Tronic transformer 10 - 40 W
Order No. : 0367 00 , 0493 57
Tronic transformer 20 - 70 W
Order No. : 0366 00 , 0493 58
Tronic transformer 20 - 105 W
Order No. : 0365 00
Tronic transformer 20 - 150 W
Order No. : 0373 00, 0493 55
Tronic transformer 50 - 200 W
Order No. : 0375 00 , 0493 56

Operating instructions

1 Safety instructions

Electrical equipment may only be installed and fitted by electrically skilled persons.

Failure to observe the instructions may cause damage to the device and result in fire and other hazards.

Danger of electric shock. Always disconnect before carrying out work on the devise or load. In so doing, take all the circuit breakers into account, which support dangerous voltages to the device and or load.

These instructions are an integral part of the product, and must remain with the end customer.

2 Function

Intended use

- Power supply for 12 V halogen lamps
- Switchable with installation switches, relays or Tronic switching inserts
- Dimmable only with Gira Tronic or universal dimmers, which work according to the phase section principle and switch-off permanently if there is a short-circuit
- Installation in false ceilings, surface mounting or luminaire installation

Product characteristics

- No-load proof
- Electronic short circuit protection
- Electronic overload protection
- Electronic over-temperature protection
- Protection against transient overvoltage according to EN 61547, power spikes

i Flickering of the connected lamps is possible if the load is below the specified minimum. This does not represent any defect in the device.

3 Information for electrically skilled persons

3.1 Fitting and electrical connection

DANGER!

Electrical shock when live parts are touched.

Electrical shocks can be fatal.

Before carrying out work on the device or load, disengage all the corresponding circuit breakers. Cover up live parts in the working environment.

Fitting the Tronic transformer

Ensure adequate installation space for heat dissipation. In critical cases, carry out temperature measurement. The housing temperature at the tc point (see device label) must not be exceeded.

	Spacing around	Spacing above

40...150 W	20 mm	10 mm
greater than 150 W	200 mm	25 mm

Maintain double spacing between Tronic transformers.

Do not fit in the vicinity of heat sources, e.g. lamps.

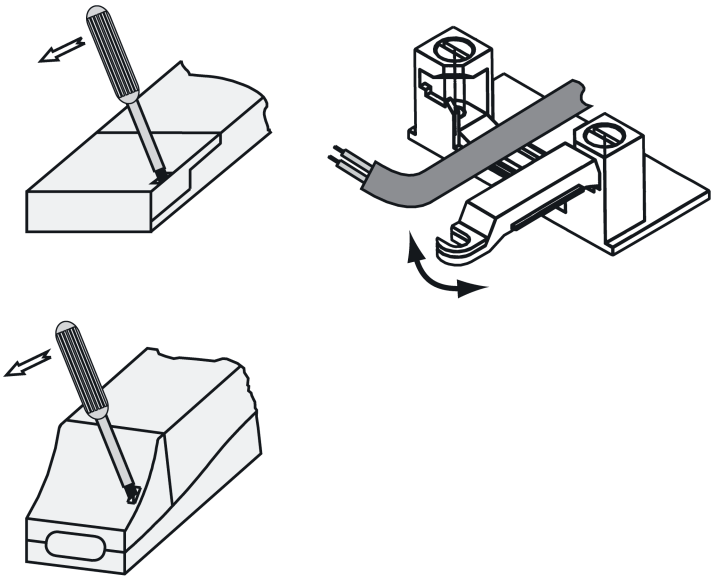

Figure 1: Terminal cover and strain relief

- Remove any terminal covers (Figure 1).
- Fasten the Tronic transformer with screws.

