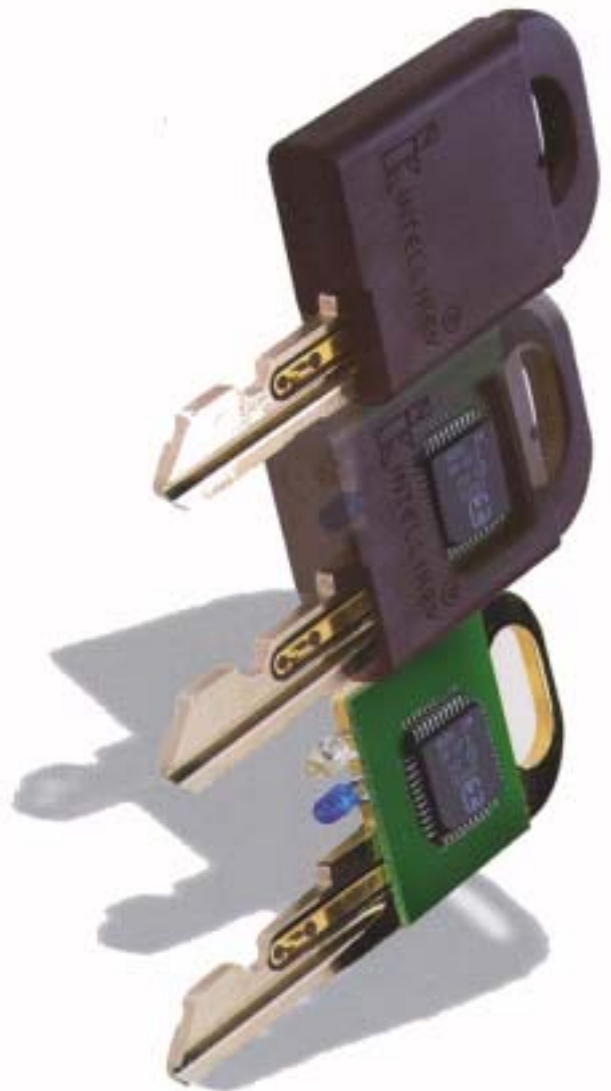


INTELLIKEY[®]

GENIUS AT YOUR FINGERTIPS

Mini-DCU Installation Manual



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Introduction



Mini-DCU shown with security cover removed
Part number 102151

Congratulations you have just purchased the INTELLIKEY Mini-Door Control Unit or Mini-DCU for short, INTELLIKEY part number 102151. The INTELLIKEY Mini-DCU has been designed for controlling a magnetic lock, an electric strike, electrified hardware or almost any other type of electrified device. Not included with the Mini-DCU are the needed locking devices or the regulated power supply with battery back up. The Mini-DCU comes with a controller & wired relay with a fixed cylinder in a narrow style mounting plate.

The Mini-DCU must be programmed before installation. Please read the instructions completely before trying to program or install the Mini-DCU. Once the instructions have been read follow the proper steps for programming. Please refer to the drawings on pages 7-14 for suggested wiring diagrams. **For specific hardware applications please refer to that manufacturer for wiring details.**

To program a Mini-DCU it must be connected to a 12 Vdc regulated power supply or, if programming on your bench, temporarily connected to one of the INTELLIKEY battery packs. Next connect the fixed cylinder to the lock electronics board. Now you are ready to program the Mini-DCU.

EZ123 Software Programming

The EZ123 software has three operating modes: Momentary, Alternate Action and Timed Unlock. Momentary Action is when the device is always locked such as storeroom function. Alternate Action is used when you want to turn a device on or off such as an alarm system or lights. And Timed Unlock is when the device must be automatically unlocked and relocked at a predefined time.

Once the proper operating mode has been decided upon you can then program the controller and install. Select the proper operating mode and follow the steps to set up and program.

Momentary Operating Mode

For new systems, with no keys or locks programmed, go to “*Add Controller*”. Fill in the building and door information. Drop down the window under operating mode and select “*Momentary*”. Next adjust the desired unlock time, normally it is set at 5 to 8 seconds. Then click OK and use the default access as being OK. When you see the screen “*Insert LPU*” click cancel as the lock isn’t being programmed at this time. If adding more Mini-DCUs please follow the same steps as the first one. After all the units have been added to system go to “*Users add*” and add all needed users to system, programming the keys as you proceed. When all users have been added then you can program the Mini-DCUs and install.

If this is an existing site, after selecting Momentary Action and setting the desired unlock time, go to “Access” and select the desired users for that Mini-DCU. When all the users have been added click OK and program DCU. You can now install the unit. Please refer to the drawings on pages 6-8 for suggested wiring diagrams.

Alternate Action Operating Mode

For new installations, with no keys or locks programmed, go to “Add Controller”. Fill in the building and door information. Drop down the window under operating mode and select “Alternate Action”. Then click OK and use the default access as being OK. When you see the screen “Insert LPU” click cancel as the lock isn’t being programmed at this time. If adding more Mini-DCUs please follow the same steps as the first one. After all the units have been added to system go to “Users add” and add all needed users to system, programming the keys as you proceed. When all users have been added then you can program the Mini-DCUs and install.

If this is an existing site, after selecting Alternate Action, go to “Access” and select the users for that Mini-DCU. When all the users have been added click OK and program DCU. You can now install the unit. Please refer to the drawings on pages 6-8 for suggested wiring diagrams.

Timed Unlock Operating Mode

First go to “Utility” Time Zones and complete a time zone(s) for the Mini-DCU(s). Then go to “Add Controller”. Fill in the building and door information. Go to operating mode and select “Timed Unlock”. Next select the time zone for that Mini-DCU. Then if needed select first man in. This feature keeps door locked until a legal key has been used that morning. Holidays can be selected if you want the door to stay locked during a holiday period. Note: you must add the correct holiday periods for Mini-DCU to work properly. If the 2 second unlock time for after hours is not sufficient you can extend the time by completing the following steps. Drop down the window under operating mode and select “Momentary”. Next adjust the unlock time needed for after hour use, normally it set at 5 to 8 seconds. Go back to operating mode and select “Timed Unlocked”. If this is a new installation, with no keys or locks programmed. Then click OK and use the default access as being OK. When you see the screen “Insert LPU” click cancel as the lock isn’t being programmed at this time. If adding more Mini-DCUs please follow the same steps as the first one. After all the units have been added to system go to Users add and add all needed users to system, programming the keys as you proceed. When all users have been added then you can program the Mini-DCUs and install.

