

Constant Current & Dimmable Driver

Model: SC42W300-1050CG-4W Triac
 SC42W300-1050CG-4B Triac
 SC42W300-1050CG-4G Triac



| Model | Output Current | Input Current | Input Power | Output Power Range | PF | Efficiency (*Typical) | Output Voltage | No load Voltage |
|--|----------------|---------------|-------------|--------------------|-------|-----------------------|----------------|-----------------|
| SC42W300-1050CG-4W Triac SC42W300-1050CG-4B Triac SC42W300-1050CG-4G Triac | 300mA | 0.13A | 16.0W | 2.70-12.00W | ≥0.75 | ≥79% | 9-40V | 55V |
| | 350mA | 0.14A | 18.5W | 3.15-14.00W | ≥0.78 | ≥81% | 9-40V | 55V |
| | 400mA | 0.15A | 20.5W | 3.55-16.00W | ≥0.82 | ≥82% | 9-40V | 55V |
| | 450mA | 0.16A | 23.0W | 4.05-18.00W | ≥0.83 | ≥83% | 9-40V | 55V |
| | 500mA | 0.17A | 25.0W | 4.50-20.00W | ≥0.85 | ≥84% | 9-40V | 55V |
| | 550mA | 0.18A | 27.0W | 4.95-22.00W | ≥0.86 | ≥85% | 9-40V | 55V |
| | 600mA | 0.19A | 29.5W | 5.40-24.00W | ≥0.88 | ≥85% | 9-40V | 55V |
| | 650mA | 0.20A | 32.0W | 5.85-26.00W | ≥0.89 | ≥86% | 9-40V | 55V |
| | 700mA | 0.21A | 35.0W | 6.30-28.00W | ≥0.90 | ≥86% | 9-40V | 55V |
| | 750mA | 0.22A | 37.0W | 6.75-30.00W | ≥0.90 | ≥86% | 9-40V | 55V |
| | 800mA | 0.23A | 39.5W | 7.20-32.00W | ≥0.92 | ≥86% | 9-40V | 55V |
| | 850mA | 0.24A | 42.0W | 7.65-34.00W | ≥0.92 | ≥87% | 9-40V | 55V |
| | 900mA | 0.25A | 43.5W | 8.10-36.00W | ≥0.92 | ≥87% | 9-40V | 55V |
| | 950mA | 0.26A | 46.0W | 8.55-38.00W | ≥0.92 | ≥87% | 9-40V | 55V |
| | 1000mA | 0.27A | 48.0W | 9.00-40.00W | ≥0.92 | ≥87% | 9-40V | 55V |
| 1050mA | 0.28A | 51.0W | 9.45-42.00W | ≥0.92 | ≥87% | 9-40V | 55V | |

* Test result @230V, 50Hz, Full Load.

1. Parameters

| Category | Item | Technical Norm |
|----------|------------------------|--------------------------|
| Features | Output Type | Constant Current |
| | Dimming Type | Phase dimming |
| | Dimming Range | 1%-100% |
| | Output Features | Isolation |
| | IP Grade | IP20 |
| | Insulation Class | Class II |
| Input | Rated Input Voltage | 220-240VAC |
| | Range of Input Voltage | 198-264VAC or 180-280VDC |

