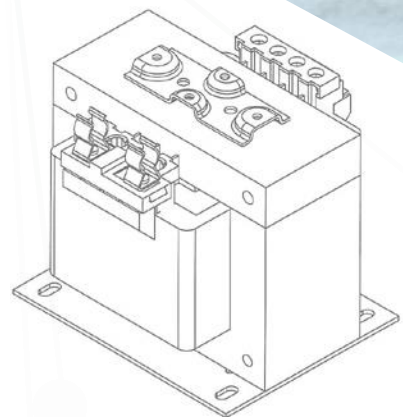


# Transforming tomorrow.



INDUSTRIAL CONTROL  
TRANSFORMERS









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# Industrial Control Transformers

SNC's Industrial Control Transformers are specially designed to accommodate the momentary current inrush caused when electromagnetic components are energized.

These transformers deliver excellent secondary voltage requirements and meet or exceed the standards established by UL and cUL. Their rugged construction and quality electrical characteristics ensure reliable operation of electromagnetic devices and trouble-free performance.

## FINGER-SAFE TERMINALS

Terminals are molded into the transformer for extra durability and are finger safe. The deep terminal channels help prevent short circuits from stray wires.

## MOUNTING ADAPTOR FOR FUSE BLOCKS

Included on all transformers up to 3kVA.

## WIRING DIAGRAM

All SNC control power transformers come with wiring diagrams for ease of installation.

## QUALITY MATERIALS

High-grade silicon steel laminations and fine quality copper magnet wire reduce core losses and ensure high efficiency.

## ENVIRONMENTAL PROTECTION

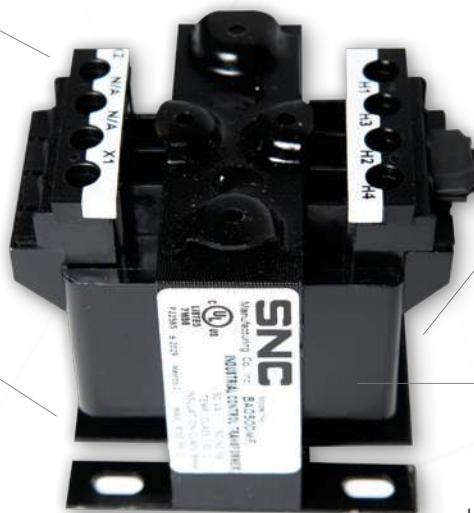
Rugged construction with fully encapsulated windings protect the transformer from harsh environments for a long life.

## PRODUCT LABEL

All SNC control power transformers come labeled with power specifications, agency listings and manufacturing date codes.

## FLEXIBLE MOUNTING

Heavy gauge steel mounting foot ensures a secure installation. Slotted holes allow for flexible mounting locations.



# Product Features

- ✓ Enclosed coils (50 - 5kVA). Completely encloses the transformer coils to protect against moisture, dirt, dust and industrial contaminants for maximum protection in industrial environments.
- ✓ Finger-safe terminals integrally built in. Up to 30% greater terminal contact area permits low-loss connections. Extra deep barriers reduce the chance of shorts from frayed leads or careless wiring. Pressure plate terminals designed to accept bare wire, ferrules, spade or ring lugs.
- ✓ Attractive black matte finish and easy to read label with complete wiring diagram.
- ✓ Terminals are molded into the transformer for a robust, compact design. A full quarter inch of thread on the terminal screws prevents stripping and pullout.
- ✓ Mounting plate is heavy gauge steel to add strength to core construction and provide stability. Slotted mounting feet permit easy and flexible installation.
- ✓ Two parallel jumper links come standard with transformers when required so they can be wired for dual primary voltages.
- ✓ Class 130°C (226°F) insulation system with 55°C (131°F) temperature rise on 50 - 100VA.
- ✓ Class 130°C (226°F) insulation system with 80°C (176°F) temperature rise on 150 - 750VA.
- ✓ Class 180°C (356°F) insulation system with 115°C (239°F) temperature rise on 1000 - 5000VA.
- ✓ UL, cUL listed, CSA certified. CE listing available upon request.



# Transformer Selection Process

**Selecting a transformer for industrial control circuit applications requires knowledge of the following terms:**

**Inrush VA** is the product of load voltage (V) multiplied by the current (A) that is required during circuit start-up. It is calculated by adding the in-rush VA requirements of all devices (contactors, timers, relays, pilot lights, solenoids, etc.), which will be energized together. Inrush VA requirements are best obtained from the component manufacturer.

**Sealed VA** is the product of load voltage (V) multiplied by the current (A) after initial start-up or under normal operating conditions. It is calculated by adding the sealed VA requirements of all electrical

components that will be energized at any given time. Sealed VA requirements are best obtained from the component manufacturer. Sealed VA is also referred to as steady state VA.

**Primary Voltage** is the voltage available from the electrical distribution system and its operational frequency, which is connected to the transformer supply voltage terminals.

**Secondary Voltage** is the voltage required for load operation which is connected to the transformer load voltage terminals.

## INRUSH REGULATION DATA CHART

INRUSH VA @ 0.4 POWER FACTOR

Continuous VA Transformer Nameplate Rating	85% Secondary Voltage	90% Secondary Voltage	95% Secondary Voltage
25	125	100	75
50	200	167	131
75	311	257	200
100	471	377	276
150	923	716	491
200	1125	883	622
250	1944	1476	970
300	2040	1547	1020
350	3300	2400	1400
500	3191	2500	1745
750	6025	4520	2915
1000	8100	5600	3000
1500	16000	12000	6600
2000	19500	13500	7300
3000	25500	18250	10500
5000	75000	56000	33000



Once the circuit variables have been determined, transformer selection is a simple 5-step process.