If this is an existing site, after selecting Timed Unlock and setting the desired unlock times, go to “Access” and select the users for that Mini-DCU. When all the users have been added click OK and program. Now you can install the unit. Please refer to the drawings on pages 6-8 for suggested wiring diagrams.

Quantum Software Programming

The Quantum software has two operating modes Relock and Toggle. For storeroom function, always locked, use the Relock mode. For auto unlock or to turn a device on and off you would use the Toggle mode.

Once the proper operating mode has been decided upon you can then program the controller and install. Select the proper operating mode and follow the steps to set up and program.

Relock

Go to “*Add Controller*”. Fill in the building and door information and click OK. Select controller features. Under operating mode select “*Relock*”. Next adjust the unlock time needed, normally it is set at 5 to 8 seconds.

If this is a new installation, with no keys or locks programmed. Then click OK and use the default access as being OK. When you see the screen “*Insert LPU*” click cancel as the lock isn’t being programmed at this time. If adding more Mini-DCUs please follow the same steps as the first one. After all the units have been added to system go to “*Users Add*” and add all needed users to system, programming the keys as you proceed. When all users have been added you can then program the Mini-DCUs and install.

If this is an existing site, after selecting Relock and setting the desired unlock time, site go to “*Users*” and select the users for that Mini-DCU. When all the users have been added click OK and program. Now you can install the unit. Please refer to the drawings on pages 6-8 for suggested wiring diagrams.

Toggle and or Timed Unlock

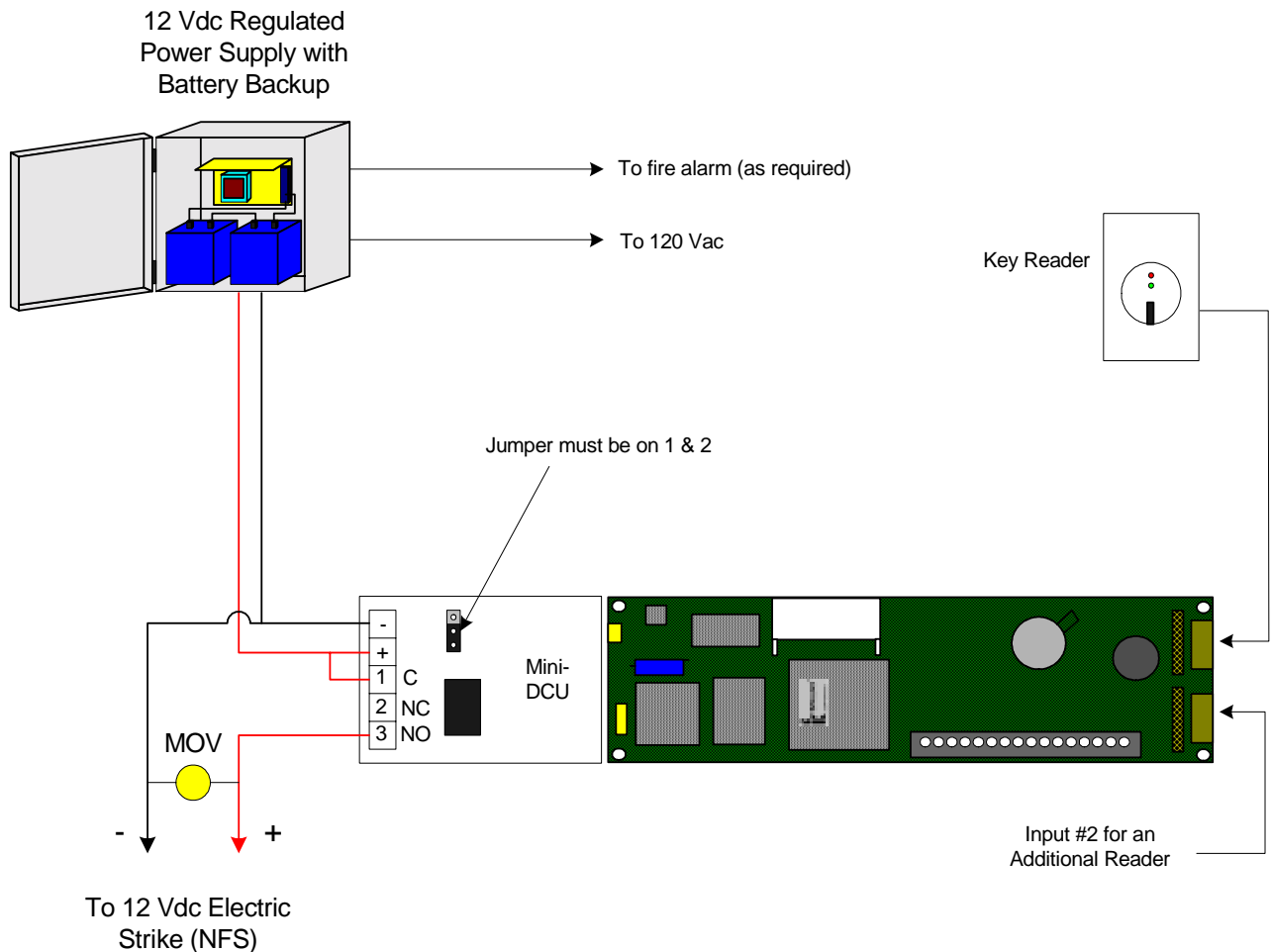
First go to “*Utility*” time zones and complete a time zone(s) for the DCU(s). Next go to “*Add Controller*”. Fill in the building and door information and click OK. Select controller features. Under operating mode select toggle. Next adjust the unlock time needed, normally it is set at 5 to 8 seconds. If automatic unlock is desired, select “*Activate*” under Automatic Unlock then add time zone. And first man in if desired. If the toggle while unlocked is selected then door can be locked during the normal unlock time. If a door is not to be auto unlocked during a holiday period then select holidays and add the correct holiday dates. Select options to disable the auto unlock feature. Click OK. If the automatic unlock is not activated then the Mini-DCU will work only in toggle mode. If this is a new installation, with no keys or locks programmed. Then click OK and use the default access as being OK. When you see the screen “*Insert LPU*” click cancel as the lock isn’t being programmed at this time. If adding more Mini-DCUs please follow the same steps as the first one. After all the units have been added to system go to “*Users add*” and add all needed users to system, programming the keys as you proceed. When all users have been added you can then program the Mini-DCUs and install.

