel
- Encapsulated with electrical grade resin
- Electrostatic shields
- 12, 13, 14 volt taps to compensate for voltage drop on long electrical runs
- Heat-cured ASA-61 gray powder coat finish

Features, Functions, Benefits

- Resettable power circuit breakers to interrupt if a short or over-voltage occurs
- Wall mount design
- Quiet operation for installation flexibility



Standards

- Built in accordance with NEMA, ANSI, UL and CSA standards

Options and Accessories

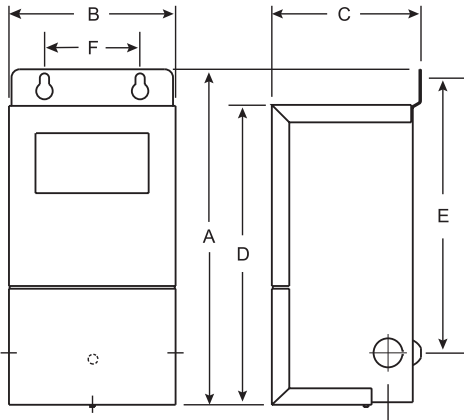
- Other sizes, voltages and temperature rises available
- Copper windings
- CE Marked units available as custom

Approvals



Enclosure Figure

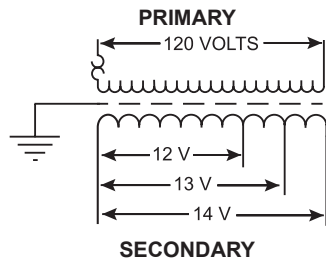
Figure 2



Wiring Diagram

S120A Wiring Diagram & Connections

Wiring Diagram



Connections

| Primary Volts | Primary Lines Connect To |
|-----------------|----------------------------|
| 120 | H1, H2 |
| Secondary Volts | Secondary Lines Connect To |
| 12 | ± and 12V |
| 13 | ± and 13V |
| 14 | ± and 14V |

More wiring diagrams can be found in catalog's appendix, section 15. Use the "Find a Product" tool on our website for detailed specification sheets. For further information, contact an Application Engineer at 800-892-3755, technical_services@jeffersonelectric.com

Pool & Spa Lighting Transformers

.050 - 1 kVA, 135°C Temperature Rise

120V — 12/13/14V Encapsulated for submersible fixtures • electrostatic shield

| Lamp Watts | Catalog Number | Enclosure Figure | Height (A) inches | Width (B) inches | Depth (C) inches | (D) inches | (E) inches | (F) inches | Est Ship Wgt | Wiring Diagram |
|------------|----------------|------------------|-------------------|------------------|------------------|------------|------------|------------|--------------|----------------|
| 100 | 411-0938-055 | 2 | 10.2 | 5.1 | 4.6 | 9 | 8.4 | 2.25 | 12.5 | S120A |
| 300 | 411-0939-055 | 2 | 10.2 | 5.1 | 4.6 | 9 | 8.4 | 2.25 | 13.0 | S120A |
| 500 | 411-0940-055 | 2 | 10.2 | 5.1 | 4.6 | 9 | 8.4 | 2.25 | 14.0 | S120A |
| 1,000 | 411-0941-055 | 2 | 10.2 | 5.1 | 4.6 | 9 | 8.4 | 2.25 | 18.0 | S120A |

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

Model Numbers Defined

411-TXXY-ABC

| | |
|------------------------------------|-----|
| Single-Phase, Encapsulated | 411 |
| Wall Mount | |
| Standard | 411 |
| International | 511 |
| Type | |
| Original style | 0 |
| kVA Rating, Primary, Voltage / XXY | |
| 0.10, 120V, 12/13/14V | 938 |
| 0.30, 120V, 12/13/14V | 949 |
| 0.50, 120V, 12/13/14V | 940 |
| 1.00, 120V, 12/13/14V | 941 |
| Wiring | |
| Copper | 0 |
| Temperature Rise, Shields | |
| 135°C Rise*, with shield | 5 |
| Taps | |
| 1@5% FCAN, 1@5% FCBN | 5 |