

# Class MT, MTG

## General

### 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 inrush 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) that is required to operate the circuit after initial start-up or under normal operating conditions. It is calculated by adding the sealed VA requirements of all electrical components of the circuit 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.



Fuse Clip Kit KCCFPX2R

### Primary Fuse Kit

In addition to factory installed secondary fusing, Siemens offers a primary fuse kit for class MT transformers size 50–750 VA for field installation. The primary fuse kit includes a 2-pole Class CC fuse block, instructions and all associated mounting and wiring hardware. Additionally, this fuse kit will fit most competitors' units. To order this kit, use catalog number **KCCFPX2R**. The primary fuse kit, when installed, will add a maximum of 0.69 in. (18 mm) to the transformer "A" dimension and 1.94 in. (49 mm) to the "C" dimension.

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

1. Determine the Application Inrush VA by using the following industry accepted formula:  

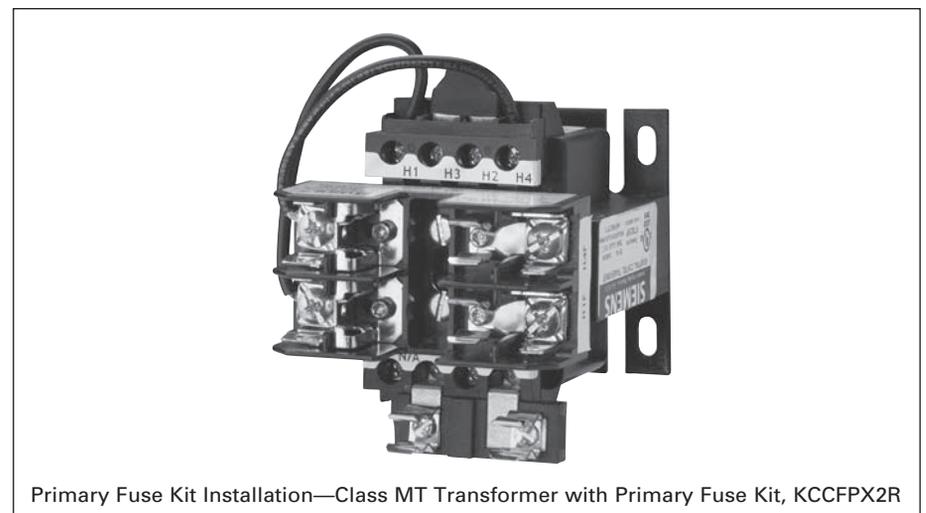
$$\text{Application Inrush VA} = \sqrt{(\text{Inrush VA})^2 + (\text{Sealed VA})^2}$$
2. Refer to the Regulation Data Chart. If the primary voltage is basically stable and does not vary by more than 5% from nominal, the 90% secondary voltage column should be used. If the primary voltage varies between 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.

### Regulation Data Chart

Transformer VA Ratings	Inrush VA At 20% Power Factor		
	NEMA/IEC 95% Sec Voltage	NEMA/IEC 90% Sec Voltage	NEMA/IEC 85% Sec Voltage
25	100/—	130/—	150/—
50	170/190	200/220	240/270
75	310/350	410/460	540/600
100	370/410	540/600	730/810
150	780/860	930/1030	1150/1270
200	810/900	1150/1270	1450/1600
250	1400/1540	1900/2090	2300/2530
300	1900/2090	2700/2970	3850/4240
350	3100/3410	3650/4020	4800/5280
500	4000/4400	5300/5830	7000/7700
750	8300/9130	11000/12100	14000/15400
1000 <sup>①</sup>	15000/—	21000/—	27000/—
1000 <sup>②</sup>	9000/—	13000/—	18500/—
1500	10500/—	15000/—	205000/—
2000	17000/—	25500/—	34000/—
3000	24000/—	36000/—	47500/—
5000	55000/—	92500/—	115000/—

To comply with NEMA standards, which require all magnetic devices to operate successfully at 85% of rated voltage, the 90% secondary voltage column is most often used in selecting a transformer.

① For units with Class 105°C insulation systems.  
 ② For units with Class 180°C insulation systems.