If this is an existing site, after selecting Toggle and setting the desired unlock times, go to “*Users*” and select the users for that Mini-DCU. When all the users have been added click OK and program. Now you can install the unit. Please refer to the drawings on pages 6-8 for suggested wiring diagrams.

Suggested Wiring diagrams

Fail secure lock locking device
(electric strike)
powered output when relay is activated

The MOV installed across the output can be purchased from Radio Shack
Part number 276-568

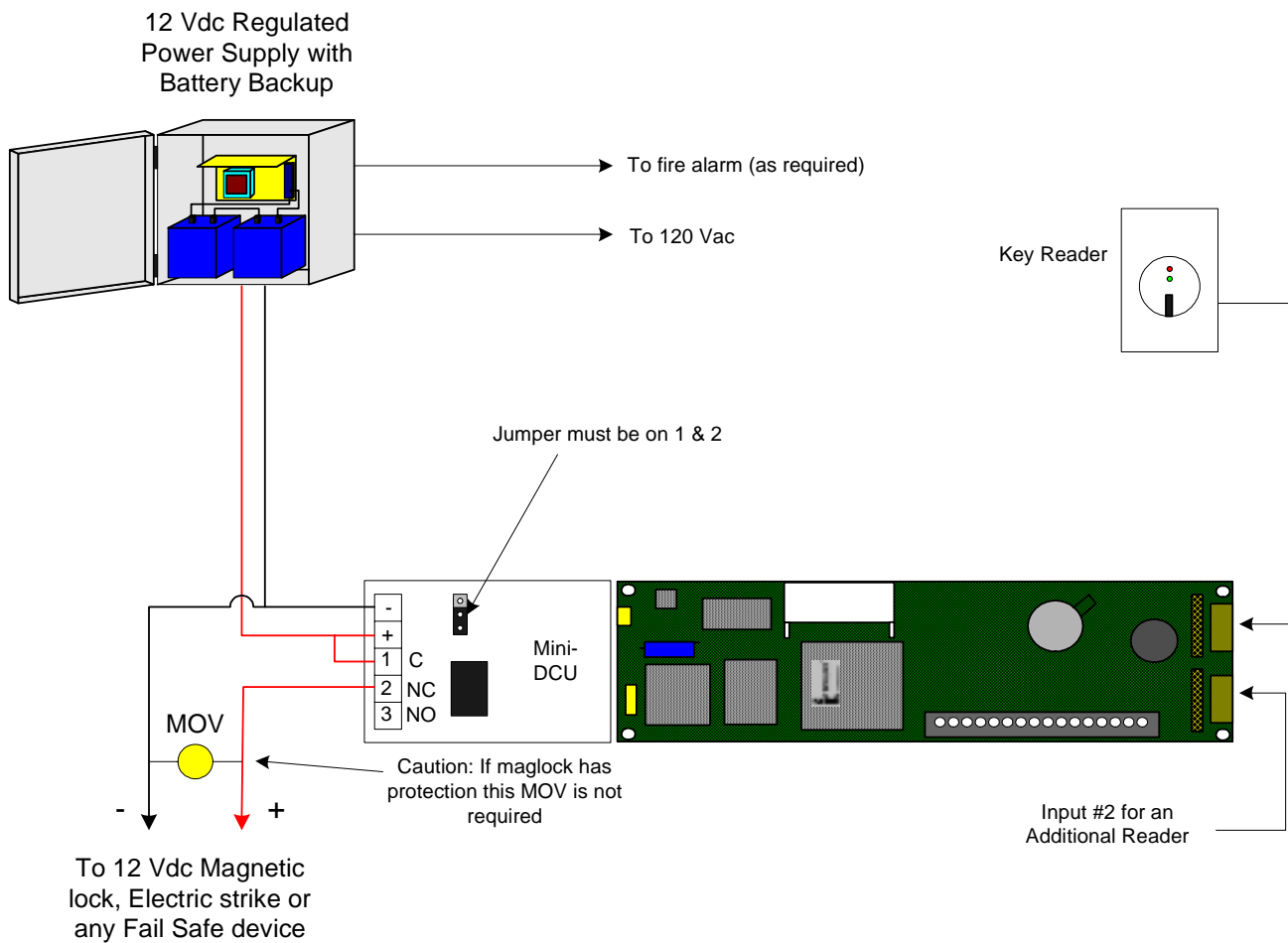


Nomenclature

- = 12 Vdc negative input from power supply
- + = 12 Vdc positive input from power supply
- Relay (SPDT)
- 1 = (C) common contact
- 2 = (NC) normally closed contact
- 3 = (NO) normally open contact

contact rating
2amp - 30Vdc Resistive

Fail safe locking device
 (magnetic lock or electric strike)
 nopower output
 when relay is activated