| | | |
|--------------|------------------------------|--|
| | Frequency | 50/60Hz |
| | Input Current | ≤0.28A (230VAC, full load) |
| | Input Power | ≤51W(230VAC, full load) |
| | Power Factor | ≥0.92(230VAC, full load) |
| | THD | ≤10% (230VAC, full load) |
| | No-load Power Consumption | ≤1.55W @230VAC |
| | Inrush Current | ≤48A/50us (230VAC, full load 42W1050mA) |
| Output | Output Voltage | 9-40V(above list) |
| | Output Current: | 300/350/400/450/500/550/600/650/700/750/800/850/900/950/1000/1050mA |
| | No Load Voltage | 55VDC Max |
| | Max. Output Power: | 46W |
| | LF Current Ripple (< 120 Hz) | ±5% (Imax-Imin)/(Imax+Imin) MAX |
| | Efficiency | ≥87% (230VAC,full load) |
| | Current Accuracy | ±5% |
| | Started Delay Time | ≤2S (230VAC,full load) |
| | PstLM | ≤1 |
| | SVM | ≤0.4 |
| Protection | Short Circuit Protection | Auto Recovery |
| | Overload Protection | Auto Recovery |
| | No-load Protection | Auto Recovery |
| | Insulation voltage | 3000V 5mA 60S between P-S |
| | Insulation resistance | >100M ohm @ 500VDC |
| | Leakage current | I/P to O/P <0.7mA |
| Environment | Ta/Operation Temperature | -20...35°C |
| | Ts/Storage Temperature | -25...80°C |
| | Tc/Enclosure Temperature | 75°C |
| | Humidity | 10%...90%RH |
| | Atmosphere | 86-108KPa |
| Construction | Connection Method | Push-in Terminal |
| | Installation | Independent |
| | SEC Wire preparation | 0.5-1.5□ |
| | Dimension | 158 x 31 x 45mm (L*W*H) |
| Standards | Certification | CE |
| | Safety Standards | EN 61347-1:2015/A1:2021 EN 61347-2-13:2014/A1:2017 EN IEC 62384:2020 EN 62493:2015/A1:2022 |
| | EMC Standards | EN IEC 55015:2019 EN IEC 55015:2019/A11:2020 EN IEC 61000-3-2:2019/A1:2021 EN 61000-3-3:2013/A2:2021 EN IEC 61547:2023 |

| | | |
|--------|-------------|--|
| | Performance | EN62384 |
| | Surge | L-N/2KV |
| | RoHS | complied to 2011/65/EU |
| Others | Life Time | 50000h Ta @35° |
| | Warranty | 5years , F.R. < 10000ppm |
| | Noise | <22dB @ 20cm distance, 15dB background |

Remark:

1.All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C ambient temperature.

2.LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.

2. Trailing Edge Dimmer list approved by KGP

| Manufacturer | Model | Q'ty of parallel connection |
|--------------|-------------------|-----------------------------|
| Schneider | E8432EPD4 | T.B.D |
| Eltako | DTD55L-230V-wg | T.B.D |
| EHMANN | LED-Dimmer T37-08 | T.B.D |
| LTECH | E6P-TD1 | T.B.D |
| EUCHIPS | WALLDIM106W | T.B.D |

Leading &Trailing Edge Dimmer list only on request -/ or confirmed by KGP Electronics

3. Output Current Setting

| Output Current | 1 | 2 | 3 | 4 |
|----------------|----|----|----|----|
| 300mA | - | - | - | - |
| 350mA | - | - | - | ON |
| 400mA | - | - | ON | - |
| 450mA | - | - | ON | ON |
| 500mA | - | ON | - | - |
| 550mA | - | ON | - | ON |
| 600mA | - | ON | ON | - |
| 650mA | - | ON | ON | ON |
| 700mA | ON | - | - | - |
| 750mA | ON | - | - | ON |
| 800mA | ON | - | ON | - |
| 850mA | ON | - | ON | ON |
| 900mA | ON | ON | - | - |
| 950mA | ON | ON | - | ON |
| 1000mA | ON | ON | ON | - |
| 1050mA | ON | ON | ON | ON |

4. Connected quantities of different current Breaker

| TYPE | Connected quantities of different current Breaker | | | | | | Input Voltage | Inrush Current | Time |
|--------|---|--------------------|--------------------|--------------------|------------------|------------------|---------------|----------------|------|
| | current (A) | 10 | 13 | 16 | 20 | 25 | | | |
| | Installation wire diameter | 1.5mm ² | 2.5mm ² | 2.5mm ² | 4mm ² | 4mm ² | | | |
| TYPE B | 13 | 16 | 20 | 25 | 31 | @230VAC | 48 | 50us | |
| TYPE C | 20 | 26 | 32 | 40 | 50 | | | | |
| TYPE D | 32 | 42 | 51 | 64 | 80 | | | | |

