

## Selecting Industrial Control Transformers

To make the proper transformer selection, the load must be completely analyzed... which involves every electrically energized component in the control circuit.

All electromagnetic control devices have two current requirements; the first to energize the coil; the second to maintain the contact for a definite period of time. The initial energizing of the coil, which takes 5 to 20 milliseconds, requires many times more current than normal. This is referred to as **volt-ampere inrush**... which is immediately followed by the sealed volt-amperes—the amount of current required to hold the contact in the circuit.

### Easy, five step selection

- Determine the voltage and frequency of supply circuit: Example: 460 Volts, 60 Hz.
- Determine the total inrush VA of the control circuits from the manufacturer's data or the contactor data table. Do not neglect the current requirements of indicating lights and timing devices that do not have an inrush VA but are energized at the same time as the other components in the circuit. Their total VA should be added to the total inrush VA.
- Refer to the regulation data chart. If the supply circuit voltage (Step 1) is reasonably stable and fluctuates no more than  $\pm 5\%$ , refer to the 90% Secondary Voltage column. If it fluctuates as much as  $\pm 10\%$ , refer to the 95% Secondary Voltage column. Go down the column you have selected until you arrive at the inrush VA closest to, but not less than, the inrush VA of your control circuit.
- Read to the far left side of the chart and you have selected the continuous nominal VA rating of the transformer needed. The secondary voltage that will be delivered under inrush conditions will be either 85%, 90%, or 95% of the rated secondary voltage—depending on the column selected from the regulation data chart. The total sealed VA of the control circuit must not exceed the nominal VA rating of the transformer selected from the manufacturer's data or the contactor's data table.

**TABLE 1. Inrush VA**

Nominal VA Rating	Inrush VA @ 20% & 40% Power Factor					
	85% Secondary Voltage		90% Secondary Voltage		95% Secondary Voltage	
	20% P.F.	40% P.F.	20% P.F.	40% P.F.	20% P.F.	40% P.F.
50	362	224	289	179	217	134
75	579	354	462	283	345	211
100	839	522	664	413	489	304
150	1326	842	1003	637	679	431
250	3447	2281	2462	1629	1477	977
300	3894	2618	2812	1890	1731	1163
350	5418	3689	3870	2635	2322	1581
500	6496	4575	4691	3304	2887	2033
750	8377	5811	5913	4102	3449	2393
1000	11329	9005	7789	6191	4248	3377
1500	25519	18803	18013	13273	10508	7742
2000	28178	21600	19372	14850	10566	8100
3000	34797	28391	24562	20041	14328	11690
5000	138500	84542	100000	61058	61550	37574

**TABLE 2. Typical Magnetic Motor Starter & Contactor Data ①**  
60 Hz, 120 Volt, 3-Pole

Contactor	N.E.M.A. Size								VA Inrush	
	00	0	1	2	3	4	5			
Allen Bradley	500 Series	—	192	192	240	660	1225	A 2040	L 1490	VA Inrush
		—	29	29	29	45	69	110	96	VA Sealed
	K Series	53	110	175	240	580	1000	1950		VA Inrush
		15	20	22	31	43	65	98		VA Sealed
ASEA	Heavy Duty Series	85	85	100	150	490	900	1200		VA Inrush
		9	9	11.5	15	35	55	65		VA Sealed
Furnas		218	218	218	218	310	957	1518		VA Inrush
		25	25	25	25	26	75	116		VA Sealed
General Electric		151	151	151	528	1152	1248	2580		VA Inrush
		24	24	24	60	83	86	191		VA Sealed
Joslyn Clark		210	210	210	210	724	880	1790		VA Inrush
		18	18	18	18	30	39	295		VA Sealed
Siemens-Allis (formerly ITE Gould)		76	76	76	194	365	530	1630		VA Inrush
		12	12	12	21	35	40	110		VA Sealed
Square D		165	245	245	311	700	1185	2970		VA Inrush
		33	27	27	37	46	85	212		VA Sealed
Westinghouse		160	160	160	160	625	625	1700		VA Inrush
		25	25	25	25	50	50	180		VA Sealed
Cutler Hammer (Citation Line)	A1 Series	87	103	103	—	—	—	1158		VA Inrush
		15	20	20	—	—	—	100		VA Sealed
	B1 Series	102	103	103	140	390	1158	1158		VA Inrush
		13	20	20	24	50	100	100		VA Sealed

- Refer to the specification tables on the following pages to select a transformer according to the required continuous nominal VA and primary/secondary voltages.

① Data is most current at time of printing. Contact individual manufacturer for updates.

## TA Series Open Core & Coil Industrial Control Transformers

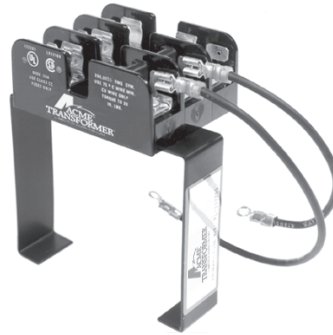
Industrial control transformers are used to reduce supply voltages to 230 V or lower for the operation of electromagnetic devices such as contactors, solenoids, relays, and timers. They are especially designed to accommodate the momentary current inrush caused when electromagnetic components are energized... without sacrificing secondary voltage stability beyond practical limits.

Acme Industrial Control Transformers are dry-type, step-down transformers with the secondary control circuit isolated from the primary line circuit to assure maximum safety.

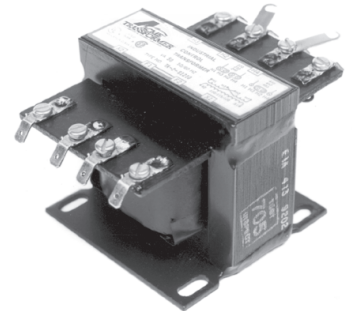
Voltage regulation of Acme Industrial Control Transformers exceeds standards recommended by the National Electrical Manufacturers Association. Secondary circuit voltage drop between no-load and momentary overload remains exceptionally low. This excellent secondary circuit voltage regulation assures reliable operation of electromagnetic components and may permit the use of a smaller and less expensive industrial control transformer.

### FEATURES

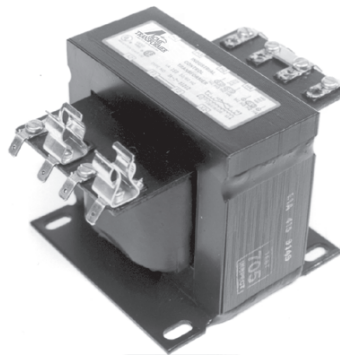
- Constructed with high quality silicon steel lamination to minimize core losses and increase efficiency.
- Designs incorporate precision wound coils for improved regulation.
- Primary fuse blocks and secondary fuse kits available and easily adaptable.
- Series-parallel connecting links save wiring and labor costs.
- Sturdy phenolic terminal panel protects the coil from foreign objects and mechanical damage.
- Copper windings on all groups.
- 130°C Insulation class. 80°C temperature rise.
- Wire retention on both primary and secondary terminals.
- Mounting plate adapts to various mounting dimensions.
- Voltage regulation exceeds NEMA requirements.
- UL Listed, CSA Certified.
- Attractive finish, nameplate, and design features enhance the end product.



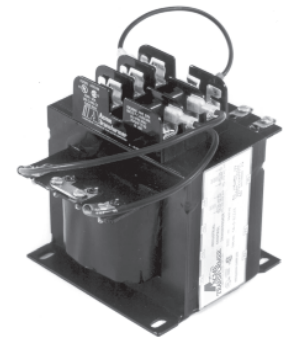
Primary Fuse Kit with Snap-on Secondary Fuse Block



Jumper Link Connections



Secondary Fuse Clips



Integrally Mounted Fuse Blocks

### Acme Industrial Control Transformers Meet or Exceed UL, CSA, NEMA & ANSI

Acme Industrial Control Transformers 50 through 5000 VA are UL Listed, File E79947 and CSA certified, File 7357.

**Laminations**—High-permeability silicon steel continuously annealed to minimize core losses.

**Magnet Wire**—Copper magnet wire is coated with high temperature-resisting insulating film.

**Coils**—Precision wound by machine; total turns per coil automatically counted.

**Mounting**—Heavy steel mounting plates add strength to core construction and provide firm mounting, slotted to facilitate installation.

**Terminal Boards**—Sturdy phenolic terminal boards.

#### Sizing Primary Fuses:

Primary Amps < 2, fuse size is 300% of rated primary current.

Primary Amps 2 < 9, fuse size is 167% of rated primary current.

Primary Amps ≥ 9, fuse size is 125% of rated primary current.

#### Sizing Secondary Fuses:

Secondary Amps < 9, fuse size is 167% of rated secondary current.

Secondary Amps ≥ 9, fuse size is 125% of rated secondary current.

## TA Series Primary Fuse Kits

### Type PL112700 Through PL112705:

#### Using 2 Class CC Dual Element Fuses (not supplied)

- Meets NEC Article 450 and UL-508 requirements.
- For use with class “CC” fuses.
- Eliminates remote mounting of primary overcurrent protection.
- Covered by Acme Electric 10-year limited warranty.

Field installation is fast and easy. Simply loosen the mounting hardware (Fig. 1), slide the bracket over the transformer and re-tighten the mounting hardware. Make the proper connections with the factory furnished jumpers (Fig. 2) and your unit is ready for operation.

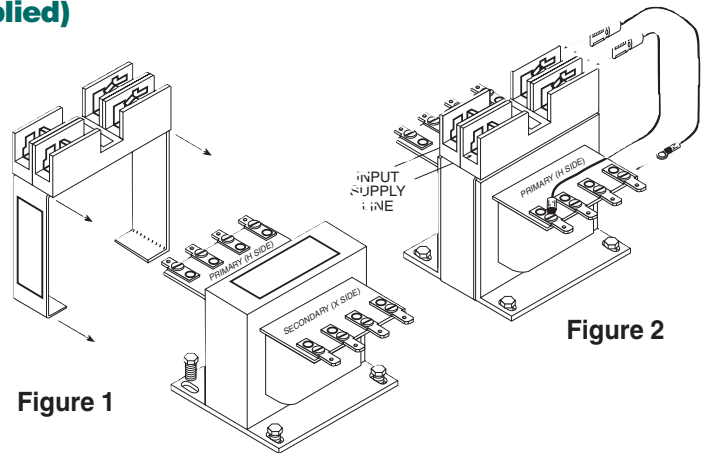


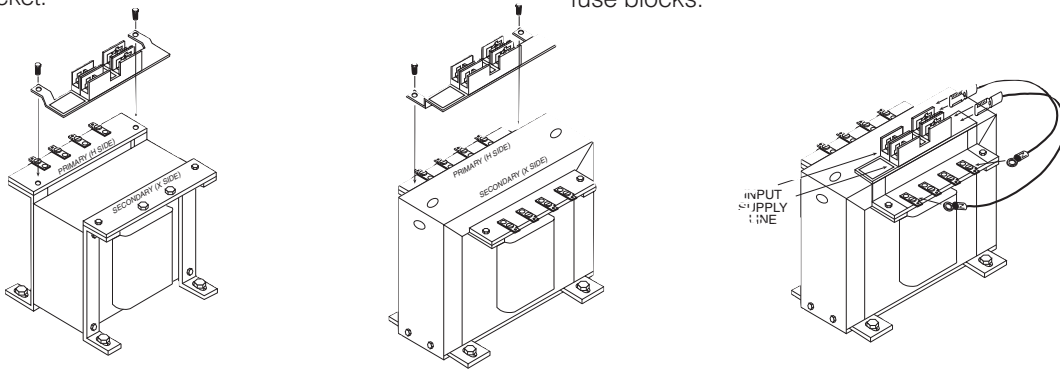
Figure 1

Figure 2

## Instructions for TA Series Primary Fuse Kit

### Type PL112706 & PL112707: Using 2 Class CC Dual Element Fuses (3000-5000 VA)

1. To mount the primary fuse kit bracket, remove the two 1/4" (.64 cm) sheet metal screws on the terminal panel on the primary (H side) of the transformer.
2. Place the slots in the fuse kit mounting bracket over the holes in the terminal and mounting bracket. To secure the fuse kit, reinsert the two 1/4" (.64 cm) sheet metal screws and tighten securely.
3. Tighten all mounting screws securely—this will secure the mounting bracket.
4. Attach the female quick connect of the jumpers supplied with the fuse kit to male quick connects on the right side of the fuse blocks—one jumper to each of the blocks.
5. Connect the ring terminal of the jumpers to the appropriate screw terminals of the transformers primary (H side). Refer to the transformer name plate for proper terminal connections.
6. Connect primary supply line leads to the screw terminals on the left side of the block—one line lead to each of the fuse blocks.



### Primary Fuse Sizing Chart<sup>①</sup>

VA	120 V	208 V	230 V	240 V	277 V	380 V	416 V	440 V	460 V	480 V	550 V	600 V
50	1.2	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	1.9	1.0	1.0	1.0	0.8	0.6	0.6	0.6	0.5	0.5	0.4	0.4
100	2.5	1.5	1.3	1.3	1.0	0.8	0.8	0.6	0.6	0.6	0.6	0.5
150	3.8	2.0	2.0	1.9	1.5	1.2	1.2	1.0	1.0	1.0	0.8	0.8
250	3.5	3.5	3.5	3.0	3.0	2.0	1.8	1.8	1.5	1.5	1.4	1.2
300	4.0	4.0	4.0	3.5	3.0	2.5	2.5	2.0	2.0	1.9	1.5	1.5
350	5.0	5.0	4.5	4.0	4.0	2.5	2.5	2.5	2.0	2.0	1.9	1.8
500	7.0	4.0	3.5	3.5	5.5	4.0	3.5	3.5	3.5	3.0	3.0	2.5
750	10.0	6.0	5.5	5.0	4.5	6.0	5.5	5.0	5.0	5.0	4.0	4.0
1000	15.0	8.0	7.0	7.0	6.0	4.5	4.0	3.5	3.5	3.5	5.5	5.0
1500	20.0	12.0	12.0	12.0	10.0	7.0	6.0	6.0	5.5	5.5	5.0	4.5
2000	25.0	12.0	15.0	15.0	12.0	9.0	8.0	8.0	7.5	7.0	6.0	6.0
3000	30.0	20.0	20.0	20.0	15.0	15.0	12.0	12.0	12.0	12.0	10.0	9.0
5000	—	30.0	30.0	30.0	25.0	20.0	15.0	15.0	15.0	15.0	12.0	15.0

<sup>①</sup> Fuse size based on time delay class CC fuses.

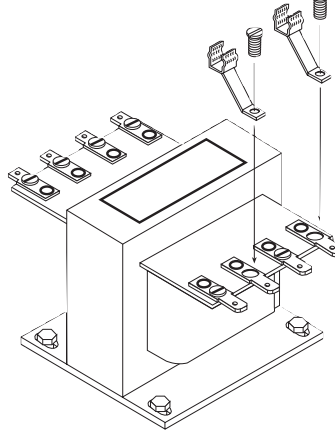
NOTE: Bold lines indicate changes in the percent of rated current used to calculate fuse sizes in accordance with article 450 of the NEC.

