

DSE331

AUTO TRANSFER SWITCH CONTROL MODULE

FEATURES



The DSE331 is an Automatic Transfer Switch Controller. The DSE331 will monitor the voltage and frequency of the incoming AC supply from two different sources, which could be from both generator or mains (utility), or a combination of both. The module will monitor S1 (source 1) and in the event of a failure will issue a start command to S2 (source 2).

Once S2 is available and producing an output within limits, the module will control the transfer device and switch the load from S1 to S2. Once the S1 supply returns to within limits, the module will command a load return to S1 and shut down S2.

Various timing sequences are available to prevent nuisance starting on minor supply breaks. Configurable digital inputs and outputs make the DSE331 fully flexible to suit a wide variety of applications.

The module can be easily configured using the DSE Configuration Suite PC Software. Where there is no DC supply a DSE160 self seeking power supply is required.

The DSE331 also supports many topologies, and includes a clear back-lit LCD display, showing system operational status and warnings.

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

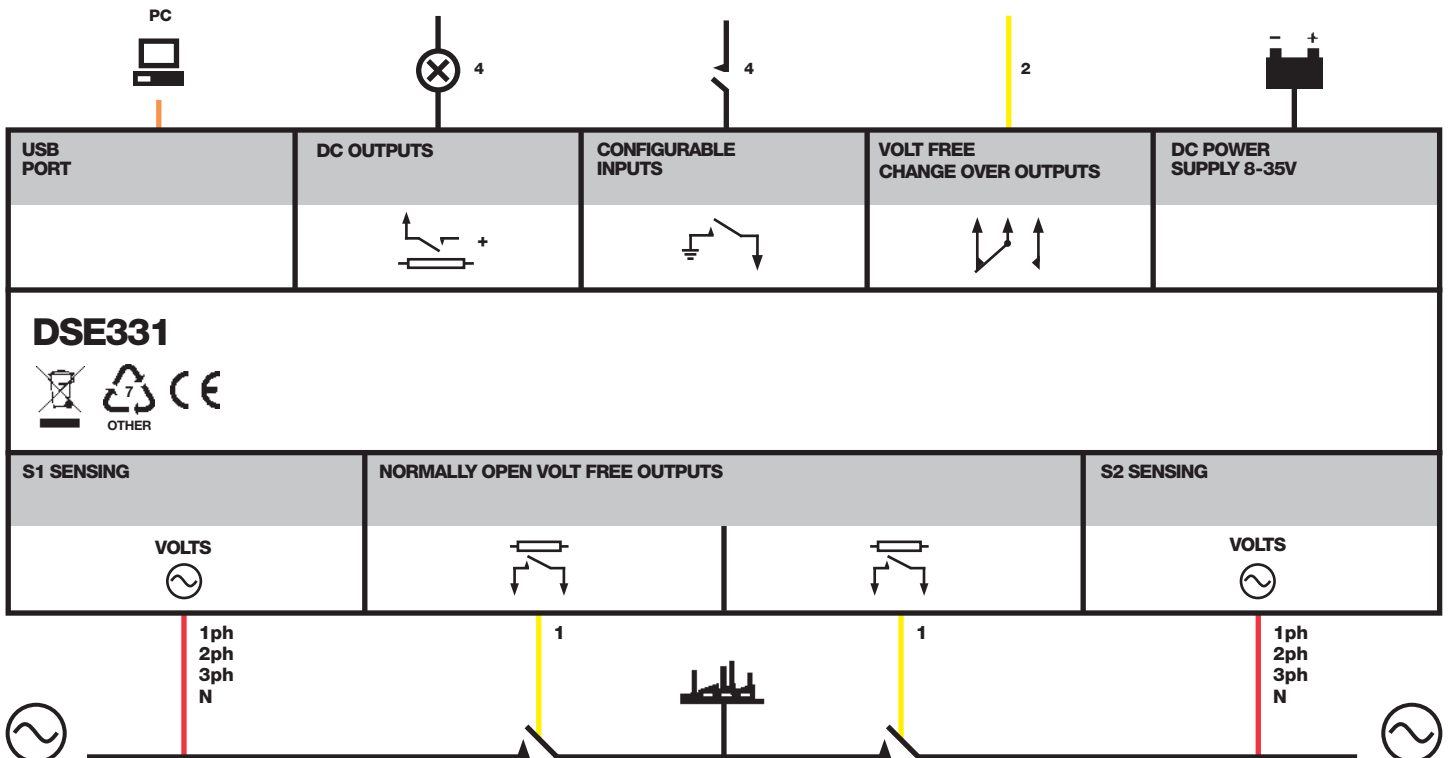
SHOCK

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



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KEY FEATURES

- Configurable inputs (4)
- Configurable volt-free outputs (4)
- Configurable DC outputs (4)
- Check sync feature
- Icon or English text display
- LED indicator
- Front panel/PC configuration
- Remote monitoring
- Source 1/Source 2 control
- Configurable timers
- Start inhibit
- Load inhibit
- Manual restore to S1
- Supports multiple topologies
- Automatic switch-over between supplies
- Rotary ATS configuration
- Single event scheduler
- 3-phase display

KEY BENEFITS

- Source 1/Source 2 provides total flexibility for the application of the product
- Icon and English text display for use across global markets
- Fully automatic and switch-over control minimises the effects of power disruptions
- User friendly set-up and button layout
- 3 phase display and check sync provide enhanced module functionality
- DSE Configuration Suite PC Software compatability for remote control and monitoring

RELATED MATERIALS

TITLE

DSE331 Installation Instructions
 DSE331 Operators Manual
 DSE331 Configuration Suite Software Manual
 DSE160 Self Seeking Power Supply Data Sheet
 DSE160 Operator Manual

PART NO'S

053-131
 057-146
 057-149
 055-076
 057-108

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

168 mA at 12 V, 80 mA at 24 V

MAXIMUM STANDBY CURRENT

39 mA at 12 V, 20 mA at 24 V

OUTPUTS

OUTPUT A & B

Normally open volt-free output
 8 A DC at 35 V DC

OUTPUT C & D

Changeover volt-free output
 8 A DC at 35 V DC

AUXILLARY OUTPUT E, F, G & H

2 A DC at supply voltage

S1 & S2

VOLTAGE RANGE

15 V to 333 V AC (L-N)

FREQUENCY RANGE

3.5 Hz to 75 Hz

DIMENSIONS

OVERALL

180 mm x 116 mm x 42 mm
 7.1" x 4.6" x 1.7"

PANEL CUT-OUT

154 mm x 98 mm
 6" x 3.9"

MAXIMUM PANEL THICKNESS

8 mm
 0.3"

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