

Phase Cut Load Compensator

TD-SCR uses the digital control technology to solve the flickering or non-shutdown problems of LED lamps during leading edge and trailing edge dimming. LED lamps are capacitive loads and often cause problems at the lowest dimming level due to insufficient holding current, leading to impulse-type flickering or failure to turn off LED lamps. TD-SCR ensures stable performance of LED lamps by maintaining the minimum output current when the conduction angle is smallest. It is ideal for load compensation in phase cut circuits.

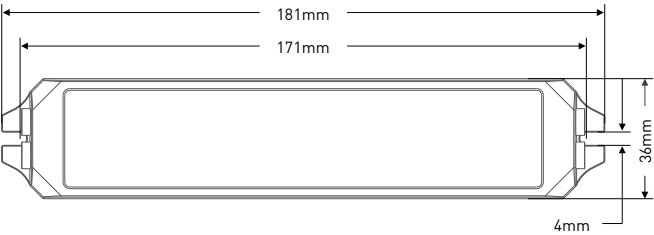


Technical Specs

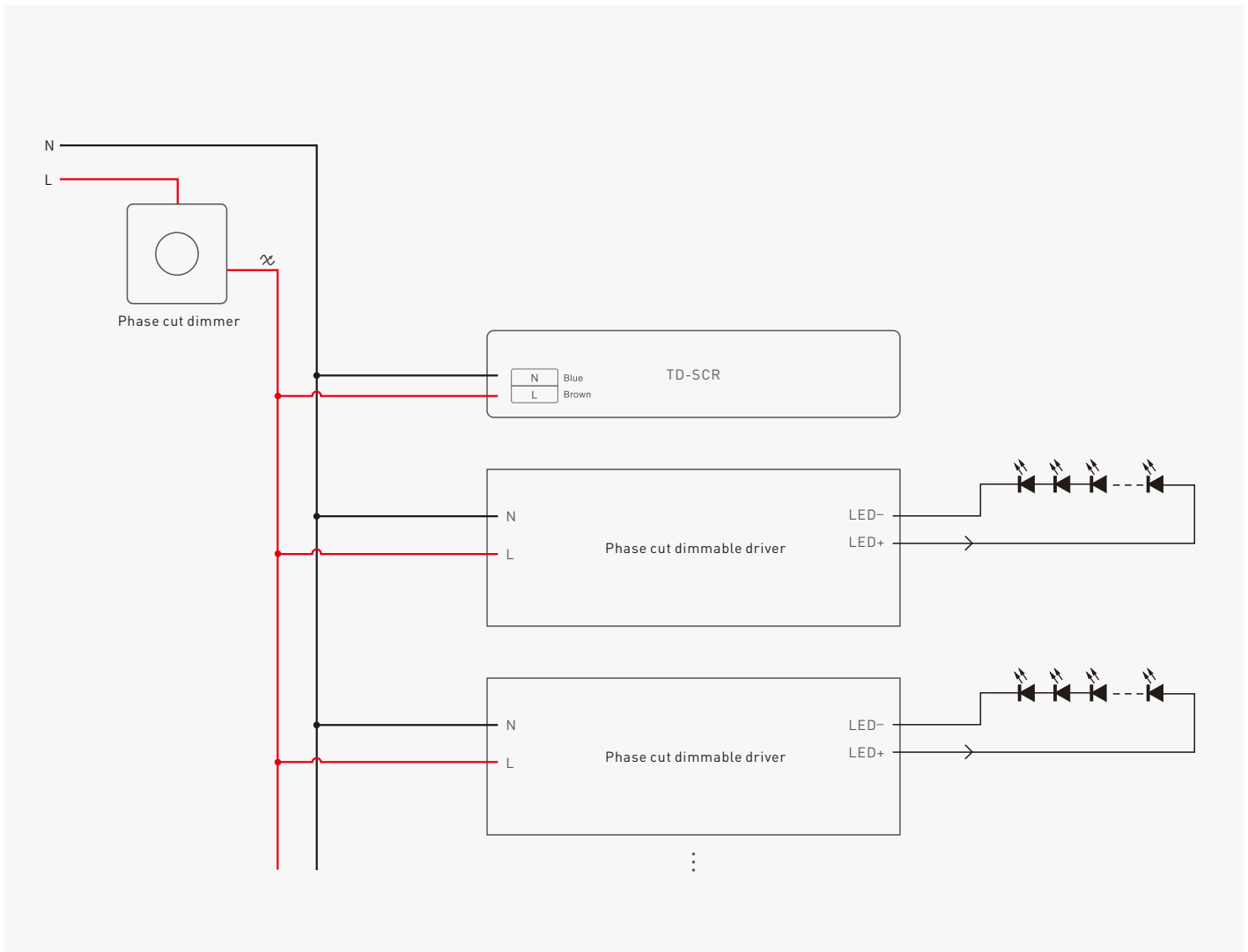
Model		TD-SCR
INPUT	Input Voltage	100-240Vac
	Frequency	50/60Hz
	Input Current	70mA@115Vac / 50mA@230Vac
	Power Transmission	5.5W@115Vac / 3.8W@230Vac
	Inrush Current	Cold start 10A/230Vac (Test twidth = 320us under 50% Ipeak)
ENVIRONMENT	Working Temperature	ta: -30 ~ 55°C tc: 90°C
	Working Humidity	20 ~ 95%RH, non-condensing
	Storage Temperature, Humidity	-40 ~ 80°C, 10~95%RH
	Temperature Coefficient	±0.03%/°C(-20~45°C)
	Vibration	10~500Hz, 2G 12min/1cycle, 72 min for X, Y and Z axes respectively
OTHERS	Dimensions	181×36×28mm(L×W×H)
	Gross Weight(G.W)	185g±10g
	Warranty	5 years