Primary Fuse Kit Installation—Class MT Transformer with Primary Fuse Kit, KCCFPX2R

## Class MT

## General

## Features

- Enclosed coils (50-5000VA); Completely encloses the transformer coils against moisture, dust, dirt and industrial contaminants for maximum protection in hostile and industrial environments.
- Fuse clips (most models). Factory mounted for integral fusing on the secondary side to save panel space, save wiring time and save the cost of buying an add-on fuse block or kit
- Integrally finger safe terminals. Between terminals and transformer, protect against electrical creepage. 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
- Terminals. Molded into the transformer, are difficult to break during wiring. A full quarter-inch of thread on the 8-32 terminal screws prevents stripping and pullout
- Jumpers supplied. Two jumper links are standard with all transformers which can be wired for dual primary voltages

## Operation

Industrial control circuits and motor control loads typically require more current when they are initially energized than under normal operating conditions. This period of high current demand, referred to as inrush, may be as great as ten times the current required under steady state (normal) operating conditions, and can last up to 40 milliseconds. A transformer in a circuit subject to inrush will typically attempt to provide the load with the required current during the inrush period. However, it will be at the expense of the secondary voltage stability by allowing the voltage to the load to decrease as the current increases. This period of secondary voltage instability, resulting from increased current, can be of such magnitude that the transformer is unable to supply sufficient voltage to energize the load. The transformer must therefore be designed and constructed to accommodate the high inrush current, while maintaining secondary voltage stability. According to NEMA standards, the secondary voltage would typically be at 85% of the rated voltage.



Industrial Control Power Transformers are specifically designed and built to provide adequate voltage to the load while accommodating the high current levels present at inrush. These transformers deliver excellent secondary voltage regulation and meet or exceed the standards established by NEMA, ANSI, UL and cUL. Their rugged construction and excellent electrical characteristics ensure reliable operation of electromagnetic devices and trouble-free performance.

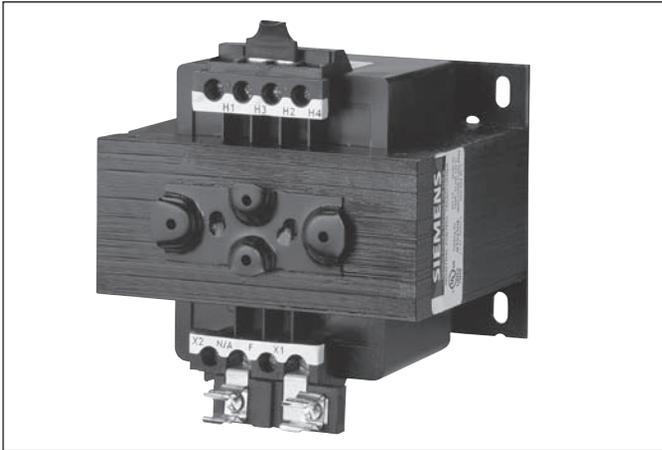
## Specifications

- Laminations are built with silicon steel to minimize core losses and to increase optimum performance and efficiency
- Copper magnet wire of the highest quality assures efficient operation
- Factory mounted type "K" fuse clips are standard on all secondary transformers where possible
- Two jumper links are standard with all transformers which can be wired for dual primary voltages
- cUL Listed and CSA certified

- 50/60 Hz rated
- Insulation materials are of the highest rating available for the temperature class
- Mounting plate is heavy gauge steel to add strength to core construction and provide stable mounting. Slotted mounting feet permit easy installation
- Attractive black finish; easy-to-read nameplate with complete rating data and wiring diagram
- Class 130°C (226°F) insulation system. 80°C (176°F) temperature rise. (50-750VA typical)
- Class 180°C (356°F) insulation system. 120°C (248°F) temperature rise. (1000-5000VA typical)
- Optional field mounted 2-pole primary Class CC fuse block is available

## Class MTG

## Genera



## Features

- Class MTG Industrial Control Transformers are 100% certified for all domestic and International Applications
- The MTG line has full compliance with IEC Safety standards EN 61 558
- CE Mark in accordance with requirements for EN 61 558
- Meets IP-20 specifications per IEC 529 for finger-safe protection when used with Siemens Touch Safe snap on terminal cover kits. Meets IP-00 specifications when covers are not used.
- UL Listed
- Exceeds applicable requirements for control transformers as determined by NEMA and ANSI
- Insulation requirements is twice that of UL5085
- Available in 50 to 750 VA sizes, in all standard voltage combinations
- Class 130°C (226°F) insulation system. 80°C (176°F) temperature rise. (50-750VA typical)
- Class 180°C (356°F) insulation system. 120°C (248°F) temperature rise. (1000-5000VA typical)
- Primary and secondary fusing capability available as field installed kits for domestic or international fusing
- Integrally-molded terminals and barriers between terminals make breakage virtually impossible during wiring. The MTG transformer construction is the same as our high quality Class MT transformers