1

Determine the application inrush VA by using the following industry accepted formula:

$$\text{Application Inrush VA} = \sqrt{((\text{Inrush VA})^2 + (\text{Sealed VA})^2)}$$

2

Refer to the Regulation Data Chart. If the primary voltage is basically stable and does not vary by more than 5% from nominal, the 90% secondary voltage column should be used. If the primary voltage varies between 5% and 10% of nominal, the 95% secondary voltage column should be used.

3

After determining the proper secondary voltage column, read down until a value equal to or greater than the application inrush VA is found. In no case should a figure less than the application inrush VA be used.

4

Read left to the Transformer VA Rating column to determine the proper transformer for this application. As a final check, make sure that the Transformer VA Rating is equal to or greater than the total sealed requirements. If not, select a transformer with a VA rating equal to or greater than the total sealed VA.

5

Refer to the following pages to determine the proper catalog number based on the transformer VA, and primary and secondary voltage requirements.



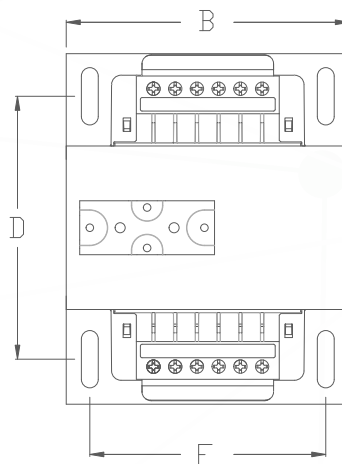
# SNC Voltage Groups

SNC Industrial Control Transformers are available in a wide variety of primary and secondary voltages, many displayed below. If you do not see the voltages required for your application, contact us about a customized option.

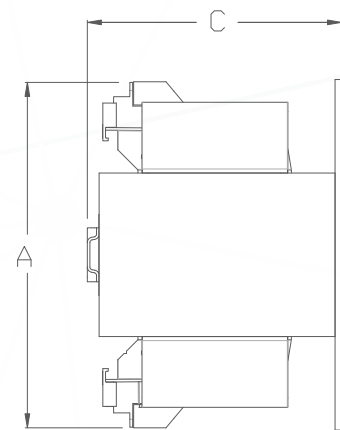
## VOLTAGE TABLE

Group	Primary	Secondary	VA Sizes	View Details on Page
A	220 x 440, 230 x 460, 240 x 480	110, 115, 120	50 - 5000	9
B	240 x 480	24	50 - 750	9
C	120 x 240	24	50 - 750	10
D	115 x 230	24	50 - 500	10
E	550, 575, 600	110, 115, 120	50 - 750	11
F	208/277	120	50 - 750	11
G	200/220/440, 208/230/460, 240/480	110, 115, 120	50 - 3000	12
H	230/460/575	95/115	150 - 5000	13
I	380/400/415	110/220	50 - 5000	13
J	200/208, 220/230/240, 440/460/480	23/110, 24/115, 25/120	50 - 500	14
K	240 x 480	120 x 240	50 - 3000	15
L	240/230/220/208, 416/400/380, 480/460/440, 600/575/550/500	130/125/120/110, 120/115/110/100, 99/95/91/85	50 - 750	15
M	220 x 440, 230 x 460, 240 x 480	110 x 220, 115 x 230, 120 x 240	1000 - 5000	16
N	240/347/380	120 x 240	1000 - 5000	16
S	600	24	50 - 500	17
T	208/277	24	50 - 750	17

Image is a general representation of a typical SNC Control Transformer without fusing accessories or jumper links. Transformers 50VA - 350VA have 4 terminals per side, and units 500VA and higher have 6 terminals per side.



Top view



Side view





## VOLTAGE GROUP A

220 x 440, 230 x 460, 240 x 480 PRIMARY VOLTS 110, 115, 120 SECONDARY VOLTS 50/60 Hz

### Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P22585	3.32	3.00	2.79	2.00	2.50	0.20	0.41	2.6
75	P22426	3.82	3.00	2.79	2.50	2.50	0.20	0.41	3.5
100	P22427	3.78	3.38	3.10	2.38	2.81	0.20	0.41	4.2
150	P22428	4.27	3.75	3.41	2.88	3.13	0.20	0.41	6.7
200	P22645	4.05	4.50	4.04	2.50	3.75	0.20	0.41	8.5
250	P22429	4.55	4.50	4.04	2.88	3.75	0.20	0.41	10.0
300	P22646	4.55	4.50	4.04	3.25	3.75	0.20	0.41	11.3
350	P22430	5.28	4.50	4.04	3.75	3.75	0.20	0.41	13.6
500	P22431	5.75	5.25	4.66	4.25	4.38	0.31	1.06	15.8
750	P22432	7.00	5.25	4.66	5.38	4.38	0.31	1.06	28.1
1000	P22433	6.61	7.00	5.65	4.00	6.13	0.31	1.06	29.8
1500	P22434	7.62	7.00	5.65	4.50	6.13	0.31	1.06	30.0
2000	P22435	8.37	7.00	5.65	5.13	6.13	0.31	1.06	38.0
3000	P22436	7.82	9.00	7.62	4.25	6.50	0.44	1.00	53.0
5000	P22437	9.06	9.00	7.62	7.25	7.50	0.44	1.00	89.0



## VOLTAGE GROUP B

240 x 480 PRIMARY VOLTS 24 SECONDARY VOLTS 50/60 Hz

### Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P23493	3.32	3.00	2.79	2.00	2.50	0.20	0.41	2.6
75	P23494	3.82	3.00	2.79	2.50	2.50	0.20	0.41	3.5
100	P23495	3.78	3.38	3.11	2.38	2.81	0.20	0.41	4.2
150	P23496	4.27	3.75	3.42	2.88	3.13	0.20	0.41	6.7
250	P23497	4.55	4.50	4.04	2.88	3.75	0.20	0.41	10.0
350	P23498	5.28	4.50	4.04	3.75	3.75	0.20	0.41	13.6
500	P23499	5.75	5.25	4.66	4.25	4.38	0.31	1.06	15.8
750	P23500	7.00	5.25	4.66	5.38	4.38	0.31	1.06	28.1