Product Size

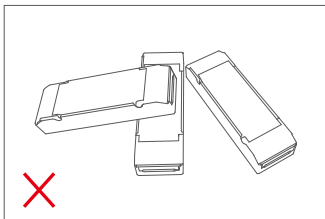
Unit: mm



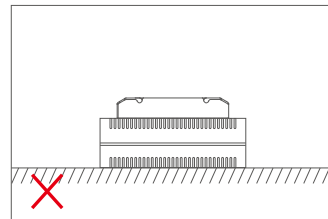
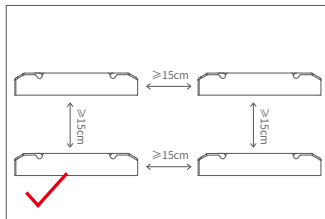
Connection Application Diagram



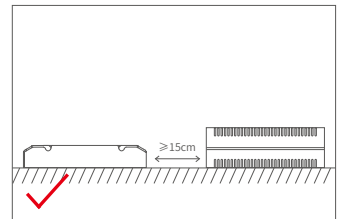
Installation Precautions



Please do not stack the products. The distance between two products should be $\geq 15\text{cm}$ so as not to affect heat dissipation and the lifespan of the products.



Please not place the products on LED drivers. The distance between the product and the driver should be $\geq 15\text{cm}$ so as not to affect heat dissipation and shorten the lifespan of the products.



Note: The temperature within the installation area should be within the working temperature range of the products. Please do not install products inside LED fixtures to avoid temperature exceeding the working temperature that may affect the product lifetime.

Transportation and Storage

1. Transportation

Products can be shipped via vehicles, boats and planes.

During transportation, products should be protected from rain and sun. Please avoid severe shock and vibration during the loading and unloading process.

2. Storage

The storage conditions should comply with the Class I Environmental Standards. The products that have been stored for more than six months are recommended to be re-inspected and can be used only after they have been qualified.

Attentions

- Product installation and commissioning should be done by a qualified professional.
- LTECH products are and not lightningproof non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure they are mounted in a water proof enclosure or in an area equipped with lightning protection devices.
- Good heat dissipation will prolong the working life of products. Please ensure good ventilation.
- Please check if the working voltage used complies with the parameter requirements of products.
- The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
- Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
- If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.

* This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

Warranty Agreement

- Warranty periods from the date of delivery: 5 years.
- Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

- Beyond warranty periods.
- Any artificial damage caused by high voltage, overload, or improper operations.
- Products with severe physical damage.
- Damage caused by natural disasters and force majeure.
- Warranty labels and barcodes have been damaged.
- No any contract signed by LTECH.