#### Optional Field Installed Fuse Clip Kits For Panel Mounting

- 2-Pole primary Class CC fuse block
- 1-Pole secondary midget fuse block for  $1\frac{3}{32} \times 1\frac{1}{2}$  fuses
- 2-Pole primary international type fuse blocks
- 1-Pole secondary international type fuse blocks

#### Optional Touch-Safe Snap-On Terminal Cover Kits

The Touch-Safe terminal covers are designed to comply with IEC 742 and IP 20 requirements. When installed, the covers prevent contact with current carrying parts on the transformer and are available for 4 terminal configurations.

The international fuse block kits have inherent touch safe terminals and fuse clips.

#### Siemens Meets International Standards

CSA (Canadian Standards Association) was utilized as a Competent Body in reviewing, interpreting and properly complying with the requirements of IEC-742 to place a CE mark on its MTG Series product. As a National Certification Body, CSA also has the proper documentation and reports on file for MTG Series to utilize the CB Scheme ensuring acceptance throughout the world.

The standard Siemens MTG product is available with terminal covers which meets the requirements of IEC-529, IP20 degree of protection and meets the applicable requirements for covers per IEC-742.

#### IEC-742

The requirements for industrial control circuit transformers to be used in the European Common Market are identified by the International Electrotechnical Commission (IEC) and specified under IEC-742, Non-Short Circuit Proof Isolating Transformers, under the Low Voltage Directive 73/23/EEC. Manufacturers of control transformers indicate compliance with these requirements by placing a CE mark on the product.

- Winding to winding insulation requirements may be twice that for IEC-742 compared to UL506
- The electrical clearances between current carrying parts are one-third greater to comply with IEC-742 requirements for units up to 250VA with voltages up to 440 volts ac
- Transformers manufactured to IEC-742 requirements will have a minimum of 10% higher overload capacity than those manufactured only to UL506 requirements

While no requirement exists in IEC-742 for the electrical connections to be either finger safe or touch proof, the specification does state that IF a transformer is supplied with a cover to prevent incidental contact with current carrying parts, that cover must utilize two separate methods or places of securing it to the component, with neither being dependent upon the other. Additionally, one of these methods MUST require a tool to remove it.

#### IEC-529

The requirements for finger-safe or touch-proof electrical connections are identified by the International Electrotechnical Commission (IEC) under specification 529, Classification of Degrees of Protection Provided by Enclosures. These various degrees of protection are identified and differentiated by IP ratings.

The IP specification which most closely approximates protection to a human finger is IP20. This IP rating would be the most common degree of touch-proof connection for electrical components such as transformers.

#### EN 61 558

The requirements for industrial control transformers to be used in the European Common Market are identified by the IEC and specified in EN 61 558, Safety of Power Control Transformers, under Low Voltage Directive 73/23/EEC. CE mark on the product indicates compliance.

# Domestic, Class MT

## Selection



### Ordering Information

- ▶ Use the Voltage Table to determine the primary and secondary voltage required.
- ▶ Field Modifications see page 9/112.
- ▶ Dimensions see page 9/155.
- ▶ Wiring Diagrams see page 9/193.
- ▶ Touchsafe cover chart see page 9/101.