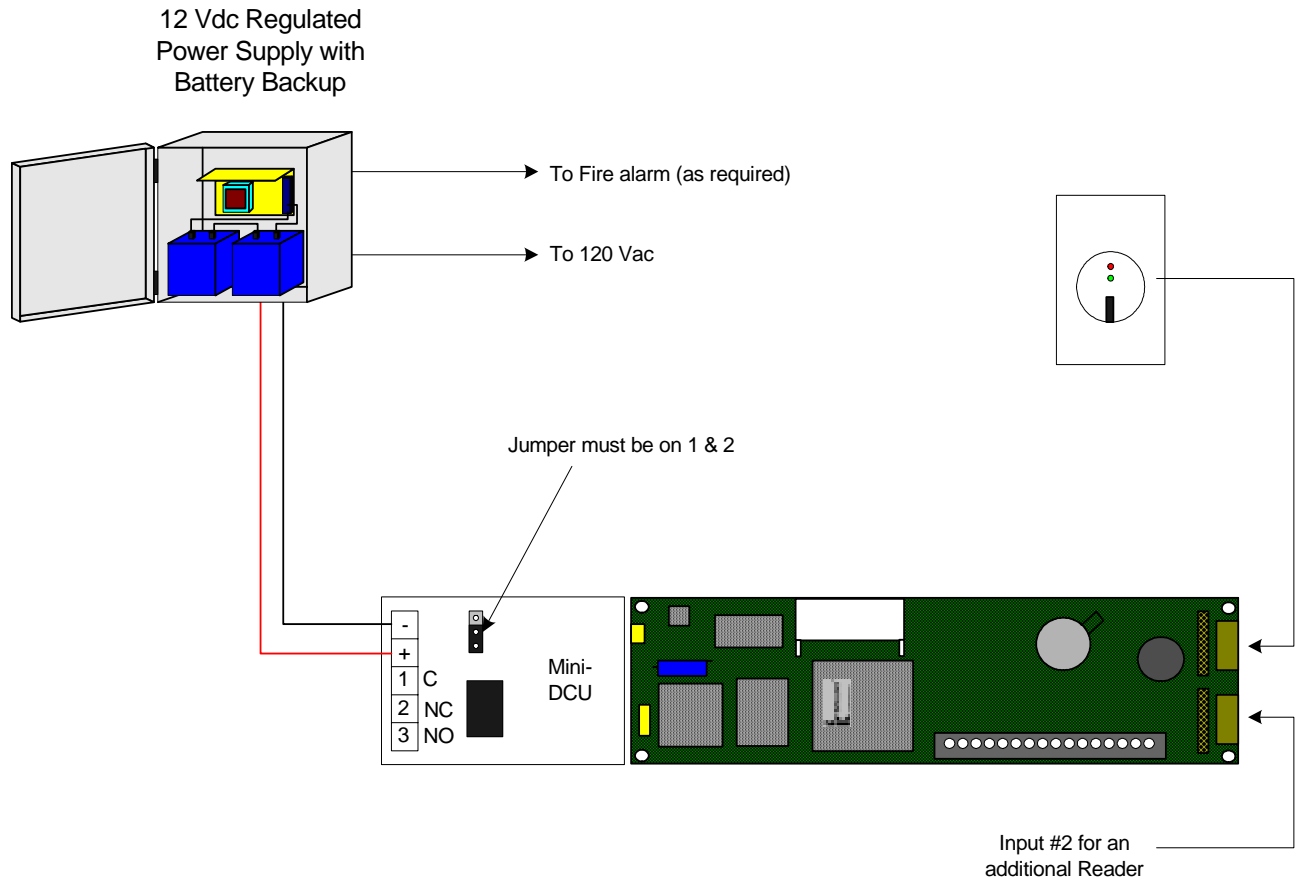


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contact rating
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Wiring for unpowered output (Dry contacts)

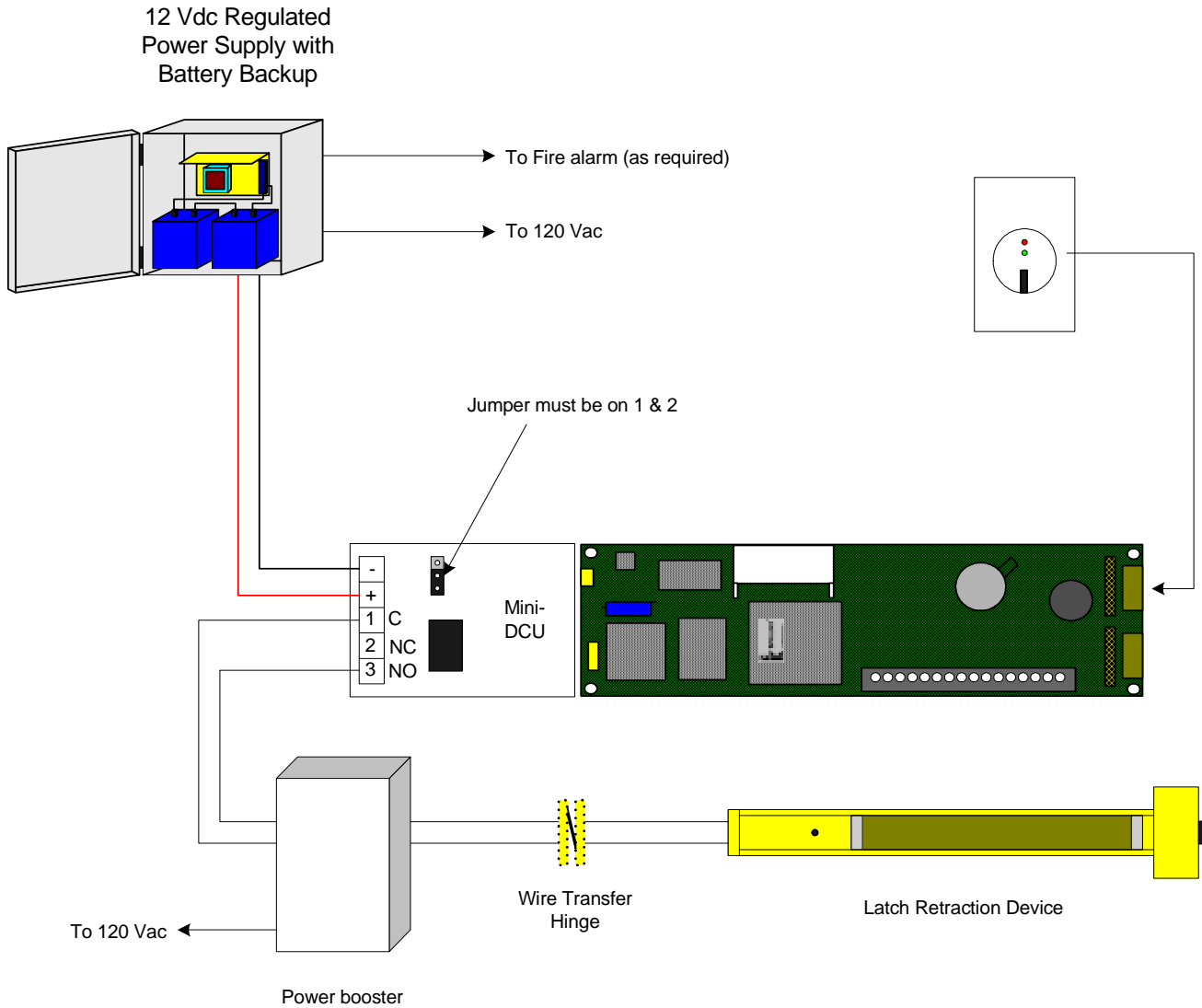


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contact rating
2amp - 30Vdc Resistive

