

## Temperature Benefits of “Thermal Guard” Solid State Technology vs Mechanical Solenoids



**The Difference is Obvious**

### 1. Why are your relays and solenoids always hot?

Electrical resistance at the primary electrical connections on relays and solenoids is a significant source of heat, which has nowhere to go but into the lugs and wires. Further, the amount of energy required to keep contact armatures and coils energized and closed on relays generates additional waste heat that has nowhere to go. This is why your relays and solenoids run hot.

### 2. Why does this matter?

Thermal cycling of electrical connections causes premature failure of relays and solenoids and degrades the efficiency as contact resistance builds, degrading their efficiency and causing premature failures.

### 3. Are you aware?

InPower's solid-state technology requires only milli-amps of signal current to activate, which generates no thermal loss, and InPower's Thermal-Guard connection technology dissipates waste heat away from the primary connections, keeping your wires and lugs cooler, your system running more efficiently, and lasting longer.

Thermal Images Running at 200 Amps