## VOLTAGE GROUP C

120 x 240 PRIMARY VOLTS 24 SECONDARY VOLTS 50/60 Hz

### Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P23485	3.32	3.00	2.79	2.00	2.50	0.20	0.41	2.6
75	P23486	3.82	3.00	2.79	2.50	2.50	0.20	0.41	3.5
100	P23487	3.78	3.38	3.11	2.38	2.81	0.20	0.41	4.2
150	P23488	4.27	3.75	3.42	2.88	3.13	0.20	0.41	6.7
250	P23489	4.55	4.50	4.04	2.88	3.75	0.20	0.41	10.0
350	P23490	5.28	4.50	4.04	3.75	3.75	0.20	0.41	13.6
500	P23491	5.75	5.25	4.66	4.25	4.38	0.31	1.06	15.8
750	P23492	7.00	5.25	4.66	5.38	4.38	0.31	1.06	28.1

## VOLTAGE GROUP D

115 x 230 PRIMARY VOLTS 24 SECONDARY VOLTS 50/60 Hz

### Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P24520	3.32	3.00	2.79	2.00	2.50	0.20	0.41	2.60
75	P24521	3.82	3.00	2.79	2.50	2.50	0.20	0.41	3.50
100	P24522	3.78	3.38	3.11	2.38	2.81	0.20	0.41	4.20
150	P24523	4.27	3.75	3.42	2.88	3.13	0.20	0.41	6.70
200	P24524	4.35	3.75	3.42	2.88	3.13	0.20	0.41	7.25
250	P24525	4.55	4.50	4.04	2.88	3.75	0.20	0.41	10.00
300	P24526	5.10	4.50	4.04	2.88	3.75	0.20	0.41	11.50
350	P24527	5.28	4.50	4.04	3.75	3.75	0.20	0.41	13.60
500	P24528	5.75	5.25	4.66	4.25	4.38	0.31	1.06	15.75

## VOLTAGE GROUP E

550, 575, 600 PRIMARY VOLTS 110, 115, 120 SECONDARY VOLTS 50/60 Hz

Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P22482	3.23	3.00	2.79	2.00	2.50	0.20	0.41	2.6
75	P22483	3.73	3.00	2.79	2.50	2.50	0.20	0.41	3.5
100	P22484	3.69	3.38	3.11	2.38	2.81	0.20	0.41	4.2
150	P22485	4.17	3.75	3.42	2.88	3.13	0.20	0.41	6.7
250	P22486	4.47	4.50	4.04	2.88	3.75	0.20	0.41	10.0
350	P22487	5.19	4.50	4.04	3.75	3.75	0.20	0.41	13.6
500	P22488	5.17	5.25	4.66	4.25	4.38	0.31	1.06	15.9
750	P22489	6.42	5.25	4.66	5.38	4.38	0.31	1.06	28.1
1000	P23767	6.21	7.00	5.65	4.00	6.13	0.31	1.06	29.8

## VOLTAGE GROUP F

208/277 PRIMARY VOLTS 120 SECONDARY VOLTS 50/60 Hz

Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P24454	3.23	3.00	2.79	2.00	2.50	0.20	0.41	2.6
75	P24455	3.73	3.00	2.79	2.50	2.50	0.20	0.41	3.5
100	P24456	3.69	3.38	3.11	2.38	2.81	0.20	0.41	4.2
150	P24457	4.17	3.75	3.42	2.88	3.13	0.20	0.41	6.7
250	P24458	4.47	4.50	4.04	2.88	3.75	0.20	0.41	10.0
350	P24459	5.19	4.50	4.04	3.75	3.75	0.20	0.41	13.6
500	P24460	5.17	5.25	4.66	4.25	4.38	0.31	1.06	15.8
750	P24461	6.42	5.25	4.66	5.38	4.38	0.31	1.06	28.1

Our custom transformers are helping power the U.S. Navy's stealth destroyer, the Zumwalt.



## VOLTAGE GROUP G

200/220/440, 208/230/460, 240/480 PRIMARY VOLTS 110, 115, 120 SECONDARY VOLTS 50/60 Hz

### Approximate Dimensions and Weight

VA Rating	SNC Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P23613	3.23	3.00	2.79	2.00	2.50	0.20	0.41	2.6
75	P23614	3.73	3.00	2.79	2.50	2.50	0.20	0.41	3.5
100	P23615	3.69	3.38	3.11	2.38	2.81	0.20	0.41	4.2
150	P23616	4.17	3.75	3.42	2.88	3.13	0.20	0.41	6.7
200	P23617	3.96	4.50	4.04	2.88	3.75	0.20	0.41	8.5
250	P23618	4.47	4.50	4.04	3.25	3.75	0.20	0.41	10.0
300	P23619	4.47	4.50	4.04	3.25	3.75	0.20	0.41	11.3
350	P23620	5.19	4.50	4.04	3.75	3.75	0.20	0.41	13.6
500	P23621	5.17	5.25	4.66	4.75	4.38	0.31	1.06	16.0
750	P22612	6.42	5.25	4.66	5.38	4.38	0.31	1.06	28.1
1000	P22613	6.21	7.00	5.65	4.00	6.13	0.31	1.06	29.8
1500	P22614	7.23	7.00	5.65	4.50	6.13	0.31	1.06	30.0
2000	P22615	7.98	7.00	5.43	5.13	6.13	0.31	1.06	38.0
3000	P22617	7.50	9.00	7.62	4.25	6.50	0.44	1.00	53.0
5000	P22618	9.00	9.00	7.62	7.25	7.50	0.44	1.00	89.0



Automated manufacturing facilities around the world are using SNC's transformers for their reliability to deliver innovation and increase their speed to market.