Connection instructions

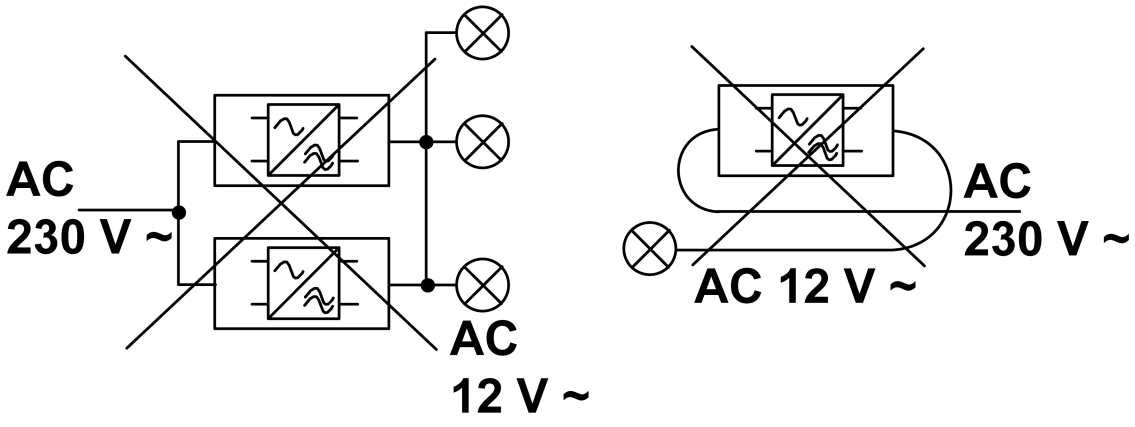

Figure 2

- Do not connect secondary cable with additional Tronic transformers (Figure 2).
- Do not route secondary cable parallel to mains cable or Tronic transformer (Figure 2).
- Do not lay secondary cable on metal surfaces.
- Ensure reliable strain relief on the primary side and on the secondary side. Use only cables of the same type on any side.

In the case of Tronic transformers without strain relief or terminated connection cables, use a suitable cable bracket to ensure tension and push-free cabling.

Cable recommendations for secure strain relief for Tronic transformers with integrated strain relief

Primary side 70...210 W	H05VV-F 2×1.5 mm²
Secondary side 70...105 W	H05VV-F 2×1.5 mm²
Secondary side 110...150 W	H05VV-F 2×2.5 mm²
Secondary side greater than 150 W	2 cables: H05VV-F 2×1.5 mm²