## TA Series Secondary Fuse Kits

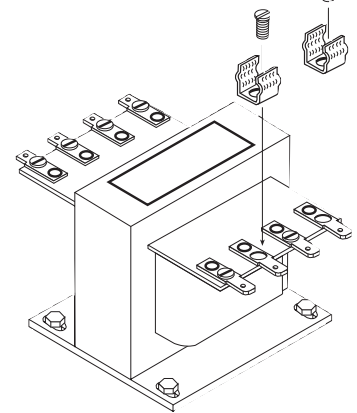
### Type PL112600, 601, 602: Use Dual Element Slow-Blow Fuse

- Mount secondary fuse clips on terminals X1 and F or F1 using the screws supplied with the transformer.
- Connect secondary load lines to terminals X2 and F or F2.
- Use dual-element slow-blowing fuses such as Bussmann MFG., Fusetron Type FNM, Littelfuse or Shawmut (not supplied with fuse kits).

PL112600/601 Fuse Kit



PL112602 Fuse Kit



## TA Series Instructions for Secondary Fuse Kit

### Type PL112603: use dual element slow-blow fuse 13/32" x 1-1/2" (1.0 x 3.8 cm)

1. To attach secondary fuse kit PL-112603 to primary fuse kits PL112700 thru PL112707 snap the secondary single pole fuse block onto the unlabeled side of the primary double pole fuse block. (See Figure 1)
2. Install the fuse kits as instructed under the primary fuse kit instructions on page 54.
3. Select the appropriate pair of jumpers for making the connections between the secondary fuse block and the secondary (X-side) of the transformer.
4. Connect the female quick-connect of the jumpers supplied to one of the male quick-connects of the secondary fuse block - one jumper to each end of the fuse block. (See Figure 2)
5. Connect the ring terminal of the jumpers supplied to screw terminals X1 and F or F1 on the secondary (X-side) of the transformer.
6. Connect secondary load lines to terminals X2 and F or F2.

Figure 1

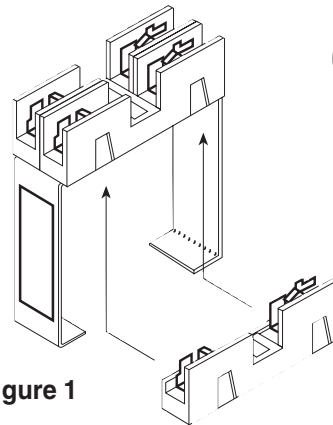
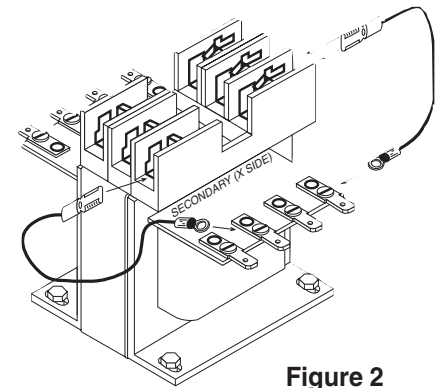


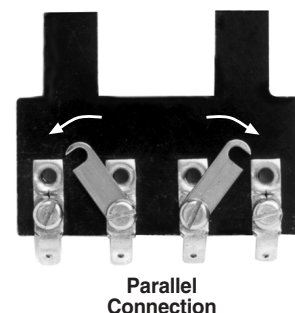
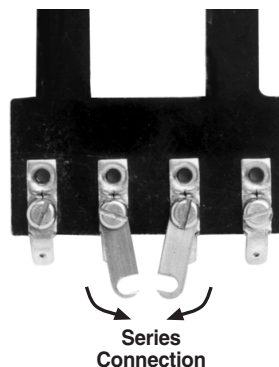
Figure 2



## Jumper Link Connections

Group A Series: 240 V parallel: 120 V  
 Group B Series: 480 V parallel: 240 V  
 Group F series: 230 V parallel: 115 V  
 Group I Series: 24 V parallel: 12 V  
 Group J Series: 480 V & 240 V: 240 V & 120 V  
 Group K Series: 240 V: 120 V

**Exception:** 150 VA transformer TA232404 does not have quick connect terminals.





## TB Series Open Core & Coil Industrial Control Transformers

Acme's TB Series Industrial Control Transformers are especially designed to accommodate the momentary current inrush caused when electromagnetic components are energized... without sacrificing secondary voltage stability beyond practical limits.

Acme's TB Series transformers are dry-type, step-down transformers with the secondary control circuit isolated from the primary line circuit to assure maximum safety.

Voltage regulation of Acme's TB Series transformers exceeds standards recommended by the National Electrical Manufacturers Association. Secondary circuit voltage drop between no-load and momentary overload remains exceptionally low. This excellent secondary circuit voltage regulation assures reliable operation of electromagnetic components and may permit the use of a smaller and less expensive industrial control transformer.

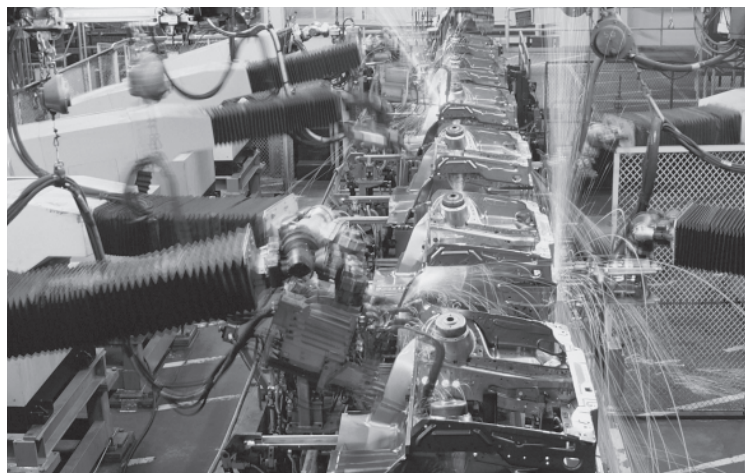
### FEATURES & BENEFITS

- 600 volt class and below.
- 50–1000 VA, 50/60 Hz.
- 80°C temperature rise, 130°C insulation class.
- Constructed with high quality silicon steel lamination to minimize core losses and increase efficiency.
- Designs incorporate precision split bobbin wound coils for improved regulation.
- Primary fuse blocks and secondary fuse kits available and easily adaptable.
- Series-parallel connecting links save wiring and labor costs.
- Terminal blocks allow full access for ring terminals for easy installation even with solid strand conductors.
- Integrally molded terminal blocks with isolation barriers to prevent arc over.
- Footprint matches TA Series for easy interchangeability.
- Copper windings on all groups.
- Heavy gauge steel mounting plate adapts to various mounting dimensions.
- Voltage regulation exceeds NEMA requirements.
- UL Listed and CSA Certified.
- Meets or exceeds UL, CSA, NEMA, ANSI and OSHA Standards.
- Ten-year limited warranty.



### APPLICATIONS

- Motor Starters
- Contactors
- Solenoids
- Timer Circuits
- Relays
- Control Panels
- Robotics



## TB Series Primary Fuse Kits

### Type PL112700 Through PL112705: Using 2 Class CC Dual Element Fuses (not supplied)

- Meets NEC Article 450 and UL-508 requirements.
- For use with class "CC" fuses.
- Eliminates remote mounting of primary overcurrent protection.
- Covered by Acme Electric 10-year limited warranty.

Field installation is fast and easy. Simply loosen the mounting hardware (Fig. 1), slide the bracket over the transformer and re-tighten the mounting hardware. Make the proper connections with the factory furnished jumpers (Fig. 2) and your unit is ready for operation.

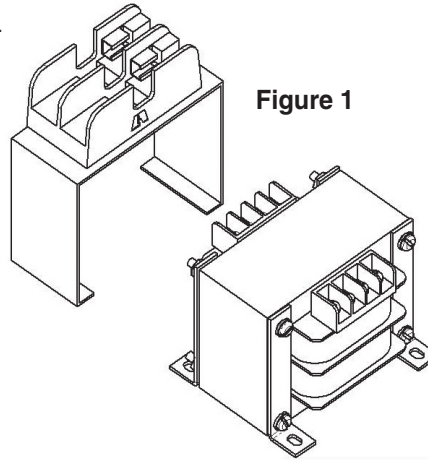


Figure 1

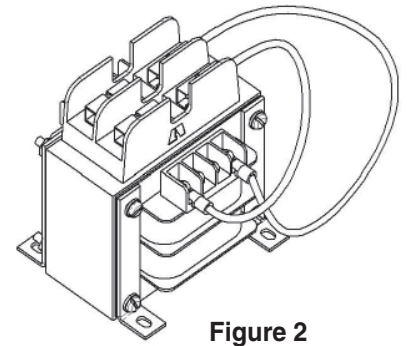


Figure 2

Fuse Kit adds approximately 1.75" to height of unit.

### Primary Fuse Sizing Chart<sup>①</sup>

VA	120 V	208 V	230 V	240 V	277 V	380 V	416 V	440 V	460 V	480 V	550 V	600 V
50	1.2	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	1.9	1.0	1.0	1.0	0.8	0.6	0.6	0.6	0.5	0.5	0.4	0.4
100	2.5	1.5	1.3	1.3	1.0	0.8	0.8	0.6	0.6	0.6	0.6	0.5
150	3.8	2.0	2.0	1.9	1.5	1.2	1.2	1.0	1.0	1.0	0.8	0.8
250	3.5	3.5	3.5	3.0	3.0	2.0	1.8	1.8	1.5	1.5	1.4	1.2
300	4.0	4.0	4.0	3.5	3.0	2.5	2.5	2.0	2.0	1.9	1.5	1.5
350	5.0	5.0	4.5	4.0	4.0	2.5	2.5	2.5	2.0	2.0	1.9	1.8
500	7.0	4.0	3.5	3.5	5.5	4.0	3.5	3.5	3.5	3.0	3.0	2.5
750	10.0	6.0	5.5	5.0	4.5	6.0	5.5	5.0	5.0	5.0	4.0	4.0
1000	15.0	8.0	7.0	7.0	6.0	4.5	4.0	3.5	3.5	3.5	5.5	5.0
1500	20.0	12.0	12.0	12.0	10.0	7.0	6.0	6.0	5.5	5.5	5.0	4.5
2000	25.0	12.0	15.0	15.0	12.0	9.0	8.0	8.0	7.5	7.0	6.0	6.0
3000	30.0	20.0	20.0	20.0	15.0	15.0	12.0	12.0	12.0	12.0	10.0	9.0
5000	—	30.0	30.0	30.0	25.0	20.0	15.0	15.0	15.0	15.0	12.0	15.0

### Secondary Fuse Sizing Chart

VA	24 V	85 V	91 V	99 V	100 V	110 V	115 V	120 V	125 V	130 V
50 VA	3.2	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6
75 VA	5.0	1.4	1.2	1.2	1.2	1.0	1.0	1.0	1.0	0.8
100 VA	6.0	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2	1.2
150 VA	10.0	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	1.5
250 VA	12.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	3.0
300 VA	15.0	5.5	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5
350 VA	20.0	6.5	6.0	5.5	5.5	5.0	5.0	4.5	4.5	4.5
500 VA	25.0	9.0	9.0	8.0	8.0	7.0	7.0	6.0	6.0	6.0
750 VA	40.0	12.0	12.0	12.0	12.0	10.0	10.0	10.0	10.0	9.0
1000 VA	50.0	15.0	15.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
1500 VA	—	25.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0	15.0
2000 VA	—	30.0	30.0	25.0	25.0	25.0	25.0	20.0	20.0	20.0
3000 VA	—	40.0	40.0	40.0	40.0	35.0	35.0	30.0	30.0	30.0
5000 VA	—	70.0	70.0	60.0	60.0	60.0	60.0	50.0	50.0	50.0

<sup>①</sup> Fuse size based on time delay class CC fuses.

NOTE: Bold lines indicate changes in the percent of rated current used to calculate fuse sizes in accordance with article 450 of the NEC.

## TB Series Secondary Fuse Kits

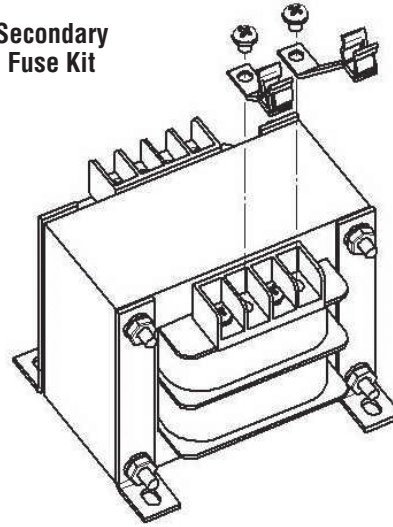
**Type PL79924, PL79930, & PL79931: Use Dual Element Slow-Blow Fuse**

Catalog Number	VA	Type
PL79924*	50-1000	1/4" x 1-1/4"
PL79930	50-350	13/32" x 1-1/2"
PL79931	500-1000	13/32" x 1-1/2"

- Mount secondary fuse clips on terminals X1 and F or F1 using the screws supplied with the transformer.
- Connect secondary load lines to terminals X2 and F or F2. Use Jumper Link to connect F1 and F2.
- Use dual-element slow-blowing fuses such as Bussmann MFG., Fusetron Type FNM, Littelfuse or Ferraz Shawmut (not supplied with fuse kits).

\* PL79924: Use fuse kit on all transformers except 750 & 1000 VA with 24 volt secondary.

Secondary Fuse Kit



## Instructions for TB Series Secondary Fuse Kit

**Type PL112603: use dual element slow-blow fuse 13/32" x 1-1/2" (1.0 x 3.8 cm)**

1. To attach secondary fuse kit PL 112603 to primary fuse kits PL112700 thru PL112705 snap the secondary single pole fuse block onto the unlabeled side of the primary double pole fuse block. (See Figure 1)
2. Install the fuse kits as instructed under the primary fuse kit instructions on page 54.
3. Select the appropriate pair of jumpers for making the connections between the secondary fuse block and the secondary (X-side) of the transformer.
4. Connect the female quick-connect of the jumpers supplied to one of the male quick-connects of the secondary fuse block—one jumper to each end of the fuse block. (See Figure 2)
5. Connect the ring terminal of the jumpers supplied to screw terminals X1 and F or F1 on the secondary (X-side) of the transformer.
6. Connect secondary load lines to terminals X2 and F or F2.

