

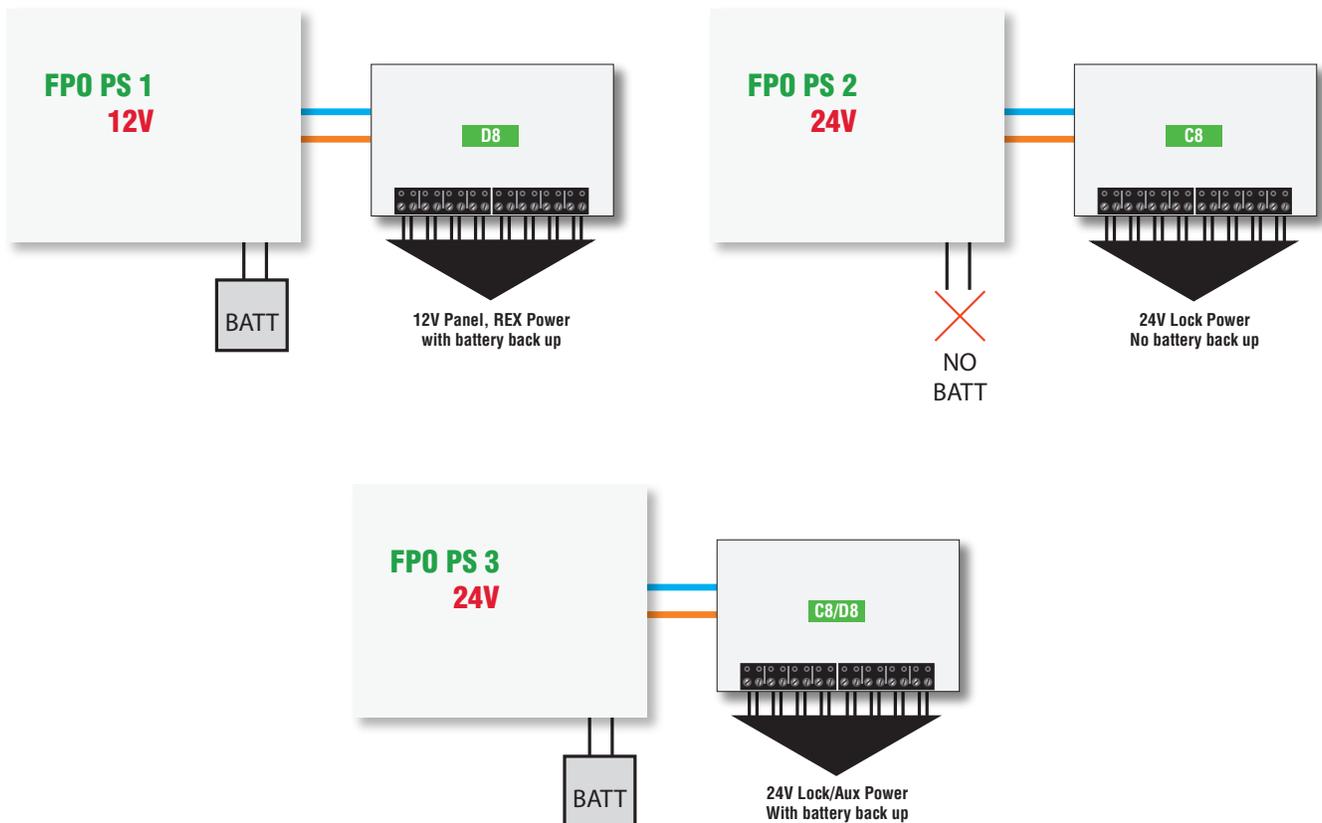
**OVERVIEW**

Many regions require egress doors to unlock upon a loss of AC power. For many years, this has been accomplished by using a separate lock power supply without backup batteries. While this is still a viable method, **FLEXPOWER** gives you other options offering more flexibility.



