



15 to 100 KVA

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Single-Phase Ventilated

Products

- *General Purpose: 15 KVA through 100 KVA*

Applications

- *For all general loads, indoors or out, including lighting, industrial and commercial applications*

Specifications

- *Cores of high quality electrical steel*
- *Meets Federally Mandated NEMA TP-1 Standard for energy efficiency*
- *NEMA 1 rated enclosures standard*
- *Electrostatic shields optional*
- *60 Hz operation*
- *Aluminum or copper windings*
- *Taps provided on primary*
- *220°C insulation class standard*
- *150°C, 115°C, and 80°C temperature rise*
- *Heat-cured ASA-61 gray powder coat finish*

Features, Functions, Benefits

- *Large connection compartment for ease of wiring and installation*
- *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*
- *CE Marked units available as custom*
- *Wall mount brackets available for units up to 75 KVA with 150°C temperature rise*
- *NEMA 3R-rated enclosure available with weather shields*

Single-Phase Ventilated

General Purpose 150°C Temperature Rise

KVA	Catalog Number*	Fig.	Height A (in.)	Width B (in.)	Depth C (in.)	Est. Ship Wgt. (lbs.)	Wiring Diagram	Weather Shield Kit	Wall Bracket Kit
208 V - 120/240 V – Aluminum Windings • Taps: 15 to 37.5 kVA: 2@ 2.5% FCAN & 4@ 2.5% FCBN 50 to 100 kVA: 1@ 5% FCAN & 1@ 5% FCBN									
15	421-7162-000	7	27.0	15.0	15.0	190	S208B	421-0007-015	223-7008-030
25	421-7182-000	7	29.0	17.0	17.0	265		421-0007-017	223-7008-075
37.5	421-7202-000	7	31.0	20.0	18.0	330		421-0007-020	
50	421-7222-000	7	32.0	22.0	20.0	405	S208C	421-0007-022	N/A
75	421-7232-000	7	34.0	22.0	22.0	535		421-0007-022	
100	421-7242-000	7	36.0	22.0	24.0	690		421-0007-022	N/A

240 x 480 V - 120/240 V – Aluminum Windings • Taps: 15 to 100 kVA: 2@ 2.5% FCAN & 4@ 2.5% FCBN									
15	421-7165-000	7	27.0	15.0	15.0	190	S480F	421-0007-015	223-7008-030
25	421-7185-000	7	29.0	17.0	17.0	265		421-0007-017	223-7008-075
37.5	421-7205-000	7	31.0	20.0	18.0	330		421-0007-020	
50	421-7225-000	7	32.0	22.0	20.0	405		421-0007-022	N/A
75	421-7235-000	7	34.0	22.0	22.0	535		421-0007-022	
100	421-7245-000	7	36.0	22.0	24.0	690		421-0007-022	N/A

600 V - 120/240 V – Aluminum Windings • Taps: 15 to 100 kVA: 4@ 2.5% FCBN									
15	421-7168-000	7	27.0	15.0	15.0	190	S600D	421-0007-015	223-7008-030
25	421-7188-000	7	29.0	17.0	17.0	265		421-0007-017	223-7008-075
37.5	421-7208-000	7	31.0	20.0	18.0	330		421-0007-020	
50	421-7228-000	7	32.0	22.0	20.0	405		421-0007-022	N/A
75	421-7238-000	7	34.0	22.0	22.0	535		421-0007-022	
100	421-7248-000	7	36.0	22.0	24.0	690		421-0007-022	N/A

* For units with an electrostatic shield, copper windings, and/or low temp rise requirements see suffix chart on page 3.4

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



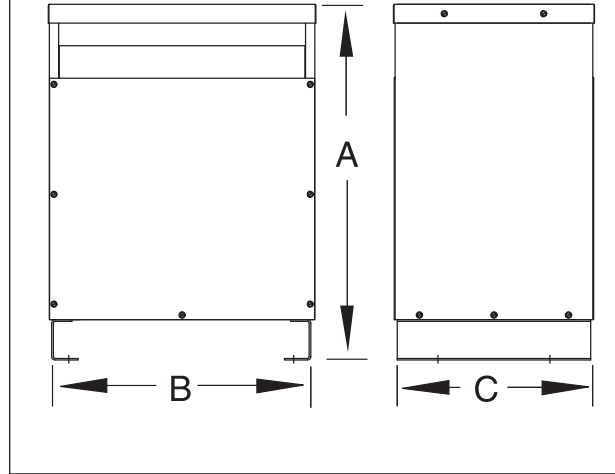
Suffix Chart

The catalog number on the standard product has a suffix of -000

To order alternate version transformers choose the suffix to match the desired features.