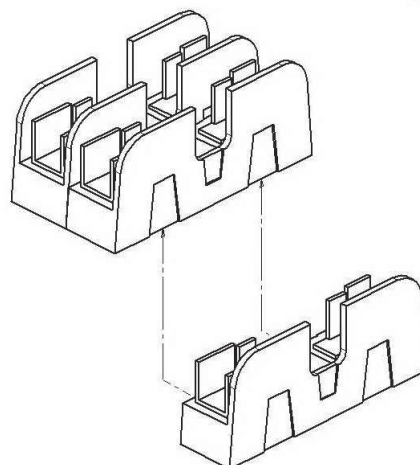


Figure 1

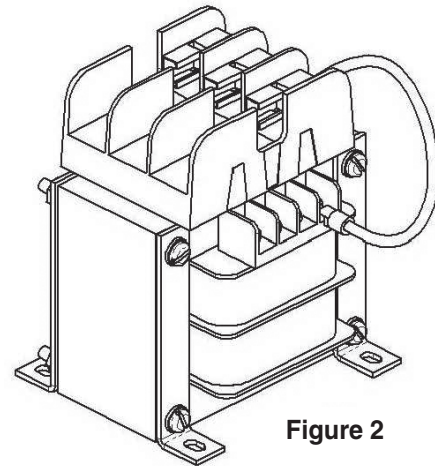


Figure 2

## SELECTION CHARTS

## GROUP A



## 120 X 240 PRIMARY VOLTS—12/24 SECONDARY VOLTS—1Ø, 50/60 Hz

CATALOG NO. ②	VA RATING	OUTPUT AMPS	APPROX. DIMENSIONS Inches (Cm.)						APPROX. SHIP WEIGHT Lbs. (Kg.)	PRIMARY FUSE BLOCK PART NO.	SECONDARY FUSE SIZE 24 VOLTS
			A	B	C	D	E	F			
TB181141 ②	50	2.08	4.23 (10.7)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.13 (5.4)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	3 <sup>2</sup> / <sub>10</sub> amps
TB181142 ②	75	3.13	4.74 (12.0)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.61 (6.6)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	5 amps
TB181143 ②	100	4.17	4.90 (12.4)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.81 (7.1)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	6 <sup>1</sup> / <sub>4</sub> amps
TB181144 ②	150	6.25	4.78 (12.1)	3.75 (9.5)	3.40 (8.6)	3.13 (8.0)	2.63 (6.7)	.22 x .50 (0.6 x 1.3)	6 (2.7)	PL112701	10 amps
TB181146 ②	250	10.42	5.08 (12.9)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.05 (7.7)	.22 x .50 (0.6 x 1.3)	9 (4.1)	PL112702	15 amps
TB181148 ②	350	14.58	6.12 (15.5)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	4.06 (10.3)	.22 x .50 (0.6 x 1.3)	13 (5.9)	PL112702	20 amps
TB181149 ②	500	20.83	5.90 (15.0)	5.25 (13.3)	4.47 (11.4)	4.38 (11.1)	4.19 (10.6)	.31 x .50 (0.8 x 1.3)	16 (7.3)	PL112704	30 amps
TB181150	750	31.25	7.53 (19.1)	5.25 (13.3)	4.47 (11.4)	4.38 (11.1)	5.25 (13.3)	.31 x .50 (0.8 x 1.3)	24 (10.9)	PL112704	—
TB181151	1000	41.67	7.43 (18.9)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	3.81 (9.7)	.31 x .50 (0.8 x 1.3)	26 (11.8)	PL112705	—

## GROUP B

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

CATALOG NO. ②	VA RATING	OUTPUT AMPS @ 120V	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (KG.)	PRIMARY FUSE BLOCK PART NO.	SECONDARY FUSE KIT ① PART NO.	SECONDARY FUSE SIZE 120 VOLTS
			A	B	C	D	E	F				
TB81210 ②	50	0.42	4.23 (10.7)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.13 (5.4)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	*	6 <sup>1</sup> / <sub>10</sub> amp
TB81201 ②	75	0.63	4.74 (12.0)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.61 (6.6)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	*	1 amp
TB81211 ②	100	0.83	4.90 (12.4)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.81 (7.1)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	*	1 <sup>1</sup> / <sub>4</sub> amps
TB81212 ②	150	1.25	5.00 (12.7)	3.75 (9.5)	3.40 (8.6)	3.13 (8.0)	2.81 (7.1)	.22 x .50 (0.6 x 1.3)	6 (2.7)	PL112701	*	2 amps
TB81213 ②	250	2.08	4.18 (10.6)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.13 (8.0)	.22 x .50 (0.6 x 1.3)	9 (4.1)	PL112702	*	3 <sup>2</sup> / <sub>10</sub> amps
TB81200 ②	300	2.50	5.57 (14.1)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.13 (8.0)	.22 x .50 (0.6 x 1.3)	10 (4.5)	PL112702	*	4 amps
TB81214 ②	350	2.92	6.32 (16.1)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.83 (9.7)	.22 x .50 (0.6 x 1.3)	12 (5.4)	PL112702	*	4 <sup>1</sup> / <sub>2</sub> amps
TB81215 ②	500	4.17	6.30 (16.0)	5.25 (13.3)	4.47 (11.4)	4.06 (10.3)	3.81 (9.7)	.22 x .50 (0.6 x 1.3)	15 (6.8)	PL112704	*	6 <sup>1</sup> / <sub>4</sub> amps
TB81216 ②	750	6.25	6.65 (16.9)	5.25 (13.3)	4.47 (11.4)	4.38 (11.1)	5.13 (13.0)	.31 x .50 (0.8 x 1.3)	23 (10.4)	PL112704	*	10 amps
TB81217 ②	1000	8.33	7.58 (19.3)	6.75 (17.1)	5.78 (14.7)	5.75 (14.6)	3.69 (9.4)	.31 x .50 (0.8 x 1.3)	25 (11.3)	PL112705	*	12 amps

① Secondary Fuse Kit PL112603 may be substituted for PL112600 thru PL112602 when Primary Fuse Kit is used. See page 58.

② See chart for integrally mounted fuse block catalog number suffix.



## GROUP B

(CONTINUED)



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

CATALOG NO. ②	VA RATING	OUTPUT AMPS @ 120V	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (KG.)	PRIMARY FUSE BLOCK PART NO.	SECONDARY FUSE KIT ① PART NO.	SECONDARY FUSE SIZE 120 VOLTS
			A	B	C	D	E	F				
TA2-81218	1500	12.50	8.80 (22.4)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	5.75 (14.6)	.31 x .50 (0.8 x 1.3)	43 (19.5)	PL112705	PL112601	15 amps
TA2-81219	2000	16.67	9.25 (23.5)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	6.38 (16.2)	.31 x .50 (0.8 x 1.3)	49 (22.2)	PL112705	PL112601	20 amps
TA2-81220	3000	25.00	8.81 (22.4)	7.50 (19.1)	8.34 (21.2)	6.50 (16.5)	7.52 (19.1)	.41 x .81 (1.0 x 2.1)	70 (31.8)	PL112706	—	—
TA281221	5000	41.67	7.52 (19.1)	11.92 (30.3)	9.49 (24.1)	6.75 (17.1)	6.25 (15.9)	.41 x .81 (1.0 x 2.1)	125 (56.7)	PL112707	—	—

\* See fusing chart for secondary fuse kits.

**Integrally Mounted Fuse Blocks Available:**  
 (See Chart)

GROUP 'A' THROUGH 500 VA

GROUP 'B' THROUGH 2000 VA

ADD SUFFIX TO CATALOG NO.	CONFIGURATION
F2	Factory installed integrally mounted 2-pole primary block
F3	Factory installed integrally mounted 3-pole primary and secondary block (100 VA & larger)
F4	Factory installed 2-pole primary block and secondary fuse clips (50 & 75 VA)

Consult factory for other sizes available.

## GROUP C

## 240/480/600, 230/460/575, 220/440/550 PRIMARY VOLTS—120/100, 115/95, 110/90 SECONDARY VOLTS—1Ø, 50/60 Hz

CATALOG NO.	VA RATING	OUTPUT AMPS @ 120V	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (KG.)	PRIMARY FUSE BLOCK PART NO.	SECONDARY FUSE KIT ① PART NO.	SECONDARY FUSE SIZE 120 VOLTS
			A	B	C	D	E	F				
TB81000	50	0.42	4.56 (11.6)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.61 (6.6)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	*	<sup>6</sup> / <sub>10</sub> amp
TB81009	75	0.63	4.90 (12.4)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.81 (7.1)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	*	1 amp
TB81001	100	0.83	5.36 (13.6)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	3.26 (8.3)	.22 x .50 (0.6 x 1.3)	5 (2.3)	PL112700	*	1 <sup>1</sup> / <sub>4</sub> amps
TB81002	150	1.25	5.00 (12.7)	3.75 (9.5)	3.40 (8.6)	3.13 (8.0)	3.06 (7.8)	.22 x .50 (0.6 x 1.3)	7 (3.2)	PL112701	*	2 amps
TB81003	250	2.08	5.57 (14.1)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.50 (8.9)	.22 x .50 (0.6 x 1.3)	11 (5.0)	PL112702	*	3 <sup>2</sup> / <sub>10</sub> amps
TB81020	300	2.50	6.48 (16.5)	4.65 (11.8)	4.15 (10.5)	4.06 (10.3)	4.06 (10.3)	.22 x .50 (0.6 x 1.3)	15 (6.8)	PL112702	*	4 amps
TB81004	350	2.92	6.48 (16.5)	4.65 (11.8)	4.15 (10.5)	4.06 (10.3)	4.06 (10.3)	.22 x .50 (0.6 x 1.3)	15 (6.8)	PL112702	*	4 <sup>1</sup> / <sub>2</sub> amps
TB81005	500	4.17	6.43 (16.3)	5.25 (13.3)	4.47 (11.4)	4.38 (11.1)	4.56 (11.6)	.31 x .50 (0.8 x 1.3)	21 (9.5)	PL112704	*	6 <sup>1</sup> / <sub>4</sub> amps
TB81006	750	6.25	7.19 (18.3)	6.75 (17.1)	5.78 (14.7)	5.75 (14.6)	3.81 (9.7)	.31 x .50 (0.8 x 1.3)	25 (11.3)	PL112705	*	10 amps
TB81007	1000	8.33	7.96 (20.2)	6.75 (17.1)	5.78 (14.7)	5.75 (14.6)	4.63 (11.8)	.31 x .50 (0.8 x 1.3)	32 (14.5)	PL112705	*	12 amps
TA281008	1500	12.50	9.46 (24.0)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	6.38 (16.2)	.31 x .50 (0.8 x 1.3)	47 (21.3)	PL112705	PL112601	15 amps
TA253929	2000	16.67	7.90 (20.1)	7.50 (19.1)	7.66 (19.5)	6.50 (16.5)	6.57 (16.7)	.41 x .81 (1.0 x 2.1)	55 (24.9)	PL112706	PL112601	20 amps
TA253930	3000	25.00	7.02 (17.8)	11.92 (30.3)	8.83 (22.4)	6.75 (17.1)	5.75 (14.6)	.41 x .81 (1.0 x 2.1)	75 (34.0)	PL112707	—	—
TA253931	5000	41.67	7.52 (19.1)	11.92 (30.3)	9.49 (24.1)	6.75 (17.1)	6.25 (15.9)	.41 x .81 (1.0 x 2.1)	110 (49.9)	PL112707	—	—

\* See fusing chart for secondary fuse kits.

① Secondary Fuse Kit PL-112603 may be substituted for PL112600 thru PL112602 when Primary Fuse Kit is used. See page 58.

② See chart for integrally mounted fuse block catalog number suffix.

## GROUP D



## 208/240/277/380/480 PRIMARY VOLTS—24 SECONDARY VOLTS—1Ø, 50/60 Hz

CATALOG NO.	VA RATING	OUTPUT AMPS	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (KG.)	PRIMARY FUSE BLOCK PART NO.	SECONDARY FUSE KIT ① PART NO.	SECONDARY FUSE SIZE 24 VOLTS
			A	B	C	D	E	F				
TB81321	50	2.08	4.08 (10.4)	3.75 (9.5)	3.40 (8.6)	3.13 (8.0)	2.19 (5.6)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112701	*	3 <sup>2</sup> / <sub>10</sub> amp
TB81322	75	3.13	4.31 (10.9)	3.75 (9.5)	3.40 (8.6)	3.13 (8.0)	2.31 (5.9)	.22 x .50 (0.6 x 1.3)	5 (2.3)	PL112701	*	5 amps
TB81323	100	4.17	4.52 (11.5)	3.75 (9.5)	3.40 (8.6)	3.13 (8.0)	2.63 (6.7)	.22 x .50 (0.6 x 1.3)	5 (2.3)	PL112701	*	6 <sup>1</sup> / <sub>4</sub> amps
TB81324	150	6.25	4.75 (12.1)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.05 (7.7)	.22 x .50 (0.6 x 1.3)	9 (4.1)	PL112702	*	10 amps
TB81325	250	10.42	5.24 (13.3)	4.65 (11.8)	4.15 (10.5)	4.06 (10.3)	3.25 (8.3)	.22 x .50 (0.6 x 1.3)	11 (5.0)	PL112702	*	15 amps
TB81326	350	14.58	6.02 (15.3)	5.25 (13.3)	4.47 (11.4)	4.38 (11.1)	4.00 (10.2)	.31 x .50 (0.8 x 1.3)	18 (8.2)	PL112704	*	20 amps
TB81327	500	20.83	6.51 (16.5)	5.25 (13.3)	4.47 (11.4)	4.38 (11.1)	4.19 (10.6)	.31 x .50 (0.8 x 1.3)	19 (8.6)	PL112704	*	30 amps
TB81328	750	31.25	7.08 (18.0)	6.75 (17.1)	5.78 (14.7)	5.75 (14.6)	3.81 (9.7)	.31 x .50 (0.8 x 1.3)	26 (11.8)	PL112705	*	— 33 amps
TB81329	1000	41.67	8.10 (20.6)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	4.63 (11.8)	.31 x .50 (0.8 x 1.3)	33 (15.0)	PL112705	*	—

\* See fusing chart for secondary fuse kits.

## GROUP E

## 208/277/380 PRIMARY VOLTS—115/95 SECONDARY VOLTS—1Ø, 50/60 Hz

CATALOG NO.	VA RATING	OUTPUT AMPS @ 115V	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (KG.)	PRIMARY FUSE BLOCK PART NO.	SECONDARY FUSE KIT ① PART NO.	SECONDARY FUSE SIZE 115 VOLTS
			A	B	C	D	E	F				
TB81301	50	0.43	4.35 (11.0)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.61 (6.6)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	*	6 <sup>1</sup> / <sub>10</sub> amp
TB81302	75	0.65	4.74 (12.0)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.81 (7.1)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	*	1 amp
TB81303	100	0.87	4.45 (11.3)	3.75 (9.5)	3.40 (8.6)	3.13 (8.0)	2.44 (6.2)	.22 x .50 (0.6 x 1.3)	5 (2.3)	PL112701	*	1 <sup>1</sup> / <sub>4</sub> amps
TB81304	150	1.30	5.00 (12.7)	3.75 (9.5)	3.84 (9.8)	3.13 (8.0)	3.06 (7.8)	.22 x .50 (0.6 x 1.3)	5 (2.3)	PL112701	*	2 amps
TB81305	250	2.17	5.68 (14.4)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	4.06 (10.3)	.22 x .50 (0.6 x 1.3)	13 (5.9)	PL112702	*	3 <sup>1</sup> / <sub>2</sub> amps
TB81306	350	3.04	6.30 (16.0)	4.65 (11.8)	4.15 (10.5)	4.06 (10.3)	4.75 (12.1)	.22 x .50 (0.6 x 1.3)	18 (8.2)	PL112702	*	5 amps
TB81307	500	4.35	6.22 (15.8)	5.25 (13.3)	4.47 (11.4)	4.38 (11.1)	4.56 (11.6)	.22 x .50 (0.6 x 1.3)	20 (9.1)	PL112704	*	7 amps
TB81308	750	6.52	6.82 (17.3)	6.75 (17.1)	5.78 (14.7)	5.75 (14.6)	3.69 (9.4)	.31 x .50 (0.8 x 1.3)	24 (10.9)	PL112705	*	10 amps
TB81309	1000	8.70	7.96 (20.2)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	4.44 (11.3)	.31 x .50 (0.8 x 1.3)	31 (14.1)	PL112705	*	12 amps

\* See fusing chart for secondary fuse kits.