## VOLTAGE GROUP H

230/460/575 PRIMARY VOLTS 95/115 SECONDARY VOLTS 1Ø 50/60 Hz

### Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P24544	3.23	3.00	2.79	2.00	2.50	0.20	0.41	2.6
75	P24545	3.73	3.00	2.79	2.50	2.50	0.20	0.41	3.5
100	P24546	3.69	3.38	3.11	2.38	2.81	0.20	0.41	4.2
150	P24547	4.17	3.75	3.42	2.88	3.13	0.20	0.41	6.7
250	P24548	4.47	4.50	4.04	3.25	3.75	0.20	0.41	10.0
350	P24549	5.19	4.50	4.04	3.75	3.75	0.20	0.41	13.6
500	P24550	5.17	5.25	4.66	4.75	4.38	0.31	1.06	16.0
750	P24551	6.42	5.25	4.66	5.38	4.38	0.31	1.06	28.1
1000	P24427	6.21	7.00	5.65	4.00	6.13	0.31	1.06	29.8
1500	P24428	7.98	7.00	5.43	5.13	6.13	0.31	1.06	38.0
2000	P24429	7.98	7.00	5.43	5.13	6.13	0.31	1.06	38.0
3000	P24430	9.00	9.00	7.62	7.25	7.50	0.44	1.00	89.0
5000 *	P24431	10.00	9.00	8.73	8.25	7.50	0.44	1.00	101.0

\*GEN I Design

## VOLTAGE GROUP I

380/400/415 PRIMARY VOLTS: 110/220 SECONDARY VOLTS 50/60Hz

### Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P24444	3.32	3.00	2.79	2.00	2.50	0.20	0.41	2.6
75	P24445	3.82	3.00	2.79	2.50	2.50	0.20	0.41	3.5
100	P24446	3.78	3.38	3.11	2.38	2.81	0.20	0.41	4.2
150	P24447	4.27	3.75	3.42	2.88	3.13	0.20	0.41	6.7
200	P24448	4.05	4.50	4.04	2.50	3.75	0.20	0.41	8.5
250	P24449	4.55	4.50	4.04	2.88	3.75	0.20	0.41	10.0
300	P24450	4.55	4.50	4.04	3.25	3.75	0.20	0.41	11.3
350	P24451	5.28	4.50	4.04	3.75	3.75	0.20	0.41	13.6
500	P24452	5.75	5.25	4.66	4.25	4.38	0.31	1.06	16.1
750	P24453	7.00	5.25	4.66	5.38	4.38	0.31	1.06	28.1

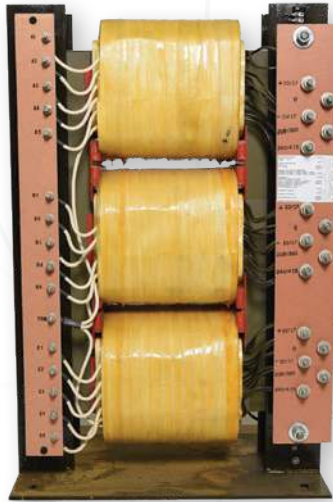


## VOLTAGE GROUP J

200/208, 220/230/240, 440/460/480 PRIMARY VOLTS 23/110, 24/115, 25/120 SECONDARY VOLTS 50/60 Hz

### Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
45	TBA	3.73	3.00	2.79	2.50	2.50	0.20	0.41	3.5
50	P22475	3.73	3.00	2.79	2.50	2.50	0.20	0.41	3.5
75	P22476	3.69	3.38	3.11	2.38	2.81	0.20	0.41	4.2
100	P22477	4.17	3.75	3.42	2.88	3.13	0.20	0.41	6.7
150	P22478	4.17	3.75	3.42	2.88	3.13	0.20	0.41	6.7
200	P24812	4.47	4.50	4.04	2.88	3.75	0.20	0.41	10.0
250	P22479	5.19	4.50	4.04	3.75	3.75	0.20	0.41	13.6
300	TBA	5.19	4.50	4.04	3.75	3.75	0.20	0.41	13.6
350	P22480	5.17	5.25	4.66	4.25	4.38	0.31	1.06	16.2
500	P22481	6.42	5.25	4.66	5.38	4.38	0.31	1.06	28.1
750	P22473	7.23	7.00	5.65	4.00	6.13	0.31	1.06	30.0
1000	P23994	7.98	7.00	5.43	5.13	6.13	0.31	1.06	38.0



## CUSTOM TRANSFORMERS

SNC builds a wide variety of custom transformers for a broad range of industries to meet our customers' individual application requirements.

To learn more, visit:

[www.sncmfg.com/custom-transformers](http://www.sncmfg.com/custom-transformers)

## VOLTAGE GROUP K

240 x 480 PRIMARY VOLTS 120 x 240 SECONDARY VOLTS 50/60Hz

Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P23691	3.41	3.00	2.79	2.00	2.50	0.20	0.41	2.6
75	P23692	3.91	3.00	2.79	2.50	2.50	0.20	0.41	3.5
100	P23693	3.86	3.38	3.10	2.38	2.81	0.20	0.41	4.2
150	P23694	4.36	3.75	3.41	2.88	3.13	0.20	0.41	6.7
200	P23695	4.14	4.50	4.04	2.50	3.75	0.20	0.41	8.5
250	P23696	4.64	4.50	4.04	2.88	3.75	0.20	0.41	10.0
300	P23697	4.64	4.50	4.04	3.25	3.75	0.20	0.41	11.3
350	P23698	5.37	4.50	4.04	3.75	3.75	0.20	0.41	13.6
500	P23699	5.75	5.25	4.66	4.25	4.38	0.31	1.06	17.3
750	P23700	6.74	5.25	4.66	5.38	4.38	0.31	1.06	28.1
1000	P23701	7.01	7.00	5.65	5.38	4.38	0.31	1.06	29.8
1500	P23702	8.00	7.00	5.65	4.50	6.13	0.31	1.06	30.0
2000	P24215	8.76	7.00	5.65	5.13	6.13	0.31	1.06	38.0
3000	P23703	8.14	9.00	7.62	4.25	6.50	0.44	1.00	53.0
5000	P24216	9.14	9.00	7.62	7.25	7.50	0.44	1.00	89.0