5. Label

KGP PRI:220-240VAC 50/60Hz Max.0.28A
 SEC:300-1050mA 9-40VDC
 NO Load:55VDC Max.42W Fmax.50N↓

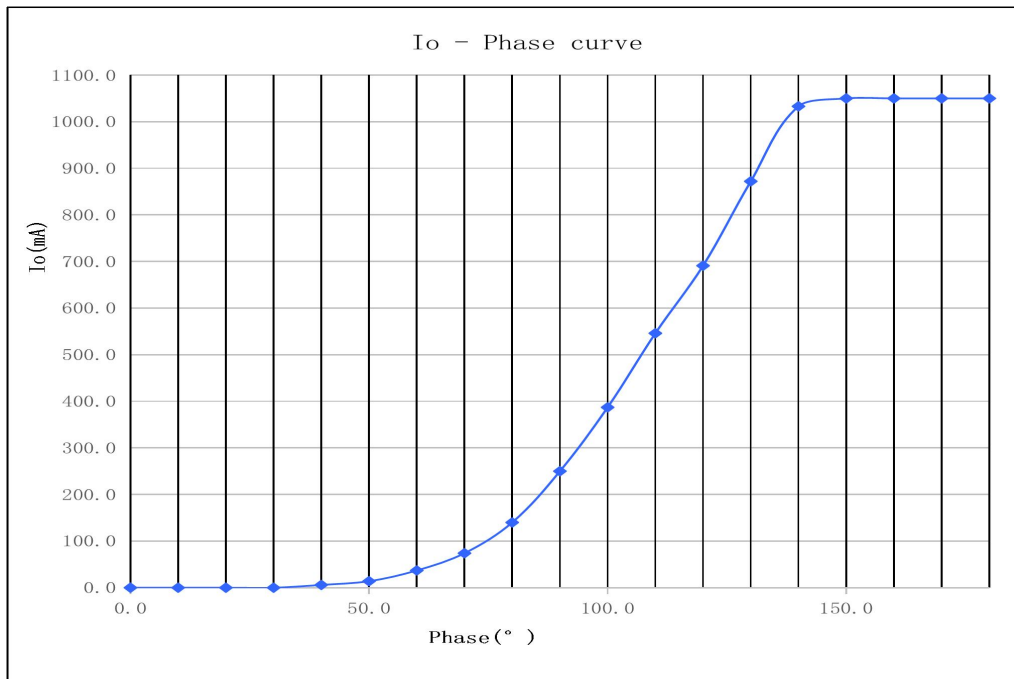
LED Driver
 SC42W300-1050CG-4W Triac
 For LED modules only
 Constant Current Lighting track adaptors

