# magicpak.

## INSTALLATION INSTRUCTIONS

# Short Circuit Current Rating (SCCR) Kit

ASCCR1 through ASCCR10

For Use With MGE/MCE/MHP Series MagicPak® Units

This manual must be left with the homeowner for future reference.

This is a safety alert symbol and should never be ignored. When you see this symbol on labels or in manuals, be alert to the potential for personal injury or death.

#### Shipping and Packing List

Package 1 of 1 contains:

- 1 SCCR Sheet Metal Box with Fuse Block, Fuses, and Wire Harness installed
- 2 Self-Tapping Screws
- 1 Installation Instruction
- 1 SCCR Compliance Label

Check the Kit for shipping damage. If you find any damage, immediately contact the last carrier.

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Only qualified technicians may install this service item.

#### General

**NOTE:** This SCCR kit does not replace the need for unit circuit breaker protection. All installations require circuit breaker protection in addition to this SCCR kit. Refer to unit nameplate for proper circuit breaker sizing.

SCCR stands for Short-Circuit Current Rating, which is defined in the 2017 NEC (National Electric Code), Article

Manufactured By Allied Air Enterprises LLC A Lennox International, Inc. Company 215 Metropolitan Drive West Columbia, SC 29170 100 as "The prospective symmetrical fault current at a nominal voltage to which an apparatus or system is able to be connected without sustaining damage exceeding defined acceptance criteria."

This SCCR Kit will improve the default 5KA rating (per UL508A Supplement SB) of the MagicPak<sup>®</sup> unit to 200KA. This is done by applying the SCCR Box Assembly (pre-assembled with fuse blocks and mounted fuses) upstream of the power-drawing components of the system.

Specifically designed fuses with low let through current allow unit protection up to 200KA of fault current.

#### Installation

1. Turn unit off and disconnect the electrical power to the unit.

#### A WARNING

#### **ELECTRICAL SHOCK HAZARD!**

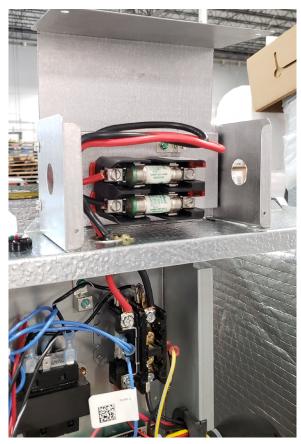
Failure to disconnect power to the unit may result in electrical shock. More than one disconnect may be required to turn off all power.

FAILURE TO DO SO COULD RESULT IN BODILY INJURY OR DEATH.

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(P) 508018-01

- 2. Verify proper kit application. Refer to Table 1 through Table 3 for kit and unit model cross reference.
- 3. Remove the upper access panel from the unit.
  - a. **MGE models only**: Remove inner control box cover.
- 4. Open cover (2 screws) of SCCR Box Assembly. Route the wire harness from the SCCR Box Assembly through field power supply opening in the unit's Top Cap. Install field supplied strain relief at wiring penetration.
  - a. **1-Circuit MGE Application**: Route wire harness to the unit's Contactor. Refer to unit's wiring diagram and Figure 1.
  - b. **1-Circuit MHP/MCE Application**: Route wire harness to unit's Terminal Block. Refer to unit's wiring diagram and Figure 2.
  - c. **2-Circuit Application (select MHP models)**: 2 wire harnesses are provided in the SCCR Box Assembly. Route wire harness from the larger Fuse Block to unit's Terminal Block. Route wire harness from smaller Fuse Block to the Contactor. Refer to unit's wiring diagram and Figure 3.
- 5. Position the SCCR Box Assembly on the unit's Top Cap with the label facing the installer. Align the Assembly with the field power supply opening in the Top Cap (see Figure 1, Figure 2, or Figure 3).
- 6. Secure Assembly using the provided self-tapping screws. Verify that screws do not contact any internal components.





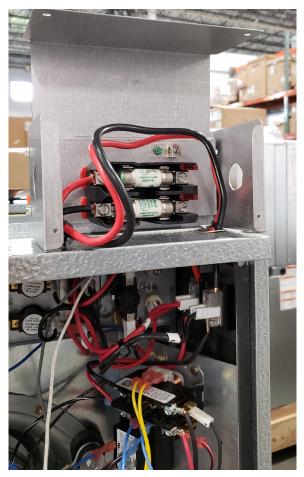


Figure 2. MHP/MCE 1-Circuit SCCR Assembly



Figure 3. MHP 2-Circuit SCCR Assembly

- 7. With the SCCR Box Assembly fastened to the unit's Top Cap, verify wiring connections at the Fuse Block, Terminal Block, and Contactor are secure.
- Connect field power supply wiring to Fuse Block(s) and ground lug within the SCCR Box Assembly. Refer to unit wiring diagram for proper circuiting.

**NOTE:** Verify that each Fuse Block receives both L1 and L2 field wiring on 2-Circuit MHP models.

- 9. Close and secure (2 screws) cover of SCCR Box Assembly.
- 10. Replace and secure unit Access Panel.
- 11. Turn on electrical power. Unit is SCCR compliant to the rating as specified on the kit label.
- 12. Apply provided SCCR compliance label adjacent to unit rating plate label.