## VOLTAGE GROUP L

240/230/220/208, 416/400/380, 480/460/440, 600/575/550/500 PRIMARY VOLTS  
130/125/120/110, 120/115/110/100, 99/95/91/85 SECONDARY VOLTS 1Ø 50/60 Hz

Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P24432	4.44	3.00	3.45	2.38	2.81	0.20	0.41	4.2
100	P24433	4.90	3.75	4.01	2.88	3.13	0.20	0.41	6.7
150	P24434	4.58	4.50	4.64	2.88	3.75	0.20	0.41	10.0
250	P24435	5.08	4.50	4.64	3.75	3.75	0.20	0.41	13.6
350	P24436	6.42	5.25	4.66	4.25	4.38	0.31	1.06	28.1
500	P24437	7.75	5.25	4.67	6.13	4.38	0.31	1.06	28.1
750	P24438	6.21	6.38	5.65	4.00	6.13	0.31	1.06	29.8

## VOLTAGE GROUP M

220 x 440, 230 x 460, 240 x 480 PRIMARY VOLTS 110 x 220, 115 x 230, 120 x 240 SECONDARY VOLTS 1Ø 50/60 Hz

### Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
1000	P24439	7.01	7.00	5.65	5.38	4.38	0.31	1.06	29.8
1500	P24440	8.00	7.00	5.65	4.50	6.13	0.31	1.06	30.0
2000	P24441	8.76	7.00	5.65	5.13	6.13	0.31	1.06	38.0
3000	P24442	8.14	9.00	7.62	4.25	6.50	0.44	1.00	53.0
5000	P24443	9.14	9.00	7.62	7.25	7.50	0.44	1.00	89.0

## VOLTAGE GROUP N

240/387/380 PRIMARY VOLTS 120 x 240 SECONDARY VOLTS 50/60Hz

### Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
1000	P24462	6.23	7.00	5.65	4.00	6.13	0.31	1.06	29.8
1500	P24463	7.23	7.00	5.65	4.50	6.13	0.31	1.06	30.0
2000	P24464	7.98	7.00	5.65	5.13	6.13	0.31	1.06	38.0
3000	P24465	7.82	9.00	7.62	4.25	6.50	0.44	1.00	53.0
5000	P24466	8.81	9.00	7.62	7.25	7.50	0.44	1.00	89.0

Notes: · Jumper Link and Fuse Clip Ht not included

· Add 5/16" to the depth when fuse clips are included (50 thru 350VA)

· Add 1/2" to the height when fuse block is included (1, 2, and 3 poles) 500 thru 5000VA)

· Add 1 3/8" to the height when fuse block is included (1, 2, and 3 poles) (50 thru 350VA)







## VOLTAGE GROUP S

600 PRIMARY VOLTS 24 SECONDARY VOLTS 50/60 Hz

### Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	P23649	3.32	3.00	2.79	2.00	2.50	0.20	0.41	2.6
75	P23650	3.82	3.00	2.79	2.50	2.50	0.20	0.41	3.5
100	P23651	3.78	3.38	3.11	2.38	2.81	0.20	0.41	4.2
150	P23652	4.27	3.75	3.42	2.88	3.13	0.20	0.41	6.7
200	P23653	4.35	4.50	4.04	2.50	3.75	0.20	0.41	8.5
250	P23654	4.55	4.50	4.04	2.88	3.75	0.20	0.41	10.0
300	P23655	4.46	4.50	4.04	3.25	3.75	0.20	0.41	11.3
350	P23656	5.28	4.50	4.04	3.75	3.75	0.20	0.41	13.6
500	P23657	5.75	5.25	4.66	4.25	4.38	0.31	1.06	15.8



## VOLTAGE GROUP T

208/277 PRIMARY VOLTS 24 SECONDARY VOLTS 50/60 Hz

### Approximate Dimensions and Weight

VA Rating	Part #	Max. Depth (A)	Max. Width (B)	Max. Height (C)	Mounting Depth (D)	Mounting Width (E)	Mounting Hole Depth	Mounting Hole Width	Shipping Weight (lbs.)
50	TBD	3.23	3.00	2.79	2.00	2.50	0.203	0.406	2.6
75	TBD	3.73	3.00	2.79	2.50	2.50	0.203	0.406	3.5
100	TBD	4.23	3.38	3.10	2.38	2.81	0.203	0.406	4.2
150	TBD	4.18	3.75	3.41	2.88	3.13	0.203	0.406	6.7
200	TBD	3.96	4.50	4.04	2.50	3.75	0.203	0.406	8.5
250	TBD	4.46	4.50	4.04	2.88	3.75	0.203	0.406	10.0
300	TBD	4.46	4.50	4.04	3.25	3.75	0.203	0.406	11.3
350	TBD	5.19	4.50	4.04	3.75	3.75	0.203	0.406	13.6
500	TBD	5.17	5.25	4.66	4.25	4.38	0.31	1.06	19.20
750	TBD	6.42	5.25	4.66	5.38	4.38	0.31	1.06	28.10

