

# **Fused Access Power Controller Kits**

## **Models Include:**

## MaxFit78AP

8 Door Kit with Fused Outputs

### Fully assembled kit includes:

- One (1) AL1024ULXB2 Power Supply/Charger
- One (1) ACM8 Fuse Protected Access Power Controller
- One (1) PD8UL Fuse Protected Power Distribution Module
- BC750 enclosure

## MaxFit716AP

16 Door Kit with Fused Outputs

### Fully assembled kit includes:

- One (1) AL1024ULXB2 Power Supply/Charger
- Two (2) ACM8 Fuse Protected Access Power Controllers
- One (1) PD16W Fuse Protected Power Distribution Module
- BC750 enclosure

## MaxFit78APS

8 Door Kit with Fused Outputs

### Fully assembled kit includes:

- One (1) AL1024ULXB2 Power Supply/Charger
- One (1) ACM8 Fuse Protected Access Power Controller
- One (1) PDS8 Dual Input Fuse Protected Power Distribution Module
- One (1) VR6 Voltage Regulator
- BC750 enclosure

## MaxFit716APS

16 Door Kit with Fused Outputs

### Fully assembled kit includes:

- One (1) eFlow104NB Power Supply/Charger
- Two (2) ACMS8 Dual Input Fuse Protected Access Power Controllers
- One (1) VR6 Voltage Regulator
- One (1) PD16W Fuse Protected Power Distribution Module.
- BC750 enclosure

# **Installation Guide**



Rev. MFKLF\_051922

Installing Company:	Service Rep. Name:		
Address:		Phone #:	

#### Overview:

Altronix fused Access Power Controller kits distribute and switch power to access control systems and accessories. They convert a 120VAC 60Hz input into eight (8) or sixteen (16) independently controlled 12VDC or 24VDC fuse protected outputs. These Fail-Safe/Fail-Secure power outputs may be converted to dry form "C" contacts. Relays are activated by an open collector sink or normally open (NO) dry trigger input from an Access Control System, Keypad, Push Button, REX PIR, etc. Units will route power to a variety of access control hardware devices including: Mag Locks, Electric Strikes, Magnetic Door Holders, etc. The FACP Interface enables Emergency Egress, Alarm Monitoring, or may be used to trigger other auxiliary devices. The fire alarm disconnect feature is individually selectable for any or all of the eight (8) Fail-Safe/Fail-Secure power outputs. Additional fuse protected outputs provide power for connected devices.

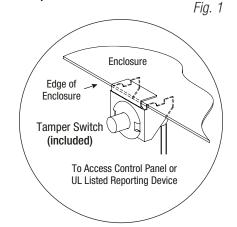
### **Configuration Chart:**

Altronix Model Number	Power Supply Board Input Fuse Rating	Power Supply Board Battery Fuse Rating	115VAC 60Hz Input Current (A)	Maximum Supply Current for Main Output on Power Supply board and ACM8/ACMS8 Access Power Controllers' outputs	Nominal DC Output Voltage Output Range (VDC)	Fail-Safe/Fail- Secure or Dry Form "C" Outputs	Additional Fused Outputs	ACM8 Board Input Fuse Rating	ACM8 Board Output Fuse Rating	ACMS8 Board Input Fuse Rating	ACMS8 Board Output Fuse Rating	PDS8 Board Input Fuse Rating	PDS8 Board Output Fuse Rating	PD8UL/PD16W Board Output Fuse Rating
MaxFit78AP	5A/ 250V	15A/ 32V	4.2	24VDC @ 9.7A	20.17-26.4	8	8	10A/ 250V	2.5A/ 250V	_	_	_	_	3.5A/ 250V
MaxFit716AP				24VDC @ 9.4A		16	16	10A/ 250V	2.5A/ 250V	_	_	_	_	3.5A/ 250V
MaxFit78APS				24VDC @ 9.4A		8	8	10A/ 250V	2.5A/ 250V	_	_	10A/ 32V	3A/ 32V	_
MaxFit716APS				24VDC @ 9.4A		16	16	_	_	15A/ 32V	3A/ 32V	_	_	3.5A/ 250V

### **Installation Instructions:**

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Product is intended for indoor use only.