Terminal designations

PRI	AC 230 V ~
R	External conductor
N	Neutral conductor
SEC	AC 12 V ~

Connecting a transformer

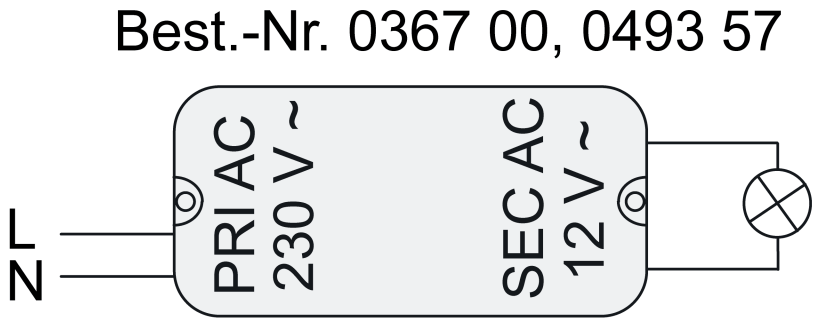

Figure 3

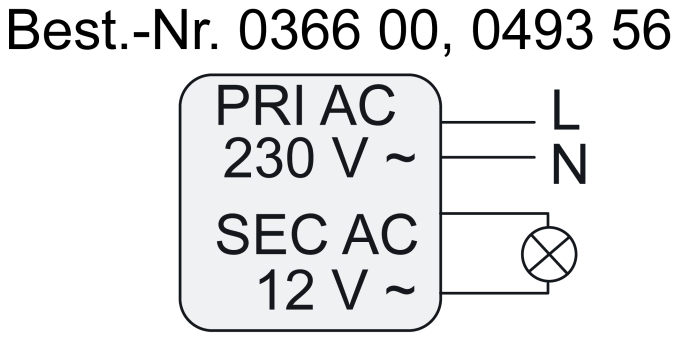

Figure 4

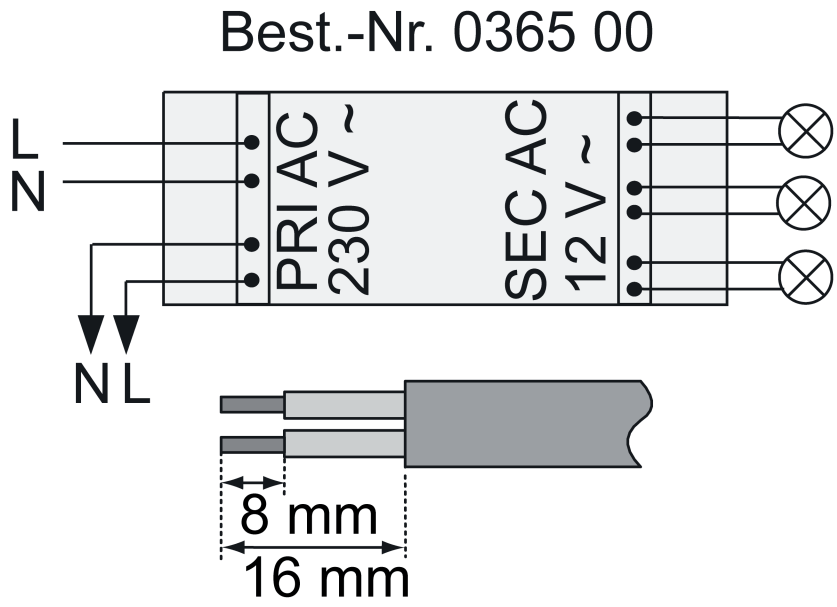

Figure 5

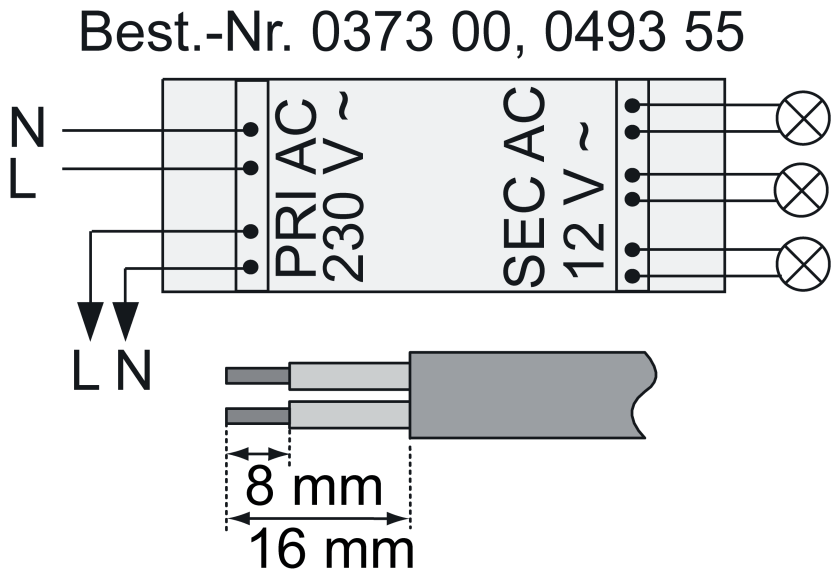

Figure 6

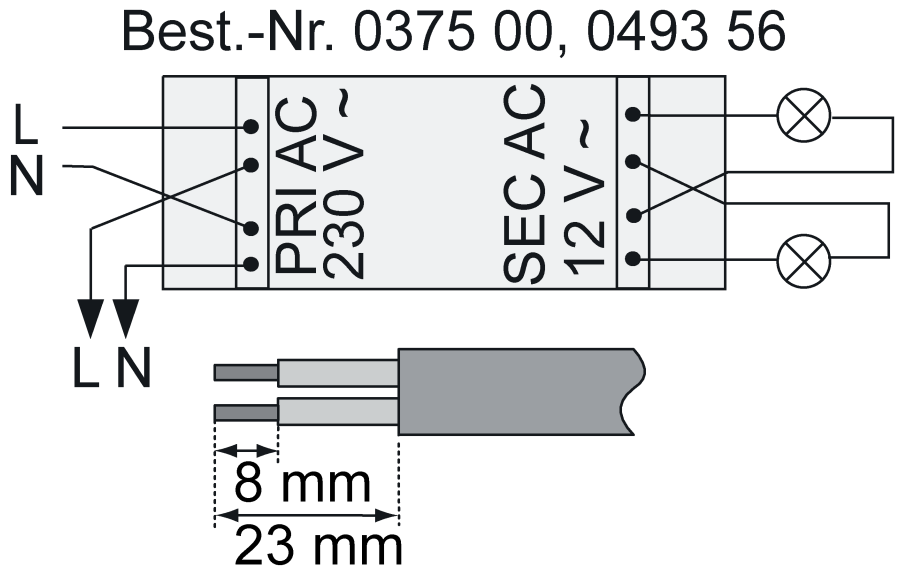

Figure 7

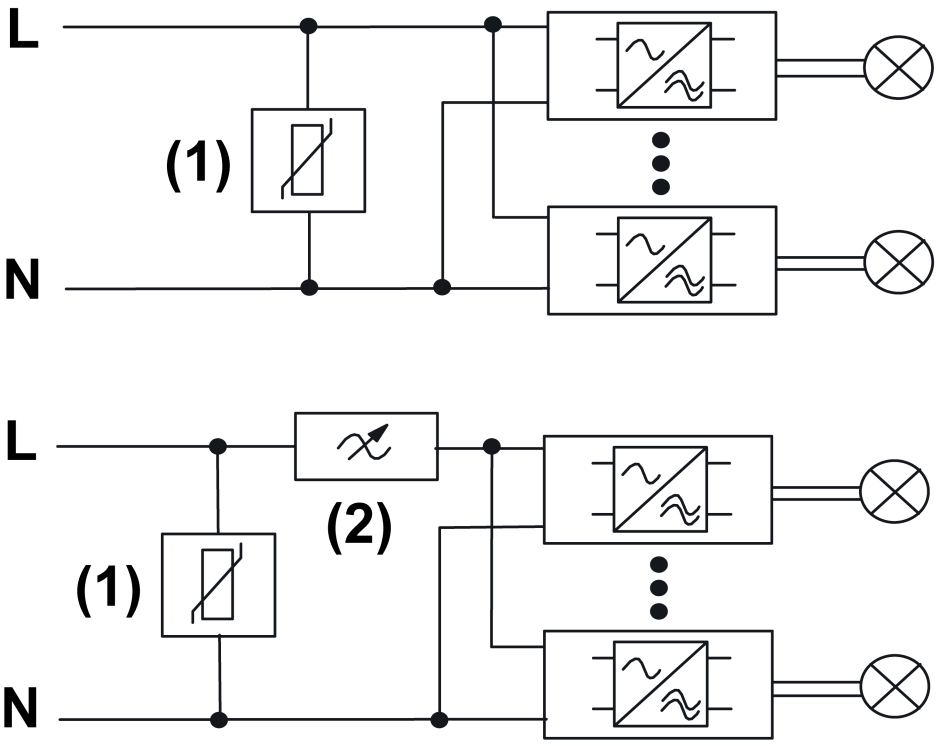

Figure 8: Connection example, surge protection module

DANGER!

Fire hazard in case of faults.

Only use Gira Tronic or universal dimmers, as these switch off permanently if there is a short-circuit.

DANGER!

Impermissible heating through excessive current load.

Risk of fire in the area of the primary side terminals.

Only use primary terminals to switch a maximum of 10 Tronic transformers.

CAUTION!

Device defect through surge voltages when switching inductive loads or power spikes.

The device will be destroyed.

Do not install the Tronic transformer with inductive loads, e. g. inductive ballasts or motors, in a shared circuit.

Use a surge protection module.

In the case of Tronic transformers with terminated connection cables, use suitable insulation to connect the power cable.

- Strip connecting cables according to specifications (see connection diagram).
- Connect the Tronic transformer according to the appropriate connection diagram (Figure 3), (Figure 4), (Figure 5), (Figure 7), (Figure 6).
- Fit the strain relief (Figure 1).

i When connecting multiple strings of lamps to Tronic transformers with terminated connection cables, it is wise to use a distributor.

i If there is a risk of power spikes, connect the primary side surge voltage module (1) to the Tronic transformer in parallel, or, if using dimmers, connect the dimmer (2) in parallel to the series circuit to the Tronic transformer between L and N (Figure 8).