Suffix	Wire	Temperature Rise	Electrostatic Shield
000	Aluminum	150	no shield
005	Aluminum	150	shield
010	Aluminum	115	no shield
015	Aluminum	115	shield
080	Aluminum	80	no shield
085	Aluminum	80	shield
800	Copper	150	no shield
805	Copper	150	shield
810	Copper	115	no shield
815	Copper	115	shield
880	Copper	80	no shield
885	Copper	80	shield

Figure 7



Note: The weight, dimensions, weather shield and mounting brackets may be different than the standard (-000) version.

Check our website www.jeffersonelectric.com for details

Weathershields Kit to Make Enclosures NEMA 3R Rated

kVA*	Part Number	Width (B)	Depth w/o weather shield (C)	Depth with weather shield (3R-C)	Shipping weight (lbs.)
15	421-0007-015	15.0	15.0	22.0	2.6
25	421-0007-017	17.0	17.0	24.0	2.9
37.5	421-0007-020	20.0	18.0	25.0	3.3
50	421-0007-022	22.0	20.0	27.0	3.6
75	421-0007-022	22.0	22.0	29.0	4.2
100	421-0007-022	22.0	24.0	31.0	4.2

*kVA for 150 degree rise temp units, low temp units may use next larger weathershield

Mounting Brackets

Part Number	Description	Shipping weight (lbs.)
223-7008-030	For 15 kVA unit at 150 degree C rise	18
223-7008-075	For 16 to 50 kVA at 150 degree C rise	20

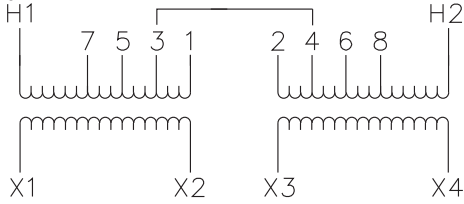
NOTE: Electrostatic shields are optionally available and not shown in all wiring diagrams.

Single-Phase Ventilated

S208B Wiring Diagram & Connections*

Wiring Diagram

Primary: 208
Secondary: 120/240



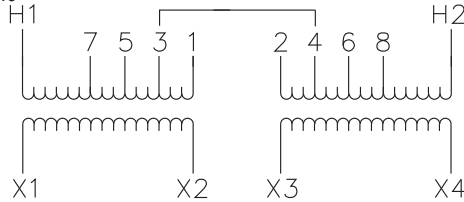
Connections

Primary Volts	Interconnect	Primary Lines Connect To
218	1 and 2	H1 - H2
213	2 and 3	H1 - H2
208	3 and 4	H1 - H2
203	4 and 5	H1 - H2
198	5 and 6	H1 - H2
192	6 and 7	H1 - H2
187	7 and 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

S480F Wiring Diagram & Connections*

Wiring Diagram

Primary: 240 x 480
Secondary: 120/240



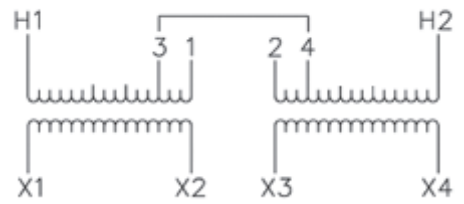
Connections

Primary Volts	Jumpers Between Taps Left Coil	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	

S208C Wiring Diagram & Connections*

Wiring Diagram

Primary: 208
Secondary: 120/240



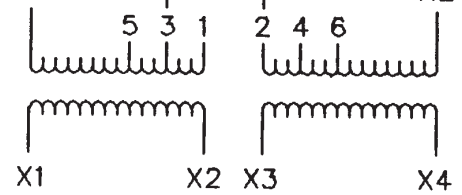
Connections

Primary Volts	Jumper Taps To	Primary Lines Connect To
218	1 and 2	H1 - H2
208	2 and 3	H1 - H2
198	3 and 4	H1 - H2
Sec. 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

S600D Wiring Diagram & Connections*

Wiring Diagram

Primary: 600
Secondary: 120/240



Connections

Primary Volts	Interconnect	Primary Lines Connect To
600	1 and 2	H1-H2
585	2 and 3	H1-H2
570	3 and 4	H1-H2
555	4 and 5	H1-H2
540	5 and 6	H1-H2
Sec. 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

NOTE:
Electrostatic shields are optionally available and not shown in all wiring diagrams.

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Notes: