

### DIESELGUARD & SA17-06 (LOAD DUMP)

Summary	
<b>News Type</b>	Service Bulletin
<b>Purpose</b>	Response to address users question of what does SA17-06 mean for Dieselguard
<b>Product Range</b>	Dieselguard Machine Monitors Part No's 121105 & 106908
<b>Target Audience</b>	Electrical Engineering Managers of Mines, OEMs, application engineers and Regulators
<b>Date of Issue</b>	21 June 2017
<b>Subject</b>	NSW Resources Regulator Safety alert SA17-06

#### SA17-06

This bulletin has been issued to advise users that the Dieselguard Machine Monitoring system is not affected by the issues raised in the regulators alert notice SA17-06.

Dieselguard was designed to address the exact overvoltage situation described in the regulators notice with input voltage range parameters (9.5 – 36V), overvoltage tolerance (90V) and infallible, galvanically isolated (2kV) encapsulated (Exm) input circuit design.

In addition each and every unit manufactured successfully completes a 1000V r.m.s 1 minute test as part of its quality control in compliance with its Exm (ia) I Certification, ensuring superior reliability over many competing products.

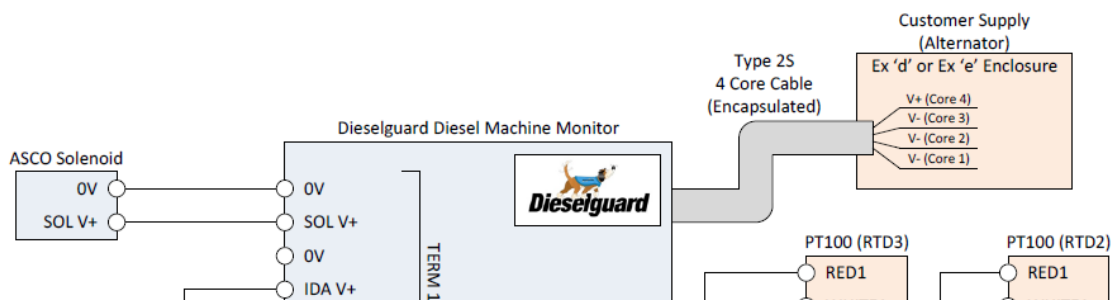
Users are advised to refer to the product manual and certificate of compliance for full details, however the following extracts are provided below for convenience.

#### Clause 3.1

Input power is provided via the integral encapsulated cable and is not polarity sensitive. The input circuitry has been designed to withstand a wide variety of 'dirty' power supply types. Many alternators provide power that has a high level of ripple and high voltage noise spikes. The Dieselguard Diesel Machine Monitor is designed to withstand these conditions without operational problems. The unit will withstand a 90V repetitive overload condition via its internal auto-reset protection barrier. The input power supply circuitry is galvanically isolated from the rest of the system.

#### Clause 4.4

### 4.4 Electrical Installation Information



#### Clause 4.4.1

#### 4.4.1 Power Supply

The power supply connection for the Diesel Machine Monitor is via the 3 metre 4 core Type 2S flying lead. This cable must be terminated into a suitable Ex 'd' or Ex 'e' enclosure and is intended to be connected to the alternator supply. The installer would typically gland this cable into the hours run enclosure, but if all the gland entries are already allocated, a separate enclosure may be required.

The Diesel Machine Monitor can be powered from a nominal 12-24V supply. The unit is designed to operate on an AC/DC supply of 9.5 - 36V but will withstand 90V. The input to the Diesel Machine Monitor is isolated from the enclosure for use with non-earthed alternator systems.

#### CONDITIONS OF CERTIFICATION:

##### Conditions of manufacture

Conditions of manufacturer are;

1. The apparatus must be manufactured in accordance with the certified drawings.
2. The apparatus shall be subjected to a 1000 V r.m.s test voltage applied between input terminals and case for not less than 1 minute.

##### Conditions of safe use

1. The following parameters are not exceeded

##### Input Parameters

Integral Cable	
$U_m$	90 V
$U_n$	12 to 24 V
Programming Header	
$U_m$	16.2 V
External Battery	
$U_m$	16.2 V

End users are recommended to contact their machine supplier and / or OEM to ensure their installation is in compliance with Dieselguard IS requirements when used in their system.

Should you wish to use Dieselguard on your machine, Ampcontrol can design and supply a suitable solution at your request. Please enquire through customer service for a quote.

#### FIND OUT MORE

For more information on this product, please contact Ampcontrol Customer Service on +61 1300 267 373 or [customerservice@ampcontrolgroup.com](mailto:customerservice@ampcontrolgroup.com) or visit the Ampcontrol website: [www.ampcontrolgroup.com](http://www.ampcontrolgroup.com)

#### DISCLAIMER

*While every effort has been made to ensure the accuracy of this document at the date of issue, Ampcontrol assumes no liability resulting from any omissions or errors in this document, and reserves the right to revise content at any time.*