- 1. Mount unit in desired location. Mark and predrill holes in the wall to line up with the top three keyholes in the enclosure. Install three upper fasteners and screws in the wall with the screw heads protruding. Place the enclosure's upper keyholes over the three upper screws, level and secure. Mark the position of the lower three holes. Remove the enclosure. Drill the lower holes and install the three fasteners. Place the enclosure's upper keyholes over the three upper screws. Install the three lower screws and make sure to tighten all screws (Enclosure Dimensions, pg. 8).
- 2. Connect unswitched AC power (120VAC 60Hz) to terminals marked [L, N] (Fig. 2-5, pg. 3-6). Use 14 AWG or larger for all power connections. Secure green wire lead to earth ground.
  - Keep power-limited wiring separate from non power-limited wiring.
  - Minimum 0.25" spacing must be provided (Fig. 2-5, pg. 3-6).
  - CAUTION: Do not touch exposed metal parts. Shut branch circuit power before installing or servicing equipment. There are no user serviceable parts inside. Refer installation and servicing to qualified service personnel.
- 3. Mount included UL Listed tamper switch (Altronix Model TS112 or equivalent) in desired location, opposite hinge. Slide the tamper switch bracket onto the edge of the enclosure approximately 2" from the right side (*Fig. 1, pg. 2*). Connect tamper switch wiring to the Access Control Panel input or the appropriate UL Listed reporting device. To activate alarm signal open the door of the enclosure.
- Refer to the ULXB Power Supply/Charger Installation Guide for AL1024ULXB2 and corresponding Sub-Assembly Installation Guides for ACM8, ACMS8, PDS8, VR6, PD8UL and PD16W for further installation instructions.

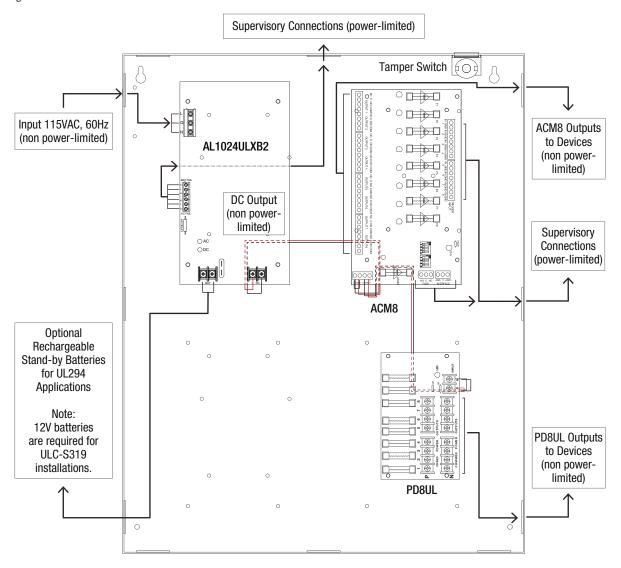


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### MaxFit78AP: NEC Power-Limited Wiring Requirements

Power-limited and non power-limited circuit wiring must remain separated in the cabinet. All power-limited circuit wiring must remain at least 0.25" away from any non power-limited circuit wiring. Furthermore, all power-limited circuit wiring and non power-limited circuit wiring must enter and exit the cabinet through different conduits. One such example of this is shown below. Your specific application may require different conduit knockouts to be used. Any conduit knockouts may be used. For power-limited applications use of conduit is optional. All field wiring connections must be made employing suitable gauge CM or FPL jacketed wire (or equivalent substitute). Optional UL Listed battery enclosure must be mounted adjacent to the power supply via Class 1 wiring methods. For Canadian installations use shielded wiring for all connections. Note: Refer to wire handling drawing below for the proper way to install the CM or FPL jacketed wire (Fig. 2a).

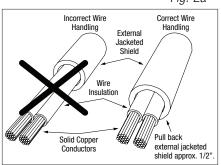
Fig. 2



Connect red battery lead to the terminal marked [BAT +] and to the [positive (+)] terminal of the battery. Connect black battery lead to terminal marked [– BAT] and to the [negative (–)] terminal of the battery. Keep power-limited wiring separate from non power-limited. Use minimum 0.25" spacing. 12AH Rechargeable batteries are the largest batteries that can fit in this enclosure.

A UL listed external battery enclosure must be used if using the 40AH or 65AH batteries.

