INSTALLATION

ICEPK

ICE PACK

RUTHERFORD CONTROLS
A DORMA Group Company

In or Out... we make it Easy!®

Thank you for purchasing the Ice Pack. This unit was designed to reduce the heat, the current and extend the life of the solenoids used in locking devices energized for long periods of time (1/2 hour to always on). The ICEPK utilizes a technology known as PWM or Pulse Width Modulation which turns the power to the lock on and off very fast allowing the lock to draw less current and operate cooler due to the brief "off" cycles occuring several thousand times per second. By the solenoid operating cooler the life of the solenoid is extended significantly.

Here's how it works - The ICEPK allows the locking device to receive full power briefly, after which the unit goes into the PWM mode just described. By allowing full power for a brief period of time the locking device receives all the power it needs to fully energize the solenoid after which the unit can "cool down" and draw enough current to hold the solenoid in place. The ICEPK also sends a pulse every few seconds to ensure the solenoid has remained lock. The unit also provides a slight burst when energized that may offset voltage drops due to long wire runs.

How to hook it up -

Step 1 - Below are the specifications for the unit. Please make sure that your operating conditions are compatible with the ICEPK. If you are not sure please contact us directly or contact the dealer you purchased the unit from.

Step 2 - Make sure that the locking device you are using with the ICEPK dose not have a bridge rectifier connected before the solenoid. A bridge rectifier may be round or square in shape and typically is no larger than 3/4" in length. If it does have one you will need to cut it out of the circuit and throw it away since it will cause the ICEPK and the solenoid to malfunction. The ICEPK is design to work with DC voltage.

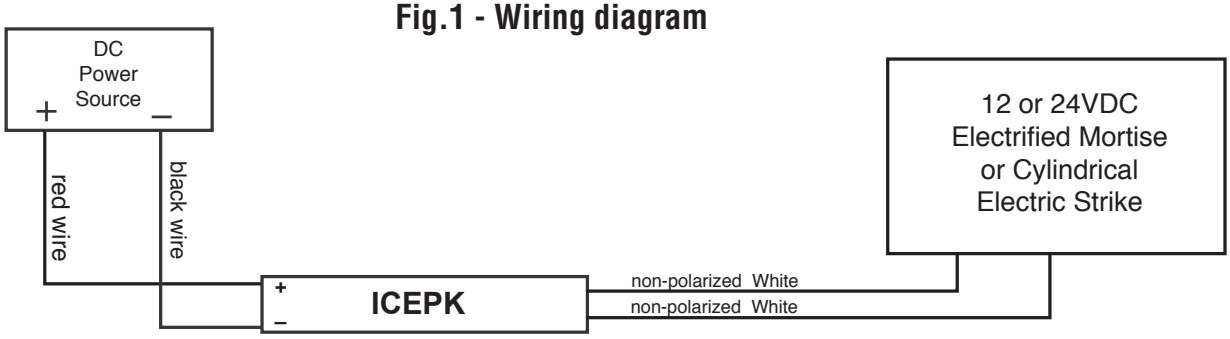
Step 3 - Connect the two White wires to the locking device. Connect the Red lead on the ICEPK to the positive lead from the power source. Connect the Black lead on the ICEPK to the negative lead from the power source.

Step 4 - Adjusting the current draw - The CRU2 has a small potentiometer located at the end of the unit that allows the amount of current drawn by the locking device during PWM to be adjusted. The unit is pre-set at the factory to about 70% of the start up current. The setting may be adjusted from 5% to 95% of full current. If the current is reduced too much the solenoid may "drop out" after energized. If too much current is allowed to pass through the solenoid may run too hot. Turn the adjustment screw **Counter Clockwise to reduce the current** and **Clockwise to increase the current**.

SPECIFICATIONS

Operating Voltage range	10 to 34 volts DC
Maximum Current Load	1 Amp
Wires	**Input to ICEPK** Red = positive, Black = negative **Output from ICEPK** White or similar = non-polarized
Note: Do not use with solenoids that have coil resistance of less than 20 ohms. (solenoids under 12V may have less than 20 ohms)	

Fig.1 - Wiring diagram



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