

**FAIL-SAFE/TIMED RELEASE:**

Connecting the Smart Pac II wires as indicated for this configuration, will allow the user to release the strike for an selected amount of time, adjustable between 2-8 seconds. (The proper 'timer adjustment dial' is indicated on the Smart Pac label.)

After the timer expires, the strike will automatically reset to the secured condition.

Loss of power results in an unsecured (released) condition.

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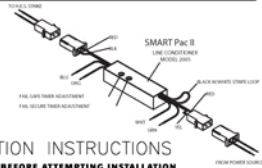
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**CURRENT DRAW COMPARISON**

<b>1000 SERIES ELECTRIC STRIKES</b>	<b>24V SMART PAC II</b>	<b>7000 SERIES ELECTRIC STRIKES</b>
DIRECT CONTROL 260 mA AT 6.24 WATTS CONTINUOUS 190 mA AT 4.56 WATTS	DIRECT CONTROL 260 mA AT 6.24 WATTS CONTINUOUS 190 mA AT 4.56 WATTS	DIRECT CONTROL 260 mA AT 6.24 WATTS CONTINUOUS 190 mA AT 4.56 WATTS
<b>230 mA AT 5.52 WATTS</b>	<b>24V WITHOUT SP II</b>	<b>230 mA AT 5.52 WATTS</b>
<b>1000 SERIES ELECTRIC STRIKES</b>	<b>12V SMART PAC II</b>	<b>7000 SERIES ELECTRIC STRIKES</b>
DIRECT CONTROL 400 mA AT 4.80 WATTS CONTINUOUS 340 mA AT 4.08 WATTS	DIRECT CONTROL 400 mA AT 4.80 WATTS CONTINUOUS 340 mA AT 4.08 WATTS	DIRECT CONTROL 400 mA AT 4.80 WATTS CONTINUOUS 340 mA AT 4.08 WATTS
<b>450 mA AT 5.40 WATTS</b>	<b>12V WITHOUT SP II</b>	<b>450 mA AT 5.40 WATTS</b>

  
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**NOTE: Drawings are not to scale. This information is subject to change without notice. For questions, consult HES technical service helpline, 800-638-7596.**

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**INSTALLATION INSTRUCTIONS**  
**READ CAREFULLY BEFORE ATTEMPTING INSTALLATION**

**What your Smart Pac II does.**

The Smart Pac II is a complex in-line power controller that makes operating an electric strike easy. It is capable of working with both Fail-Safe and Fail-Secure electric strikes in four different operational modes. The Smart Pac II includes a built in bridge rectifier, a zener diode to protect the host system from possible reverse current surges and a minimum activation timer. The Smart Pac II can operate between 12 and 32 volts, either AC or DC. The Smart Pac II also has the ability to help the strike run cool during continuous duty applications. This is accomplished by applying the initial voltage to energize the strike and then reducing the voltage after a few seconds to a lower "holding" voltage. This has the effect of lowering the overall heat dissipated by the coil and makes it more efficient to operate over long periods.

**"DC Source Only" Conversion**

The HES 2005 Smart-Pac II contains electronic components to rectify and filter an AC power source into a regulated 12V or 24V DC signal. In the case where a DC power supply is used (thus nullifying the need of the rectifier and filters), the input filter of the Smart-Pac acts as a capacitive load that will cause a higher than anticipated inrush current. Depending on the amount of resistance in the circuit, the system may experience an inrush current that is as much as 10 Amps over 3 milliseconds. To prevent the need to "size up" your relays to levels appropriate for such capacitive loading, the input filter capacitor can be disconnected from the circuit by cutting the black/white striped wire. After the wire is cut, be sure to cap both free ends of the wire using the connectors provided or wire nuts. Other than limiting its filtering ability of rectified AC current, this conversion does not affect any other feature of the Smart Pac II.

<b>inrush @ AC</b>
12V INPUT: 450 mA
24V INPUT: 400 mA

**Input Requirements**

The Smart Pac II will operate on either Alternating Current (AC) or Direct Current (DC), between 12 and 32 volts. The input voltage must be equal to or greater than the voltage required by the electric strike.

**Output Requirements**

The Smart Pac II has two output options, 12 and 24 volts. These voltages can be selected by using different wire configurations.

