

FEATURES

- * **2 IN 1 ELECTRONICS INCLUDE A 3 CIRCUIT ENGINE MANAGEMENT SYSTEM AND IDLE, REVS AND SPEED LIMITER**
- * **DUAL OUTPUTS - CAN BE SET UP TO SUIT CUSTOMER APPLICATION AND VEHICLE TYPE**
- * **LESS WIRING**
- * **BI VOLTAGE**
- * **PRE-WARNING BEFORE SHUTDOWN**
- * **SPEED AND REVS INFINITELY ADJUSTABLE**
- * **CODED CALIBRATION OF SPEED AND REVS PREVENTS TAMPERING**
- * **CAN BE USED WITH SPEED RETARDER**
- * **CATERS FOR STAGED SHUTDOWN**
- * **SELF DIAGNOSTICS**
- * **ONE FAULT INDICATION DISPLAY UNIT**
- * **TAMPERPROOF CONTROL MODULE**
- * **ENCAPSULATED ELECTRONICS**
- * **FAIL SAFE OPERATION**
- * **WATERPROOF ELECTRONICS**
- * **VIBRATION RESISTANT**
- * **NATIONWIDE 24 HOUR SERVICE**

INTRODUCTION

Requirements from the transport industry necessitated the introduction of a more convenient system which was quicker to install and less complicated. The EMRS Combo was designed to meet this criteria. It is a three circuit Engine Management System combined with an Idle, Revs and Speed Limiter, all in one package. Due to modern vehicle design with limited mounting opportunities to install extra equipment on the dashboard, a special single compact display unit with 7 LED's compliments the product. With absolute safety in mind and also a first in the South African transport industry, the product introduces the option of a staged shutdown system.

DESCRIPTION

Cab equipment consists of a single epoxy encapsulated control module, dedicated wiring harnesses, dashboard display unit, starter interrupt relay and a high frequency Piezo buzzer.

Standard engine equipment includes switches for low oil pressure, high water temperature and low coolant level. If required a speed transducer is installed. Engine revolutions are taken from the alternator or an OE flywheel sensor.

Shutdown equipment is dependent upon the type of application. This can vary from a fuel flow solenoid, an air solenoid with a pneumatic ram, an electro magnetic retarder or a relay.

OPERATION

Engine Management-Standard Shutdown:

If any circuit is tripped due to a pre-set parameter being exceeded, switch failure or loss of continuity of a signal wire, the driver is alerted to the impending shutdown of the engine by the appropriate circuit light and buzzer. This 10 second pre-warning allows the driver to take necessary action by moving the vehicle to the side of the road before power loss occurs.

The priority circuit diagnostic system allows the driver to identify which circuit caused the shutdown even if several circuits have failed.

Engine Management-Staged Shutdown:

The system behaves in exactly the same way except that after the 10 second pre-warning the engine returns to idle thus maintaining all essential services such as brakes and power steering. Only after the vehicle has come to a complete stop does the engine shut down.

Idle, Revs and Speed Limiter:

Speed Limiter-Standard Application:

A warning is sounded at 5% before the engine loses power. If the driver continues to increase speed beyond the pre-set limit, the engine will lose power, forcing the vehicle to decelerate. At just below the speed where the buzzer sounded, engine power is re-instated.

Example:

