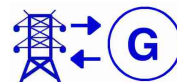


AUTOMATIC TRANSFER SWITCH (ATS)

DSE 334 Three Phase ATS - Contactor switching (40A - 400A)

MAINS
TO
GENERATOR



OVERVIEW

- Contactor pair conforming to BS EN 60947-6-1
- Contactors mechanically & electrically interlocked
- Deepsea Electronics DSE 334 control module
- Large backlit LCD screen
- 3 Phase Mains (Utility) voltage monitoring
- 3 Phase generator voltage monitoring
- Configurable timers
- Control & monitoring fuses
- Robust mild steel enclosure
- Bottom entry gland plate
- Two wire generator start



DESCRIPTION & FUNCTION

Automatic switching between local Mains supply and a standby generator.

Three phase (400V) ATS (Automatic Transfer Switch) panel. Our ATS-334 control panel uses a Deep Sea Electronics DSE334 control module.

The DSE334 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 DSE334 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 module can be easily configured via the front panel. Further configuration options can be altered through the USB connection to PC software.

Control is made with membrane pushbuttons on the front of the controller. In the AUTO position all operations are automatic with the panel requesting the generator to start and stop when there is a failure of the Mails (Utility) supply. Manual mode starts and runs the generator. This can be set for either off load or on load.

The generator start signal is by means of volt free normally open (N/O) contact closing when the generator is required to run.

Housed in a robust mild steel enclosure rated to IP65. Supplied with loose gland plate, and door key. Enclosure specification to EN 62208, RAL7035, EN 60529, IK10, EN 61439-1-2. Cable entry as standard is arranged for bottom entry with a direct connection into the contactors. A 16A auxiliary output is provided for use with battery chargers, water jacket heaters etc.

Assembled in the UK by Blandon Systems using parts conforming to EN60529, EN60947. Provided with a 12-month warranty

The control panel requires a DC supply to power the Deepsea control module. This is usually fed from the generator starting battery (12Vdc or 24Vdc). If this is not available a self-seeking power supply can be fitted. This sources ac power from either the Mains (utility) or generator and converts it to DC for the module. This is an extra cost option please contact us if you require the self-seeking power supply fitted to your panel.

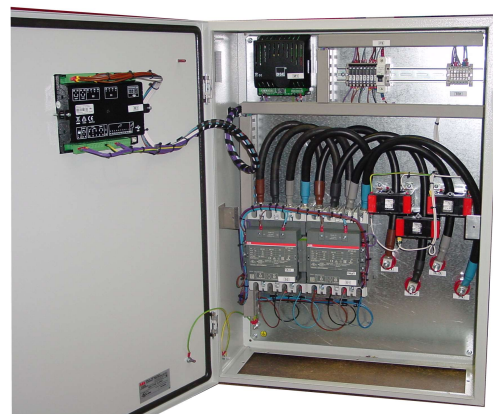
DSE 160 Self seeking Power Supply	
Description	Part Code
12V version DSE160-12	030-033
24V version DSE160-24	030-034