Wiring for
unpowered output
(Dry contacts)
Example of latch retraction

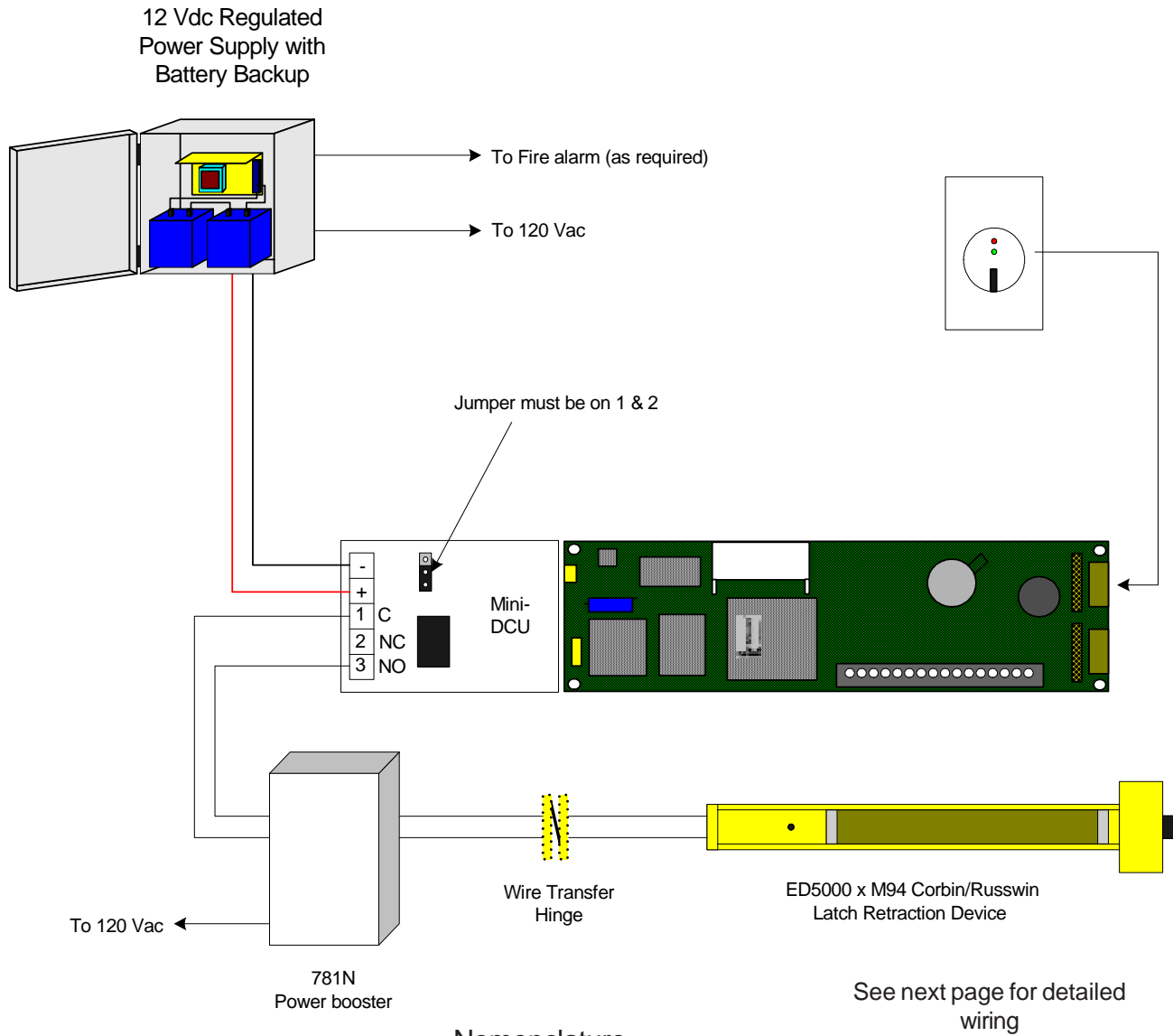


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contact rating
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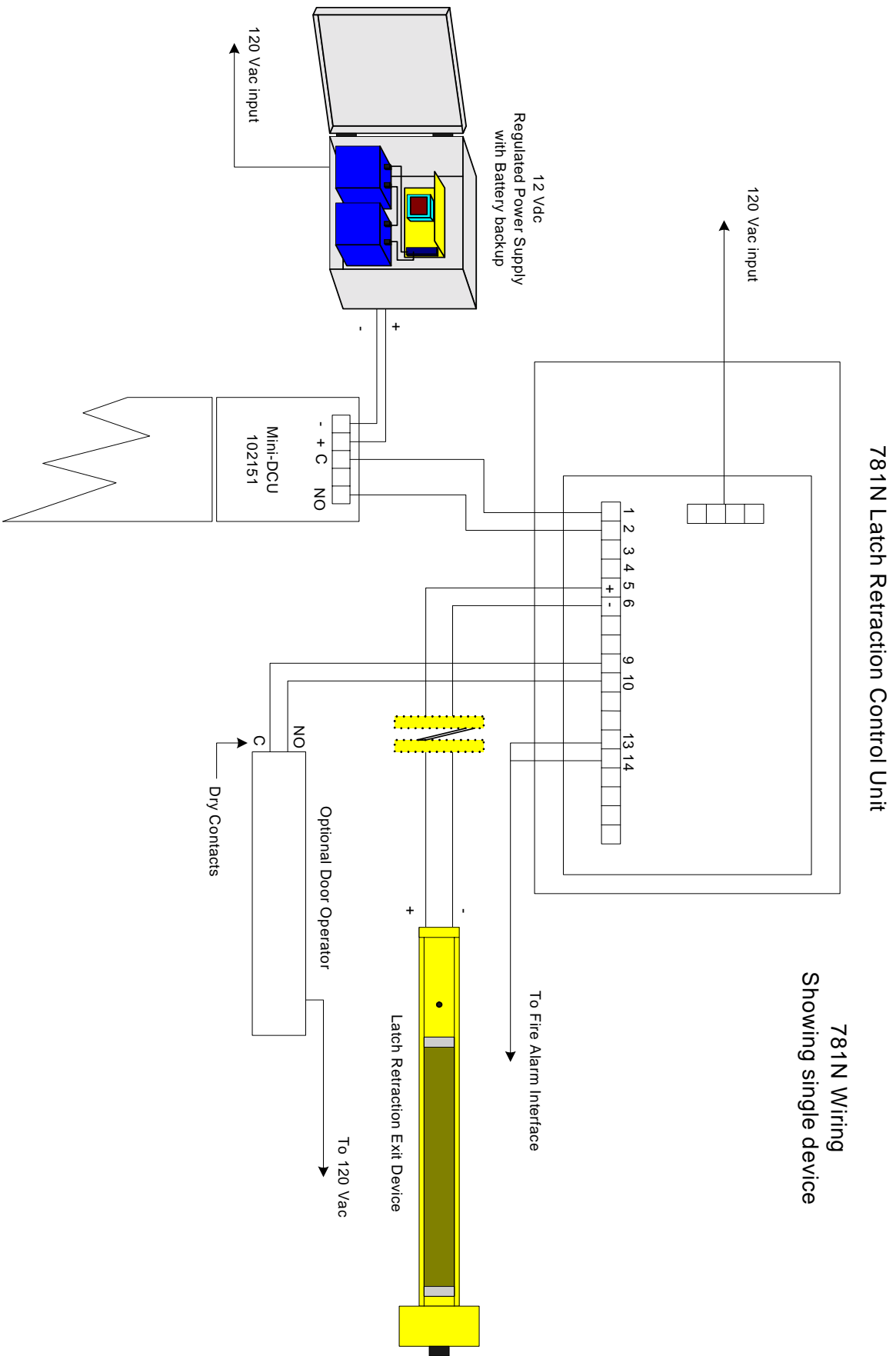
Wiring for
unpowered output
(Dry contacts)