tc:75°C
 ta:-20°C...35°C

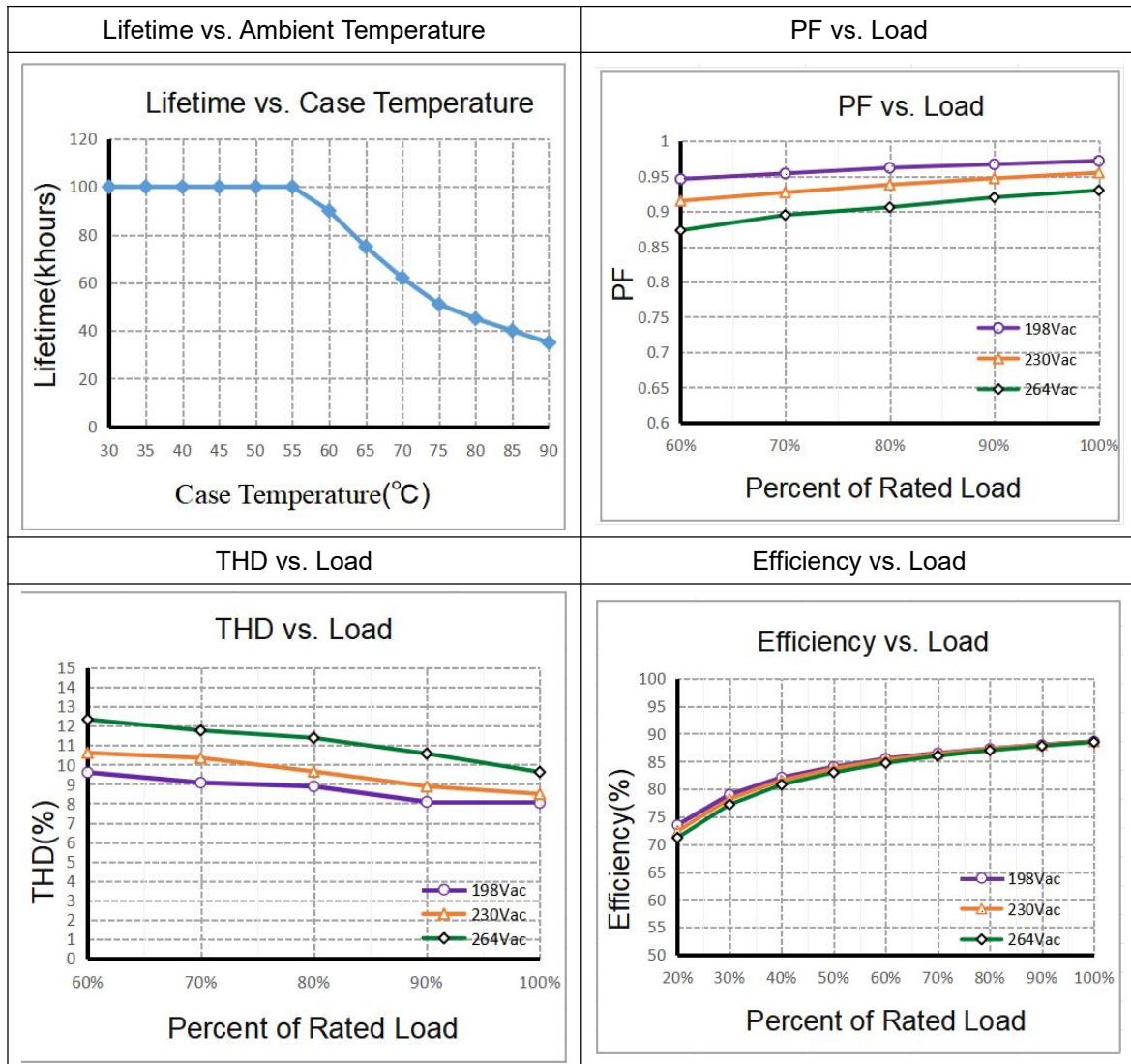
SELV

| Pout [W] | Iout [mA] | λ | 1 | 2 | 3 | 4 | Pout [W] | Iout [mA] | λ | 1 | 2 | 3 | 4 |
|----------|-----------|-------|---|----|----|----|----------|-----------|-------|----|----|----|----|
| 12.6 | 300 | 0.78C | - | - | - | - | 29.4 | 700 | 0.91C | ON | - | - | - |
| 14.7 | 350 | 0.82C | - | - | - | ON | 31.5 | 750 | | ON | - | - | ON |
| 16.8 | 400 | 0.84C | - | - | ON | - | 33.6 | 800 | 0.92C | ON | - | ON | - |
| 18.9 | 450 | 0.87C | - | - | ON | ON | 34 | 850 | | ON | - | ON | ON |
| 21 | 500 | 0.87C | - | ON | - | - | 36 | 900 | | ON | ON | - | - |
| 23.1 | 550 | 0.89C | - | ON | - | ON | 38 | 950 | | ON | ON | - | ON |
| 25.2 | 600 | 0.90C | - | ON | ON | - | 40 | 1000 | ON | ON | ON | - | |
| 27.3 | 650 | 0.90C | - | ON | ON | ON | 42 | 1050 | ON | ON | ON | ON | |

