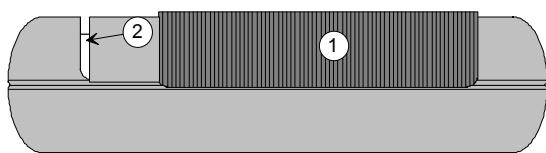


<b>Line transformer 20 - 70 W</b>	pure white	Order No. 033561
<b>Line transformer 20 - 70 W</b>	black	Order No. 033562
<b>Line transformer 20 - 105 W</b>	pure white	Order No. 033564
<b>Line transformer 20 - 105 W</b>	black	Order No. 033565

## Function



TRONIC in-line transformer for switching and dimming of locomotive light fittings with LV-halogen lamps. Stepless setting of brightness from switching-on to maximum brightness via slide potentiometer ①. A permanent luminous glow lamp ② helps detection at brightness. A gentle connection via softstart ensures an optimum lamp age.

## Overload and overtemperature protected:

Automatic power decrease control.

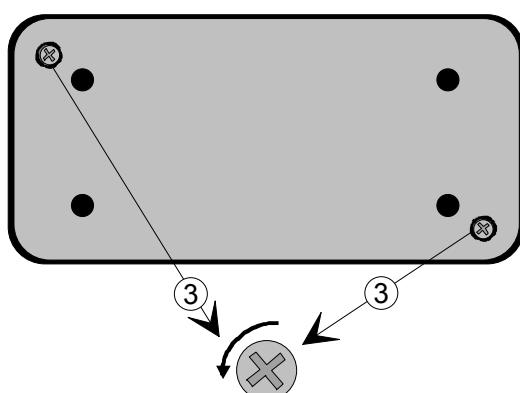
## Short circuit proof:

Electronic disconnection with automatic re-start after solving short circuit. Not suitable for 230 V DC.

## Indications of danger

**Caution!** The installation and assembly of electrical equipment may be carried out only by a skilled person.

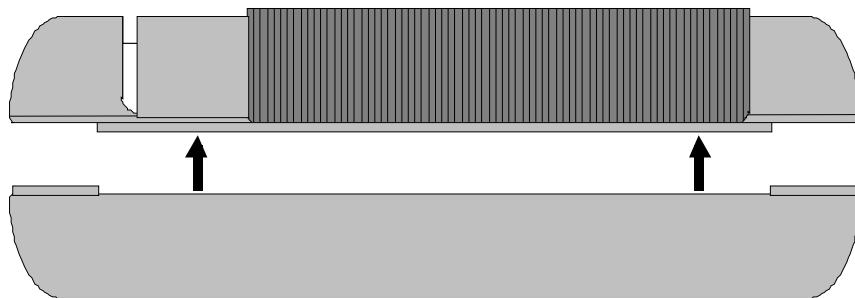
## Instructions for installation



TRONIC in-line transformers are spikeproof according DIN VDE 0712 part 25.

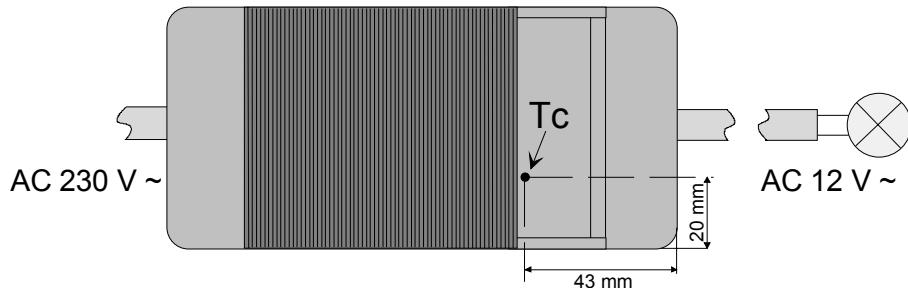
Please consider performance of transformer. Underload may lead to flicking. Only to be used with 12 V LV-halogen lamps.

Release screws ③ at housing bottom.



Lift top according illustration.

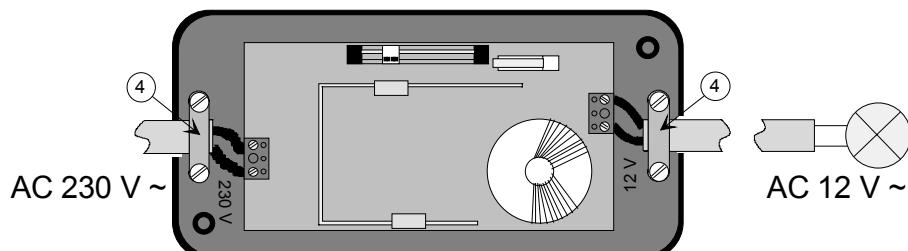
Use main H 05 VV-F 2x1,5 mm<sup>2</sup> for stress relief.  
Secondary wiring **max. 2 m** (observe radio interference suppression).



Recommended cross-section and type of secondary wiring:

In-line trans. 20-70 W: H05 VV-F 2x1,0 mm<sup>2</sup>  
In-line trans. 20-105 W: H05 VV-F 2x1,5 mm<sup>2</sup>

Strip exterior coat of connection wire 19 mm to ensure safe stress relief.



Connect in-line transformer according to diagram.

Assemble stress relief ④ (see diagram).

Place top. The driver inside the housing top has to be locked to the slide of the potentiometer. Screw device from bottom side.

Do not connect secondary wiring to further TRONIC in-line transformers.

## Technical Data

	<b>ST 70</b>	<b>ST 105</b>
Rated load	20-70 W	20-105 W
Rated input voltage	230 V AC	
Output voltage at 230 V AC	11,8 Veff AC	
Power factor		$\cos \varphi = 0,98$
Efficiency		95 %
Mains	0,33 A	0,49 A
Ambient temperature / housing temperature Tc	max. 50 °C	max. 45 °C
Length of secondary wiring / cross-section	max. 2 m mind. 2 x 1,0 mm <sup>2</sup>	max. 2 m mind. 2 x 1,5 mm <sup>2</sup>
Main for stress relief	H 05 VV-F 2 x 1,5 mm <sup>2</sup>	
Dimming via slide potentiometer	●	
No-load proof	●	
Softstart	●	
Electronic short circuit disconnection	●	
Overload and overtemperature protection	●	
Safety against spikes according VDE 0712 part 25	●	
Dimensions of housing	150 x 70 x 38 [mm]	
Housing material unbreakable and heat resistant polycarbonate	●	
Protection class II, earthing conductor not essential	●	

## Acceptance of guarantee

We accept the guarantee in accordance with the corresponding legal provisions.

**Please return the unit postage paid to our central service department giving a brief description of the fault:**

Gira  
Giersiepen GmbH & Co. KG  
**Service Center**  
Dahlienstrasse 12  
D-42477 Radevormwald



The CE sign is a free trade sign addressed exclusively to the authorities and does not include any warranty of any properties.

Gira  
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