① Secondary Fuse Kit PL112603 may be substituted for PL112600 thru PL112602 when Primary Fuse Kit is used. See page 58.

② See chart for integrally mounted fuse block catalog number suffix.

## GROUP F



## 380/440/550/600 PRIMARY VOLTS—115/230 SECONDARY VOLTS—1Ø, 50/60 Hz

CATALOG NO.	VA RATING	OUTPUT AMPS @ 115V	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (KG.)	PRIMARY FUSE BLOCK PART NO.	SECONDARY FUSE SIZE ② 115 VOLTS
			A	B	C	D	E	F			
TA254535	50	0.43	4.12 (10.5)	3.75 (9.5)	3.21 (8.2)	3.13 (8.0)	2.19 (5.6)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112701	6/10 amp
TA254536	100	0.87	4.56 (11.6)	3.75 (9.5)	3.21 (8.2)	3.13 (8.0)	2.31 (5.9)	.22 x .50 (0.6 x 1.3)	5 (2.3)	PL112701	1 1/4 amps
TA254537	150	1.30	5.00 (12.7)	3.75 (9.5)	3.21 (8.2)	3.13 (8.0)	3.06 (7.8)	.22 x .50 (0.6 x 1.3)	10 (4.5)	PL112701	2 amps
TA254538	250	2.17	5.49 (13.9)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.50 (8.9)	.22 x .50 (0.6 x 1.3)	11 (5.0)	PL112702	3 1/2 amps
TA281197	350	3.04	6.03 (15.3)	4.88 (12.4)	4.15 (10.5)	4.06 (10.3)	4.38 (11.1)	.22 x .50 (0.6 x 1.3)	17 (7.7)	PL112703	5 amps
TA254539	500	4.35	6.76 (17.1)	4.88 (12.4)	4.15 (10.5)	4.06 (10.3)	5.75 (14.6)	.22 x .50 (0.6 x 1.3)	23 (10.4)	PL112703	7 amps
TA281240	750	6.52	7.19 (18.3)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	3.69 (9.4)	.31 x .50 (0.8 x 1.3)	25 (11.3)	PL112705	10 amps
TA281241	1000	8.70	7.77 (19.7)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	4.44 (11.3)	.31 x .50 (0.8 x 1.3)	30 (13.6)	PL112705	12 amps

## GROUP G

## 240/416/480/600; 230/400/460/575; 220/380/440/550; 208/500 PRIMARY VOLTS

## 99/120/130; 95/115/125; 91/110/120; 85/100/110 SECONDARY VOLTS —1Ø, 50/60 Hz

CATALOG NO.	VA RATING @ 130V	OUTPUT AMPS	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (KG.)	PRIMARY FUSE BLOCK PART NO.	SECONDARY FUSE KIT PART NO.	SECONDARY FUSE SIZE 130 VOLTS
			A	B	C	D	E	F				
TB32403	50	0.38	4.08 (10.4)	3.75 (9.5)	3.40 (8.6)	3.13 (8.0)	2.31 (5.9)	.22 x .50 (0.6 x 1.3)	5 (2.3)	PL112701	NA	6/10 amp
TB32404	150	1.15	4.75 (12.1)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.05 (7.7)	.22 x .50 (0.6 x 1.3)	10 (4.5)	PL112702	NA	1 6/10 amps
TB32405	250	1.92	5.58 (14.2)	4.65 (11.8)	4.15 (10.5)	4.06 (10.3)	4.06 (10.3)	.22 x .50 (0.6 x 1.3)	16 (7.3)	PL112702	NA	3 2/10 amps
TB32669	350	2.69	6.23 (15.8)	4.65 (11.8)	4.15 (10.5)	4.06 (10.3)	5.50 (14.0)	.22 x .50 (0.6 x 1.3)	22 (10.0)	PL112702	NA	4 amps
TB32406	500	3.85	6.40 (16.3)	6.75 (17.1)	5.78 (14.7)	5.75 (14.6)	3.69 (9.4)	.22 x .50 (0.6 x 1.3)	23 (10.4)	PL112705	NA	6 1/4 amps
TB54523	750	5.77	7.08 (18.0)	6.75 (17.1)	5.78 (14.7)	5.75 (14.6)	4.13 (10.5)	.31 x .50 (0.8 x 1.3)	29 (13.2)	PL112705	NA	9 amps
TB54524	1000	7.69	8.56 (21.7)	6.75 (17.1)	5.78 (14.7)	5.75 (14.6)	4.88 (12.4)	.31 x .50 (0.8 x 1.3)	35 (15.9)	PL112705	NA	12 amps
TA254525	1500	11.54	6.75 (17.1)	7.50 (19.1)	7.66 (19.5)	6.50 (16.5)	5.42 (13.8)	.41 x .81 (1.0 x 2.1)	55 (24.9)	PL112706	PL-112601	20 amps
TA281202	2000	15.39	7.45 (18.9)	7.50 (19.1)	7.66 (19.5)	6.50 (16.5)	6.12 (15.5)	.41 x .81 (1.0 x 2.1)	55 (24.9)	PL112706	PL-112601	25 amps
TA281203	3000	23.08	7.02 (17.8)	11.92 (30.3)	8.83 (22.4)	6.75 (17.1)	5.75 (14.6)	.41 x .81 (1.0 x 2.1)	70 (31.8)	PL112707	—	—
TA281205	5000	38.46	7.52 (19.1)	11.92 (30.3)	9.49 (24.1)	6.75 (17.1)	6.25 (15.9)	.41 x .81 (1.0 x 2.1)	110 (49.9)	PL112707	—	—

① Secondary Fuse Kit PL112603 may be substituted for PL112600 thru PL112602 when Primary Fuse Kit is used. See page 58.

② Secondary fuse kit application for 115V only.



## CONNECTION DETAILS FOR GROUP G

CONNECT TO LINE FOR RESPECTIVE VOLTAGE				OUTPUT VOLTS		
H1-H2	H1-H3	H1-H4	H1-H5	X1-X2	X1-X3	X1-X4
208	—	—	500	85	100	110
220	380	440	550	91	110	120
230	400	460	575	95	115	125
240	416	480	600	99	120	130

## GROUP H

## 208/230/460 PRIMARY VOLTS—115 SECONDARY VOLTS—1Ø, 50/60 Hz

CATALOG NO.	VA RATING	OUTPUT AMPS	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (KG.)	PRIMARY FUSE BLOCK PART NO.	SECONDARY FUSE KIT ① PART NO.	SECONDARY FUSE SIZE 115 VOLTS
			A	B	C	D	E	F				
TB69300	50	0.43	4.44 (11.3)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.61 (6.6)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	*	<sup>6</sup> / <sub>10</sub> amp
TB69301	100	0.87	5.21 (13.2)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	3.26 (8.3)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700	*	1 <sup>4</sup> / <sub>10</sub> amps
TB69302	150	1.30	5.10 (13.0)	3.75 (9.5)	3.40 (8.6)	3.13 (8.0)	3.06 (7.8)	.22 x .50 (0.6 x 1.3)	7 (3.2)	PL112701	*	2 amps
TB69303	250	2.17	5.38 (13.7)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.50 (8.9)	.22 x .50 (0.6 x 1.3)	11 (5.0)	PL112702	*	3 <sup>1</sup> / <sub>2</sub> amps
TB69304	350	3.04	5.90 (15.0)	4.65 (11.8)	4.15 (10.5)	4.06 (10.3)	3.81 (9.7)	.22 x .50 (0.6 x 1.3)	15 (6.8)	PL112702	*	5 amps
TB69305	500	4.35	6.22 (15.8)	5.25 (13.3)	4.47 (11.4)	4.38 (11.1)	4.56 (11.6)	.31 x .50 (0.8 x 1.3)	20 (9.1)	PL112704	*	7 amps
TB69306	750	6.52	6.82 (17.3)	6.75 (17.1)	5.78 (14.7)	5.75 (14.6)	3.81 (9.7)	.31 x .50 (0.8 x 1.3)	26 (11.8)	PL112705	*	10 amps
TB69307	1000	8.70	7.96 (20.2)	6.75 (17.1)	5.78 (14.7)	5.75 (14.6)	4.63 (11.8)	.31 x .50 (0.8 x 1.3)	33 (15.0)	PL112705	*	12 amps

\* See fusing chart for secondary fuse kits.

## GROUP I

## 600 PRIMARY VOLTS—12/24 SECONDARY VOLTS—1Ø, 60 Hz

CATALOG NO.	VA RATING	OUTPUT AMPS @ 12V	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (KG.)	PRIMARY FUSE BLOCK PART NO.
			A	B	C	D	E	F		
TA83300	50	4.17	4.13 (10.5)	3.00 (7.6)	2.59 (6.6)	2.50 (6.4)	2.30 (5.8)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700
TA83301	100	8.33	4.90 (12.4)	3.00 (7.6)	2.59 (6.6)	2.50 (6.4)	3.35 (8.5)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700
TA83302	150	12.50	4.92 (12.5)	3.75 (9.5)	3.21 (8.2)	3.13 (8.0)	2.81 (7.1)	.22 x .50 (0.6 x 1.3)	6 (2.7)	PL112701
TA83303	250	20.83	5.38 (13.7)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.05 (7.7)	.22 x .50 (0.6 x 1.3)	9 (4.1)	PL112702
TA83304	500	41.67	6.06 (15.4)	4.88 (12.4)	4.15 (10.5)	4.06 (10.3)	4.06 (10.3)	.22 x .50 (0.6 x 1.3)	13 (5.9)	PL112703
TA83305	750	62.50	6.43 (16.3)	5.25 (13.3)	4.47 (11.4)	4.38 (11.1)	4.00 (10.2)	.31 x .50 (0.8 x 1.3)	21 (9.5)	PL112704
TA83306	1000	83.33	7.30 (18.5)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	3.69 (9.4)	.31 x .50 (0.8 x 1.3)	24 (10.9)	PL112705

① Secondary Fuse Kit PL112603 may be substituted for PL112600 thru PL112602 when Primary Fuse Kit is used. See page 58.



## GROUP J

## 240 X 480 PRIMARY VOLTS—120/240 SECONDARY VOLTS—1Ø, 60 Hz

CATALOG NO.	VA RATING	OUTPUT AMPS @ 120V	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (KG.)	PRIMARY FUSE BLOCK PART NO.
			A	B	C	D	E	F		
TB83210	50	0.42	4.13 (10.5)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	2.30 (5.8)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700
TB83212	100	0.83	4.90 (12.4)	3.00 (7.6)	2.70 (6.8)	2.50 (6.4)	3.35 (8.5)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700
TB83213	150	1.25	4.92 (12.5)	3.75 (9.5)	3.40 (8.6)	3.13 (8.0)	2.81 (7.1)	.22 x .50 (0.6 x 1.3)	6 (2.7)	PL112701
TB83215	250	2.08	5.38 (13.7)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.05 (7.7)	.22 x .50 (0.6 x 1.3)	9 (4.1)	PL112702
TB83218	500	4.17	6.06 (15.4)	5.25 (13.3)	4.47 (11.4)	4.06 (10.3)	4.06 (10.3)	.22 x .50 (0.6 x 1.3)	13 (5.9)	PL112704
TB83219	750	6.25	6.43 (16.3)	5.25 (13.3)	4.47 (11.4)	4.38 (11.1)	5.30 (13.0)	.31 x .50 (0.8 x 1.3)	21 (9.5)	PL112704
TB83220	1000	8.33	7.34 (18.6)	6.75 (17.1)	5.78 (14.7)	5.75 (14.6)	3.69 (9.4)	.31 x .50 (0.8 x 1.3)	24 (10.9)	PL112705
TA83221	1500	12.50	8.80 (22.4)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	5.02 (12.8)	.31 x .50 (0.8 x 1.3)	43 (19.5)	PL112705
TA83222	2000	16.67	9.15 (23.2)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	5.42 (13.8)	.31 x .50 (0.8 x 1.3)	48 (21.8)	PL112705
TA83223	3000	25.00	7.00 (17.8)	7.50 (19.1)	7.66 (19.5)	6.50 (16.5)	5.55 (14.1)	.41 x .81 (1.0 x 2.1)	51 (23.1)	PL112706
TA83224	5000	41.67	7.06 (17.9)	11.92 (30.3)	8.75 (22.2)	6.75 (17.1)	5.75 (14.6)	.41 x .81 (1.0 x 2.1)	90 (40.8)	PL112707

## GROUP K

## 600 PRIMARY VOLTS—120/240 SECONDARY VOLTS—1Ø, 60 Hz

CATALOG NO.	VA RATING	OUTPUT AMPS @ 120V	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (KG.)	PRIMARY FUSE BLOCK PART NO.
			A	B	C	D	E	F		
TA83310	50	0.42	4.13 (10.5)	3.00 (7.6)	2.59 (6.6)	2.50 (6.4)	2.30 (5.8)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700
TA83311	100	0.83	4.90 (12.4)	3.00 (7.6)	2.59 (6.6)	2.50 (6.4)	3.35 (8.5)	.22 x .50 (0.6 x 1.3)	4 (1.8)	PL112700
TA83312	150	1.25	4.92 (12.5)	3.75 (9.5)	3.21 (8.2)	3.13 (8.0)	2.81 (7.1)	.22 x .50 (0.6 x 1.3)	6 (2.7)	PL112701
TA83313	250	2.08	5.38 (13.7)	4.50 (11.4)	3.84 (9.8)	3.75 (9.5)	3.05 (7.7)	.22 x .50 (0.6 x 1.3)	9 (4.1)	PL112702
TA83314	500	4.17	6.06 (15.4)	4.88 (12.4)	4.15 (10.5)	4.06 (10.3)	4.06 (10.3)	.22 x .50 (0.6 x 1.3)	13 (5.9)	PL112703
TA83315	750	6.25	6.43 (16.3)	5.25 (13.3)	4.47 (11.4)	4.38 (11.1)	4.00 (10.2)	.31 x .50 (0.8 x 1.3)	21 (9.5)	PL112704
TA83316	1000	8.33	7.34 (18.6)	6.75 (17.1)	5.72 (14.5)	5.75 (14.6)	3.69 (9.4)	.31 x .50 (0.8 x 1.3)	24 (10.9)	PL112705

\* See fusing chart for secondary fuse kits.

### TA & TB SERIES PROTECTIVE DEVICES— Primary Fuse Kits

FUSES ARE NOT INCLUDED. CONSULT CATALOG FOR PROPER FUSE SELECTION.

