

DSE103MKII

SPEED SWITCH CONTROLLER

FEATURES



The DSE103MKII Speed Switch Controller has been designed to monitor the speed of an engine by detecting pulses from a magnetic pick-up device or alternative output.

The speed switch can be set to operate the independent relays at different speed settings. Both relays can be adjusted to operate from between 0% and 400% of the engine's rated running speed.

This flexibility allows the module to be used for many different applications including under speed or over speed protection or crank disconnect.

The nominal speed input can be set on the unit meaning that the majority of applications will not require any PC software configuration.

Meter calibration can be achieved using the pre-set potentiometer or the PC software. Configuration enables the meter output to be scaled to match the optional RPM meter. The speed switch is presented in a durable ABS plastic enclosure and is fully potted to protect against the harshest environments.

ENVIRONMENTAL TESTING STANDARDS

ELECTRO-MAGNETIC COMPATIBILITY

BS EN 61000-6-2
EMC Generic Immunity Standard for the Industrial Environment
BS EN 61000-6-4
EMC Generic Emission Standard for the Industrial Environment

ELECTRICAL SAFETY

BS EN 60950
Safety of Information Technology Equipment, including Electrical Business Equipment

TEMPERATURE

BS EN 60068-2-1
Ab/Ae Cold Test -30 °C
BS EN 60068-2-2
Bb/Be Dry Heat +70 °C

VIBRATION

BS EN 60068-2-6
Ten sweeps in each of three major axes
5 Hz to 8 Hz @ +/-7.5 mm,
8 Hz to 500 Hz @ 2 gn