### Voltage Table

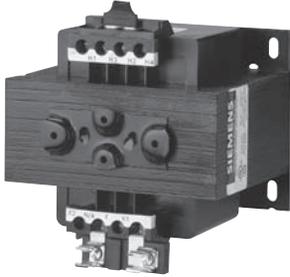
Primary Volts 50/60 Hz	Secondary Volts	Letter
240 X 480, 230 X 460, 220 X 440	120/115/110	A
240 X 480	24	B
120 X 240	24	C
115 X 230	24	D
550/575/600	110/115/120	E
208/277	120	F
208/230/460	115	G
230/460/575	95/115	H
380/400/415	110 X 220	I
208/230/460, 200/220/440,240/480	24 X 115, 23 X 110, 25 X 120	J
240/416/480/600, 230/400/460/575, 220/380/440/550, 208/500	99/120/130, 95/115/125, 91/110/120, 85/100/110	L
240 X 480	120 X 240	M

VA Rating	Voltage Letter A		Voltage Letter B		Voltage Letter C		Voltage Letter D		Voltage Letter E		Voltage Letter F	
	Catalog No	List Price \$										
50	MT0050A		MT0050B		MT0050C		MT0050D		MT0050E		MT0050F	
75	MT0075A		MT0075B		MT0075C		MT0075D		MT0075E		MT0075F	
100	MT0100A		MT0100B		MT0100C		MT0100D		MT0100E		MT0100F	
150	MT0150A		MT0150B		MT0150C		MT0150D		MT0150E		MT0150F	
200	MT0200A		MT0200B		MT0200C		MT0200D		MT0200E		MT0200F	
250	MT0250A		MT0250B		MT0250C		MT0250D		MT0250E		MT0250F	
300	MT0300A		MT0300B		MT0300C		MT0300D		MT0300E		MT0300F	
350	MT0350A		MT0350B		MT0350C		MT0350D		MT0350E		MT0350F	
500	MT0500A		MT0500B		MT0500C		MT0500D		MT0500E		MT0500F	
750	MT0750A		MT0750B		—	—	—	—	MT0750E		MT0750F	
1000	MT1000A		—	—	—	—	—	—	MT1000E		—	—
1500	MT1500A		—	—	—	—	—	—	—	—	—	—
2000	MT2000A		—	—	—	—	—	—	—	—	—	—
3000	MT3000A		—	—	—	—	—	—	—	—	—	—
5000	MT5000A		—	—	—	—	—	—	—	—	—	—

VA Rating	Voltage Letter G		Voltage Letter H		Voltage Letter I		Voltage Letter J		Voltage Letter L		Voltage Letter M	
	Catalog No	List Price \$										
50	MT0050G		MT0050H		MT0050I		MT0050J		MT0050L		MT0050M	
75	MT0075G		MT0075H		MT0075I		MT0075J		—	—	MT0075M	
100	MT0100G		MT0100H		MT0100I		MT0100J		MT0100L		MT0100M	
150	MT0150G		MT0150H		MT0150I		MT0150J		MT0150L		MT0150M	
200	MT0200G		MT0200H		MT0200I		MT0200J		—	—	MT0200M	
250	MT0250G		MT0250H		MT0250I		MT0250J		MT0250L		MT0250M	
300	MT0300G		MT0300H		MT0300I		MT0300J		—	—	MT0300M	
350	MT0350G		MT0350H	—	MT0350I		MT0350J		MT0350L		MT0350M	
500	MT0500G		MT0500H		MT0500I		MT0500J		MT0500L		MT0500M	
750	MT0750G		MT0750H		MT0750I		—	—	MT0750L		MT0750M	
1000	MT1000G		MT1000H		MT1000I		—	—	—	—	MT1000M	
1500	MT1500G		MT1500H		MT1500I		—	—	—	—	MT1500M	—
2000	MT2000G		MT2000H		MT2000I		—	—	—	—	MT2000M	—
3000	MT3000G		MT3000H		MT3000I		—	—	—	—	MT3000M	—
5000	MT5000G		MT5000H		—	—	—	—	—	—	MT5000M	—

# International, Class MTG

## Selection

	<b>Ordering Information</b> ▶ Use the Voltage Table to determine the primary and secondary voltage required. ▶ Field Modifications see page 9/112. ▶ Dimensions see page 9/155. ▶ Wiring Diagrams see page 9/193. ▶ Touchsafe cover chart see below.	<b>Voltage Table</b>		
		Primary Volts 50/60 Hz 240 X 480, 230 X 460, 220 X 440 240 X 480 120 X 240 550/575/600 380/400/415 208/230/460, 200/220/440, 240/480 380	Secondary Volts 120/115/110 24 24 110/115/120 110 X 220 24 X 115, 23 X 110, 25 X 120 24	Letter A B C E I J P

