

## 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

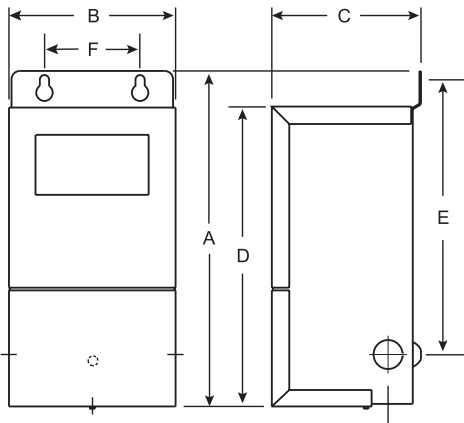
- 50/60 Hz optional
- Other sizes, voltages and temperature rises available
- Copper windings
- CE Marked units available as custom
- Class I Div 2 units available

### Approvals

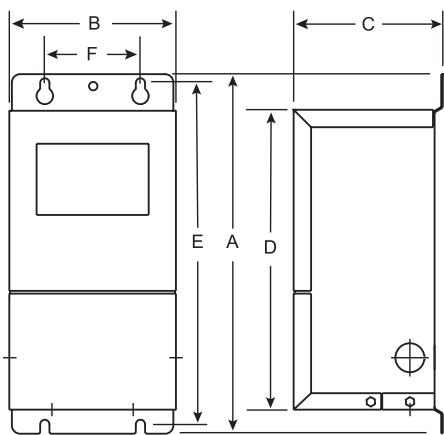


**Enclosure Figures**

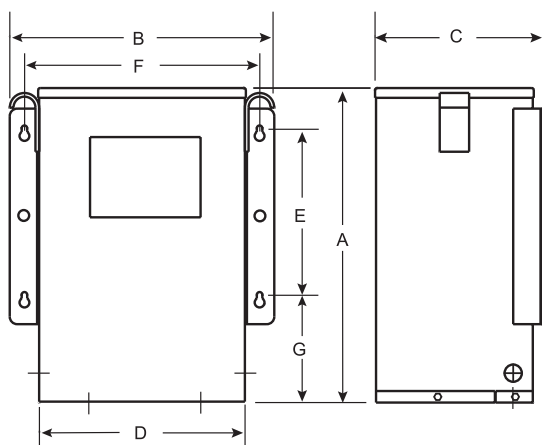
**Figure 2**



**Figure 3**



**Figure 4**



**Model Numbers Defined**

**411-TXXY-ABC**

Single-Phase, Encapsulated  
Wall Mount  
Standard 411  
International 511

Type  
Updated style 1  
Class I, Div 2 2

kVA Rating / XX		kVA Rating / XX	
0.5	05	6.0	12
0.75	06	7.5	13
1.0	07	9.0	14
1.5	08	10.0	15
2.0	09	15.0	16
3.0	10	20.0	17
5.0	11	25.0	18

Primary	Secondary	
120x240	120/240	1
208	120/240	2
240x480	120/240	3
277	120/240	4
600	120/240	5
600 Max	120 Min 600 Max	6
480	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#, with 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

<b>120 x 240V — 120/240V • Taps: None</b>												
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
<b>240 x 480V — 120/240V • Taps: None</b>												
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
<b>240 x 480V — 120/240V • Taps: 2–2.5% FCAN + 2–2.5% FCBN</b>												
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.

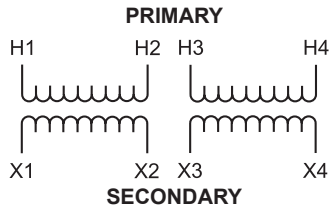
For further information, contact an Application Engineer at 800-892-3755, [technical\\_services@jeffersonelectric.com](mailto:technical_services@jeffersonelectric.com)

## Wiring Diagrams

### S240A Wiring Diagram & Connections

#### Wiring Diagram

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



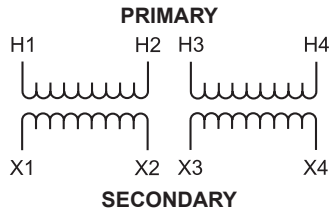
#### Connections

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



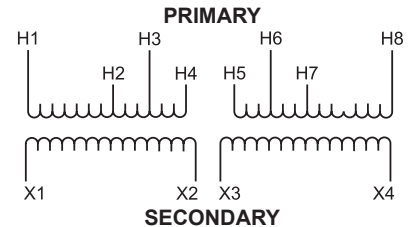
#### Connections

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

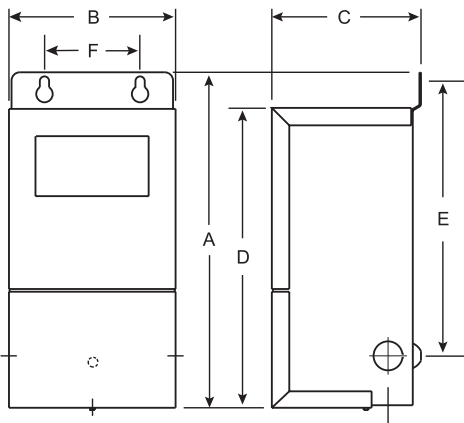
- Other sizes, voltages and temperature rises available
- Copper windings
- CE Marked units available as custom

#### Approvals



**Enclosure Figure**

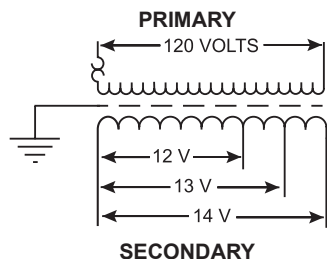
**Figure 2**



**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](mailto: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](mailto:technical_services@jeffersonelectric.com)

**Model Numbers Defined**

**411-TXXY-ABC**

Single-Phase, Encapsulated	
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