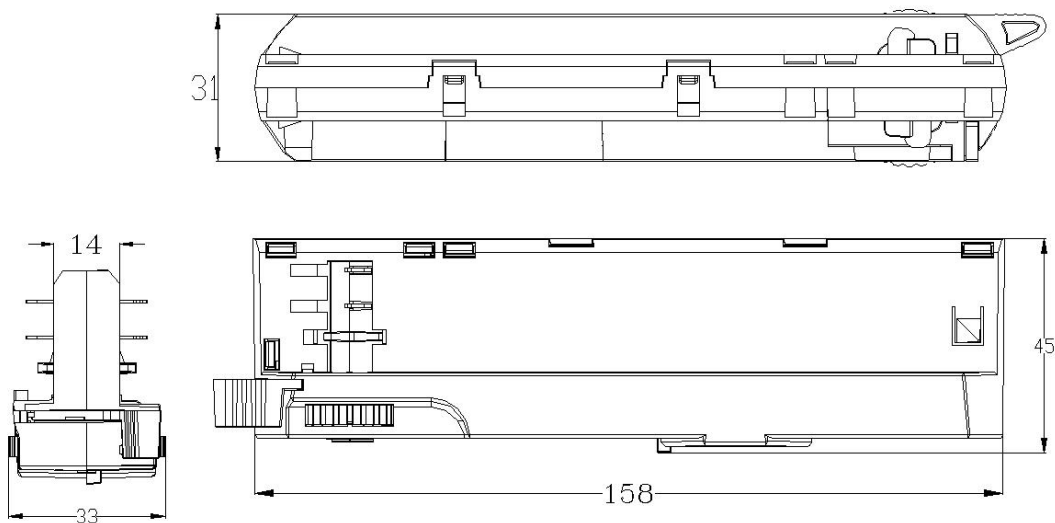
6. Dimming curve



7. Electrical values



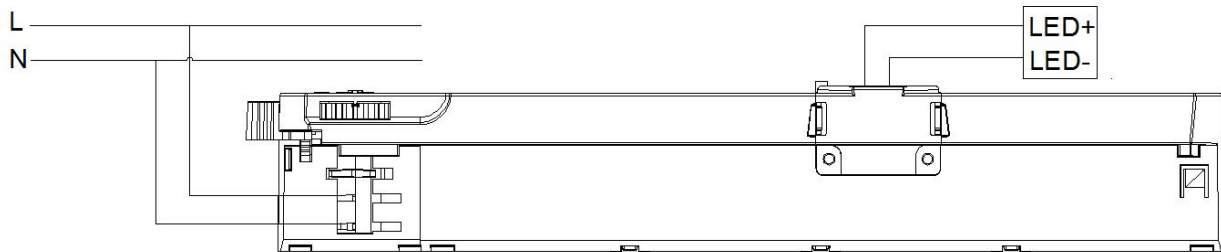
8. Dimension



9. Packing information

| Packing way | Model | Colour | Carton L*W*H(mm) | Pcs/ Carton | Net weight/ Pcs(kg) | Net weight/ Carton(kg) | Gross weight/ Carton(kg) |
|-------------|--------------------|--------|------------------|-------------|---------------------|------------------------|--------------------------|
| industrial | SC42W300-1050CG-4W | White | 515*274*370 | 150 | 0.125 | 18.75 | 20.07 |
| | SC42W300-1050CG-4B | Black | | | | | |
| | SC42W300-1050CG-4G | Grey | | | | | |