CATALOG NO.	APPROX. SHIP WEIGHT	Lbs. (Kg.)
PL112700	1	(0.5)
PL112701	1	(0.5)
PL112702	1	(0.5)
PL112703	1	(0.5)
PL112704	1	(0.5)
PL112705	1	(0.5)
PL112706	1	(0.5)
PL112707	1	(0.5)

### TA SERIES PROTECTIVE DEVICES—Secondary Fuse Kits

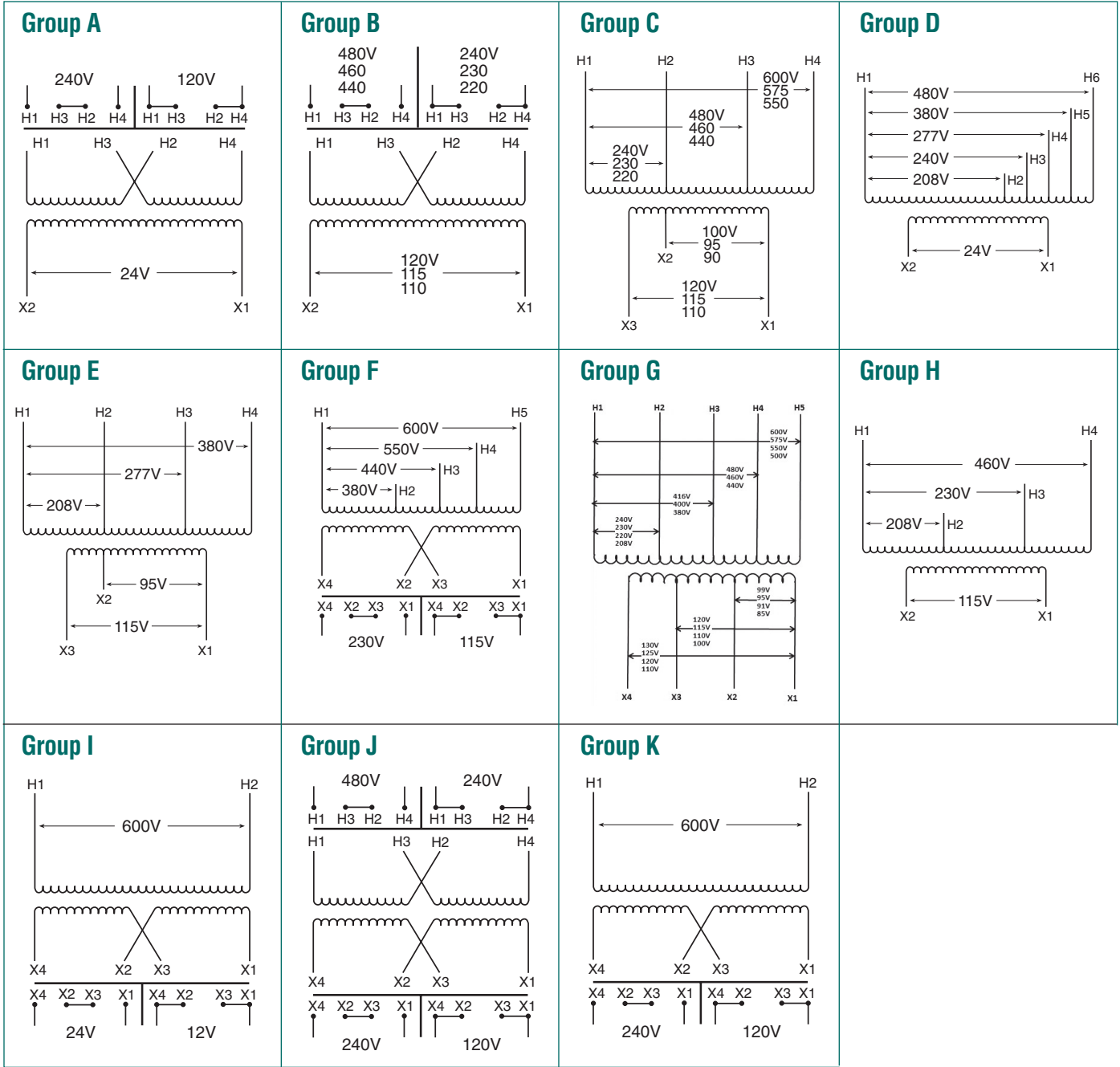
FOR USE WITH INDUSTRIAL CONTROL TRANSFORMERS THROUGH 1500 VA.

CATALOG NO.	APPROX. SHIP WEIGHT	Lbs. (Kg.)
PL112600	0.5	(0.2)
PL112601	0.5	(0.2)
PL112602	1	(0.5)
PL112603	1	(0.5)

### TB SERIES PROTECTIVE DEVICES—Secondary Fuse Kits

CATALOG NO.	VA	DESCRIPTION	APPROX. SHIPPING WT. (LBS./KG.)
PL79924		Fuse Kit: Secondary Fuse 1/4" x 1-1/4" w/ARM	1.0 (0.5)
PL79928	50–350	Link: Small Jumper Links (Qty. 2)	1.0 (0.5)
PL79929	500 & 750	Link: Large Jumper Links (Qty. 2)	1.0 (0.5)
PL79930	50–350	Fuse Kit: Secondary Fuse Midget w/ARM	1.0 (0.5)
PL79931	500 & 1000	Fuse Kit: Secondary Fuse Midget w/ARM	1.0 (0.5)

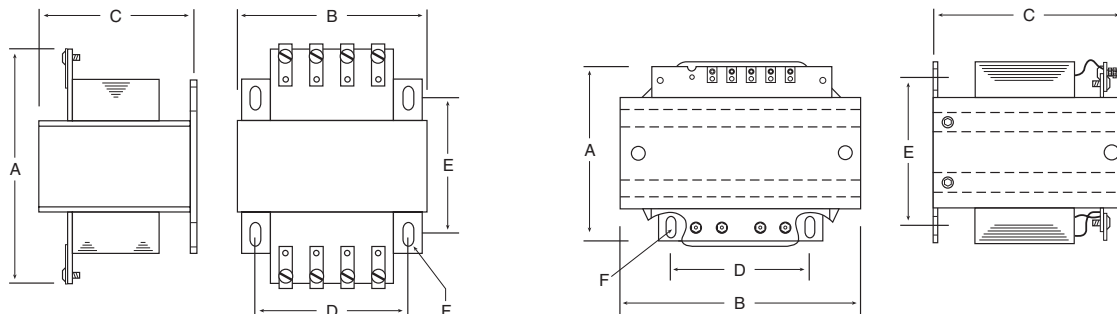
TA Series Open Core & Coil Wiring Diagrams



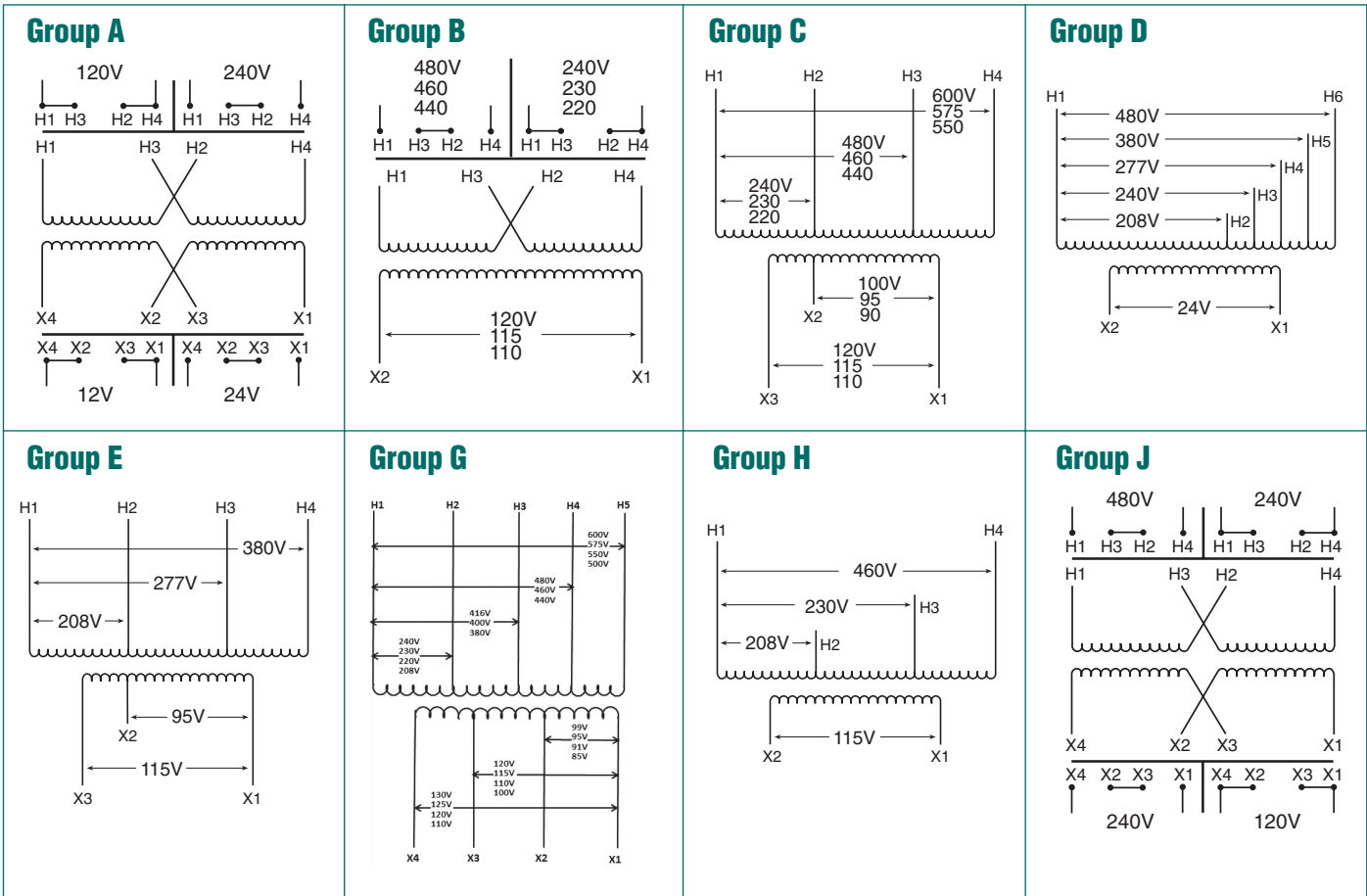
TA Series Open Core & Coil Dimensional Drawings

50 VA Thru 2 kVA

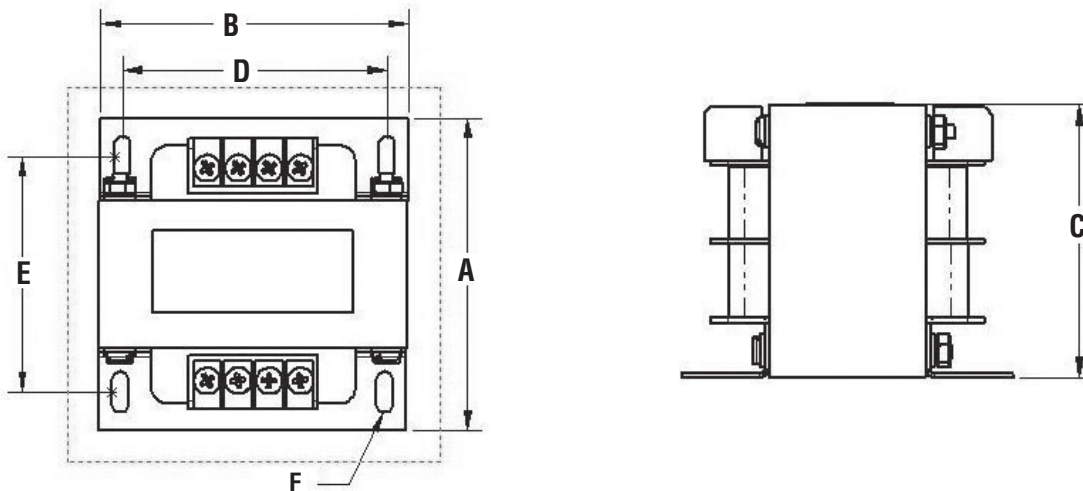
3 & 5 kVA



# TB Series Open Core & Coil Wiring Diagrams



# TB Series Open Core & Coil Dimensional Drawings



## Industrial Control Transformers for Harsh Environments

### Designed for Control Panels where Internal Installation of Control Transformers is prohibited.

Some specifications require installation of large control transformers, usually 1000 to 5000 VA outside the control cabinet. This means the transformer must be in a sheet metal enclosure instead of the usual open core and coil construction method.

Acme meets this need by providing all of the power, protection, regulation and performance of our standard industrial control transformers in one UL -3R enclosure. These transformers are wound with copper magnet wire, deliver full nameplate capacity, and provide the high regulation required in control applications.

Voltage combinations available are: 240 x 480V primary, 120V secondary and 240/480/600V primary, 120/100V secondary. Ratings available are 1000, 2000, 3000 and 5000 VA. All units are UL listed, CSA certified, and covered by Acme's exclusive 10-year limited warranty.

### FEATURES

- Fully encapsulated and enclosed.
- 55°C temperature rise, 155°C insulation.
- Copper windings.
- 1000, 2000, 3000, 5000 and 10000 VA sizes.
- Voltage regulation exceeds NEMA requirements.
- UL and UL-3R listed.
- CSA certified.
- 10-year limited warranty.



### GROUP L



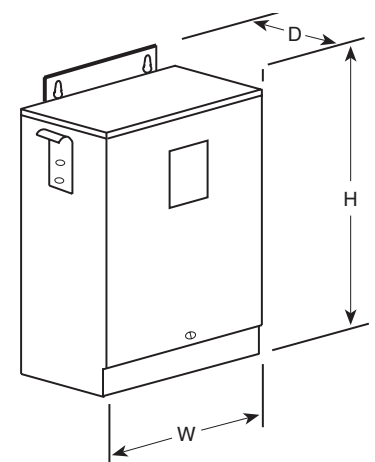
#### 240 x 480 PRIMARY VOLTS—120 SECONDARY VOLTS<sup>®</sup>—1Ø, 50/60 Hz

CATALOG NO.	VA RATING	OUTPUT AMPS	APPROX. DIMENSIONS INCHES (CM.)			APPROX. SHIP WEIGHT LBS. (KG.)	ELECTRICAL CONNECTION DIAGRAM ① ②
			H	W	D		
T181217	1000	8.33	13.10 (33.3)	10.31 (26.2)	7.13 (18.1)	55 (24.9)	B
T181219	2000	16.67	14.77 (37.5)	10.31 (26.2)	7.13 (18.1)	80 (36.3)	B
T181220	3000	25.00	14.77 (37.5)	10.31 (26.2)	7.13 (18.1)	100 (45.4)	B
T181221	5000	41.67	13.85 (35.2)	13.25 (33.7)	10.19 (25.9)	140 (63.5)	B
T181223	10000	83.3	16.47 (41.8)	13.88 (35.3)	12.94 (32.9)	308 (139.7)	B

### GROUP M

#### 240/480/600 PRIMARY VOLTS—120/100 Secondary Volts<sup>®</sup>—1Ø, 50/60 Hz

CATALOG NO.	VA RATING	OUTPUT AMPS	APPROX. DIMENSIONS INCHES (CM.)			APPROX. SHIP WEIGHT LBS. (KG.)	ELECTRICAL CONNECTION DIAGRAM ① ②
			H	W	D		
T153929	2000	16.67	14.77 (37.5)	10.31 (26.2)	7.13 (18.1)	80 (36.3)	C
T153930	3000	25.00	13.85 (35.2)	13.25 (33.7)	10.19 (25.9)	130 (59.0)	C
T153931	5000	41.67	13.85 (35.2)	13.25 (33.7)	10.19 (25.9)	140 (63.5)	C



Encapsulated  
1000 VA–10000 VA

① See page 70 for electrical diagram.

② See page 58 for fuse sizing information.