Example of a Corbin/Ruswin latch retraction panic device



Nomenclature

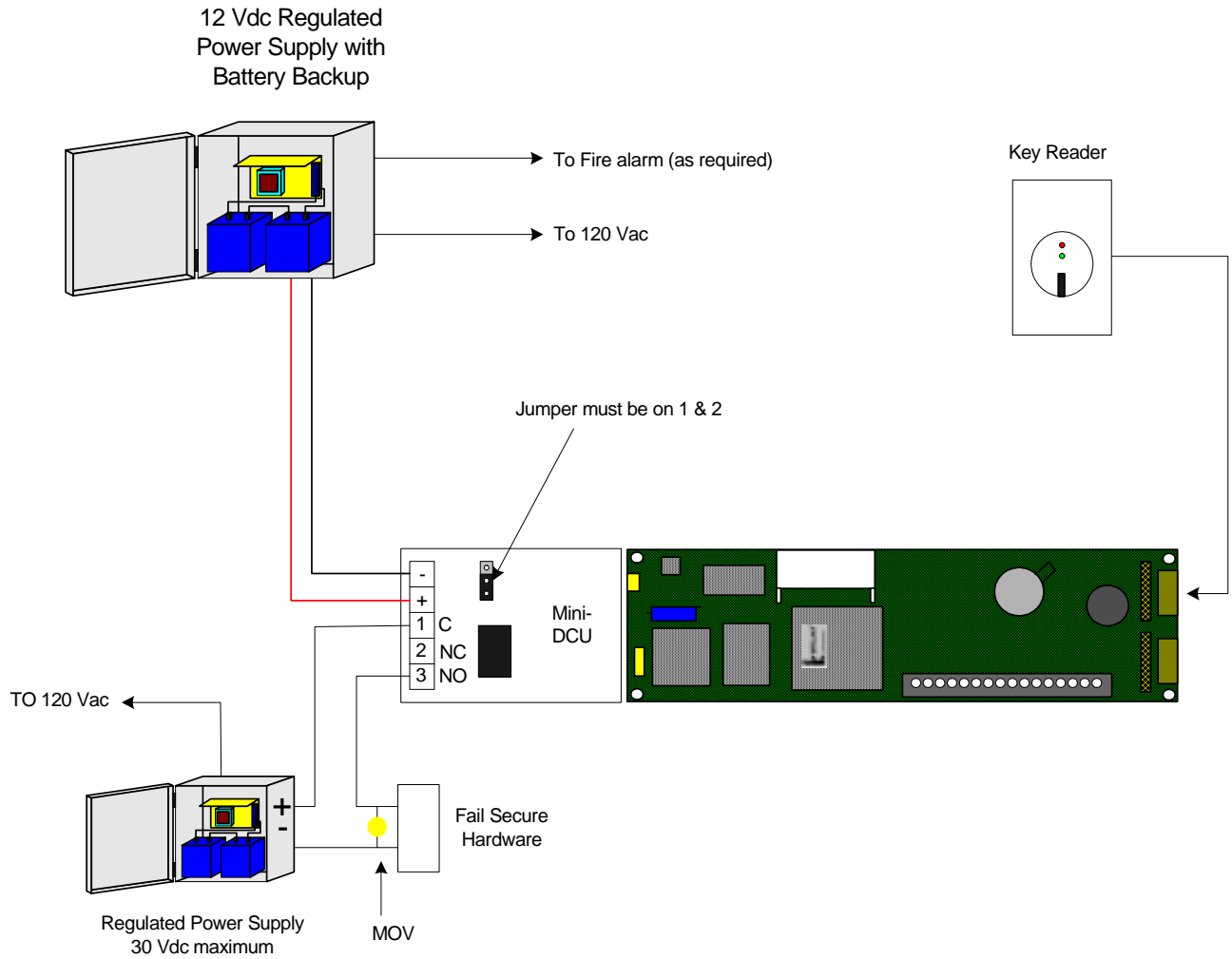
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- 3 = normally open contact

contact rating
2amp - 30Vdc Resistive



781N Wiring
Showing single device

Wiring for
unpowered output
(Dry contacts)
For use with Fail Secure
24Vdc powered devices