VA Rating	Voltage Letter A		Voltage Letter B		Voltage Letter C		Voltage Letter E		Voltage Letter I		Voltage Letter J		Voltage Letter P	
	Catalog No	ListPrice\$												
50	MTG0050A		MTG0050B		MTG0050C		MTG0050E		MTG0050I		MTG0050J		MTG0050P	
75	MTG0075A		MTG0075B		MTG0075C		MTG0075E		MTG0075I		MTG0075J		MTG0075P	
100	MTG0100A		MTG0100B		MTG0100C		MTG0100E		MTG0100I		MTG0100J		MTG0100P	
150	MTG0150A		MTG0150B		MTG0150C		MTG0150E		MTG0150I		MTG0150J		MTG0150P	
200	MTG0200A		MTG0200B		MTG0200C		MTG0200E		MTG0200I		MTG0200J		MTG0200P	
250	MTG0250A		MTG0250B		MTG0250C		MTG0250E		MTG0250I		MTG0250J		MTG0250P	
300	MTG0300A		MTG0300B		MTG0300C		MTG0300E		MTG0300I		MTG0300J		MTG0300P	
350	MTG0350A		MTG0350B		MTG0350C		MTG0350E		MTG0350I		MTG0350J		MTG0350P	
500	MTG0500A		MTG0500B		MTG0500C		MTG0500E		MTG0500I		MTG0500J		MTG0500P	
750	MTG0750A		MTG0750B		MTG0750C		MTG0750E		MTG0750I		MTG0750J		MTG0750P	
1000	MTG1000A		MTG1000B		MTG1000C	—	—	—	—	—	MTG1000J		—	—
1500	MTG1500A	—	—	—	—	—	—	—	—	—	—	—	—	—
2000	MTG2000A	—	—	—	—	—	—	—	—	—	—	—	—	—
3000	MTG3000A	—	—	—	—	—	—	—	—	—	—	—	—	—
5000	MTG5000A	—	—	—	—	—	—	—	—	—	—	—	—	—

### Touchsafe Covers For MT style CPT

VA Rating	Voltage Letter	Primary Side Touchsafe?	Secondary Side Touchsafe?	Secondary Side Fuse Clips?
50	A,B,C,D,E,F,G,H,J	Yes	Yes	Yes <sup>①</sup>
	I,L,M	Yes	Yes	No <sup>②</sup>
75	A,B,C,D,E,F,G,H,J	Yes	Yes	Yes <sup>①</sup>
	I,M	Yes	Yes	No <sup>②</sup>
100	A,B,C,D,E,F,G,H,J	Yes	Yes	Yes <sup>①</sup>
	I,L,M	Yes	Yes	No <sup>②</sup>
150	A,B,C,D,E,F,G,H,J	Yes	Yes	Yes <sup>①</sup>
	I,L,M	Yes	Yes	No <sup>②</sup>
200	A,B,C,D,E,F,G,H,J	Yes	Yes	Yes <sup>①</sup>
	I,M	Yes	Yes	No <sup>②</sup>
250	A,B,C,D,E,F,G,H,J	Yes	Yes	Yes <sup>①</sup>
	I,L,M	Yes	Yes	No <sup>②</sup>
300	A,B,C,D,E,F,G,H,J	Yes	Yes	Yes <sup>①</sup>
	I,M	Yes	Yes	No <sup>②</sup>
350	A,B,C,D,E,F,G,H,J	Yes	Yes	Yes <sup>①</sup>
	I,L,M	Yes	Yes	No <sup>②</sup>
500	A,B,C,D,E,F,G,H,J	Yes	No <sup>③</sup>	Yes <sup>①</sup>
	I,L,M	Yes	Yes	No <sup>②</sup>
750	A,B,C,D,E,F,G,H	Yes	No <sup>③</sup>	Yes <sup>①</sup>
	I,L,M	Yes	Yes	No <sup>②</sup>
1000	A,E,G,H	Yes	No <sup>③</sup>	Yes <sup>①</sup>
	I,M	Yes	Yes	No <sup>②</sup>
1500	A,G,H	Yes	No <sup>③</sup>	Yes <sup>①</sup>
	I	Yes	Yes	No <sup>②</sup>
2000	A,G,H	Yes	No <sup>③</sup>	Yes <sup>①</sup>
	I	Yes	Yes	No <sup>②</sup>
3000	A,G,H,I	Yes	Yes	No <sup>②</sup>
5000	A,G,H	Yes	Yes	No <sup>②</sup>