③ For secondary fuse size, multiply output amps x 1.25.



## AE/CE Series Industrial Control Transformers



### FEATURES & BENEFITS

- Epoxy encapsulated design protects core & coil assembly from potentially damaging contaminants.
- Integrally molded terminal blocks with isolation barriers to prevent arc over, terminal blocks allow full access for ring terminals for easy installation and solid termination.
- Heavy gauge steel mounting feet.
- Available factory or field installed fuse blocks provide integral fusing on the primary or primary and secondary.
- Dual labeling for easy product identification when equipped with a fuse block.
- 50-750 VA, 50/60 Hz.
- UL and cUL Listed, CE Marked (CE Series only).
- Ten-year limited warranty.
- 55°C Temperature Rise.
- 105°C Insulation Class.

### CE Series for Global Applications

Acme's CE Series Encapsulated Industrial Control Transformers carry the CE mark, indicating it complies with the requirements established by the International Electrotechnical

Commission (IEC) for use of control circuit transformers in the countries of the European Union. Regulations that apply to control transformers include Low Voltage Directive 73/23/EEC and Electromagnetic Compatibility (EMC) Directive 89/336/EEC.



The Acme Electric AE and CE Series Industrial Control Transformers are designed specifically for machine tool control circuit applications. These transformers have the ability to handle potentially damaging high in-rush currents that occur when electromagnetic components are energized, without sacrificing the required stable output voltage. Designed to meet or exceed the demands of international standards, combined with the full breadth of product offering, the AE and CE Series Transformers from Acme Electric are the ideal solution for your industrial control applications.

### Cooler. Cleaner. More Compact.

The AE and CE Series design improves the dissipation of the heat away from the core and coil assembly providing cooler operation. In addition, the AE and CE Series industrial control transformers seal the transformer's windings and internal terminations within an epoxy encapsulant encased in a durable thermoplastic end cap, protecting them from potentially damaging moisture, dirt and other ambient contaminants. Furthermore, Acme's compact design helps minimize the mounting footprint, providing more flexibility in applications where space is at a premium.

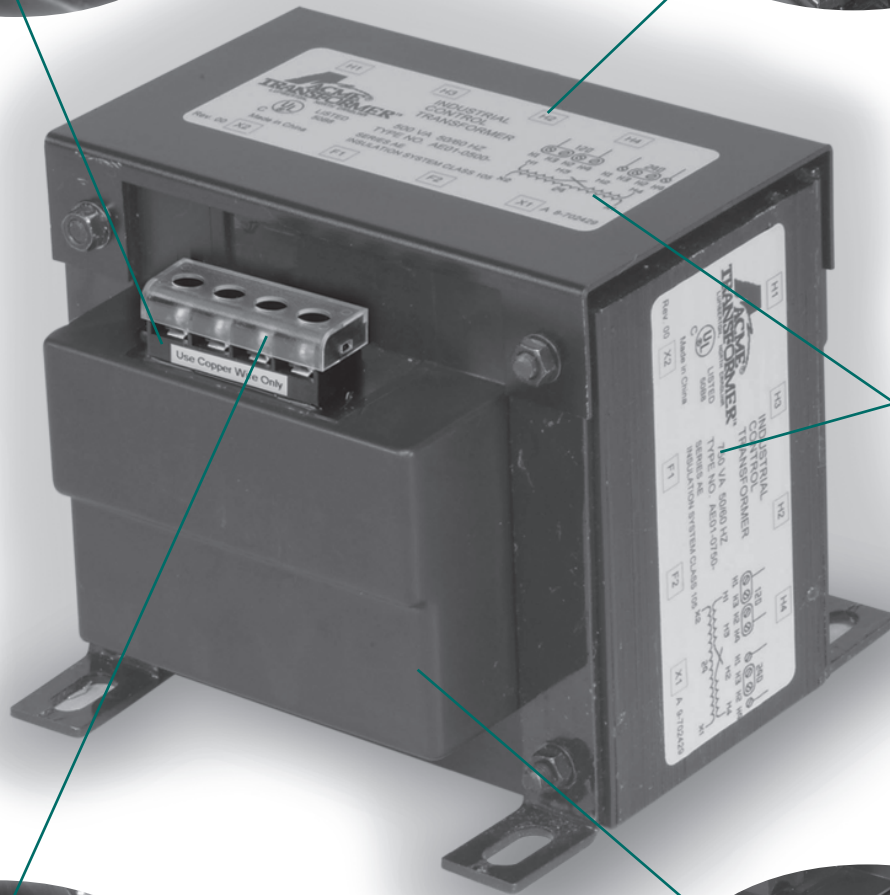
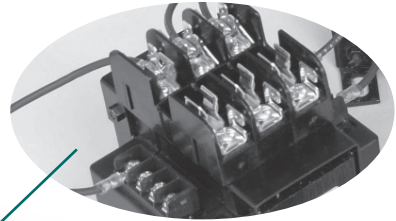


## FEATURES

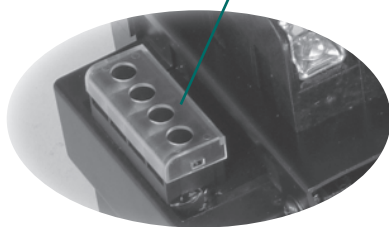
Integrally molded terminal blocks with combination slotted/Phillips screws. Isolation barriers protect against arc over while able to accommodate a full ring terminal.



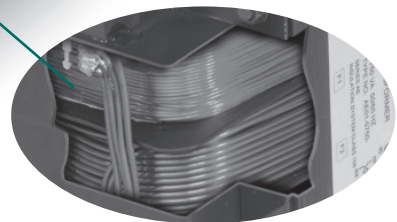
Integrally mounted fuse blocks available in standard and touch-proof (CE Series) style.



Dual labels for identification of fused modules



CE Series offers touch-proof terminals, isolating live contacts for additional safety.



Epoxy encapsulated copper windings and internal terminations, providing isolation from external contaminants and physical damage.

## SELECTION CHARTS

## AE SERIES

## GROUP I



## 120 x 240 PRIMARY VOLTS—24 SECONDARY VOLTS — 1Ø, 50/60 Hz

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT		APPROX. SHIPPING WT
		A	B	C	D	E	F		
50	AE010050	2.69 (6.8)	3.00 (7.6)	2.81 (7.1)	2.03 (5.1)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)	2.50 (1.1)	
75	AE010075	3.22 (8.1)	3.00 (7.6)	2.81 (7.1)	2.53 (6.4)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)	3.50 (1.6)	
100	AE010100	3.28 (8.3)	3.41 (8.6)	3.09 (7.8)	2.41 (6.1)	2.81 (7.1)	.20 x .40 (0.5 x 1.0)	4.05 (1.8)	
150	AE010150	3.88 (9.8)	3.78 (9.6)	3.41 (8.6)	2.97 (7.5)	3.13 (7.9)	.20 x .40 (0.5 x 1.0)	6.50 (2.9)	
250	AE010250	4.13 (10.4)	4.50 (11.4)	3.84 (9.7)	2.94 (7.4)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	9.25 (4.2)	
350	AE010350	5.00 (12.7)	4.50 (11.4)	3.84 (9.7)	3.78 (9.6)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	12.75 (5.8)	
500	AE010500	5.53 (14.0)	5.25 (13.3)	4.66 (11.8)	4.16 (10.5)	4.38 (11.1)	.31 x .69 (0.8 x 1.7)	19.00 (8.6)	
750	AE010750	6.81 (17.3)	5.25 (13.3)	4.66 (11.8)	5.75 (14.6)	4.38 (11.1)	.31 x .69 (0.8 x 1.7)	26.00 (11.8)	

## GROUP II

## 200/220/440, 208/230/460, 240/480 PRIMARY VOLTS—23/110, 24/115, 25/120 SECONDARY VOLTS—1Ø, 50/60 Hz

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT		APPROX. SHIPPING WT
		A	B	C	D	E	F		
50	AE020050	3.28 (8.3)	3.00 (7.6)	2.78 (7.0)	2.25 (5.7)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)	3.0 (1.4)	
75	AE020075	3.28 (8.3)	3.00 (7.6)	3.09 (7.8)	2.53 (6.4)	2.81 (7.1)	.20 x .40 (0.5 x 1.0)	4.0 (1.8)	
100	AE020100	3.28 (8.3)	3.41 (8.6)	3.41 (8.6)	2.53 (6.4)	3.13 (7.9)	.20 x .40 (0.5 x 1.0)	4.0 (1.8)	
150	AE020150	4.03 (10.2)	3.75 (9.5)	3.41 (8.6)	3.28 (8.3)	3.13 (7.9)	.20 x .40 (0.5 x 1.0)	7.0 (3.2)	
250	AE020250	4.38 (11.1)	4.50 (11.4)	4.03 (10.2)	3.75 (9.5)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	9.0 (4.1)	
300	AE020300	5.13 (13.0)	4.50 (11.4)	4.97 (12.6)	3.88 (9.8)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	11.0 (5.0)	
350	AE020350	5.25 (13.3)	4.50 (11.4)	4.97 (12.6)	4.16 (10.5)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	13.0 (5.9)	
500	AE020500	6.31 (16.0)	5.25 (13.3)	4.97 (12.6)	5.25 (13.3)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	19.0 (8.6)	
750	AE020750	6.81 (17.3)	5.25 (13.3)	4.97 (12.6)	5.75 (14.6)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	27.0 (12.2)	

## GROUP III

## 240 x 480 PRIMARY VOLTS—24 SECONDARY VOLTS — 1Ø, 50/60 Hz

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT		APPROX. SHIPPING WT
		A	B	C	D	E	F		
50	AE030050	2.69 (6.8)	3.00 (7.6)	2.81 (7.1)	2.03 (5.1)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)	2.5 (1.1)	
75	AE030075	3.22 (8.1)	3.00 (7.6)	2.81 (7.1)	2.53 (6.4)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)	3.5 (1.6)	
100	AE030100	3.28 (8.3)	3.41 (8.6)	3.09 (7.8)	2.41 (6.1)	2.81 (7.1)	.20 x .40 (0.5 x 1.0)	4.0 (1.8)	
150	AE030150	3.88 (9.8)	3.84 (9.7)	3.41 (8.6)	2.97 (7.5)	3.13 (7.9)	.20 x .40 (0.5 x 1.0)	6.5 (2.9)	
250	AE030250	4.13 (10.4)	4.50 (11.4)	3.84 (9.7)	2.94 (7.4)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	9.2 (4.2)	
350	AE030350	5.00 (12.7)	4.50 (11.4)	3.84 (9.7)	3.78 (9.6)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	12.7 (5.8)	
500	AE030500	5.53 (14.0)	5.25 (13.3)	4.66 (11.8)	4.16 (10.5)	4.34 (11.0)	.31 x .69 (0.8 X 1.7)	19.0 (8.6)	
750	AE030750	6.81 (17.3)	5.25 (13.3)	4.66 (11.8)	5.75 (14.6)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	26.0 (11.8)	

## GROUP VI



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

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT		APPROX. SHIPPING WT
		A	B	C	D	E	F		
50	AE060050	2.69 (6.8)	3.00 (7.6)	2.81 (7.1)	2.03 (5.1)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)		2.5 (1.1)
75	AE060075	3.22 (8.1)	3.00 (7.6)	2.81 (7.1)	2.53 (6.4)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)		3.5 (1.6)
100	AE060100	3.28 (8.3)	3.41 (8.6)	3.09 (7.8)	2.41 (6.1)	2.81 (7.1)	.20 x .40 (0.5 x 1.0)		4.0 (1.8)
150	AE060150	3.88 (9.8)	3.84 (9.7)	3.41 (8.6)	2.97 (7.5)	3.13 (7.5)	.20 x .40 (0.5 x 1.0)		6.5 (2.9)
250	AE060250	4.13 (10.4)	4.50 (11.4)	3.84 (9.7)	2.94 (7.4)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)		9.2 (4.2)
350	AE060350	5.00 (12.7)	4.50 (11.4)	3.84 (9.7)	3.78 (9.6)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)		12.7 (5.8)
500	AE060500	5.53 (14.0)	5.25 (13.3)	4.66 (11.8)	4.16 (10.5)	4.34 (11.0)	.31 x .69 (0.8 X 1.7)		19.0 (8.6)
750	AE060750	6.81 (17.3)	5.25 (13.3)	4.66 (11.8)	5.75 (14.6)	4.31 (10.9)	.31 x .69 (0.8 X 1.7)		26.0 (11.8)

## GROUP VII

## 208/230/460 PRIMARY VOLTS — 115 SECONDARY VOLTS — 1Ø, 50/60 Hz

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT		APPROX. SHIPPING WT
		A	B	C	D	E	F		
50	AE070050	2.84 (7.2)	3.00 (7.6)	2.81 (7.1)	2.16 (5.4)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)		2.6 (1.2)
100	AE070100	3.41 (6.6)	3.41 (8.6)	3.09 (7.8)	2.69 (6.8)	2.81 (7.1)	.20 x .40 (0.5 x 1.0)		4.2 (1.9)
150	AE070150	3.88 (9.8)	3.75 (9.5)	3.41 (8.6)	3.09 (7.8)	3.09 (7.8)	.20 x .40 (0.5 x 1.0)		6.7 (3.1)
250	AE070250	4.16 (10.5)	4.50 (11.4)	4.03 (10.2)	3.28 (8.3)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)		9.5 (4.3)
350	AE070350	5.19 (13.1)	4.50 (11.4)	4.03 (10.2)	4.38 (11.1)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)		13.4 (6.1)
500	AE070500	5.88 (14.9)	5.25 (13.3)	4.66 (11.8)	4.78 (12.1)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)		19.0 (8.6)
750	AE070750	6.81 (17.3)	5.25 (13.3)	4.66 (11.8)	5.75 (14.6)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)		27.0 (12.2)

## GROUP XII

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

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT		APPROX. SHIPPING WT
		A	B	C	D	E	F		
50	AE120050	2.88 (7.3)	3.00 (7.6)	2.81 (7.1)	2.19 (5.5)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)		2.6 (1.2)
100	AE120100	3.59 (9.1)	3.41 (8.6)	3.09 (7.8)	2.88 (7.3)	2.81 (7.1)	.20 x .40 (0.5 x 1.0)		4.2 (1.9)
150	AE120150	3.94 (10.0)	3.78 (9.6)	3.41 (8.6)	3.28 (8.3)	3.09 (7.8)	.20 x .40 (0.5 x 1.0)		6.8 (3.1)
250	AE120250	4.16 (10.5)	4.50 (11.4)	4.03 (10.2)	3.22 (8.1)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)		9.5 (4.3)
350	AE120350	5.00 (12.7)	4.50 (11.4)	4.03 (10.2)	3.69 (9.3)	4.31 (10.9)	.20 x .40 (0.5 x 1.0)		13.2 (6.0)
500	AE120500	5.84 (14.8)	5.25 (13.3)	4.66 (11.8)	4.66 (11.8)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)		19.2 (8.7)
750	AE120750	6.81 (17.3)	5.25 (13.3)	4.66 (11.8)	5.81 (14.7)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)		27.0 (12.2)