DSE 160 self seeking power supply

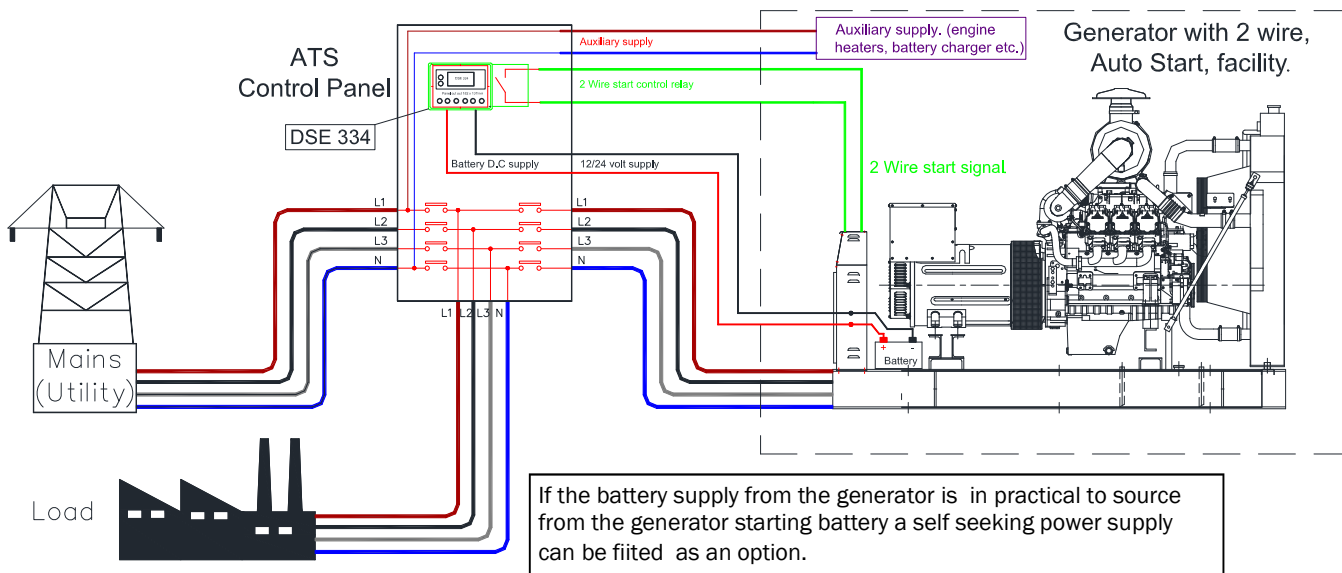
SPECIFICATION

Voltage:	Nominal 400 Vac
	380 - 440 Vac
Frequency:	50 / 60Hz
Contactors:	Mechanically & electrically interlocked
	Utilization category AC1
	BS EN 60947-6-1
Enclosure:	Mild steel
	RAL 7035
	IP 65
	EN 62208, EN 60529, IK10
	Bottom gland plate
ATS Controller	Deepsea DSE 334
	Automatic switch over between supplies
	10 configurable inputs
	5 configurable outputs
	Three phase mains voltage monitoring
	Three Phase generator voltage monitoring
	*Optional current monitoring (requires CT's)
	Front panel programming or PC via USB
	Large backlit display
<i>Displayed parameters</i>	Voltage, *current, ATS status, operating mode
	Configurable timers
<i>Auto</i>	Generator starts / stops automatically
<i>Stop</i>	Generator is stopped, No start request on Main fail
<i>Manual mode</i>	Test generator either ON or OFF load
<i>Inhibit return</i>	User intervention required to restore mains after a mains failure to generator
Auxiliary output:	16A single phase
Two wire generator stat relay:	Normally open contact, closes to call the generator
	* Current monitoring requires optional CT's to be fitted