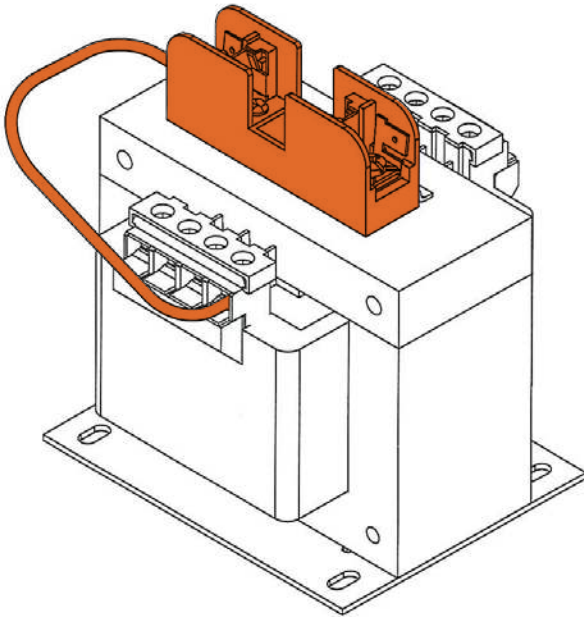
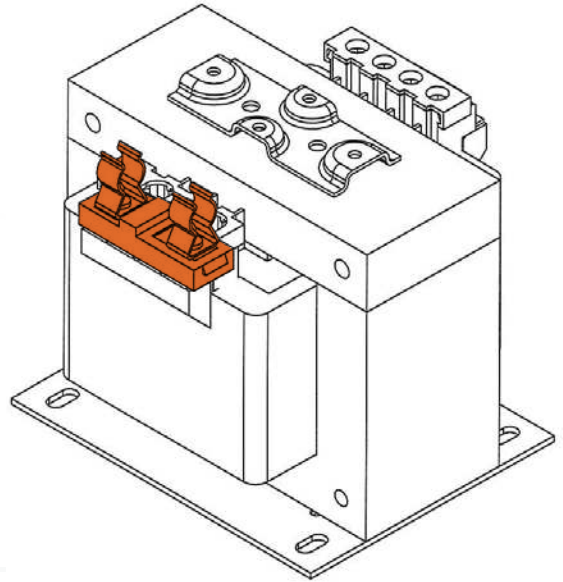
Notes: · Jumper Link and Fuse Clip Ht not included · Add 5/16" to the depth when fuse clips are included (50 thru 350VA) · Add 1/2" to the height when fuse block is included (1, 2, and 3 poles) 500 thru 5000VA) · Add 1 3/8" to the height when fuse block is included (1, 2, and 3 poles) (50 thru 350VA)

# Fusing Accessories

## OPTION: F0

(P23725 KIT)

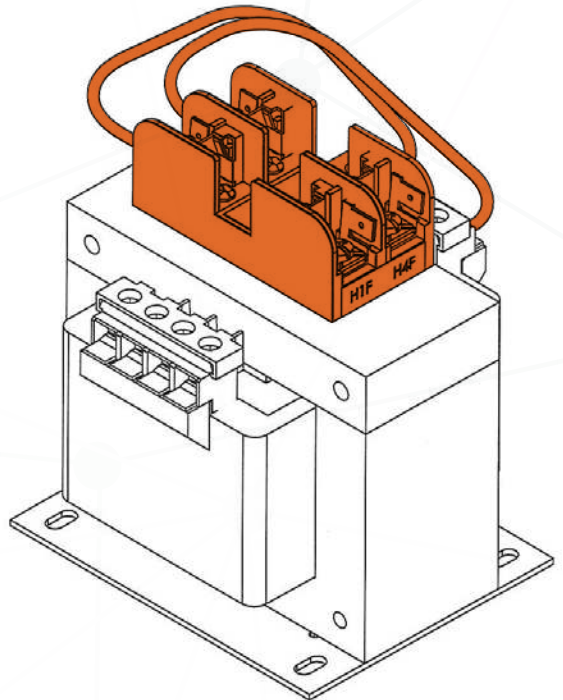
Secondary Fuse Clip  
(13/32" x 1 1/2" Midget Fuse)



## OPTION: F1

(P24084 KIT)

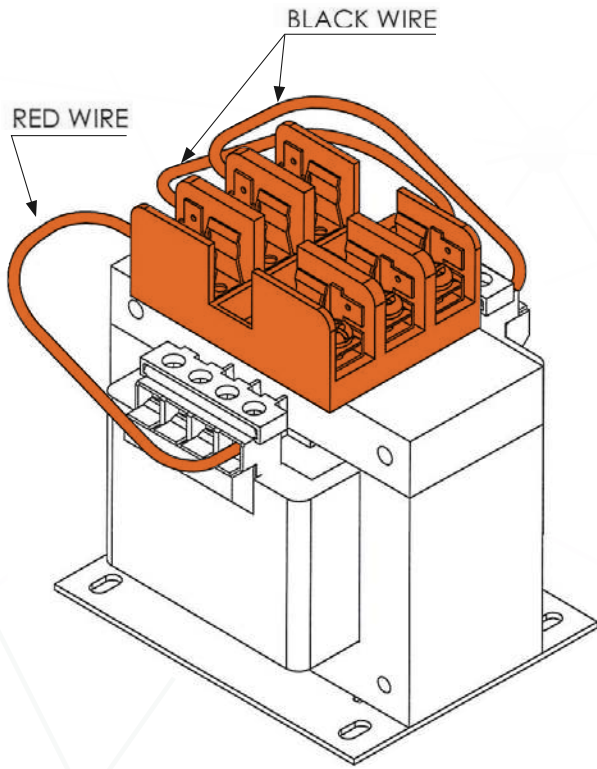
Secondary Fuse Block  
(13/32" x 1 1/2" Midget Fuse)