10. Wiring Diagram

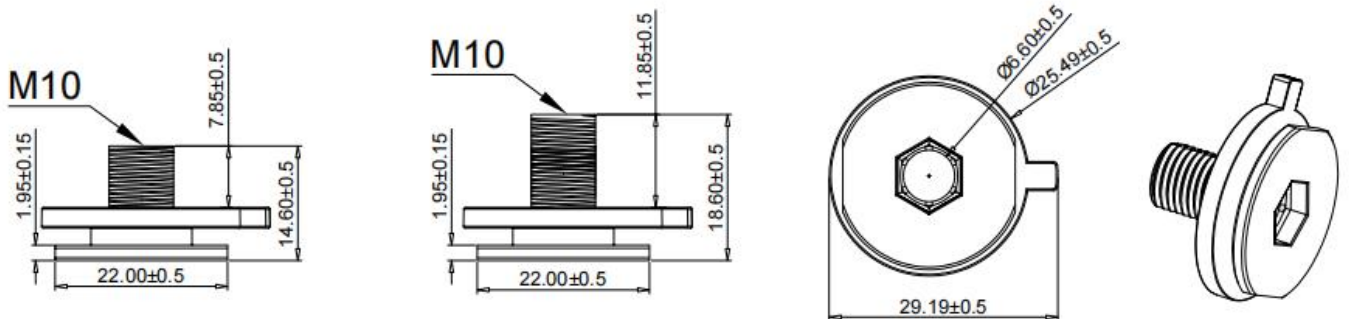


11. Lamp Screw Type

- Optional threaded sleeve for luminaire mounting
- Suitable for M10x1x8 threaded nut
- Additional mounting equipment, e.g. M10x1x12
- aluminium, black, white
- further on request

Ordering data

| Type | Colour | Article number | Qty/ctn | Weight/pcs |
|----------|--------|----------------|---------|------------|
| M10x1x8 | White | AL | PC | 9.31 |
| | Black | AL | PC | 9.31 |
| | Gray | AL | PC | 9.31 |
| M10x1x12 | White | AL | PC | 10.01 |
| | Black | AL | PC | 10.01 |
| | Gray | AL | PC | 10.01 |