4 Appendix

4.1 Technical data

Tronic transformer 10 - 40 W, Order No. 0367 00 , 0493 57

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Rated load	10 ... 40 W
Power factor	0.96
Efficiency	95 %
Primary current	max. 0.18 A
Ambient temperature	max. 50 °C
Housing temperature	85 °C (tc)
Degree of protection	IP 20
Protection class	II
Output voltage	AC 11.7 V ~ eff.
Secondary cable length	max. 2 m
Dimensions W×H×D	73×18×35.5 mm

Tronic transformer 20 - 70 W, Order No. 0366 00 , 0493 58

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Rated load	20 ... 70 W
Power factor	0.96
Efficiency	95 %
Primary current	max. 0.33 A
Ambient temperature	max. 50 °C (60 W)
Housing temperature	75 °C (tc)
Degree of protection	IP 20
Protection class	II
Output voltage	AC 11.7 V ~ eff.
Output frequency	approx. 40 kHz
Secondary cable length	max. 2 m
Dimensions W×H×D	49×28×48 mm

Tronic transformer 20 - 105 W, Order No. 0365 00

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Rated load	20 ... 105 W
Power factor	0.96
Efficiency	95 %
Primary current	max. 0.45 A
Ambient temperature	max. 50 °C
Housing temperature	80 °C (tc)
Degree of protection	IP 20
Protection class	II
Output voltage	AC 11.8 V ~ eff.
Output frequency	approx. 40 kHz
Connection	
single stranded	max. 4 mm²
finely stranded without conductor sleeve	max. 2.5 mm²
Finely stranded with conductor sleeve	max. 1.5 mm²
Secondary cable length	max. 2 m
Dimensions W×H×D	175×18×42 mm

Tronic transformer 20 - 150 W, Order No. 0373 00, 0493 55

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Rated load	20 ... 150 W
Power factor	0.96
Efficiency	95 %
Primary current	max. 0.71 A
Ambient temperature	50 °C
Housing temperature	75 °C (tc)
Degree of protection	IP 20
Protection class	II
Output voltage	AC 11.7 V ~ eff.
Output frequency	approx. 24 kHz
Connection	
single stranded	max. 4 mm²
finely stranded without conductor sleeve	max. 2.5 mm²
Finely stranded with conductor sleeve	max. 1.5 mm²
Secondary cable length	max. 2 m
Dimensions W×H×D	176×38×42 mm

Tronic transformer 50 - 200 W, Order No. 0375 00 , 0493 56

Rated voltage	AC 230 V ~
Mains frequency	50 Hz
Rated load	50 ... 210 W
Power factor	0.96
Efficiency	95 %
Primary current	max. 1 A
Ambient temperature	max. 50 °C
Housing temperature	65 °C (tc)
Degree of protection	IP 20
Protection class	II
Output voltage	AC 11.5 V ~ eff.
Output frequency	approx. 40 kHz
Connection	
single stranded	max. 4 mm²
finely stranded without conductor sleeve	max. 2.5 mm²
Finely stranded with conductor sleeve	max. 1.5 mm²
Secondary cable length	max. 2 m
Dimensions W×H×D	212×46×48.5 mm

4.2 Troubleshooting

Device switches off

Cause: short-circuit protection has tripped.

Eliminate short-circuit.

i The Tronic transformer switches on again after the short-circuit is eliminated

Light becomes dimmer and brighter again after some time

Cause: overheating protection adjusts the power downwards to allow the Tronic transformer to cool, and then raises it again.

Check the installation situation, ensure better cooling as necessary.

Reduce the connected load.

i If the power throttleback is insufficient, the Tronic transformer switches off and then back on again after cooling.

i The square 70 W Tronic transformer switches off if the temperature is too high and on again after cooling.

4.3 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade. Please submit or send faulty devices postage paid together with an error description to your responsible salesperson (specialist trade/installation company/electrical specialist trade). They will forward the devices to the Gira Service Center.

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