### Touchsafe Covers For MTG style CPT

VA Rating	Voltage Letter	Primary Side Touchsafe?	Secondary Side Touchsafe?	Secondary Side Fuse Clips? <sup>④</sup>
50	A,B,C,E,I,J,P	Yes	Yes	No
75	A,B,C,E,I,J,P	Yes	Yes	No
100	A,B,C,E,I,J,P	Yes	Yes	No
150	A,B,C,E,I,J,P	Yes	Yes	No
200	A,B,C,E,I,J,P	Yes	Yes	No
250	A,B,C,E,I,J,P	Yes	Yes	No
300	A,B,C,E,I,J,P	Yes	Yes	No
350	A,B,C,E,I,J,P	Yes	Yes	No
500	A,B,C,E,I,J,P	Yes	Yes	No
750	A,B,C,E,I,J,P	Yes	Yes	No
1000	A,B,C,J	Yes	Yes	No
1500	A	Yes	Yes	No
2000	A	Yes	Yes	No
3000	A	Yes	Yes	No
5000	A	Yes	Yes	No

① Needs US2:KCCSECFVCR to be Touchsafe

② If secondary fuse holder is required, use KCCF1G panel mount fuse holder

③ Needs US2:KCCSECFVCR2

④ International fusing options, see CPT accessory page

# NEMA, Reduced Voltage and Lighting

## Selection

### Starter/Contactor Auxiliary Contact Kits

Description	Class	Size	Type	Catalog Number	List Price \$
	14, 17, 18, 22, 25, 26, 30, 32, 36, 37, 40, 43, 83, 84, 87, 88	00-4	1 NO	49AB10	
			1 NC	49AB01	
			1 NC Early Break	49AB01EB	
			1 NC Late Break	49AB01LB	
			1 NC Extra Late Break	49AB01XLB	
			1 NO Extra Late Make	49AB10XLM	
			1 NO & 1 NC	49AB11	
			2 NO	49AB20	
			4 NO	49AB40	
			3 NO & 1 NC	49AB31	
			2 NO & 2 NC	49AB22	
				14, 17, 18, 22, 25, 26, 36, 37, 40, 43, 87, 88	5, 6
1 NO & 1 NC	3RH1921-1DA11				
2 NC	3RH1921-1EA02				
	14, 17, 18, 22, 25, 26, 40, 43	7, 8	1 NO & 1 NC (Inside L or R)	49CAL18-11	
			1 NO & 1 NC (Outside L or R)	49CAL18-11B	
	LC	30	1 NO/NC	49LCAC1PA	
			2 NO/NC	49LCAC2PA	
	LE	20	Front Mounted 1 NO/NC	3RH2911-1HA11	
		30	Side Mounted 1 NO/NC	3RH2911-1DA11	
		60-400	Side Mounted 1 NO/NC	3RH1921-1EA11	
	CLM, CMN, CMF, CMB	20 Amps	1 NO/NC SPDT	CLM4097291	
			2 NO/NC SPDT	CLM4097292	
		30-200 Amps	1 NO & 1 NC	CLMFCAK11	
			2 NC	CLMFCAK02	
			2 NO	CLMFCAK20	
		300-400 Amps	1 Coil Clearing NO & NC	CLMFCKK11	
			1 NO & 1 NC	CLMHCAK11	
			2 NC	CLMHCAK02	
			2 NO	CLMHCAK20	
			1 Coil Clearing NO & NC	CLMHCKK11	

### Disconnect Auxiliary Switch Kits

Description	Class	Disconnect Amp or CB Rating	Type	Catalog Number	List Price \$
Non-fusible or Fusible Type 	17, 25, 32, 37, 83, 84, 87, 88, LED, LEF, CMN, CMF	30 - 200A	2 NO/2 NC DPDT (NEMA A600)	HA261234	
MCP 	18, 26, 32, 37, 83, 84, 87, 88, LEB, CMB	3A-125A	1 NO/1 NC 240V	A02ED62	
		250A	1 NO/1 NC 480V	A02FD64	
		400A-600A	(2) 1 NO/1 NC SPDT-480V	A02JLD64	