Fig. 2a

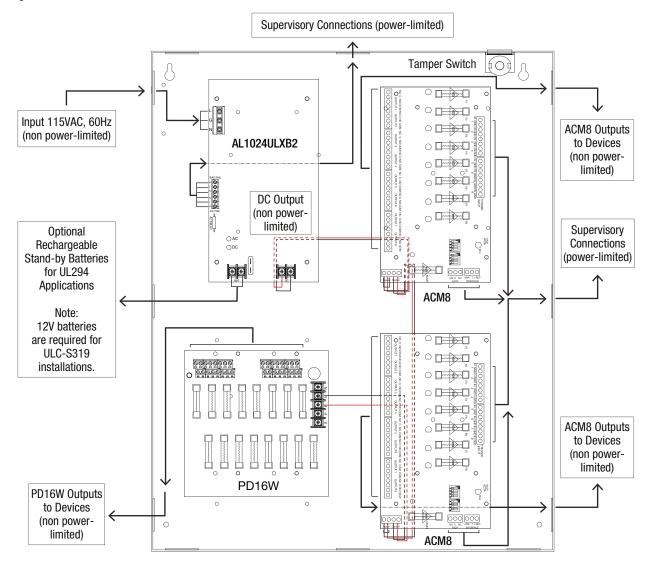


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### **MaxFit716AP: NEC Power-Limited Wiring Requirements**

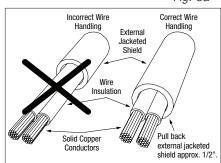
Power-limited and non power-limited circuit wiring must remain separated in the cabinet. All power-limited circuit wiring must remain at least 0.25" away from any non power-limited circuit wiring. Furthermore, all power-limited circuit wiring and non power-limited circuit wiring must enter and exit the cabinet through different conduits. One such example of this is shown below. Your specific application may require different conduit knockouts to be used. Any conduit knockouts may be used. For power-limited applications use of conduit is optional. All field wiring connections must be made employing suitable gauge CM or FPL jacketed wire (or equivalent substitute). Optional UL Listed battery enclosure must be mounted adjacent to the power supply via Class 1 wiring methods. For Canadian installations use shielded wiring for all connections. Note: Refer to wire handling drawing below for the proper way to install the CM or FPL jacketed wire (Fig. 3a).

Fig. 3



Connect red battery lead to the terminal marked [BAT +] and to the [positive (+)] terminal of the battery. Connect black battery lead to terminal marked [-BAT] and to the [negative (-)] terminal of the battery. Keep power-limited wiring separate from non power-limited. Use minimum 0.25" spacing. 12AH Rechargeable batteries are the largest batteries that can fit in this enclosure. A UL listed external battery enclosure must be used if using the 40AH or 65AH batteries.

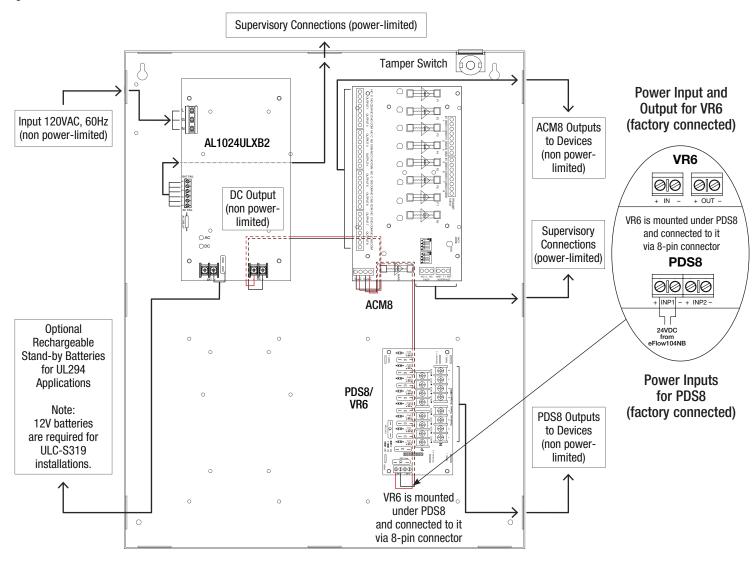
Fig. 3a



### **MaxFit78APS: NEC Power-Limited Wiring Requirements**

Power-limited and non power-limited circuit wiring must remain separated in the cabinet. All power-limited circuit wiring must remain at least 0.25" away from any non power-limited circuit wiring. Furthermore, all power-limited circuit wiring and non power-limited circuit wiring must enter and exit the cabinet through different conduits. One such example of this is shown below. Your specific application may require different conduit knockouts to be used. Any conduit knockouts may be used. For power-limited applications use of conduit is optional. All field wiring connections must be made employing suitable gauge CM or FPL jacketed wire (or equivalent substitute). Optional UL Listed battery enclosure must be mounted adjacent to the power supply via Class 1 wiring methods. For Canadian installations use shielded wiring for all connections. Note: Refer to wire handling drawing below for the proper way to install the CM or FPL jacketed wire (Fig. 4a).

