

SECOND GENERATION ELECTRONICS



New Electronic Control System (ECS) from Industrias Zelu, S.L.

Industrias Zelu has a long history for being the first in the market with new technology in regards to Electromagnetic Retarders.

Now we have done it again. Industrias Zelu has introduced a new Electronic Retarder Control System called ECS.

The ECS system is designed to meet the safety requirements and demands of the vehicle manufacturers as well as the ability to interface with the modern commercial vehicles and legislative demands.

The benefits, advantages and features are far reaching from “brake blending”, to “integrated on the CANbus system” and with built in Diagnostics. Also installation advantages have made this ECS system one of a kind.

EMC approval is a indispensable requirement since 2003 as the new automotive EMC conditions have been effective since January 2003 and not only “a must” for installation of Electromagnetic Retarders in vehicles, but also a necessity if these products are interfaced with ABS control units, EDC control systems and traction control systems.

Klam has also won the recognition of the vehicle manufacturing industry and it’s governing bodies with the EMI approval for the ECS system. It allows you to use the Electronic Control System without interfering with the “on board” electronics, also protecting your electrical power source at all times and saving the KLAM Electronic Control System against abuse.

Benefits:

- The retarder brake torque is applied proportionally to the driveline by using all the coils of the retarder simultaneously. The lifespan of the stator and coils will improve dramatically, and eliminating “singing” of the driveline components.
- The (ECS) Electronic Control System will save up to 50% of the current consumption by using pulse width modulation (PWM); saving batteries and alternator from wear.
- Maintenance free. No more mechanical parts.

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- The vehicle electrical system will be monitored and protected against over-and under voltage caused by the Klam Electromagnetic Retarder or other electric consumers.
- The (ECS) Electronic Control System interfaces with ABS and ESP by using the “ramp up” and programmable time delay after an ABS event has taken place.
- Functions like low speed switch off, electronic system temperature control and function control lights are standard.
- The (ECS) Electronic Control System can be programmed and adjusted for your needs and the vehicle / retarder application. This will allow you to adjust the retarder system to the requirements of the customer via software.
- The (ECS) Electronic Control System has a diagnostic tool that allows the driver / owner to locate a failure and report. Failure caused by abuse to the system is stored in the ECM of the system for interrogation later.
- ECS via CAN-BUS, plug and play to the vehicle CANbus utilising the SAE J1939 protocol and SW in an electronic level.
- Unify two modules in one. Installation time is considerably reduced due to fewer cables and connections.
- Retarder temperature monitoring feature.

