

Electronic

ET-Standard Transformer

New



ET-STANDARD

Definition

A high frequency electronic transformer for operation with 12V halogen lamps. The ET-Standard range comes in 60W versions. It is fully IEC compliant and uniquely compact and lightweight. It is also dimmable with Philips approved Leading and Trailing Edge dimmers.

Descriptions

The ET-Standard range has the following advantages over conventional gear:

- Safe Operation
 - Short circuit-In the case of a short circuit in the lamp. The ET-Standard has built in self-resetting short-circuit protection.
 - Thermal switch-The thermal switch interrupts overloads and will switch the transformer off if there is excess current.
 - Temperature protection-If the housing or ambient temperature becomes high the protection circuit will reduce the output voltage.
- Constant output voltage-In the event of lamp wattage variations the ET-Standard guarantees a continual secondary voltage of 12V, ensuring long lamp life and constant light level.
- Compact and lightweight
- Long lamp life
- Inaudible during operation

Application

ET-Standard transformers are designed for areas such as:

- Indoor residential; living rooms, decorative and accent lighting
- In professional areas; reception areas, retail areas, conference rooms and offices
- In retail areas and exhibitions rooms

Philips Quality

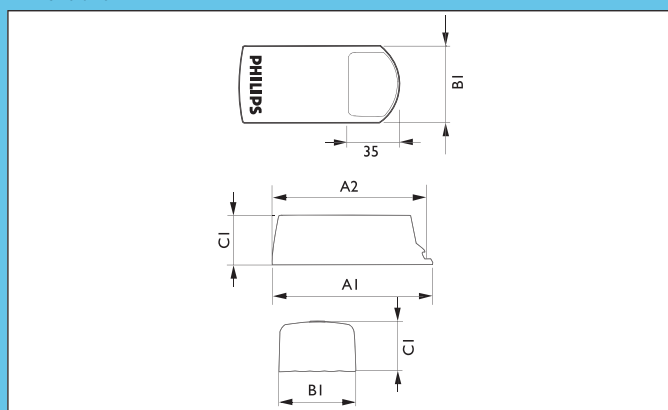
This represents optimum quality with regards to:

- System supplier:
 - As a manufacturer of lamps and electronic control gear; Philips ensures that, from the earliest development stage, maximum lamp life performance is maintained
- International standards;
 - The ET-Standard complies with the relevant international rules and regulations.

Compliances and approvals

- RFI < 30 MHz EN 55015
- Harmonics EN 61000-3-2
- Immunity EN 61547
- Safety EN 61046, IEC 61347-2-2*
- Performance EN 61047
- Environmental standard ISO 14001
- Marking CE, SELV

Dimensions in mm



| Product ID | Overall length | | | |
|------------|----------------|---------|---------|---------|
| | A1 max. | A2 max. | B1 max. | C1 max. |
| ET-S 60W | 98 | 88 | 46 | 31 |
| ET-S 105W | 110 | - | 52 | 33.5 |
| ET-S 150W | 140 | - | 52 | 36 |

* for ET-S 105, ET-S 150

Technical data

| Transformer | Voltage (Volt) | Power range (Watt) | Frequency (Hz) | Power loss (Watt) | Dimming from (Watt) | Output (Volt) [(Watt)] |
|-----------------|----------------|--------------------|----------------|-------------------|---------------------|------------------------|
| ETS 60 220-240 | 220-240 | 20-60 | 50/60 | 4 | 20 | 11.3 (60) |
| ETS 105 220-240 | 220-240 | 35-105 | 50/60 | 6 | 20 | 11.5 (105) |
| ETS 150 220-240 | 220-240 | 50-150 | 50/60 | 10 | 20 | 11.5 (150) |

Technical data for installation

Mains operation

| | |
|----------------------------|---------------------|
| Rated voltage | 220 - 240 V |
| with tolerances for safety | 170 - 264 V |
| Tolerances for performance | +6% -8% 212 - 254 V |
| Operating frequency | > 25 kHz |

DC voltage operation during emergency back-up*

| | |
|--|-------------|
| Required battery voltage guaranteed ignition | 170 - 254 V |
| Required battery voltage for burning | 160 - 254 V |

Lifetime

| | |
|---------------|------------|
| ET-s 60 | 20,000 hrs |
| ET-s 105, 150 | 40,000 hrs |

Over voltage protection

Up to 350V

Tamb

| | |
|---------------|---------------|
| ET-s 60 | -20°C - +50°C |
| ET-s 105, 150 | -20°C - +45°C |

MAX t_{case}

85°C

Lamp end of life detection/shut off

Yes

Cable capacity

120pf

Hum and noise level

inaudible

Dimming

Dimming is possible with approved leading and trailing edge dimmers.

*** When working on DC all the protection circuits and dimming will not function**

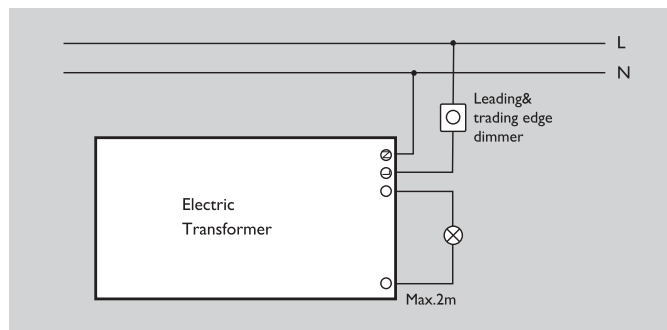
Lamp combination

ET-s 60

| Lamp watt \ Lamp qty | Min | Max |
|----------------------|-----|-----|
| 5W | 4 | 12 |
| 10W | 2 | 6 |
| 20W | 1 | 3 |
| 35W | 1 | 1 |
| 50W | 1 | 1 |

Installation recommendation:

| | |
|--|-------------------------|
| Wire cross-section on mains side | 0.5 - 25mm ² |
| Wire cross-section on lamp side | 0.5 - 25mm ² |
| Strip Length | 6-8mm |
| The minimum distance between transformer and the lamp is | 20cm |
| The maximum distance between transformer and the lamp is | 2M |
| The distance between transformer must be more than | 25cm |



Wiring diagrams

Ordering and packing data

| Transformer | Single unit | Carton packing | | |
|-----------------|---------------|----------------|-------------------------|-----------------|
| | Weight net kg | Qty. pcs | Dimensions l x w x h cm | Weight gross kg |
| ETS 60 220-240 | 0.09 | 50 | 25.5 x 21.5 x 18.5 | 5.4 |
| ETS 105 220-240 | 0.12 | 50 | 28.5 x 23.5 x 18 | 7.4 |
| ETS 150 220-240 | 0.18 | 50 | 30 x 29.5 x 20 | 10 |