**Method 1 - No Backup Batteries**

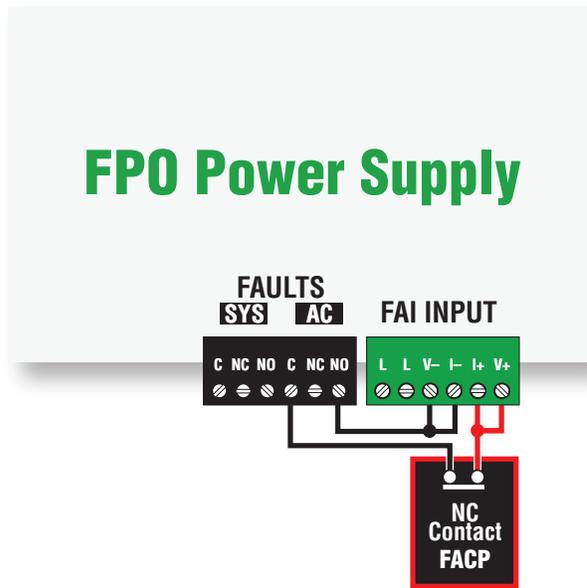
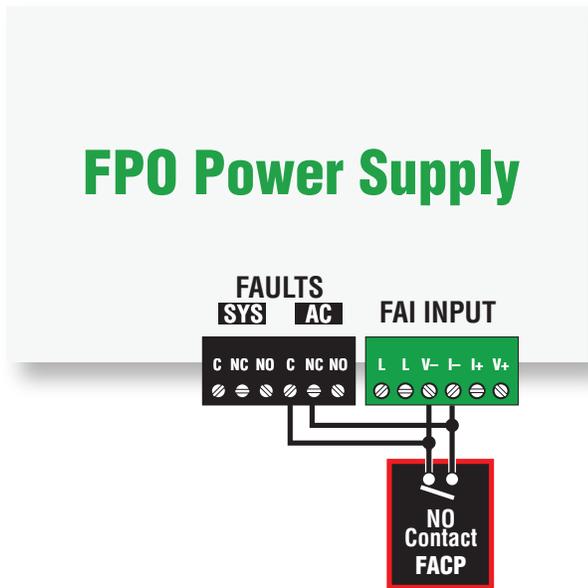
The traditional method of unlocking egress doors on a fire alarm is to simply not place backup batteries on the lock power supply. This requires a dedicated lock power supply and only allows unlocking of Fail-Safe locks during AC loss. The dedicated supply could also cause a situation where you need a 12V supply and two 24V supplies in a single system, driving up cost and complexity. In the example below, FPO PS 1 is supplying a constant 12V with battery backup to the Access Control panel and other 12V devices. FPO PS 2 is supplying 24V WITHOUT battery backup to locks that need to drop power on a loss of AC. FPO PS 3 is supplying 24V WITH battery backup to locks and other devices that need to remain powered during an AC loss. These three power supplies may be in separate enclosures or combined into a single enclosure.



### Method 2 - Using the AC Fault Relay with the FAI Input

This method is useful if the locks that need to release on an AC loss are the same locks that need to release on an FAI condition. This method will also work if FAI is not required in the system. To accomplish this, the AC Fault relay of the FPO power supply is integrated into the FAI input. Any egress doors that need to unlock on a Fire Alarm Input will now unlock on an AC loss as well. The output board being used for the locks must be capable of unlocking on an FAI condition. The AC fault delay must be set at or near zero to ensure unlocking of the doors on a loss of AC power.

This method also allows latching of the unlocked condition by using a NC contact on the LL terminals of the FAI input. In this case, the doors will remain unlocked after restoration of AC power until the NC reset switch is activated. **See the FPO manual and AN-27 for more information on using the LL terminals.**



### Method 3 - Using the M8 Managed Output Board

This method allows independent egress on AC or FAI for each output without additional wiring. Simply by setting the desired outputs to "Unlock on AC Loss", you can select which doors will unlock on an AC loss. You can also select each door to unlock on a fire alarm by selecting "Unlock on FAI Activation".

REMOTE REPORTING LSP SYSTEM MANAGER POWERCOM®

HOME Reporting Configure Tools msm Log Out Firmware: 0.46.54

Client ID FPO75/150-D8M8NLXE2  
 Site ID PDRC - Second Floor  
 Return Date Fri Jul 16 2021 Time 17:12:53

Save Settings Fill All Include Output Description  Export Settings Import Settings

| Output # | Output Description | Control Input Type | Output Load Type   | Unlock on FAI Activation | Unlock on AC Loss | Mail Alert on Fault | Voltage Lower Limit (V) | Voltage Upper Limit (V) | Current Lower Limit (A) | Current Upper Limit (A) | Cycle Count Limit |
|----------|--------------------|--------------------|--------------------|--------------------------|-------------------|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------|
| 1        | Strike             | Normally Open      | Fail Secure Strike | Yes                      | Yes               | Yes                 | 0.00                    | 30.00                   | 0.00                    | 3.00                    | 100000000         |
| 2        |                    | Normally Open      | Maglock            | No                       | No                | Yes                 | 0.00                    | 30.00                   | 0.00                    | 3.00                    | 100000000         |
| 3        |                    | Normally Open      | Maglock            | No                       | No                | Yes                 | 0.00                    | 30.00                   | 0.00                    | 3.00                    | 100000000         |
| 4        |                    | Normally Open      | Maglock            | No                       | No                | Yes                 | 0.00                    | 30.00                   | 0.00                    | 3.00                    | 100000000         |
| 5        |                    | Normally Open      | Maglock            | No                       | No                | Yes                 | 0.00                    | 30.00                   | 0.00                    | 3.00                    | 100000000         |
| 6        |                    | Normally Open      | Fail Secure Strike | No                       | No                | Yes                 | 0.00                    | 30.00                   | 0.00                    | 3.00                    | 100000000         |

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