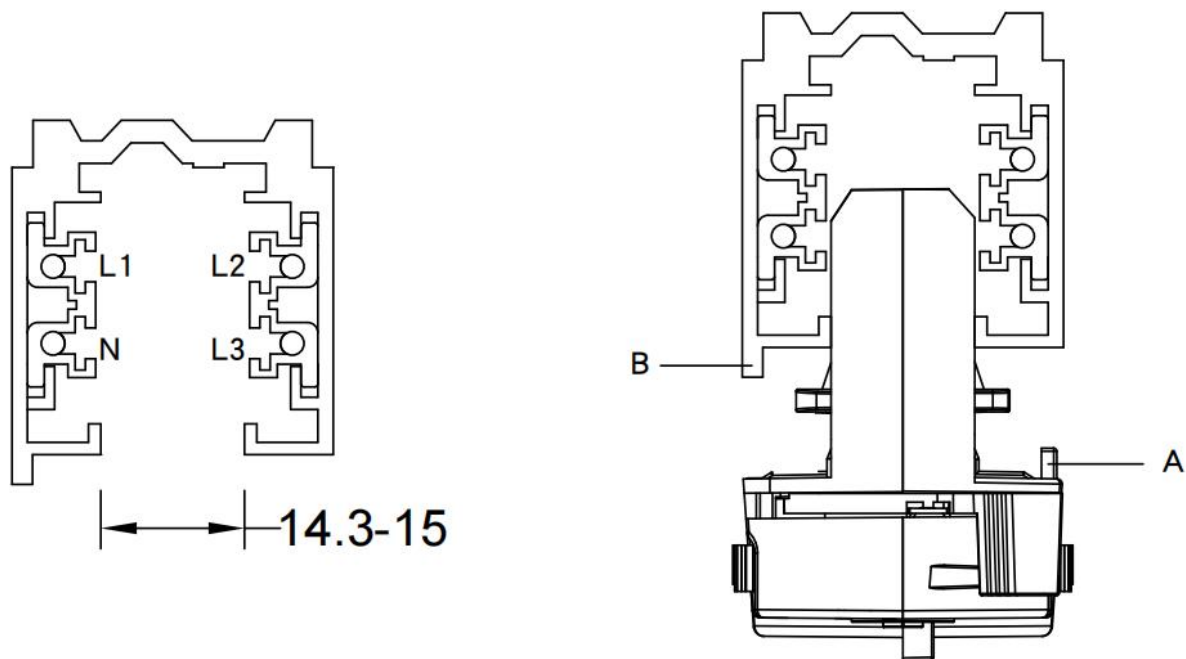
12. Suitable for following tracks

| Serial number | Brand | Track model | System |
|---------------|---------------|---------------------|--------|
| 1 | Global | XTS11 & XTSC611 | 3P |
| 2 | A.A.G STUCCHI | 9000-1-ST | 3P |
| 3 | Eutrac | 25-106 | 3P |
| 4 | PowerGEAR | Pro-0431L&Pro-D631R | 3P |
| 5 | ERCO | 1079301000 | 3P |

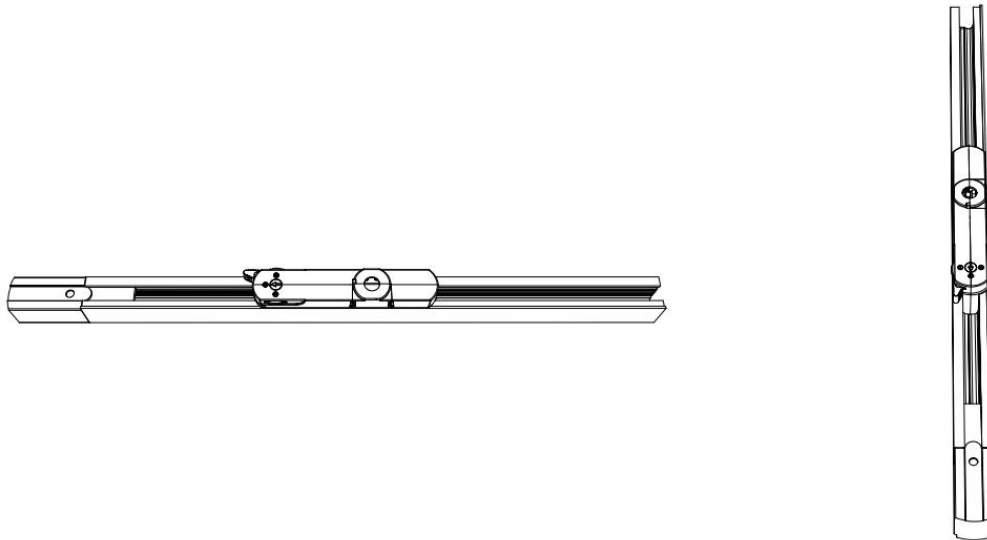
Remark:

1. The model name is XTS11 and XTSC611 tracks, and its brand is Global.
2. The model name used is the 9000-1-ST track, and its brand is A.A.G STUCCHI.
3. The model name is 25-106 tracks, and its brand is Eutrac.
4. The model name is Pro-0431L and Pro-D631R tracks, and its brand is PowerGEAR.
5. The model name is 1079301000 tracks, and its brand is ERCO.

13. Phase track light rail specification:



14. Lighting track adapter and rail system installation diagram:



The adaptor shall be given that the use is limited to the track system specified.

15. Wiring instructions

- All connections must be kept as short as possible to ensure good EMI behaviour
- Mains leads should be kept apart from LED Driver and other leads (ideally 5 – 10 cm distance)
- Advice the maximum length of output wires is 3 m
- Secondary switching is not permitted (Except for constant voltage)
- Incorrect wiring can damage LED modules.
- The wiring must be protected against short circuits to earth (sharp edged metals parts, metal cable clips, louver, etc.)
- Hot plug-in is not supported due to residual output voltage of > 0 V up to mains voltage. Danger to life.
- When connecting an LED load, restart the device to activate the LED output.

16. Replace LED module

- Mains off
- Remove LED module
- Wait for 30 seconds
- Connect LED module again
- Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs

17. REVISION HISTORY

| DATE | REV | Modification details |
|-------------|------------|-----------------------------|
| 2025-01-15 | V1.0 | Initial release. |
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