Unit	Kit		Circ		
	Kit Model	Catalog Number	Fuse	Fuse Block	SCCR Rating
15MGE4,8-12-091*P		1.841213	106494-01	106495-01	200KA
24MGE4,8-12-091*P	1				
15MGE4,8-12-121*P					
24MGE4,8-12-121*P					
36MGE4,8-12-121*P	ASCCR1				
15MGE4,8-12-181*P					
24MGE4,8-12-181*P					
36MGE4,8-12-181*P					
48MGE4,8-12-181*P					
60MGE4,8-12-181*P					
15MGE4,8-12-241*P					
24MGE4,8-12-241*P					
36MGE4,8-12-241*P					
48MGE4,8-12-241*P					
60MGE4,8-12-241*P					
24MGE4,8-12-301*P		1.841215	106494-03	106495-02	
36MGE4,8-12-301*P					
48MGE4,8-12-301*P					
60MGE4,8-12-301*P	ASCCR3				
24MGE4,8-14-361*P					
36MGE4,8-14-361*P					
48MGE4,8-14-361*P					
60MGE4,8-14-361*P					

Table 1. MGE SCCR Kits

Unit	Kit		Circ		
	Kit Model	Catalog Number	Fuse	Fuse Block	SCCR Rating
0MCE4-12-091*P	ASCCR1	1.841213	106494-01	106495-01	200KA
3MCE4-12-091*P	ASCORT				
5MCE4-12-091*P	ASCCR2	1.841214	106494-02		
0MCE4-12-121*P	ASCCR1	1.841213	106494-01		
3MCE4-12-121*P	ASCORT				
5MCE4-12-121*P	ASCCR2	1.841214	106494-02		
0MCE4-12-181*P	ASCCR1	1.841213	106494-01		
3MCE4-12-181*P	ASCORT				
5MCE4-12-181*P	ASCCR2	1.841214	106494-02		
7MCE4-12-181*P	ASCCR3	1.841215	106494-03	106495-02	
10MCE4-12-181*P	ASCCR5	1.841217	106494-05	100495-02	
0MCE4-12-241*P	ASCCR1	1.841213	106494-01	106495-01	
5MCE4-12-241*P	ASCCR2	1.841214	106494-02	100495-01	
7MCE4-12-241*P	ASCCR3	1.841215	106494-03	106495-02	
10MCE4-12-241*P	ASCCR5	1.841217	106494-05	100495-02	
0MCE4-12-301*P	ASCCR2	1.841214	106494-02	106495-01	
5MCE4-12-301*P	ASCORZ				
7MCE4-12-301*P	ASCCR3	1.841215	106494-03		
10MCE4-12-301*P	ASCCR5	1.841217	106494-05		
0MCE4-14-361*P		1.841215	106494-03	106405 00	
5MCE4-14-361*P	ASCCR3			106495-02	
7MCE4-14-361*P					
10MCE4-14-361*P	ASCCR5	1.841217	106494-05	]	

Table 2. MCE SCCR Kits

	Kit		Number of	Circuit 1		Circuit 2		SCCR
Unit	Kit Model	Catalog Number	Circuits	Fuse	Fuse Block	Fuse		Rating
3MHP4-12-091*P	ASCCR2	1.841214	1	106494-02	106495-01		N/A	
5MHP4-12-091*P	ASCCR3	1.841215	1	106494-03	106495-02			
3MHP4-12-121*P	ASCCR2	1.841214	1	106494-02	106495-01			
5MHP4-12-121*P	ASCCR3	1.841215	1	106494-03	106495-02	N/A		
3MHP4-12-181*P	ASCCR2	1.841214	1	106494-02	106495-01			
5MHP4-12-181*P	ASCCR3	1.841215	1	106494-03	100105 00			
7MHP4-12-181*P	ASCCR4	1.841216	1	106494-04	106495-02			
10MHP4-12-181*P	ASCCR6	1.841218	2	106494-01	106495-01	106494-04	106495-02	
5MHP4-12-241*P	ASCCR4	1.841216	1	106494-04	400405.00	N/A	N/A	200KA
7MHP4-12-241*P	ASCCR5	1.841217	1	106494-05	106495-02			
10MHP4-12-241*P	ASCCR7	1.841219	2	106494-02	106495-01	106494-04	106495-02	
5MHP4-12-301*P	ASCCR4	1.841216	1	106494-04	106495-02	N/A	N/A	
7MHP4-12-301*P	ASCCR8	1.841220	2	400404.00 400405.00		106494-03	106495-02	
10MHP4-12-301*P	ASCCR7	1.841219	2	106494-02	106495-01	106494-04	106495-02	
5MHP4-14-361*P	ASCCR4	1.841216	1	106494-04		N/A	N/A	
7MHP4-14-361*P	ASCCR9	1.841221	2	106494-03		106494-03	106495-02	
10MHP4-14-361*P	ASCCR10	1.841222	2			106494-04	106495-02	

Table 3. MHP SCCR Kits