DSEAts

DSE333
AUTO TRANSFER SWITCH CONTROL MODULE

FEATURES

The DSE333 is an Automatic Transfer Switch Controller for genset and other applications. The module will monitor the voltage and frequency of the incoming AC mains (utility) supply and in the event of a failure, will issue a start command to the generator control system.

Once the generator is available and producing an output within limits, the DSE333 will control the transfer device and switch the load from the mains (utility) to the generating set.

Once the mains (utility) supply returns to within limits, the module will command a return to the mains (utility) supply and shut down the generator after a suitable cooling run.

Various timing sequences are available to prevent nuisance starting on minor supply breaks.

The DSE333 supports many topologies and features include mains (utility) rated volt-free relays, a clear back-lit LCD 4-line text display, showing system status and warnings and red and green LEDs indicating operational status.

The modules can be easily configured using the DSE Configuration Suite PC Software. Selected front panel editing is also available.

Configurable volt-free digital inputs and outputs make the DSE333 fully flexible to suit a wide variety of applications.

When there is no DC supply, a compatible self-seeking power supply is available (DSE160).

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

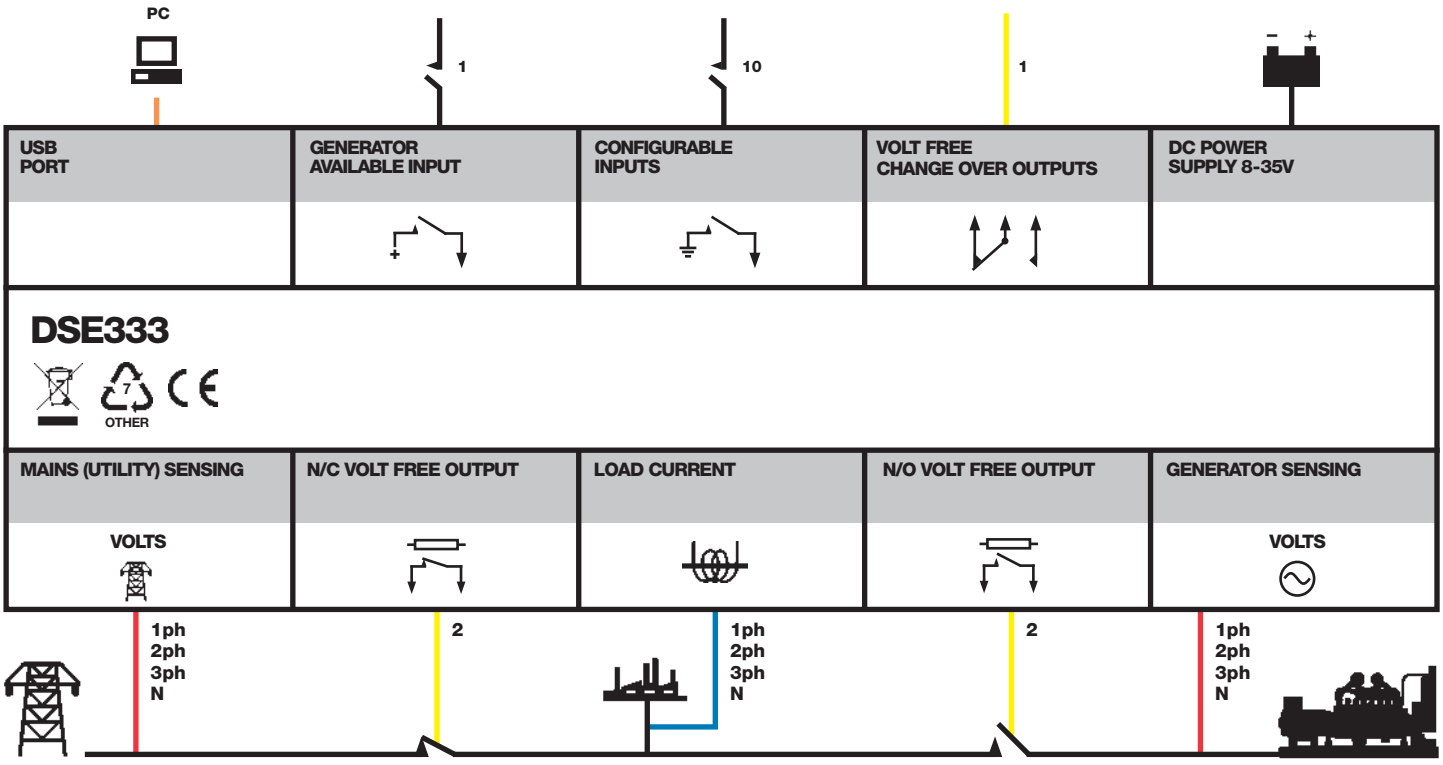
VIBRATION
BS EN 60068-2-6
Ten sweeps in each of three major axes
5 Hz to 8 Hz @ +/-7.5 mm,
8 Hz to 500 Hz @ 2 gn

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

DEGREES OF PROTECTION PROVIDED BY ENCLOSURES
BS EN 60529
IP65 - Front of module when installed into the control panel with the supplied sealing gasket.

COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF ATS APPLICATIONS



ISSUE 2

DSEAts

DSE333
AUTO TRANSFER SWITCH CONTROL MODULE

FEATURES

KEY FEATURES

- Volt-free relays
- Supports many topologies
- Automatic switch-over between supplies
- Check sync feature
- Real-time clock
- 10 configurable inputs
- 5 configurable outputs
- Event log (10)
- Configurable timers
- Automatic shutdown or warning when fault conditions are detected
- PC configuration
- Front panel configuration
- LED indicators
- Back-lit 4-line text LCD display
- External mains (utility) or genset failure inputs
- Auto start inhibit
- Load inhibit
- Manual restore to mains (utility)
- Optional current monitoring

KEY BENEFITS

- Fully automatic monitoring and switch-over control minimises the effects of power disruptions
- Real-time clock provides accurate event information for easy maintenance diagnostics
- User-friendly set-up and button layout
- Will work with external synchroniser for seamless return to mains (utility)

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. LEDs and backlight will not be maintained during cranking.

MAXIMUM OPERATING CURRENT
292 mA at 12 V, 167 mA at 24 V

MAXIMUM STANDBY CURRENT
101 mA at 12 V, 66 mA at 24 V

MAINS (UTILITY)

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

FREQUENCY RANGE
3.5 Hz to 75 Hz

OUTPUTS

OUTPUT A (MAINS/UTILITY)
Normally closed volt-free output
8 A AC at 250 V AC

OUTPUT B (GENERATOR)
Normally open volt-free output
8 A AC at 250 V AC

OUTPUT C (START AND RUN)
Normally closed volt-free output
8 A DC at 35 V DC (UL Rating 30 V)

OUTPUT D
Changeover volt-free output
8 A AC at 250 V AC

OUTPUT E
Normally open volt-free output
8 A AC at 250 V AC

GENERATOR

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

FREQUENCY RANGE
3.5 Hz to 75 Hz

DIMENSIONS

OVERALL
215 mm x 158 mm x 42 mm
8.5” x 6.2” x 1.6”

PANEL CUT-OUT
182 mm x 137 mm
7.2” x 5.4”

MAXIMUM PANEL THICKNESS
8 mm
0.3”

RELATED MATERIALS

TITLE	PART NO’S
DSE333 Installation Instructions	053-066
DSE333 Operator Manual	057-118
DSE333 Configuration Suite PC Manual	057-106
DSE160 Self-Seeking Power Supply Data Sheet	055-076
DSE160 Operator Manual	057-108

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