

Oxford Electrical Products Ltd.

Instruction for the use of the electronic transformer with integrated dimmer for low voltage halogen lamps

Model: **SET70-D SET105-D**

Applications

The transformer SET70-D/105-D is exclusively designed for the use in halogen lamp systems (e.g. tube and rail systems, halogen lamp sets, hanging lamps, ceiling lamps). The transformer operates with a soft start that produces a steadily rising current after switching-on.

The electronic transformer has an integrated dimmer with adjustable sensitivity. The brightness of the light can be adjusted by the push button on the primary side and/or the touching sensor on the secondary side.

An electronic protection circuit switches off the transformer in case of short circuit or overload in the secondary circuit as well as open circuit. After the removing of the faults, the transformer is ready for operation again.

Important information for the installation

The unit conforms to the directive 89/336/EEC for the electromagnetic compatibility and the low voltage directive 73/23/EEC.

This unit uses dangerous mains voltage (230-240V--). The connection of the transformer to the mains voltage must be carried out by authorized per-sonnet according to the safety regulations of the respective country.

For the installation also note in any case the following points:

- The transformer can only be used with halogen lamps. The protection against the electric shock must be ensured during the installation.
- The transformer is only suitable for indoor use. Protect the transformer against humidity and excessive heat (permissible operating temperature range -20 to +50C).
- A thermal fuse has been built into the transformer, which will cut off the circuit of the

transformer in the case of overheating.

- As a mains cable it is recommended to use a PVC tube or flat cable according to VDE 0281 of a cross section of at least 0,75mm². The cross section of the lamp supply cables must be 0,75 to 1.5mm². To avoid RF interference, the lengths of the supply cables of the lamps must not be more than max. 2m.
- The loads indicated on the transformer must be within the ranges specified below:
SET70-D: 20-70W
SET105-D: 35-105W
- Necessary branchings to connect several lamps have to be made directly at the low voltage terminals of the transformer. The mains cable and the lamp supply cables must not cross each other.
- The transformer should be mounted as near as possible to the halogen lamps. However, due to the heat radiation of the lamps, a minimum distance of approx. 30cm has to be observed. The electronic transformer mounting place must be sufficiently ventilated.
- The transformer is provided with an insulation protection. Therefore there is no connection of the ground-wire. Phase and neutral wire may be connected at will.
- If the transformer is used for purposes other than originally intended or it is connected in the wrong way, no liability can be accepted for possible damages.

Specifications:

Input voltage:	230-240V — +6-10% 50Hz
Output voltage:	3.5-11.5V—rms
Rated power:	SET70-D: 70W; SET105-D: 105W
Rated current:	SET70-D: 0.30A; SET105-D: 0.46A
Ambient temperature ta:	Max. 50t
Case temperature tc:	SET70-D: 80C; SET105-D: 85t
Primary cable:	HO3W-F 2x0.75mm ²
Secondary cable:	1 to 2 cable(s) of mm. 0.3m, and max. 2m long

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Electronic transformer with integrated dimmer and adjustable sensor

Instruction for the dimmer operation

The electronic transformer has an integrated dimmer with adjustable sensitivity. By short touching (less than 0.8 s) of the touching-sensor wire end (or metal piece connected to the touching-sensor wire) on the secondary side or short pressing (less than 0.8 s) of the push button on the primary side, it will cause the dimmer to switch on or off the light. By continuously touching (more than 0.8 s) of the touching-sensor wire end (or metal piece connected to the touching-sensor wire) or continuously pressing (more than 0.8 s) of the push button, it will cause the dimmer to adjust the brightness of the light from dark to bright or from bright to dark according to the last adjustment. The adjusted brightness will be stored until the next adjustment occurs.

Instruction for the sensor regulation

You can regulate the sensor sensitivity by turning the trimmer screw as marked on the cover of the transformer. This regulation is possible to change the sensitivity in systems with touching-sensor wire from 0.4 up to 5 meters. In factory a medium standard regulation is pre-adjusted. In case of following problems, you have to perform adjustments as following:

1). The light goes up and down by itself (the sensitivity is too high). Turn the screw in the (-) direction, until the up/down effect of the light stops. Now try to switch on the light a few times by touching the sensor-wire. If the system doesn't react with the desired sensitivity, you have to fine-tune by turning the screw in the (+) or (-) direction, until the system reacts with satisfactorily.

2). The control doesn't work or operates only on strong or long-lasting touch (the sensitivity is too low or doesn't exist).

Turn the screw in the (+) direction, until the light goes on.

Now try to switch on the light a few times by touching the sensor wire.

If the system doesn't react with the desired sensitivity, you have to make a fine-tuning by turning the screw in the (+) or (-) direction, until the system reacts with satisfaction.