1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

Update Log

Version	Updated Time	Update Content	Updated by
A0	2023.03.10	Original version	Liu Weili

可控硅负载补偿器

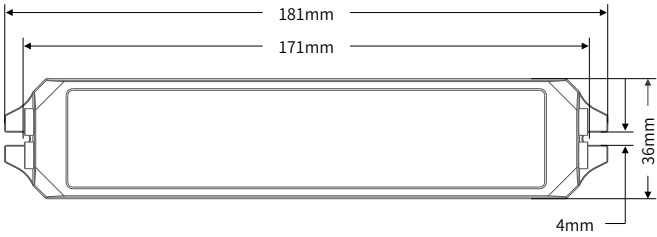
TD-SCR 采用数字控制技术，用于解决可控硅前后沿调光过程中LED灯具闪烁或者关不灭问题，LED灯具是容性负载，当可控硅调光亮度调节到最低时，容易由于维持电流太小而关断输出，从而引起LED灯具脉冲式闪烁或者不能关闭LED灯光源。当导通角最小时，TD-SCR将控制和维持最小输出电流，保证LED灯具稳定工作。适用于可控硅电路负载补偿。



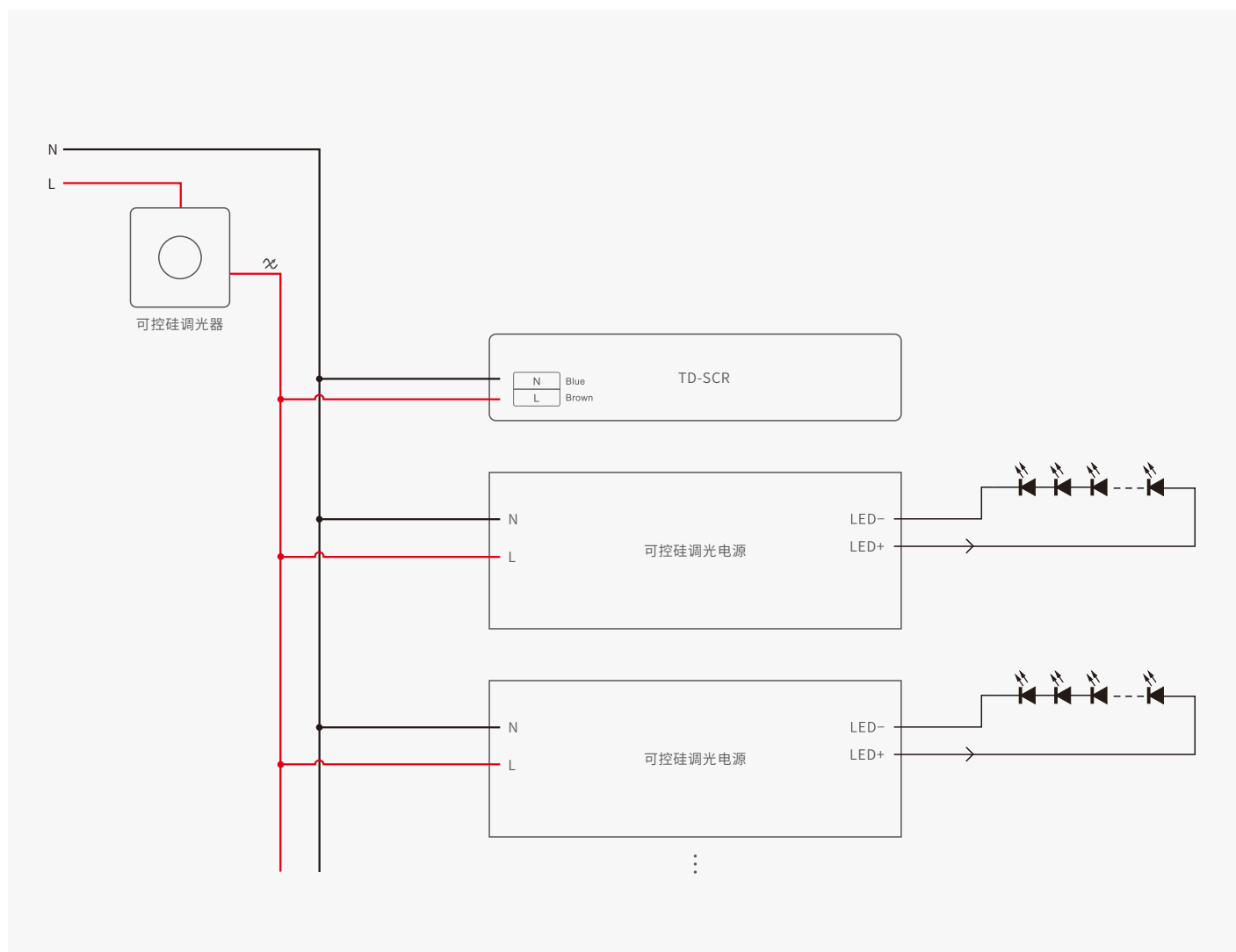
技术参数

型号		TD-SCR
输入	输入电压	100-240Vac
	频率范围	50/60Hz
	输入电流	70mA@115Vac / 50mA@230Vac
	输入功率	5.5W@115Vac / 3.8W@230Vac
	浪涌电流	冷启动10A/ (在50%Ipeak下测试twidth=320us)@230Vac
环境	工作温度	ta: -30 ~ 55°C tc: 90°C
	工作湿度	20 ~ 95%RH, 无冷凝
	储存温度/湿度	-40 ~ 80°C/10~95%RH
	温度系数	±0.03%/°C(-20~45°C)
	耐振动	10-500HZ, 2G 12分钟/周期, X, Y, Z轴各72分钟
其他	产品尺寸	181×36×28mm(L×W×H)
	产品重量	185g±10g
	质保	5年

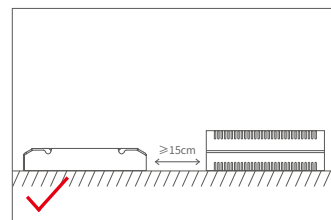
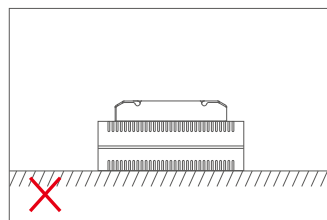
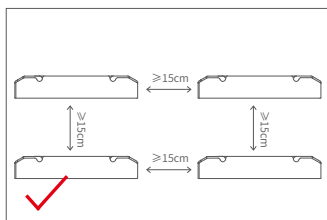
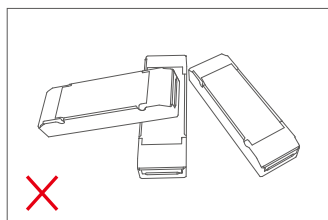