## OPTION: F2

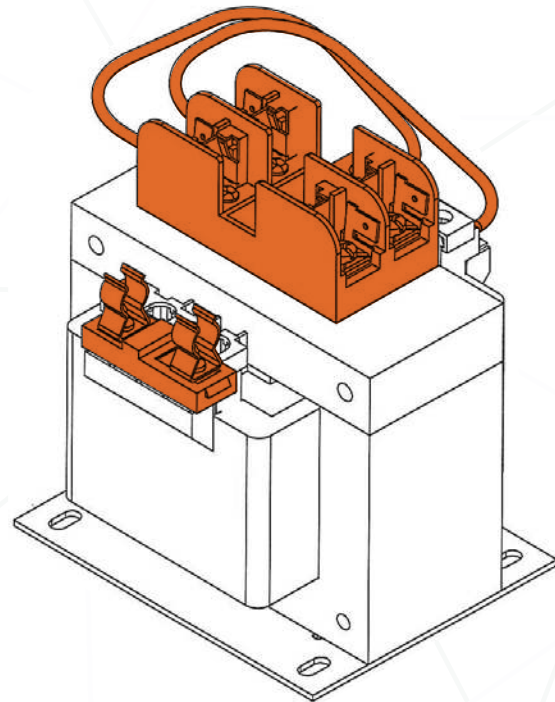
(P23721 KIT)

Primary Fuse Block  
(Class CC Fuses)



### OPTION: F3

(P24085 KIT)  
 Primary & Secondary Fuse Block  
 (Class CC Fuses (PRI) &  
 13/32" x 1 1/2" Midget Fuse (SEC))



### OPTION: F4

(P24086 KIT)  
 Primary Fuse Block & Secondary  
 Fuse Clips (Class CC Fuses (PRI)  
 & 13/32" x 1 1/2" Midget Fuse (SEC))

## ACCESSORIES

SNC Part #	Fusing Options
P23722	Primary fuse cover with puller - fits any fuse block
P24286	Primary fuse cover with puller - fits any fuse block (25 pack)
P23724	Secondary fuse cover - fits any secondary fuse clip
P24291	Secondary fuse cover - fits any secondary fuse clip (25 pack)
P23725	Secondary fuse clip fits 50 - 750VA
P24665	Secondary fuse clip fits 1 - 5 KVA
P24084	Single pole secondary fuse block - fits all models
P23721	Dual pole primary fuse block - fits all models
P24085	Dual pole primary fuse block and secondary fuse block - fits 150VA+
P24086	Dual pole primary fuse block and secondary fuse clip

Options designated with an "F" are factory installed.

# Fusing Sizing Chart

## SECONDARY STANDARD FUSE RATING

Voltage/ VA	25	45	50	75	100	150	200	250	300	350	500	750	1000	1500	2000	3000	5000
12	3.2	6.25	6.25	10	12	15	20	25	30								
23	1.8	3.2	3.5	5	7	10	12	15	15	20	30						
24	1.6	3	3.2	5	6.25	10	12	15	15	20	30						
25	1.6	3	3.2	5	6.25	10	12	15	15	15	25						
90	0.4	0.8	0.8	1.3	1.8	2.5	3.5	4.5	5	6.25	9	12	15	25	30		
95	0.4	0.75	0.8	1.3	1.6	2.5	3.5	4	5	6	8	12	15	20	30		
100	0.4	0.7	0.8	1.25	1.6	2.5	3.2	4	5	5.6	8	12	15	20	25		
110	0.3	0.6	0.75	1	1.5	2	3	3.5	4.5	5	7.5	10	12	15	25		
115	0.3	0.6	0.7	1	1.4	2	2.8	3.5	4	5	7	10	12	15	25		
120	0.3	0.6	0.6	1	1.3	2	2.5	3.2	4	4.5	6.25	10	12	15	25		
220	0.25	0.3	0.3	0.5	0.75	1	1.5	1.8	2	2.5	3.5	5.6	7.5	10	12	15	30
230	0.25	0.3	0.3	0.5	0.7	1	1.4	1.8	2	2.5	3.5	5	7	10	12	15	30
240	0.25	0.3	0.3	0.5	0.6	1	1.3	1.6	2	2.25	3.2	5	6.25	10	12	15	30

## PRIMARY STANDARD FUSE RATING

Voltage/ VA	25	45	50	75	100	150	200	250	300	350	500	750	1000	1500	2000	3000	5000
115	0.5	0.8	1	1.6	2	3.2	4	5	6.25	7.5	10	15	20	30			
120	0.5	0.8	1	1.5	2	3	4	5	6.25	7	10	15	20	30			
200	0.3	0.5	0.6	0.8	1.25	1.8	2.5	3	3.5	4	6.25	9	12	17.5	25		
208	0.3	0.5	0.6	0.8	1.125	1.8	2.25	3	3.5	4	6	9	12	17.5	20		
220	0.25	0.5	0.5	0.8	1	1.6	2	2.8	3.2	3.5	5.6	8	10	15	20	30	
230	0.25	0.4	0.5	0.8	1	1.6	2	2.5	3.2	3.5	5	8	10	15	20	30	
240	0.25	0.4	0.5	0.75	1	1.5	2	2.5	3	3.5	5	7.5	10	15	20	30	
277	0.25	0.4	0.4	0.6	0.8	1.3	1.8	2	2.5	3	4.5	6.25	9	12	17.5	25	
380	0.25	0.3	0.3	0.5	0.6	0.8	1.3	1.6	1.8	2.25	3.2	4.5	6.25	9	12	17.5	30
400	0.25	0.25	0.3	0.4	0.6	0.8	1.25	1.5	1.8	2	3	4.5	6.25	9	12	17.5	30



## PRIMARY STANDARD FUSE RATING

Voltage/ VA	25	45	50	75	100	150	200	250	300	350	500	750	1000	1500	2000	3000	5000
415	0.25	0.25	0.3	0.4	0.6	0.8	1.125	1.5	1.8	2	3	4.5	6	9	12	17.5	30
440	0.25	0.25	0.25	0.4	0.5	0.8	1	1.4	1.6	1.8	2.8	4	5.6	8	10	15	25
460	0.25	0.25	0.25	0.4	0.5	0.8	1	1.3	1.6	1.8	2.5	4	5	8	10	15	25
480	0.25	0.25	0.25	0.4	0.5	0.75	1	1.3	1.5	1.8	2.5	3.5	5	7.5	10	15	25
550	0.25	0.25	0.25	0.3	0.4	0.6	0.8	1	1.3	1.6	2	3.2	4.5	6.25	9	12	20
575	0.25	0.25	0.25	0.3	0.4	0.6	0.8	1	1.3	1.5	2	3.2	4	6.25	8	12	20
600	0.25	0.25	0.25	0.3	0.4	0.6	0.8	1	1.25	1.4	2	3	4	6.25	8	12	20

