

## 15 to 1,650 kVA

### Applications

- For general loads, including lighting, industrial and commercial applications

### Specifications

- Meets DOE-2016 and C802 standards for energy efficiency
- 60 Hz operation
- Aluminum windings
- 150°C temperature rise
- 220°C insulation class standard
- NEMA3R rated enclosures standard
- Heat-cured ASA-61 gray powder coat finish
- Cores of high quality electrical steel
- Primary taps
- Lugs provided for units up to and including 50 kVA on catalog items

### Features, Functions, Benefits

- Large connection compartment for ease of wiring and installation
- Many sizes in stock and available for immediate shipment
- Quiet operation for installation flexibility
- Seismic certification for all units



### Standards

- Meets DOE-2016 standard Part 431, Subpart K for energy efficiency
- Built in accordance with NEMA, ANSI, UL and CSA standards

### Options and Accessories

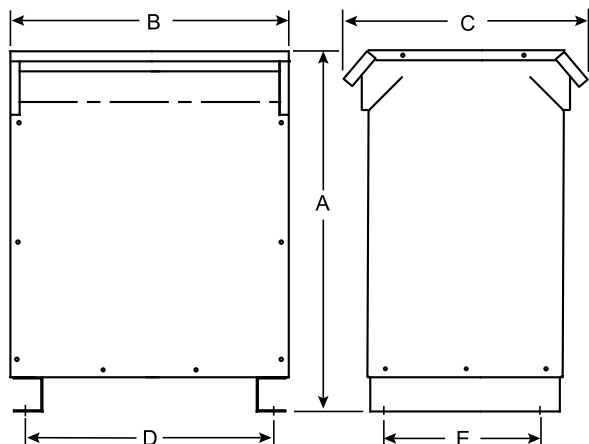
- Other sizes, voltages and temperature rises available
- Copper windings
- CE Marked units available as custom
- Wall brackets available for units up to 75 kVA

### Approvals



**Enclosure Figure**

**Figure 24**



**Model Numbers Defined**

**421-TXXY-ABC**

Single-Phase, Ventilated  
Floor Mount

Type

C802 compliant 2  
DOE compliant 9

kVA Rating / XX	kVA Rating / XX	kVA Rating / XX	kVA Rating / XX
15	16	112.5	25
20	17	150	26
25	18	167	27
30	19	200	28
37.5	20	225	29
45	21	250	30
50	22	300	31
75	23	333	32
100	24		

Up to 1,650 kVA available as specials

Primary	Secondary	
120x240	120/240	1
208	120/240	2
Custom		3
277	120/240	4
240x480	120/240	5
120 Min 600 Max	120 Min 600 Max	6
120x240	120/240	7
600	120/240	8
Custom		9

**Wiring**

Aluminum 0  
Copper 8

**Temperature Rise**

150°C 0  
115°C 1  
80° 8

**Shield**

No shield 0  
Shield 5

**Mounting Brackets**

Part Number	Description	Max Unit Wgt (lbs)
223-7008-030	For 15 kVA units, 150°C rise	250
223-7008-075	For 16 to 75 kVA units, 150°C rise	750

**Lugs**

Part Number	kVA	Primary Lug	Qty	Secondary Lug	Qty
4PT-2007-LUG	15	#14 - 2	2	#2/0 - 6	2
4PT-2017-LUG	25	#14 - 2	2	250MCM - 6	2
4PT-2008-LUG	37.5	#14 - 2	2	350MCM - 6	2
4PT-2009-LUG	50	#2/0 - 6	2	600MCM - 6	2
4PT-2018-LUG*	75	#2/0 - 6	2	600MCM - 6	4

\* Must be ordered, not included on stock units

**Single-Phase General Purpose Transformers – DOE Compliant**

150°C Temperature Rise • Aluminum Windings • NEMA3R Enclosures

Taps: 2 @ 2.5% FCAN &amp; 4 @ 2.5% FCBN

240 x 480V — 120/240V										
kVA	Catalog Number	Enclosure Figure	Height (A) inches	Width (B) inches	Depth (C) inches	(D) inches	(E) inches	Est Ship Wgt	Wiring Diagram	Wall Bracket Kit
15	421-9165-000	24	27	15	20.5	12.5	11	190	S480F	223-7008-030
25	421-9185-000	24	29	17	22.5	14	13	265	S480F	223-7008-075
37.5	421-9205-000	24	31	20	23.5	16.9	14	330	S480F	223-7008-075
50	421-9225-000	24	32	22	25.5	19	16	465	S480F	223-7008-075
75	421-9235-000	24	34	22	27.5	19	16	555	S480F	223-7008-075
100	421-9245-000	24	36	22	29.5	19	18	690	S480F	n/a
150	421-9265-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a
167	421-9275-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a
200	421-9285-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a
250	421-9305-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a
300	421-9315-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a
333	421-9325-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a

