

Smart Power® Glow Plug Controller

Faster starts. Smarter control. Reliable performance.

The Smart Power® Glow Plug Controller is a precision-engineered glow plug controller diesel solution designed to optimize cold-start performance in demanding environments. By managing critical timing functions, it ensures consistent glow plug activation, delivering faster ignition, reduced engine wear, and improved system reliability.

In diesel systems, timing is everything. This precision glow plug timing module eliminates the inconsistencies that lead to hard starts, increased emissions, and premature component wear.

Engineered for Cold Start Reliability

Conventional systems often struggle with inconsistent timing, especially in extreme temperatures. The Smart Power® controller replaces this variability with a controlled, repeatable diesel cold start system controller that delivers accurate heating cycles every time.

This results in faster starts, reduced strain on starters and batteries, and dependable performance in critical applications. As a proven engine preheat control system, it ensures optimal combustion conditions from the moment the engine turns over.

Key Benefits & Performance

- Optimized timing through an integrated glow plug timing control system
- Faster cold starts with reduced battery and starter load
- Consistent operation as a high reliability glow plug module
- Stable performance across voltage fluctuations
- Rugged design for harsh automotive, industrial, and military environments
- Simple integration as a vehicle glow plug relay controller replacement

How This Diesel Glow Plug Controller Improves Cold Start Performance

The controller functions as a dedicated diesel ignition assist module, regulating glow plug operation through precise electrical timing. It receives vehicle power and ignition signals, processes them through internal logic, and delivers controlled output to the glow plugs.

This ensures proper heating duration and intensity, enabling reliable ignition even in extreme cold. As a complete diesel engine start reliability system, it removes guesswork from the startup process.

Technical Overview

Built for durability and integration, the Smart Power® controller operates as a robust 24V glow plug controller system across demanding applications.

- Input Voltage: 16–30 VDC
- Output Voltage: 16–30 VDC (regulated)
- Current: 1–4A input / 4A output
- Signal Type: square wave control

- Ground: common reference
- Connector: multi-pin interface (6-pin configuration)

Applications

This industrial diesel glow plug system solution is used across a wide range of platforms requiring dependable cold-start performance.

- Heavy-duty vehicles and fleet systems
- Industrial equipment and machinery
- Military and extreme environment diesel start system platforms

Upgrade Your Cold Start System with a More Reliable Glow Plug Controller

Basic controllers deliver inconsistent timing and moderate reliability. The Smart Power® controller provides controlled, repeatable performance, improving cold-start behavior and extending engine life.

As a field-proven diesel engine cold start solution, it ensures consistent ignition, reduces maintenance risk, and supports long-term operational readiness.

Feature	Basic Controller	Nartron
Timing Accuracy	Variable	Controlled
Reliability	Moderate	High
Cold Start Performance	Inconsistent	Optimized

Glow Plug Part numbers

- 3001079-100 –
- 3001079-200 – 6.2 L (*military*)
- 3001079-300 – 5.7 L
- 3001079-400 – 6.9 L

Connect With Our Team

Upgrade to a proven glow plug controller diesel solution that delivers faster starts, better performance, and reliable operation in any environment.