ATS

TYPICAL LAYOUT



ABB



Available with either ABB or ICG contactors

ICG

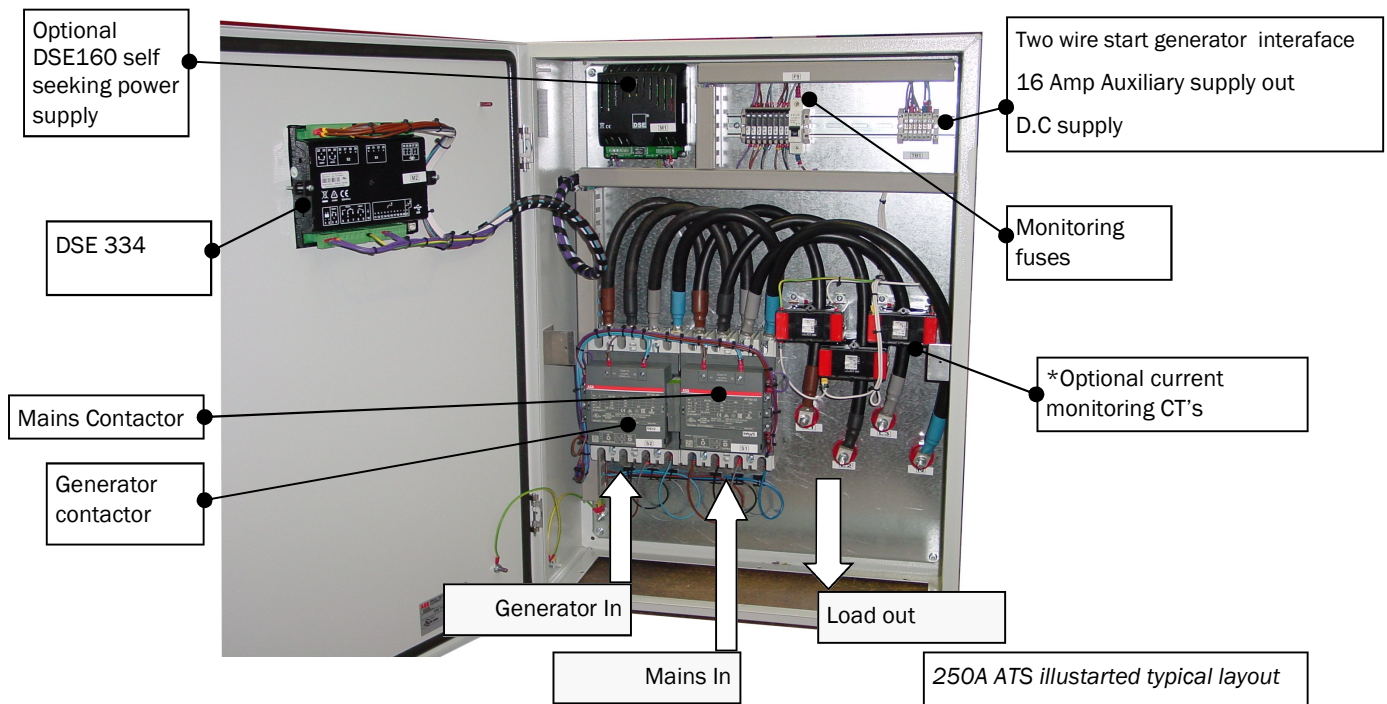


Please see the following pages for part codes

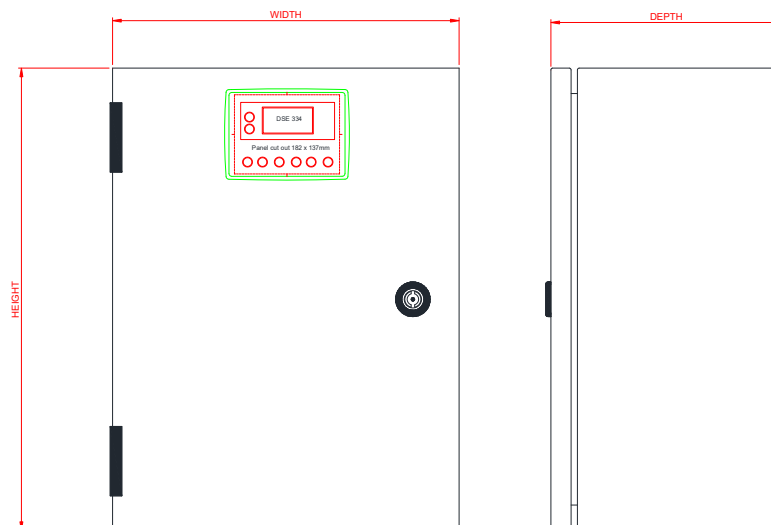
FRONT PANEL INDICATION



INTERNAL LAYOUT

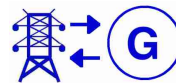


DIMENSIONS



PART CODES

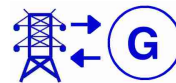
DSE 334 ATS THREE PHASE - ICG CONTACTOR



Amps (AC1) 400V	Amps (AC3) 400V	Part Code	Enclosure Size			
			Height (mm)	Width (mm)	Depth (mm)	Terminal
40A	25A	PAN-ATS4-40-334	400	300	200	Cage clamp
60A	40A	PAN-ATS4-60-334	400	300	200	Cage clamp
100A	53A	PAN-ATS4-100-334	500	400	200	Cage clamp
125A	80A	PAN-ATS4-125-334	500	400	200	Cage clamp
160A	115A	PAN-ATS4-160-334	600	600	250	M8
200A	115A	PAN-ATS4-200-334	800	600	250	M8
250A	150A	PAN-ATS4-250-334	800	600	250	M8
275A	185A	PAN-ATS4-275-334	800	600	250	M8
315A	225A	PAN-ATS4-315-334	1000	800	300	M10
350A	265A	PAN-ATS4-350-334	1000	800	300	M10
400A	330A	PAN-ATS4-400-334	1000	800	300	M10

ATS

DSE334 ATS THREE PHASE - ABB CONTACTOR



Amps (AC1) 400V	Amps (AC3) 400V	Part Code	Enclosure Size			
			Height (mm)	Width (mm)	Depth (mm)	Terminal
30A	18A	PAN-ATS4-30-334-ABB	400	300	200	Cage clamp
40A	22A	PAN-ATS4-40-334-ABB	400	300	200	Cage clamp
45A	22A	PAN-ATS4-45-334-ABB	400	300	200	Cage clamp
60A	40A	PAN-ATS4-60-334-ABB	400	300	200	Cage clamp
70A	40A	PAN-ATS4-70-334-ABB	400	300	200	Cage clamp
100A	53A	PAN-ATS4-100-334-ABB	400	300	200	Cage clamp
125A	80A	PAN-ATS4-125-334-ABB	500	400	200	Cage clamp
160A	116A	PAN-ATS4-160-334-ABB	600	600	250	Cage clamp
200A	140A	PAN-ATS4-200-334-ABB	700	500	250	Cage clamp
250A	150A	PAN-ATS4-250-334-ABB	800	600	250	M8
275A	190A	PAN-ATS4-275-334-ABB	800	600	250	M8
315A	205A	PAN-ATS4-315-334-ABB	1000	800	300	M8
350A	205A	PAN-ATS4-350-334-ABB	1000	800	300	M8
400A	265A	PAN-ATS4-400-334-ABB	1000	800	300	M10