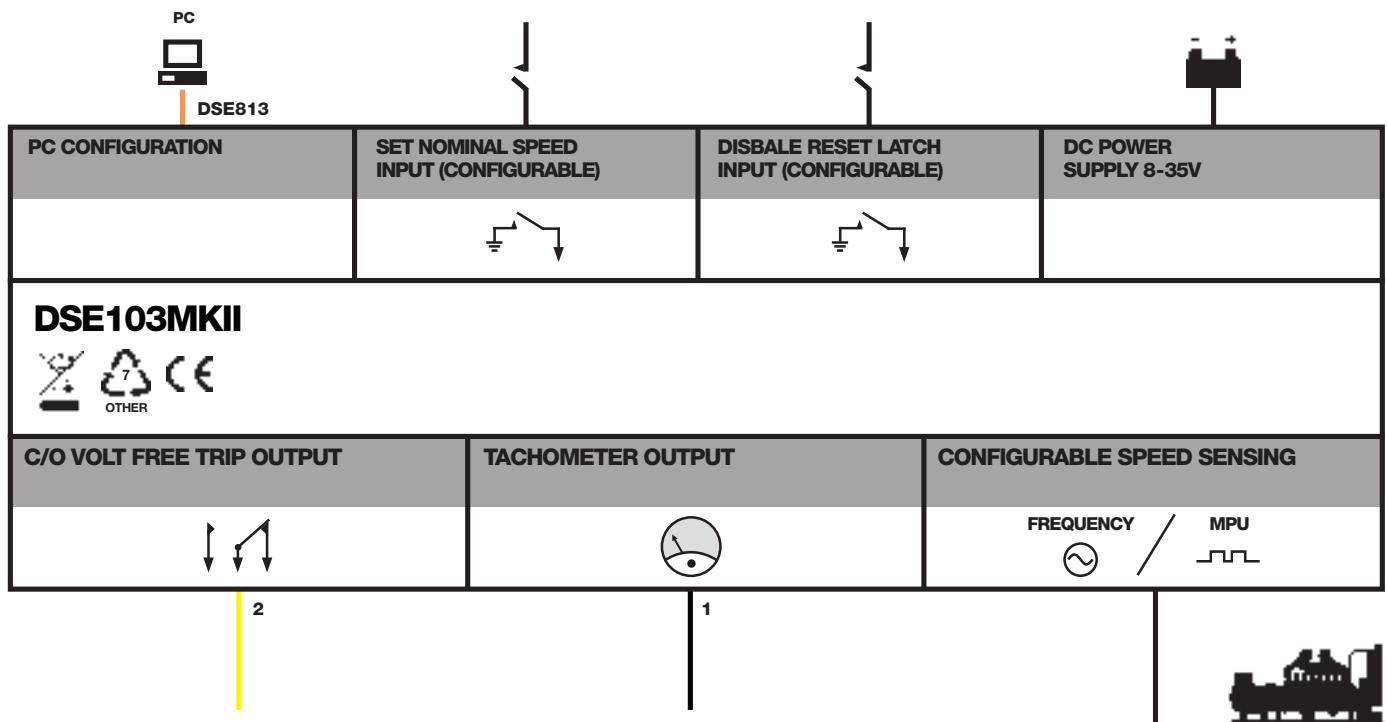
HUMIDITY

BS EN 60068-2-30
Db Damp Heat Cyclic 20/55 °C
@ 95% RH 48 Hours
BS EN 60068-2-78
Cab Damp Heat Static 40 °C
@ 93% RH 48 Hours

SHOCK

BS EN 60068-2-27
Three shocks in each of three major axes
15 gn in 11 ms

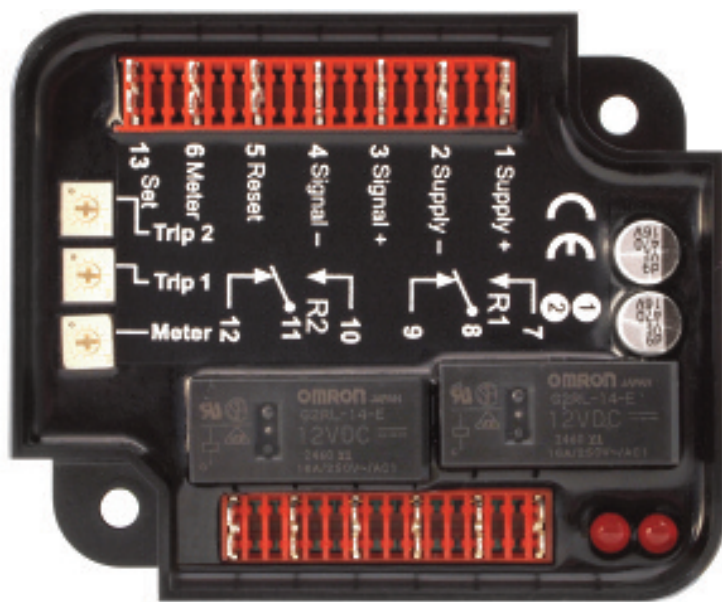
COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF APPLICATIONS



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KEY FEATURES

- Configurable trip points
- Configurable nominal speed
- Trip points can be configured to be latching or non-latching
- Analogue meter output
- Potted enclosure
- Spade terminals for easy connection

KEY BENEFITS

- Can be used for magnetic pick-up or alternator frequency sensing
- Intuitive manual set-up procedure for nominal speed and trip points
- Comprehensive PC configuration using DSE Configuration Suite Lite PC Software
- Compact design

SPECIFICATION

DC SUPPLY

CONTINUOUS VOLTAGE RATING
8 V to 35 V Continuous

CRANKING DROPOUTS

Able to survive 0 V for 50 mS, providing supply was at least 10 V before dropout and supply recovers to 5 V. This is achieved without the need for internal batteries.

MAXIMUM OPERATING CURRENT

95 mA at 12 V, 100 mA at 24 V

MINIMUM OPERATING CURRENT

21 mA at 12 V, 22 mA at 24 V

OUTPUTS

TRIP 1 & 2
16 A at 35 V DC/AC

TACHOMETER

1 mA full scale

ALTERNATOR

VOLTAGE RANGE
15 V - 333 V AC (L-N) RMS

FREQUENCY RANGE

3.5 Hz to 75 Hz

MAGNETIC PICK UP

VOLTAGE RANGE
+/- 0.7 V to 70 V RMS

FREQUENCY RANGE

10,000 Hz (max)

DIMENSIONS

OVERALL
88 mm x 72 mm x 26 mm
3.4" x 2.8" x 1.0"

RELATED MATERIALS

TITLE

DSE103MKII Installation Instructions
DSE103MKII Operator Manual
DSE103MKII Software Manual

PART NO'S

053-124
057-135
057-136

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