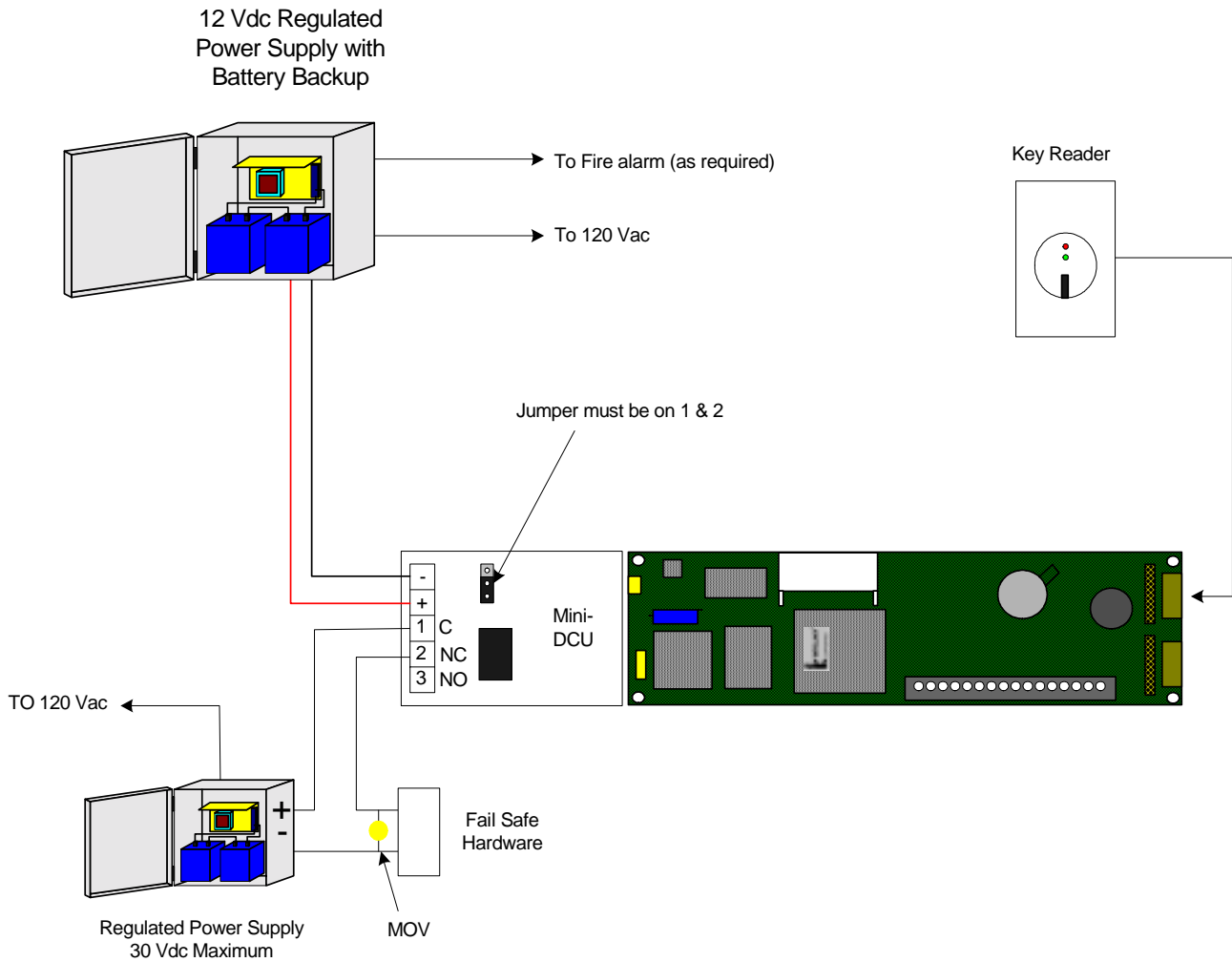


Nomenclature

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- 3 = normally open contact

contact rating
2amp - 30Vdc Resistive

Wiring for
unpowered output
(Dry contacts)
For use with Fail Secure
24Vdc powered devices