## PRIMARY AND SECONDARY PROTECTION

\*Fuse sizing is based on NEC 450.3

### Rated Secondary Current in Amps

### Maximum Primary Fuse Size

### Maximum Secondary Fuse

Less than 9 amps

250% or next size smaller

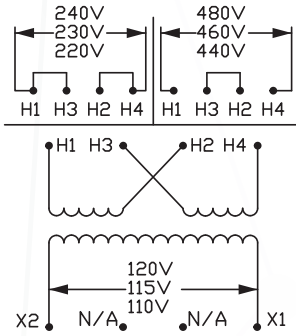
167% or next size smaller

Greater than or equal to 9 amps

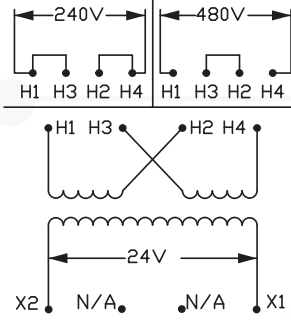
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125% or next size smaller

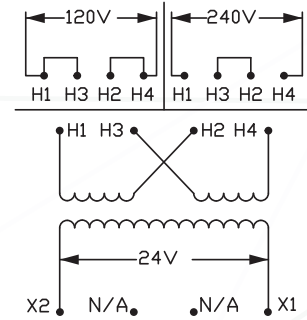
# Connection Diagrams



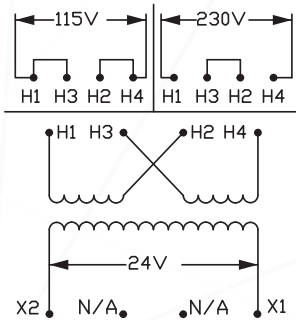
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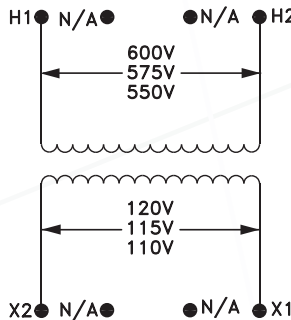
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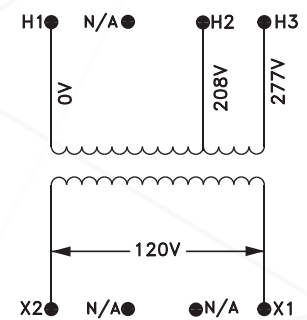
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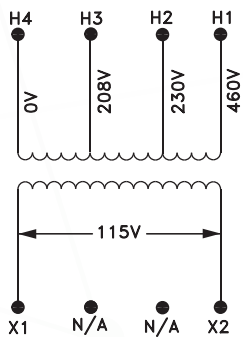
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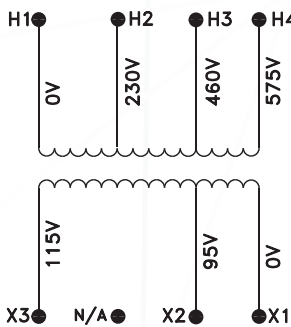
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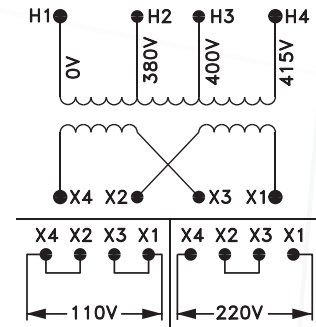
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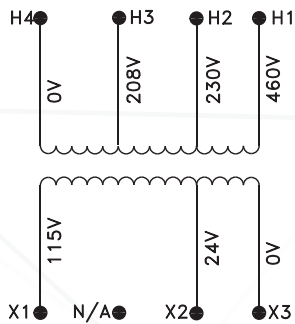
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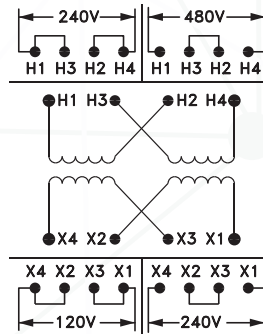
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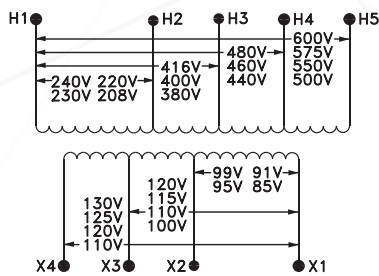
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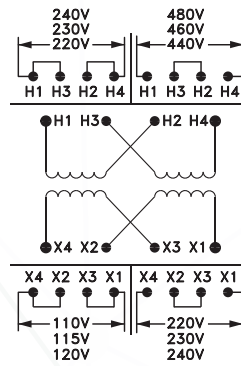
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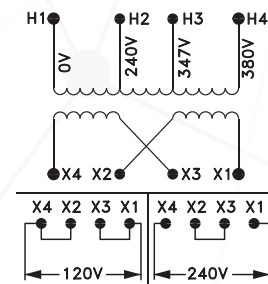
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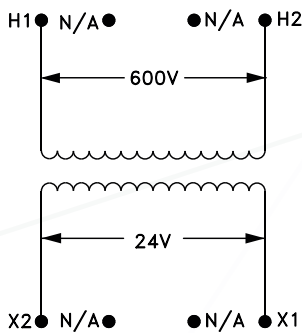
GROUP L



GROUP M



GROUP N



GROUP S

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