## SELECTION CHARTS

## CE SERIES

## GROUP IC



## 120 x 240 PRIMARY VOLTS — 24 SECONDARY VOLTS — 1Ø, 50/60 Hz

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT	APPROX. SHIPPING WT
		A	B	C	D	E	F	
50	CE010050	2.69 (6.8)	3.00 (7.6)	2.81 (7.1)	2.25 (5.7)	2.56 (6.5)	.20 x .40 (0.5 x 1.0)	2.5 (1.2)
75	CE010075	3.22 (8.1)	3.41 (8.6)	2.81 (7.1)	2.25 (5.7)	2.88 (7.3)	.20 x .40 (0.5 x 1.0)	3.5 (1.6)
100	CE010100	3.28 (8.3)	3.75 (9.5)	3.09 (7.8)	2.53 (6.4)	3.13 (7.9)	.20 x .40 (0.5 x 1.0)	4.2 (1.9)
150	CE010150	3.88 (9.8)	4.50 (11.4)	3.41 (8.6)	2.53 (6.4)	3.84 (9.7)	.20 x .40 (0.5 x 1.0)	6.6 (3.0)
250	CE010250	4.13 (10.4)	4.50 (11.4)	4.03 (10.2)	3.22 (8.1)	3.84 (9.7)	.20 x .40 (0.5 x 1.0)	9.4 (4.3)
350	CE010350	5.00 (12.7)	5.25 (13.3)	4.03 (10.2)	3.75 (9.5)	4.50 (11.4)	.31 x .69 (0.8 X 1.7)	13.0 (5.9)
500	CE010500	5.50 (13.9)	5.25 (13.3)	4.66 (11.8)	4.28 (10.8)	4.50 (11.4)	.31 x .69 (0.8 X 1.7)	19.1 (8.7)
750	CE010750	7.03 (17.8)	5.25 (13.3)	4.66 (11.8)	5.75 (14.6)	4.50 (11.4)	.31 x .69 (0.8 X 1.7)	26.6 (12.1)

## GROUP IIC

## 200/220/440, 208/230/460, 240/480 PRIMARY VOLTS — 23/110, 24/115, 25/120 SECONDARY VOLTS — 1Ø, 50/60 Hz

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT	APPROX. SHIPPING WT
		A	B	C	D	E	F	
50	CE020050	3.28 (8.3)	3.28 (8.3)	2.81 (7.1)	2.25 (5.7)	2.81 (7.1)	.20 x .40 (0.5 x 1.0)	2.7 (1.2)
100	CE020100	4.03 (10.2)	3.75 (9.5)	3.13 (7.9)	3.22 (8.1)	3.16 (8.0)	.20 x .40 (0.5 x 1.0)	4.3 (1.9)
150	CE020150	4.03 (10.2)	4.50 (11.4)	3.41 (8.6)	2.81 (7.1)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	6.8 (3.0)
250	CE020250	4.78 (12.1)	4.50 (11.4)	4.03 (10.2)	4.06 (10.3)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	9.7 (4.4)
350	CE020350	5.53 (14.0)	5.25 (13.3)	4.03 (10.2)	4.28 (10.8)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	13.5 (6.1)
500	CE020500	7.25 (18.4)	5.25 (13.3)	4.69 (11.9)	6.00 (15.2)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	19.6 (8.9)
750	CE020750	6.81 (17.3)	5.28 (13.4)	4.69 (11.9)	5.75 (14.6)	4.44 (11.2)	.31 x .69 (0.8 X 1.7)	27.0 (12.2)

## GROUP IIIC

## 240 x 480 PRIMARY VOLTS — 24 SECONDARY VOLTS — 1Ø, 50/60 Hz

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT	APPROX. SHIPPING WT
		A	B	C	D	E	F	
50	CE030050	3.00 (7.6)	3.00 (7.6)	2.81 (7.1)	2.25 (5.7)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)	2.5 (1.1)
75	CE030075	3.28 (8.3)	3.28 (8.3)	2.81 (7.1)	2.25 (5.7)	2.81 (7.1)	.20 x .40 (0.5 x 1.0)	3.5 (1.6)
100	CE030100	3.28 (8.3)	3.75 (9.5)	3.09 (7.8)	2.53 (6.4)	3.13 (7.9)	.20 x .40 (0.5 x 1.0)	4.0 (1.8)
150	CE030150	3.88 (9.8)	4.50 (11.4)	3.47 (8.8)	2.53 (6.4)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	6.5 (2.9)
250	CE030250	4.13 (10.4)	4.50 (11.4)	4.03 (10.2)	3.22 (8.1)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	9.2 (4.2)
350	CE030350	5.00 (12.7)	5.25 (13.3)	4.03 (10.2)	3.75 (9.5)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	12.7 (5.8)
500	CE030500	5.53 (14.0)	5.25 (13.3)	4.66 (11.8)	4.28 (10.8)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	19.0 (8.6)
750	CE030750	7.03 (17.8)	5.25 (13.3)	4.66 (11.8)	5.41 (13.7)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	26.0 (11.8)

**GROUP IVC****380/400/415 PRIMARY VOLTS — 110/220 SECONDARY VOLTS — 1Ø, 50/60 Hz**

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT	APPROX. SHIPPING WT
		A	B	C	D	E	F	
50	CE040050	3.53 (8.9)	3.00 (7.6)	2.81 (7.1)	2.53 (6.4)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)	2.6 (1.2)
100	CE040100	3.53 (8.9)	3.75 (9.5)	3.22 (8.1)	2.53 (6.4)	3.13 (8.0)	.20 x .40 (0.5 x 1.0)	4.3 (1.9)
150	CE040150	3.53 (8.9)	4.34 (11.0)	3.41 (8.6)	2.53 (6.4)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	6.7 (3.0)
250	CE040250	4.03 (10.2)	4.50 (11.4)	4.22 (10.7)	3.22 (8.1)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	9.4 (4.3)
350	CE040350	4.91 (12.4)	4.50 (11.4)	4.22 (10.7)	4.06 (10.3)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	13.0 (5.9)
500	CE040500	6.00 (15.2)	5.25 (13.3)	4.69 (11.9)	4.78 (12.1)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	18.8 (8.5)
750	CE040750	6.81 (17.3)	5.25 (13.3)	4.69 (11.9)	5.75 (14.6)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	26.0 (11.8)

**GROUP VC****208, 220/380/440, 230/400/460, 240/416/480 PRIMARY VOLTS —  
85/100/110, 91/110/120, 95/115/125, 99/120/130 SECONDARY VOLTS — 1Ø, 50/60 Hz**

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT	APPROX. SHIPPING WT
		A	B	C	D	E	F	
50	CE050050	4.03 (10.2)	3.41 (8.6)	3.09 (7.8)	2.47 (6.2)	2.81 (7.1)	.20 x .40 (0.5 x 1.0)	2.7 (1.2)
150	CE050150	3.88 (9.8)	4.34 (11.0)	3.41 (8.6)	2.88 (7.3)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	6.7 (3.0)
250	CE050250	5.13 (13.0)	4.50 (11.4)	4.03 (10.2)	4.38 (11.1)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	9.5 (4.3)
350	CE050350	5.91 (15.0)	5.25 (13.3)	4.03 (10.2)	4.78 (12.1)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	13.3 (6.0)
500	CE050500	5.91 (15.0)	5.25 (13.3)	4.66 (11.8)	4.63 (11.7)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	19.0 (8.6)
750	CE050750	7.09 (18.0)	5.25 (13.3)	4.66 (11.1)	5.81 (14.7)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	27.0 (12.2)

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

VA RATING	CATALOG NUMBER	APPROX. DIMENSIONS INCHES (CM.)					MOUNTING SLOT	APPROX. SHIPPING WT
		A	B	C	D	E	F	
50	CE060050	3.41 (8.6)	3.00 (7.6)	2.81 (7.1)	2.53 (6.4)	2.53 (6.4)	.20 x .40 (0.5 x 1.0)	2.6 (1.2)
75	CE060075	3.41 (8.6)	3.28 (8.3)	2.81 (7.1)	2.53 (6.4)	2.81 (7.1)	.20 x .40 (0.5 x 1.0)	3.6 (1.6)
100	CE060100	3.41 (8.6)	3.75 (9.5)	3.09 (7.8)	2.53 (6.4)	3.13 (7.9)	.20 x .40 (0.5 x 1.0)	4.3 (1.9)
150	CE060150	3.88 (9.8)	4.50 (11.4)	3.47 (8.8)	2.53 (6.4)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	6.7 (3.0)
250	CE060250	4.13 (10.4)	4.50 (11.4)	4.03 (10.2)	3.22 (8.1)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	9.4 (4.3)
300	CE060300	4.53 (11.5)	4.50 (11.4)	4.03 (10.2)	3.75 (9.5)	3.75 (9.5)	.20 x .40 (0.5 x 1.0)	10.9 (4.9)
350	CE060350	5.00 (12.7)	5.25 (13.3)	4.03 (10.2)	3.75 (9.5)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	13.0 (5.9)
500	CE060500	6.00 (15.2)	5.25 (13.3)	4.66 (11.8)	4.78 (12.1)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	18.8 (8.5)
750	CE060750	6.81 (17.3)	5.25 (13.3)	4.66 (11.8)	5.75 (14.6)	4.38 (11.1)	.31 x .69 (0.8 X 1.7)	26.0 (11.8)

## FUSE SIZING CHARTS

### PRIMARY FUSE SIZING CHARTS

#### RECOMMENDED RATING FOR CURRENT LIMITING CLASS CC FUSES

VA	120 V	208 V	230 V	240 V	277 V	380 V	416 V	440 V	460 V	480 V	550 V	600 V
50	1.2	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	1.9	1.0	1.0	1.0	0.8	0.6	0.6	0.6	0.5	0.5	0.4	0.4
100	2.5	1.5	1.3	1.3	1.0	0.8	0.8	0.6	0.6	0.6	0.6	0.5
150	3.8	2.0	2.0	1.9	1.5	1.2	1.2	1.0	1.0	1.0	0.8	0.8
250	3.5	3.5	3.5	3.0	3.0	2.0	1.8	1.8	1.5	1.5	1.4	1.2
300	4.0	4.0	4.0	3.5	3.0	2.5	2.5	2.0	2.0	1.9	1.5	1.5
350	5.0	5.0	4.5	4.0	4.0	2.5	2.5	2.5	2.0	2.0	1.9	1.8
500	7.0	4.0	3.5	3.5	5.5	4.0	3.5	3.5	3.5	3.0	3.0	2.5
750	10.0	6.0	5.5	5.0	4.5	6.0	5.5	5.0	5.0	5.0	4.0	4.0

**NOTE:** Bold lines indicate changes in the percent of rated current used to calculate fuse sizes in accordance with article 450 of the NEC.

### SECONDARY FUSE SIZING CHARTS

#### RECOMMENDED RATING FOR CURRENT LIMITING MIDGET FUSES

VA	24 V	85 V	91 V	99 V	100 V	110 V	115 V	120 V	125 V	130 V
50 VA	3.2	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6
75 VA	5.0	1.4	1.2	1.2	1.2	1.0	1.0	1.0	1.0	0.8
100 VA	6.0	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2	1.2
150 VA	10.0	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	1.5
250 VA	12.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	3.0
300 VA	15.0	5.5	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5
350 VA	20.0	6.5	6.0	5.5	5.5	5.0	5.0	4.5	4.5	4.5
500 VA	25.0	9.0	9.0	8.0	8.0	7.0	7.0	6.0	6.0	6.0
750 VA	40.0	12.0	12.0	12.0	12.0	10.0	10.0	10.0	10.0	9.0

### CONNECTION DETAILS FOR AE05 & CE05

H1-H2	H1-H3	H1-H4	X1-X2	X1-X3	X1-X4
208			85	100	110
220	380	440	91	110	120
230	400	460	95	115	125
240	416	480	99	120	130

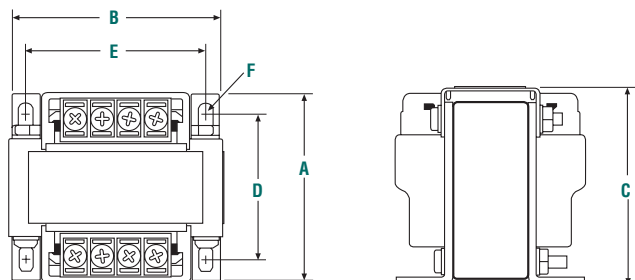
FUSE KITS & ACCESSORIES

CATALOG NUMBER	VA	DESCRIPTION	APPROX. SHIPPING WT. (Lbs./Kg.)
PL79920	50-750	Fuse Kit: Primary Fuse Block EIC Series (2 Class CC Blocks)	1.0 (0.5)
PL79921	150-750	Fuse Kit: Primary & Secondary Fuse Block EIC Series (2 Class CC and 1 Midget Blocks)	1.0 (0.5)
PL79922	50-750	Fuse Kit: Primary Fuse Block EIC Series CE Listed w/ Covers (2 Class CC Blocks)	1.0 (0.5)
PL79923	150-750	Fuse Kit: Primary & Secondary Fuse Block EIC Series CE Listed w/ Covers (2 Class CC and 1 Midget Blocks)	1.0 (0.5)
PL79924		Fuse Kit: Secondary Fuse 1/4" x 1-1/4" w/ARM	1.0 (0.5)
PL79925	50-350	Cover: Small Terminal Covers (Qty. 2)	1.0 (0.5)
PL79926	500 & 750	Cover: Large Terminal Covers (Qty. 2)	1.0 (0.5)
PL79927		Cover: Fuse Block Covers (Qty. 1)	1.0 (0.5)
PL79928	50-350	Link: Small Jumper Links (Qty. 2)	1.0 (0.5)
PL79929	500 & 750	Link: Large Jumper Links (Qty. 2)	1.0 (0.5)
PL79930	50-350	Fuse Kit: Secondary Fuse Midget w/ARM	1.0 (0.5)
PL79931	500 & 750	Fuse Kit: Secondary Fuse Midget w/ARM	1.0 (0.5)

AE & CE Series Wiring Diagrams

WIRING FOR AE01 & CE01	WIRING FOR AE02 & CE02	WIRING FOR AE03 & CE03	WIRING FOR CE04
WIRING FOR AE05 & CE05	WIRING FOR AE06 & CE06	WIRING FOR AE07	WIRING FOR AE12

AE & CE Series Dimensional Drawings



## FINGER/GUARD® Industrial Control Transformers

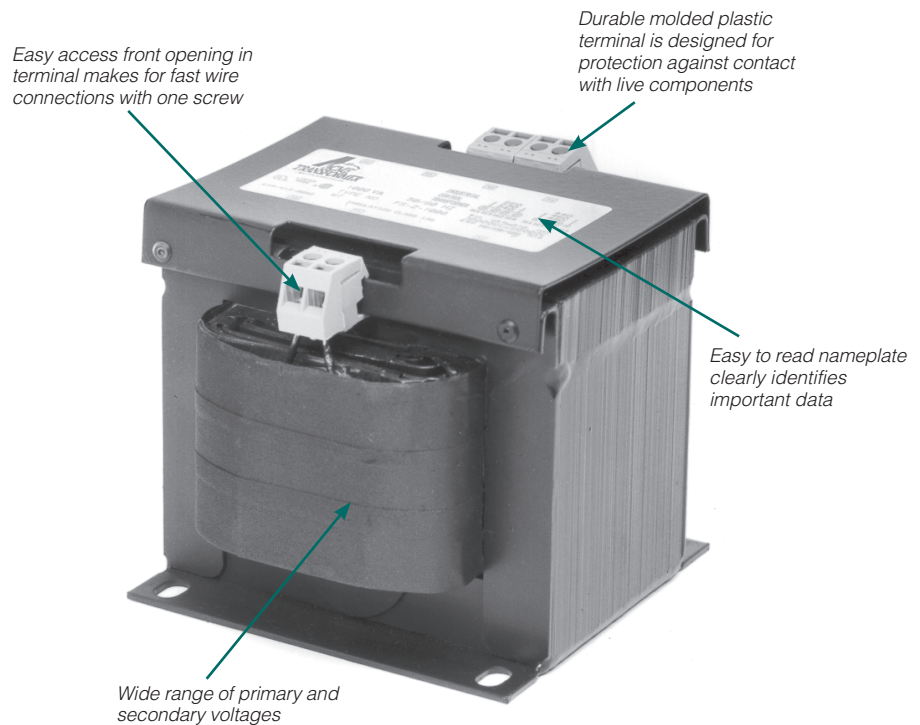
The Acme FINGER/GUARD® line of Touch-Protected Industrial Control Transformers offers the most advanced and versatile design concepts available to the marketplace today.