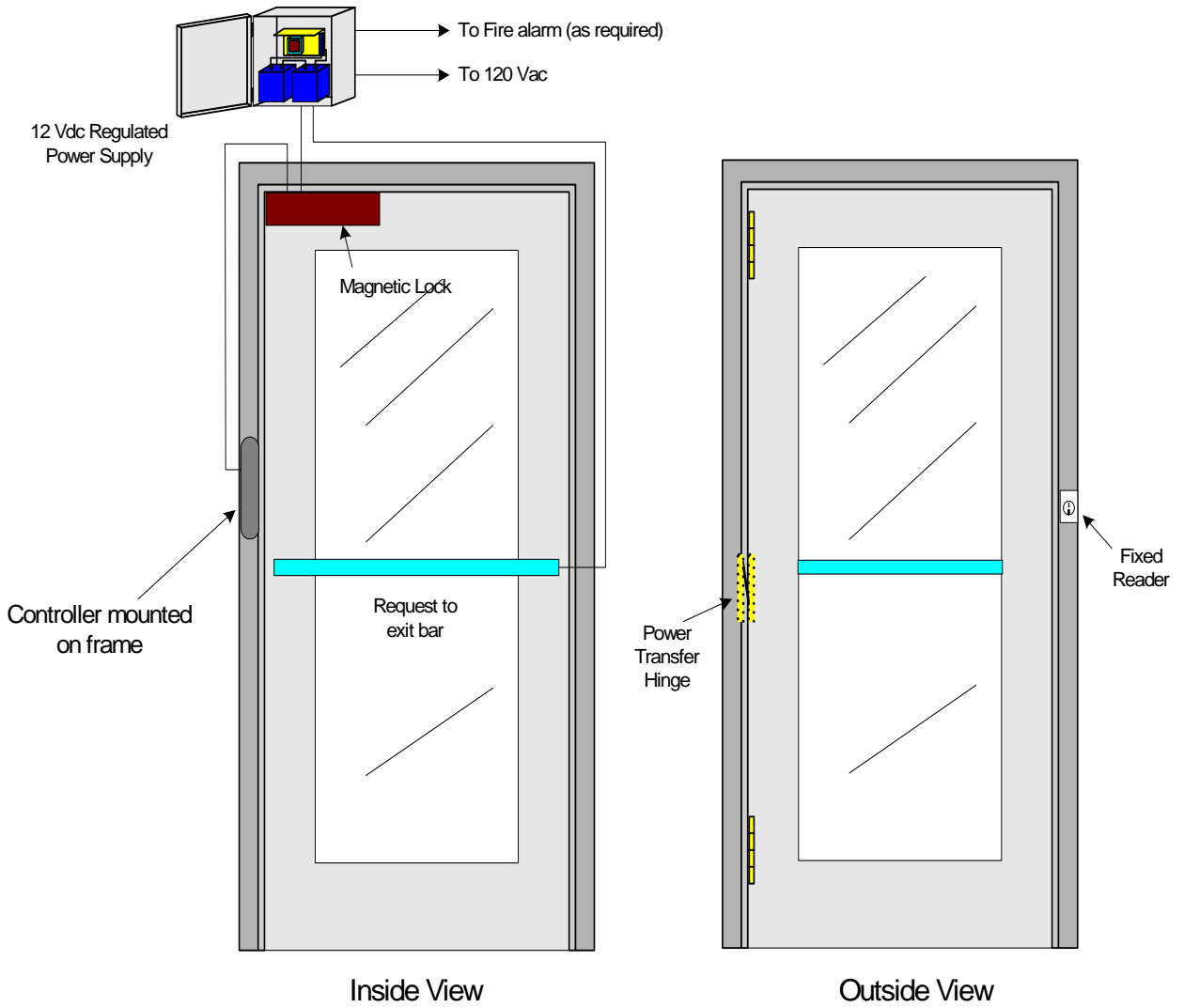


Nomenclature

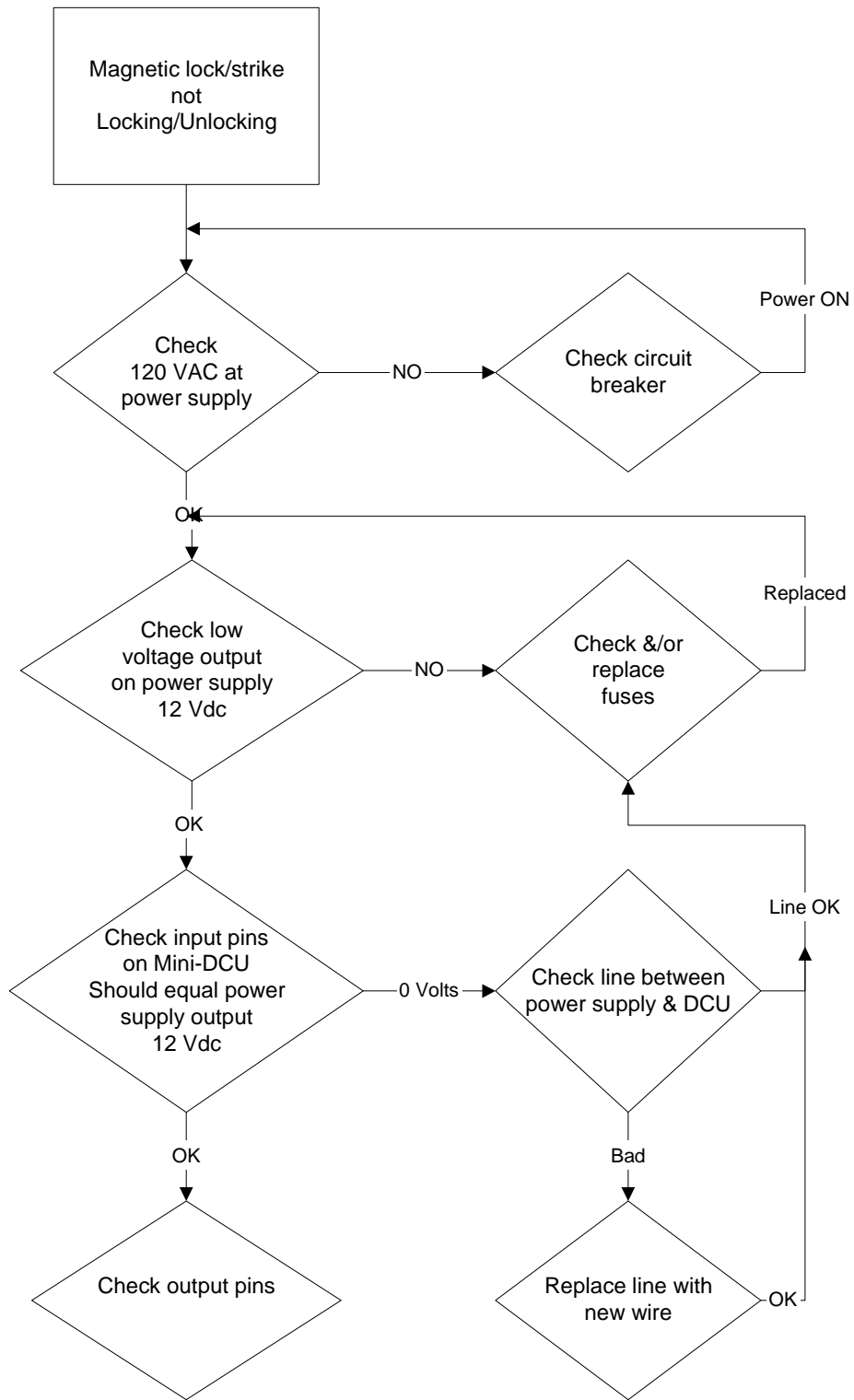
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- 3 = normally open contact

contact rating
2amp - 30Vdc Resistive

Elevation view Suggested magnetic lock installation



Trouble shooting Mini-DCU



Installation Notes

Installation Notes

Contact Information

INTELLIKEY Corporation
4325 Woodland Park Drive
Suite 102
West Melbourne, FL 32904
Phone: 321-724-5595
Fax: 321-724-5695

email: info@intellikey.com
www.intellikey.com

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