For use with a 12 volt rated strike, the initial output voltage will be 12 volts [voltage will drop to 9 volts after a few seconds]. NOTE: The blue wire is not used in this situation.

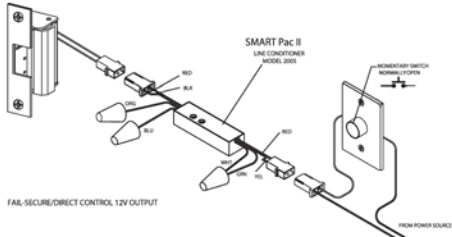
For use with a 24 volt rated strike, the initial output voltage will be 24 volts [voltage will drop to 18 volts after a few seconds]. NOTE: The blue wire is to be connected to the white wire, or the white and green wires, (for direct control)

**Modes of Operation**

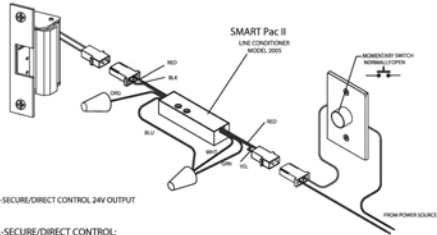
The Smart Pac II has four modes of operation, which are defined as; Fail-Safe/Direct Control, Fail-Secure/Direct Control, Fail-Safe/Timed Release, and Fail-Secure/Timed Release. These options are available in both 12 and 24 volt applications. In all situations, Fail-Safe can be opened while not being energized. Fail-Secure cannot be opened unless power is supplied.

**WIRING OPTIONS:**

Use the diagram appropriate for the voltage (12 or 24), operation (fail-secure or fail-safe), and the actuation method (direct control or timed release).



FAIL-SECURE/DIRECT CONTROL 12V OUTPUT



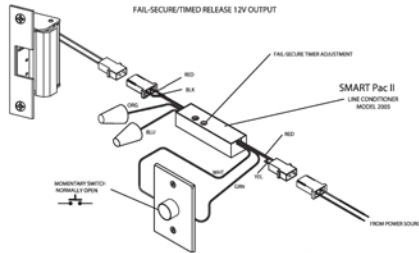
FAIL-SECURE/DIRECT CONTROL 24V OUTPUT

**FAIL-SECURE/DIRECT CONTROL:**

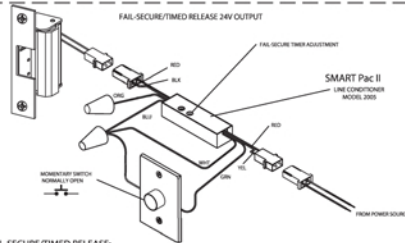
Connecting the Smart Pac II wires as indicated for this configuration, will allow the user to unlock the strike by pushing a button.

Releasing the button will immediately reset the strike to the secured condition.

Loss of power results in a secured (locked) condition.



FAIL-SECURE/TIMED RELEASE 12V OUTPUT



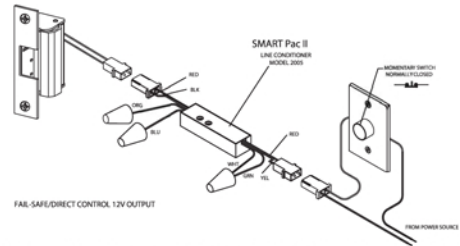
FAIL-SECURE/TIMED RELEASE 24V OUTPUT

**FAIL-SECURE/TIMED RELEASE:**

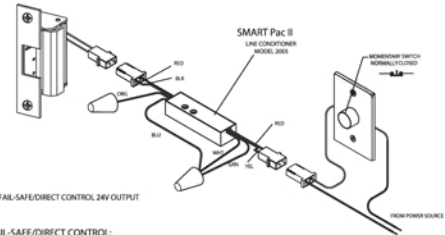
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FAIL-SAFE/DIRECT CONTROL 12V OUTPUT



FAIL-SAFE/DIRECT CONTROL 24V OUTPUT

**FAIL-SAFE/DIRECT CONTROL:**

Connecting the Smart Pac II wires as indicated for this configuration, will allow the user to unlock the strike by pushing a button.

Releasing the button will immediately reset the strike to the secured condition.

Loss of power results in an unsecured (released) condition.