They are designed to meet Acme's rigid standards for mechanical durability as well as surpass Agency and Industry electrical standards. The FINGER/GUARD® line is designed for all control applications and features integrally installed, durable molded plastic terminations designed to protect against contact with live components. No slip-on plastic covers to be broken, lost or misplaced.

All FINGER/GUARD® products use copper windings, high-permeability silicon steel cores and 130 degree C (Class B) insulation. All FINGER/GUARD® products meet or exceed ANSI, IEC and NEMA standards. They are third party witness tested and are UL Listed (File E79947), CSA Certified (File 7357) and CE Marked (to EN60742)... ON ALL SIZES. The product is suitable for both 50 and 60 Hertz applications and is available in sizes ranging from 50 VA to 3000 VA.

### FEATURES

- Constructed with high quality silicon steel lamination to minimize core losses and increase efficiency.
- Designs incorporate precision wound coils for improved regulation.
- Copper windings on all groups.
- 50 VA through 3000 VA sizes, 50/60 Hz.
- 130°C (Class B) Insulation 80°C temperature rise.
- Voltage regulation exceeds NEMA requirements.
- UL Listed, CSA Certified and CE Marked.
- Attractive finish, nameplate, and design features enhance the end product.
- Ten-year limited warranty.
- Smaller, lighter weight design.



### CE Marking (Conformité Européene)

The CE Marking, standing for Conformité Européene, is a European Mark of conformity indicating that a product or system to which it is applied, complies with European law (Directives) regulating a necessary level of protection in Europe with respect to safety, health, environmental and consumer protection; however, it is not intended as a guarantee of quality for the consumer. The CE Marking must be applied to products being placed on the European market. The CE Marking does allow a product to be moved freely within the internal market of the European Union.

The Directives that apply to Control or Power Distribution Transformers are:

- Low Voltage Directive, 73/23/EEC effective January 1, 1997
- Electromagnetic Compatibility (EMC) Directive, 89/336/EEC effective January 1, 1996

The stringent testing required to obtain a third party certification mark in many cases is significantly more rigid than domestic requirements. This ensures that not only the Acme FINGER/GUARD® product, but all of our CE Marked products are designed to meet a higher level of safety standards than non-CE Marked products.

All Acme transformers are manufactured in a facility certified by Underwriters Laboratories to ISO-9001.





## SELECTION CHARTS

## GROUP A



## 120 X 240 PRIMARY VOLTS—24 SECONDARY VOLTS—50/60 Hz

CATALOG NO.	VA RATING	EUROPEAN* RATING	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (Kg.)
			A	B	C	D	E	F	
FS150									
FS175									
FS1100									
FS1150									
FS1250									
FS1350									
FS1500									
FS1750									
FS11000	1000	870	4.76 (12.1)	6.75 (17.1)	6.03 (15.3)	5.75 (14.6)	2.86 (7.3)	.31 x .50 (0.8 x 1.3)	26 (11.8)

Reference Group IC (CE01):  
CE Series Industrial Control Transformers  
50-750 VA  
See Pg 72

## GROUP B

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

CATALOG NO.	VA RATING	EUROPEAN* RATING	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (Kg.)
			A	B	C	D	E	F	
FS250									
FS275									
FS2100									
FS2150									
FS2250									
FS2300									
FS2350									
FS2500									
FS2750									
FS21000	1000	870	4.76 (12.1)	6.75 (17.1)	6.03 (15.3)	5.75 (14.6)	2.86 (7.3)	.31 x .50 (0.8 x 1.3)	26 (11.8)
FS21500	1500	1290	6.01 (15.3)	6.75 (17.1)	6.03 (15.3)	5.75 (14.6)	4.13 (10.5)	.31 x .50 (0.8 x 1.3)	38 (17.2)
FS22000	2000	1680	6.51 (16.5)	6.75 (17.1)	6.03 (15.3)	5.75 (14.6)	4.63 (11.8)	.31 x .50 (0.8 x 1.3)	44 (20.0)
FS23000	3000	2465	7.44 (18.9)	7.50 (19.1)	6.68 (17.0)	6.50 (16.5)	6.47 (16.4)	.41 x .81 (1.0 x 2.1)	60 (27.2)

Reference Group VIC (CE06):  
CE Series Industrial Control Transformers  
50-750 VA  
See Pg 73

## GROUP C

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

CATALOG NO.	VA RATING	EUROPEAN* RATING	APPROX. DIMENSIONS INCHES (CM.)						APPROX. SHIP WEIGHT LBS. (Kg.)
			A	B	C	D	E	F	
FS350	50	50	2.59 (6.6)	3.75 (9.5)	3.64 (9.2)	3.13 (8.0)	1.70 (4.3)	.22 x .50 (0.6 x 1.3)	5 (2.3)
FS3150	150	150	3.31 (8.4)	4.50 (11.4)	4.15 (10.5)	3.75 (9.5)	2.18 (5.5)	.22 x .50 (0.6 x 1.3)	8 (3.6)
FS3250	250	250	3.61 (9.2)	4.88 (12.4)	4.46 (11.3)	4.06 (10.3)	2.33 (5.9)	.22 x .50 (0.6 x 1.3)	11 (5.0)
FS3350	350	345	4.69 (11.9)	4.88 (12.4)	4.46 (11.3)	4.06 (10.3)	3.48 (8.8)	.22 x .50 (0.6 x 1.3)	17 (7.7)
FS3500	500	490	4.39 (11.2)	6.75 (17.1)	6.03 (15.3)	5.75 (14.6)	2.48 (6.3)	.31 x .50 (0.8 x 1.3)	22 (10.0)
FS3750	750	720	5.18 (13.2)	6.75 (17.1)	6.03 (15.3)	5.75 (14.6)	3.31 (8.4)	.31 x .50 (0.8 x 1.3)	30 (13.6)
FS31000	1000	870	6.18 (15.7)	6.75 (17.1)	6.03 (15.3)	5.75 (14.6)	4.30 (10.9)	.31 x .50 (0.8 x 1.3)	39 (17.7)
FS31500	1500	1290	6.26 (15.9)	7.50 (19.1)	6.68 (17.0)	6.50 (16.5)	5.26 (13.4)	.41 x .81 (1.0 x 2.1)	51 (23.1)
FS32000	2000	1680	7.76 (19.7)	7.50 (19.1)	7.70 (19.6)	6.50 (16.5)	6.75 (17.1)	.41 x .81 (1.0 x 2.1)	66 (29.9)
FS33000	3000	2465	8.88 (22.6)	11.92 (30.3)	8.83 (22.4)	6.75 (17.1)	5.75 (14.6)	.41 x .81 (1.0 x 2.1)	70 (31.8)

## FUSE KITS—FOR FINGER/GUARD® INDUSTRIAL CONTROL TRANSFORMERS

CATALOG NO.	DESCRIPTION
PL79905	PRIMARY FUSE KIT FOR CLASS CC FUSES
PL79906	PRIMARY & SECONDARY FUSE KIT FOR CLASS CC PRIMARY FUSES & MIDGET SECONDARY FUSE
PL79907	PRIMARY FUSE KIT FOR MIDGET FUSES
PL79908	PRIMARY & SECONDARY FUSE KIT FOR MIDGET FUSES

\* EN60742 requires transformers to pass the temperature rise limits of a 130° C (Class B) insulation system at 6% above the rated supply voltage.

## CONNECTION DETAILS FOR GROUP C

CONNECT TO LINE FOR RESPECTIVE VOLTAGE				OUTPUT VOLTS		
H1-H2	H1-H3	H1-H4	H1-H5	X1-X2	X1-X3	X1-X4
208	—	—	500	85	100	110
220	380	440	550	91	110	120
230	400	460	575	95	115	125
240	416	480	600	99	120	130

## PRIMARY FUSE SIZING CHARTS

## RECOMMENDED RATING FOR CURRENT LIMITING CLASS CC FUSES

VA	120 V	208 V	230 V	240 V	277 V	380 V	416 V	440 V	460 V	480 V	550 V	600 V
50	1.2	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	1.9	1.0	1.0	1.0	0.8	0.6	0.6	0.6	0.5	0.5	0.4	0.4
100	2.5	1.5	1.3	1.3	1.0	0.8	0.8	0.6	0.6	0.6	0.6	0.5
150	3.8	2.0	2.0	1.9	1.5	1.2	1.2	1.0	1.0	1.0	0.8	0.8
250	3.5	3.5	3.5	3.0	3.0	2.0	1.8	1.8	1.5	1.5	1.4	1.2
300	4.0	4.0	4.0	3.5	3.0	2.5	2.5	2.0	2.0	1.9	1.5	1.5
350	5.0	5.0	4.5	4.0	4.0	2.5	2.5	2.5	2.0	2.0	1.9	1.8
500	7.0	4.0	3.5	3.5	5.5	4.0	3.5	3.5	3.5	3.0	3.0	2.5
750	10.0	6.0	5.5	5.0	4.5	6.0	5.5	5.0	5.0	5.0	4.0	4.0
1000	15.0	8.0	7.0	7.0	6.0	4.5	4.0	3.5	3.5	3.5	5.5	5.0
1500	20.0	12.0	12.0	12.0	10.0	7.0	6.0	6.0	5.5	5.5	5.0	4.5
2000	25.0	12.0	15.0	15.0	12.0	9.0	8.0	8.0	7.5	7.0	6.0	6.0
3000	30.0	20.0	20.0	20.0	15.0	15.0	12.0	12.0	12.0	12.0	10.0	9.0

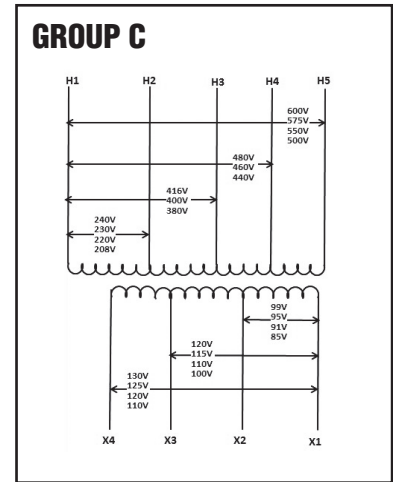
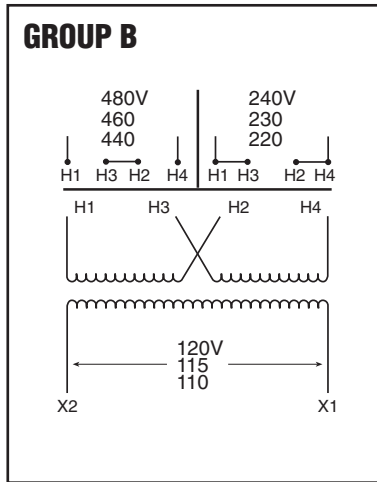
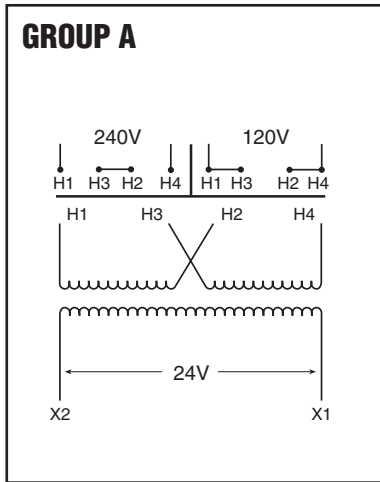
**NOTE:** Bold lines indicate changes in the percent of rated current used to calculate fuse sizes in accordance with article 450 of the NEC.

## SECONDARY FUSE SIZING CHARTS

## RECOMMENDED RATING FOR CURRENT LIMITING MIDGET FUSES

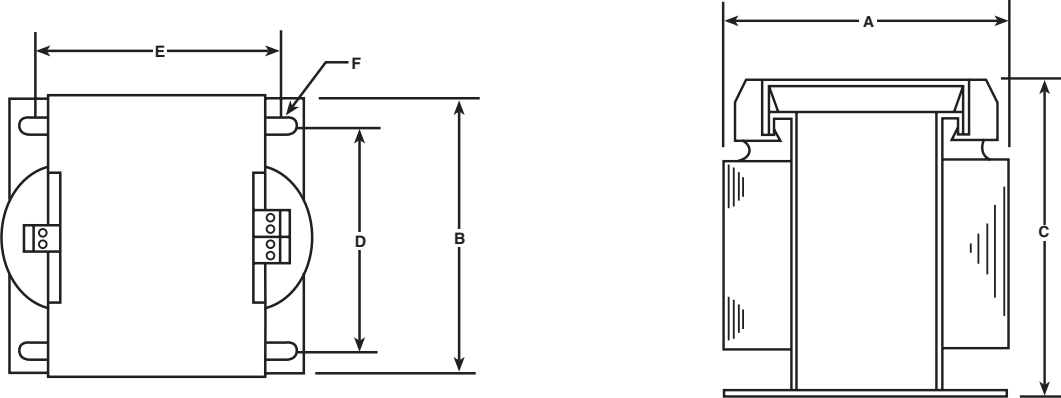
VA	24 V	85 V	91 V	99 V	100 V	110 V	115 V	120 V	125 V	130 V
50 VA	3.2	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6
75 VA	5.0	1.4	1.2	1.2	1.2	1.0	1.0	1.0	1.0	0.8
100 VA	6.0	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2	1.2
150 VA	10.0	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	1.5
250 VA	12.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	3.0
300 VA	15.0	5.5	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5
350 VA	20.0	6.5	6.0	5.5	5.5	5.0	5.0	4.5	4.5	4.5
500 VA	25.0	9.0	9.0	8.0	8.0	7.0	7.0	6.0	6.0	6.0
750 VA	40.0	12.0	12.0	12.0	12.0	10.0	10.0	10.0	10.0	9.0
1000 VA	50.0	15.0	15.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
1500 VA	—	25.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0	15.0
2000 VA	—	30.0	30.0	25.0	25.0	25.0	25.0	20.0	20.0	20.0
3000 VA	—	40.0	40.0	40.0	40.0	35.0	35.0	30.0	30.0	30.0

FINGER/GUARD® Wiring Diagrams



FINGER/GUARD® Dimensional Drawings

50 VA Thru 2 kVA



3 kVA

