

## Combined Switching Transformers



The ALS Combined Switching Transformer provides lamp control and power in a single unit – saving space and cost, and minimising connections. They include a wide range of input and output currents and are available in Fail-On and Fail-Off versions. The maximum Wattage is 100 Watts. Power and switch circuit isolation is achieved by optical isolation. Combined Switching Transformers can also be made with ‘daisy chains’ of transformers. All ALS transformers are designed and manufactured to BS EN 61823. This also exceeds the requirements of the FAA AC 150/5345-47. All AGLSTs come encapsulated in high quality polyurethane resin and are suitable for burial directly into the ground or submersion. ALS AGLSTs are resistant to acid and alkaline soils and to chemicals such as oils, fuels and de-icing fluids which are commonly found on airfields.

### Specification:

- Switching signal voltages 12V to 72V DC - **Half-wave control signals must not be used**
- Switching signal current of 2mA at 48V DC

- Switching signal to transformer secondary isolation voltage of +2500V AC
- Control signal cables 2 core, 2.5mm<sup>2</sup>
- Current to the lamps is ramped up and down more slowly than the regulator changes its firing angle (150ms)
- Maximum rms voltage of 33V when open circuit

### Compliance:

- All AGLSTs meet the following industry standards:
- BS EN 61823
- FAA specification AC 150/5345-47
- ICAO Design Manual, Part 5, Electrical Systems

### Features:

- Encapsulated in a homogenous high quality polyurethane resin
- 8mm insulation between outer and any core components exceeding requirements of 6.5mm
- Available in Fail-On & Fail-Off versions
- 12hr minimum water testing prior to despatch
- Ambient temperature range -20°C to +55°C
- Permanently marked with rating, product identification and manufacturer details
- Materials used are also termite and rodent proof
- Resistant to acid and alkaline soils, oils, fuels and de-icing fluids
- IP Rating equivalent to IP68

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### Applications:

- Military or civil airport AGL constant current circuits.
- Taxiway routing
- Stop Bar control

### Options:

ALS also offer our unique 'Daisy Chaining' service, where strings of transformers are moulded to each other, minimising the number of onsite joints, whilst providing superior circuit insulation

- Daisy chains of transformers up to a length of 6 of various sizes
- Plugs and sockets moulded on the primary cables

### Electrical Data:

AGLST	Power Range	Variations available	Size	Weight
36 Watt	25W to 45W with output remaining within $\pm 1\%$ of 6.60A	36/6/6.6 36/6.6/6.6 36/12/6.6	L: 135mm W: 113mm H: 87mm	4.50 kg
45 Watt	35W to 60W with output remaining within $\pm 1\%$ of 6.60A	45/6/6.6 45/6.6/6.6 45/12/6.6	L: 135mm W: 113mm H: 87mm	4.50 kg
65 Watt	50W to 85W with output remaining within $\pm 1\%$ of 6.60A	65/6/6.6 65/6.6/6.6 65/12/6.6	L: 132mm W: 133mm H: 103mm	6.00 kg
100 Watt	80W to 125W with output remaining within $\pm 1\%$ of 6.60A	100/6/6.6 100/6.6/6.6 100/12/6.6	L: 132mm W: 133mm H: 103mm	6.00 kg
N.B. For All Fail Off: L: 132mm, W: 133mm, H: 103mm, 6kg				