### Control Power Transformer Kits<sup>①③</sup>

Description	Recommended Transformer Size		VA Rating	Catalog Number	List Price \$	Transformer Table			
	Control Size	Transformer VA				Primary Volts	Secondary Volts	Code	
 Transformer 50/60HZ	00-2½	45 or 50 <sup>②</sup>	45 VA	KT*050 <sup>②③</sup>		120	24	1	
	3-3½	75	50 VA	KT*050P <sup>②</sup>		208	24	G	
	4	150	100 VA	KT*100		208	120	H	
	5-6	150	150 VA	KT*150		240/480	24	4	
	7-8	300	200 VA	KT*200		240/480	120	8	
	Lighting Control			300 VA		KT*300	277	24	5
				500 VA		KT*500	277	120	7
							600	24	6
	CLM	20A, 2 - 12P	150				600	24	6
		30A, 3P	100				600	120	9
		30A, 6 - 12P	200						
		60A, 3P	100						
		60A, 4 - 6P	150						
		60A, 8 - 12P	250						
		100/200A, 3P	200						
LC & LE	100/200A, 5P	250							
	300/400A, 3P	250							
	LC 30A, 2-12P	100							
	LE 20, 30, 60A, 3 & 4P	45							
	LE 30A, 6P	45							
	LE 30A, 9-12P	100							
	LE 60A, 6-12P	150							
	LE 100, 200A, 3P	100							
	LE 300, 400A, 3P	150							

Replace \* with code from Transformer table. Kits used with NEMA 1 general purpose lift-off cover type require extra wide enclosure.  
 Class 14 Sizes 0-2½  
 Class 30 (2S2W) Sizes 0-2½  
 Class 30 (2S1W) Sizes 0-1½

① Installation of CPTs may require a larger enclosure.  
 ② 45VA transformer kits will include secondary but not primary fusing. Sizes 50VA and higher include

2-pole primary fusing and 1-pole secondary fusing.

③ For 24VAC control a minimum of 100VA CPT is required.

### Fuse Blocks, Touch-Safe Terminal Covers

Catalog Number	Description	List Price \$
<b>KCCF1G</b>	SECONDARY FUSE BLOCK, 1P, 250V MAX	
 <b>KCCFBCK</b>	SINGLE POLE FUSE BLOCK COVER KIT	
 <b>KCCFP2RG</b>	2 Pole PRIMARY FUSE BLOCK, 2P, 600V MAX (block only)	
 <b>KCCFPX2R</b>	2 Pole PRIMARY FUSE BLOCK KIT with wire Leads	
<b>US2:49FCCPT</b>	Secondary Fuse Clips, 2 per pack	
<b>US2:49JUCPT</b>	Terminal Jumpers	
 <b>US2:KCCSECFVR</b>	Terminal touchsafe cover Secondary Side: VAs 45 thru 350	
 <b>US2:KCCSECFVR2</b>	Terminal touchsafe cover Secondary Side: VAs 500 thru 2K	
<b>US2:KCCFP3POLE</b>	3 pole fuse blk (2 pole primary and 1 pole secondary)	

### International Fusing<sup>Ⓢ</sup>

Catalog Number	Description	List Price \$
 <b>8WA1011-1SF12</b>	1-Pole Fuse Block, Touch-Safe. Up to 6.3A for 5 mm × 20 mm or 5 mm × 25 mm (Requires DIN Rail Mounting)	
 <b>3NW7013</b>	1-Pole Fuse Block, Touch-Safe 32A, for 10 × 38 mm Cylindrical Fuses. (Requires DIN Rail Mounting.)	
 <b>3NW7023</b>	2-Pole Fuse Block, Touch-Safe 32A, for 10 × 38 mm Cylindrical Fuses. (Requires DIN Rail Mounting.)	
 <b>3NW7111</b>	1-Pole Fuse Block, Touch-Safe 4-50A, for 14 × 51 mm Cylindrical Fuses. (Requires DIN Rail Mounting.)	
 <b>8WA1815</b>	Fuse Block DIN Rail Mounting for separate screw mounting to panel. (Max 2-pole 2-25A size per rail.) (Max 1-pole 4-50A size per rail.)	

Ⓢ Product Category: IEC.