产品尺寸



连接应用图



安装注意事项



请勿将产品堆叠摆放，产品与产品间间隔距离应 $\geq 15\text{cm}$ ，避免影响产品散热和使用寿命。

请勿将产品置于电源上方，与电源间隔距离应 $\geq 15\text{cm}$ ，避免影响产品散热而减少使用寿命。

注：安装需符合产品的环境工作温度，切勿安装到灯具内部，以免超出产品环境温度影响产品寿命。

运输和贮存

1. 运输

产品适用车、船、飞机交通运输工具运输。

在运输中，应使用遮篷进行防雨和防晒，并保持文明装卸，不应有剧烈振动、撞击等。

2. 贮存

贮存符合 I 类环境的规定。贮存期限超过6个月的产品建议重新检验，合格后方可使用。

注意事项

- 请由具有专业资格的人员进行调试安装；
- 雷特产品（专有型号除外）不能防水防雷，需避免日晒雨淋，如安装在户外，请用防水箱和防雷装置；
- 良好的散热条件会延长产品的使用寿命，请把产品安装在通风良好的环境；
- 请检查使用的工作电压是否符合产品的参数要求；
- 使用的电线直径大小必须能够负载连接的LED灯具，并确保接线牢固；
- 通电调试前，应确保所有接线正确，避免因接线错误而导致灯具损坏；
- 如果发生故障，请勿私自维修；如有疑问，请联系供应商。

* 本说明书的内容如有变更，恕不另行通知。若内容与您使用的功能有所不同，则以实物为准。如有疑问，请与供应商联系。

保修条例

- 自出厂之日起保修服务期为5年。
- 在保修服务期内出现产品质量问题雷特将给予免费修理或更换服务。

非保修条例：

属下列情况不在免费保修或更换服务范围之内：

- 已经超出保修服务期；
- 过高电压、超负载、操作不当等人为造成的损坏；
- 产品外形严重损坏或变形；
- 自然灾害以及人力不可抗拒原因造成的损坏；
- 产品保修标签和产品唯一条形码损坏；
- 无雷特签订的合同或发票凭证。

1. 修理或更换是雷特对客户的一补救措施。雷特不承担任何附带引起的损害赔偿，除非在适用法律范围之内。
2. 雷特享有修正或调整本保修条款的权利，并以书面形式发布为准。

更新日志

版本	更改日期	更改内容	更改人
A0	2023.03.10	正稿	刘伟丽