150°C Temperature Rise • Aluminum Windings • NEMA3R Enclosures

Taps: 2 @ 2.5% FCAN &amp; 2 @ 2.5% FCBN

600V — 120/240V										
kVA	Catalog Number	Enclosure Figure	Height (A) inches	Width (B) inches	Depth (C) inches	(D) inches	(E) inches	Est Ship Wgt	Wiring Diagram	Wall Bracket Kit
15	421-9168-000	24	27	15	20.5	12.5	11	190	S600E	223-7008-030
25	421-9188-000	24	29	17	22.5	14	13	265	S600E	223-7008-075
37.5	421-9208-000	24	31	20	23.5	16.9	14	330	S600E	223-7008-075
50	421-9228-000	24	32	22	25.5	19	16	405	S600E	223-7008-075
75	421-9238-000	24	34	22	27.5	19	16	620	S600E	223-7008-075
100	421-9248-000	24	36	22	29.5	19	18	725	S600E	n/a
150	421-9268-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a
167	421-9278-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a
200	421-9288-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a
250	421-9308-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a
300	421-9318-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a
333	421-9328-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a

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)

## 1-4 Single-Phase Ventilated

### Single-Phase General Purpose Transformers – C802 Compliant

150°C Temperature Rise • Aluminum Windings • NEMA3R Enclosures

Taps: 2 @ 2.5% FCAN & 4 @ 2.5% FCBN

#### 240 x 480V — 120/240V

kVA	Catalog Number	Enclosure Figure	Height (A) inches	Width (B) inches	Depth (C) inches	(D) inches	(E) inches	Est Ship Wgt	Wiring Diagram	Wall Bracket Kit
15	421-2165-000	24	27	15	20.5	12.5	11	190	S480F	223-7008-030
25	421-2185-000	24	29	17	22.5	14	13	265	S480F	223-7008-075
37.5	421-2205-000	24	31	20	23.5	16.9	14	330	S480F	223-7008-075
50	421-2225-000	24	32	22	25.5	19	16	465	S480F	223-7008-075
75	421-2235-000	24	34	22	27.5	19	16	555	S480F	223-7008-075
100	421-2245-000	24	36	22	29.5	19	18	690	S480F	n/a
150	421-2265-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a
167	421-2275-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a
200	421-2285-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a
250	421-2305-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a
300	421-2315-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a
333	421-2325-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S480F	n/a

150°C Temperature Rise • Aluminum Windings • NEMA3R Enclosures

Taps: 2 @ 2.5% FCAN & 2 @ 2.5% FCBN

#### 600V — 120/240V

15	421-2168-000	24	27	15	20.5	12.5	11	190	S600E	223-7008-030
25	421-2188-000	24	29	17	22.5	14	13	265	S600E	223-7008-075
37.5	421-2208-000	24	31	20	23.5	16.9	14	330	S600E	223-7008-075
50	421-2228-000	24	32	22	25.5	19	16	405	S600E	223-7008-075
75	421-2238-000	24	34	22	27.5	19	16	620	S600E	223-7008-075
100	421-2248-000	24	36	22	29.5	19	18	725	S600E	n/a
150	421-2268-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a
167	421-2278-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a
200	421-2288-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a
250	421-2308-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a
300	421-2318-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a
333	421-2328-000	24	TBD	TBD	TBD	TBD	TBD	TBD	S600E	n/a

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

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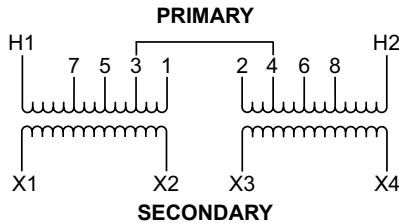
For further information, contact an Application Engineer at 800-892-3755, [technical\\_services@jeffersonelectric.com](mailto:technical_services@jeffersonelectric.com)

## Wiring Diagrams

### S480F Wiring Diagram & Connections

#### Wiring Diagram

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



#### Connections

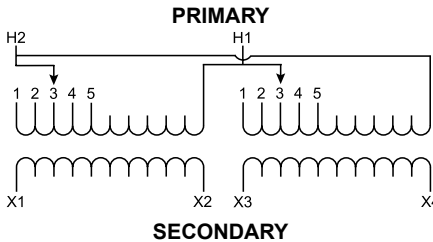
Primary Volts	Jumpers Between Taps Left Coil	Jumpers Between Taps Right Coil	Primary Lines Connect To
504	1	2	H1, H2
492	3	2	H1, H2
480	3	4	H1, H2
468	5	4	H1, H2
456	5	6	H1, H2
444	7	6	H1, H2
432	7	8	H1, H2
252	H2, 1	H1, 2	H1, H2
240	H2, 3	H1, 4	H1, H2
228	H2, 5	H1, 6	H1, H2
216	H2, 7	H1, 8	H1, H2

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

### S600E Wiring Diagram & Connections

#### Wiring Diagram

Primary: 600 Volts Delta  
Secondary: 120/240 Volts



#### Connections

Primary Volts	On Each Coil Jumper Taps To	Primary Lines Connect To
630	1	H1, H2
615	2	H1, H2
600	3	H1, H2
585	4	H1, H2
570	5	H1, H2

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

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)

