

Battery Backup of Powerlouver[™] Windows

Breezway Technical Bulletin

27 June 2011

Page | of |

Breezway Powerlouver Windows require direct current power to be operated. If the window is powered by a transformer connected directly to mains power and the electricity grid fails then the windows cannot be opened or closed. Some buildings require that the windows are operable even when electricity is not available through the electricity grid.

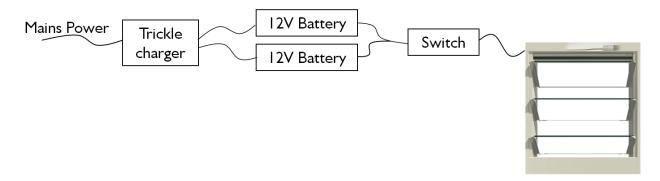
Breezway Powerlouver Motor requirements:

- 24v DC
- 0.25 amps of continuous operating current per motor

Battery Backup Systems

While the technology for battery backup systems is not complex, Breezway does not supply battery backup systems. As batteries supply DC current, Powerlouver Motors can be operated directly from appropriately specified batteries. A simple battery backup system would involve batteries being trickle-charged from a mains power supplied battery charger. Each time the Powerlouver Window is operated it draws power from the batteries and the trickle charge then re-charges the battery. If mains power is lost the Powerlouver Window can be operated by drawing power from the batteries until the batteries run flat. When the mains power is restored the batteries will be re-charged.

Example: A Simple Battery Backup System For A Powerlouver Window



Note:

12V batteries are commonly available so have been shown. As the Powerlouver Window required 24V of direct current, two 12V batteries are shown with their outputs wired together in parallel. For more information on combining DC outputs, please refer to the Breezway Technical Bulletin titled <u>Combining The Outputs Of Breezway</u> <u>Transformers.</u>

Breezway Louver Windows

light · air · space

www.breezway.com