Fig. 4



Connect red battery lead to the terminal marked [BAT +] and to the [positive (+)] terminal of the battery. Connect black battery lead to terminal marked [– BAT] and to the [negative (–)] terminal of the battery. Keep power-limited wiring separate from non power-limited. Use minimum 0.25" spacing. 12AH Rechargeable batteries are the largest batteries that can fit in this enclosure.

A UL listed external battery enclosure must be used if using the 40AH or 65AH batteries.

Fig. 4a

Incorrect Wire Handling External Jacketed Shield

Solid Copper Conductors

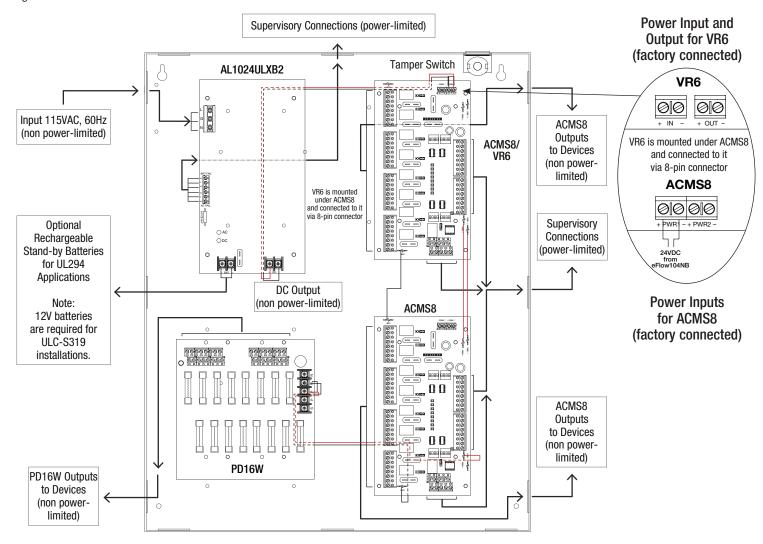
Full back external jacketed shield approx. 1/2".

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### MaxFit716APS: NEC Power-Limited Wiring Requirements

Power-limited and non power-limited circuit wiring must remain separated in the cabinet. All power-limited circuit wiring must remain at least 0.25" away from any non power-limited circuit wiring. Furthermore, all power-limited circuit wiring and non power-limited circuit wiring must enter and exit the cabinet through different conduits. One such example of this is shown below. Your specific application may require different conduit knockouts to be used. Any conduit knockouts may be used. For power-limited applications use of conduit is optional. All field wiring connections must be made employing suitable gauge CM or FPL jacketed wire (or equivalent substitute). Optional UL Listed battery enclosure must be mounted adjacent to the power supply via Class 1 wiring methods. For Canadian installations use shielded wiring for all connections. Note: Refer to wire handling drawing below for the proper way to install the CM or FPL jacketed wire (Fig. 5a).

Fig. 5



Connect red battery lead to the terminal marked [BAT +] and to the [positive (+)] terminal of the battery. Connect black battery lead to terminal marked [– BAT] and to the [negative (–)] terminal of the battery. Keep power-limited wiring separate from non power-limited. Use minimum 0.25" spacing. 12AH Rechargeable batteries are the largest batteries that can fit in this enclosure.

A UL listed external battery enclosure must be used if using the 40AH or 65AH batteries.

Fig. 5a

Incorrect Wire Handling External Jacketed Shield

Solid Copper Conductors

Pull back external jacketed shield approx. 1/2".

### **Notes:**

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## **MaxFit Enclosure Dimensions** (H x W x D approximate):

20.5" x 16.5" x 6.25" (520.7mm x 419.1mm x 158.8mm)

