



### Constant Current Driver

Model: SC20W150-500CG-4W  
 SC20W150-500CG-4B  
 SC20W150-500CG-4G



| Model                                                       | Item code                  | Output Current | PF   | Efficiency (*Typical) | Output Voltage | No load Voltage |
|-------------------------------------------------------------|----------------------------|----------------|------|-----------------------|----------------|-----------------|
| SC20W150-500CG-4W<br>SC20W150-500CG-4B<br>SC20W150-500CG-4G | 145561<br>145541<br>145551 | 150mA          | 0.8  | 80%                   | 20-40V         | ≤55V            |
|                                                             |                            | 200mA          | 0.88 |                       |                |                 |
|                                                             |                            | 250mA          | 0.9  | 83%                   |                |                 |
|                                                             |                            | 300mA          |      |                       |                |                 |
|                                                             |                            | 350mA          | 0.92 | 85%                   |                |                 |
|                                                             |                            | 400mA          |      |                       |                |                 |
|                                                             |                            | 450mA          |      |                       |                |                 |
|                                                             |                            | 500mA          |      |                       |                |                 |

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

### 1. Parameters

| category                     | Item                      | Technical Norm                                 |
|------------------------------|---------------------------|------------------------------------------------|
| Features                     | Output Type               | Constant Current                               |
|                              | 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             | ≤0.16A                                         |
|                              | Input Power               | ≤27W                                           |
|                              | Power Factor              | ≥0.92                                          |
|                              | THD                       | ≤20%                                           |
|                              | No-load Power Consumption | ≤0.5W                                          |
|                              | Output                    | Output Voltage                                 |
| Output Current:              |                           | 150/200/250/300/350/400/450/500MA              |
| No Load Voltage              |                           | 55VDC Max                                      |
| Max. Output Power:           |                           | 20W                                            |
| Efficiency                   |                           | ≥86%                                           |
| LF Current Ripple (< 120 Hz) |                           | ±5% (Imax-Imin)/(Imax+Imin)                    |
| Current Accuracy             |                           | 150/200/250/300mA@±7%<br>350/400/450/500MA@±5% |
| Started Delay Time           |                           | ≤0.5S                                          |

|              |                          |                                                                                                   |
|--------------|--------------------------|---------------------------------------------------------------------------------------------------|
|              | 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   | -40....+85°C                                                                                      |
|              | Tc/Enclosure Temperature | 75°C                                                                                              |
|              | Humidity                 | 10%...90%RH                                                                                       |
|              | Atmosphere               | 86-108KPa                                                                                         |
|              | Connection Method        | Push-in Terminal                                                                                  |
| Construction | Installation             | Independent                                                                                       |
|              | PRI Wire preparation     | 0.75-1.5□                                                                                         |
|              | SEC Wire preparation     | 0.5-1.5□                                                                                          |
|              | Dimension                | 128 x 30.8x 43mm (L*W*H)                                                                          |
|              | Certification            | CE ENEC EAC SAA UKCA                                                                              |
| Standards    | Safety Standards         | EN61347-1:2015,EN61347-2-13:2014/A1:2017,EN62493:2015,AS/NZSIEC61347.2.13:2013,AS/NZS61347.1:2016 |
|              | EMC Standards            | EN55015:2013/A1:2015,EN61000-3-2:2014,EN61000-3-3:2013,EN61547:2009                               |
|              | Performance              | EN62384                                                                                           |
|              | Surge                    | L-N/2KV                                                                                           |
|              | RoHS                     | complied to 2011/65/EU                                                                            |
| Others       | Life Time                | 50000h @35°C (Ta) / 75°C (Tc)                                                                     |
|              | Warranty                 | 5years , F.R. < 10000ppm                                                                          |

**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. Output Current Setting

| Output Current | Dial 1 | Dial 2 | Dial 3 |
|----------------|--------|--------|--------|
| 150mA          | -      | -      | -      |
| 200mA          | ON     | -      | -      |
| 250mA          | -      | ON     | -      |
| 300mA          | ON     | ON     | -      |
| 350mA          | -      | -      | ON     |
| 400mA          | ON     | -      | ON     |
| 450mA          | -      | ON     | ON     |
| 500mA          | ON     | ON     | ON     |

## 3. 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 <sup>2</sup> | 2.5mm <sup>2</sup> | 2.5mm <sup>2</sup> | 4mm <sup>2</sup> | 4mm <sup>2</sup> |               |                |      |
| TYPE B |                                                   | 30                 | 39                 | 48                 | 60               | 75               | @230VAC       | 20             | 40us |
| TYPE C |                                                   | 48                 | 62                 | 77                 | 96               | 120              |               |                |      |
| TYPE D |                                                   | 77                 | 100                | 123                | 154              | 192              |               |                |      |

## 4. Label





**KGP Electronics GmbH**  
Hueckstraße 19  
DE-58511 Lüdenscheid  
For LED modules only

**SC20W150-500CG-4W**  
145561  
LED Driver  
Constant Current Lighting track adaptors  
PRI:220-240VAC 50/60Hz Max.0.16A  
SEC:150-500mA 20-40VDC  
NO Load:55VDC Max.20W Fmax.50N↓






•tc  
0.5-1.5  
8-9mm  
SEC  
123

| Pout [W] | Iout [mA] | In [A] | λ     | 1  | 2  | 3 | Pout [W] | Iout [mA] | In [A] | λ     | 1  | 2  | 3  |
|----------|-----------|--------|-------|----|----|---|----------|-----------|--------|-------|----|----|----|
| 6        | 150       | 0.06   | 0.78C | -  | -  | - | 14       | 350       | 0.10   | 0.9C  | -  | -  | ON |
| 8        | 200       | 0.07   | 0.8C  | ON | -  | - | 16       | 400       | 0.12   | 0.9C  | ON | -  | ON |
| 10       | 250       | 0.08   | 0.84C | -  | ON | - | 18       | 450       | 0.14   | 0.92C | -  | ON | ON |
| 12       | 300       | 0.09   | 0.84C | ON | ON | - | 20       | 500       | 0.16   | 0.92C | ON | ON | ON |

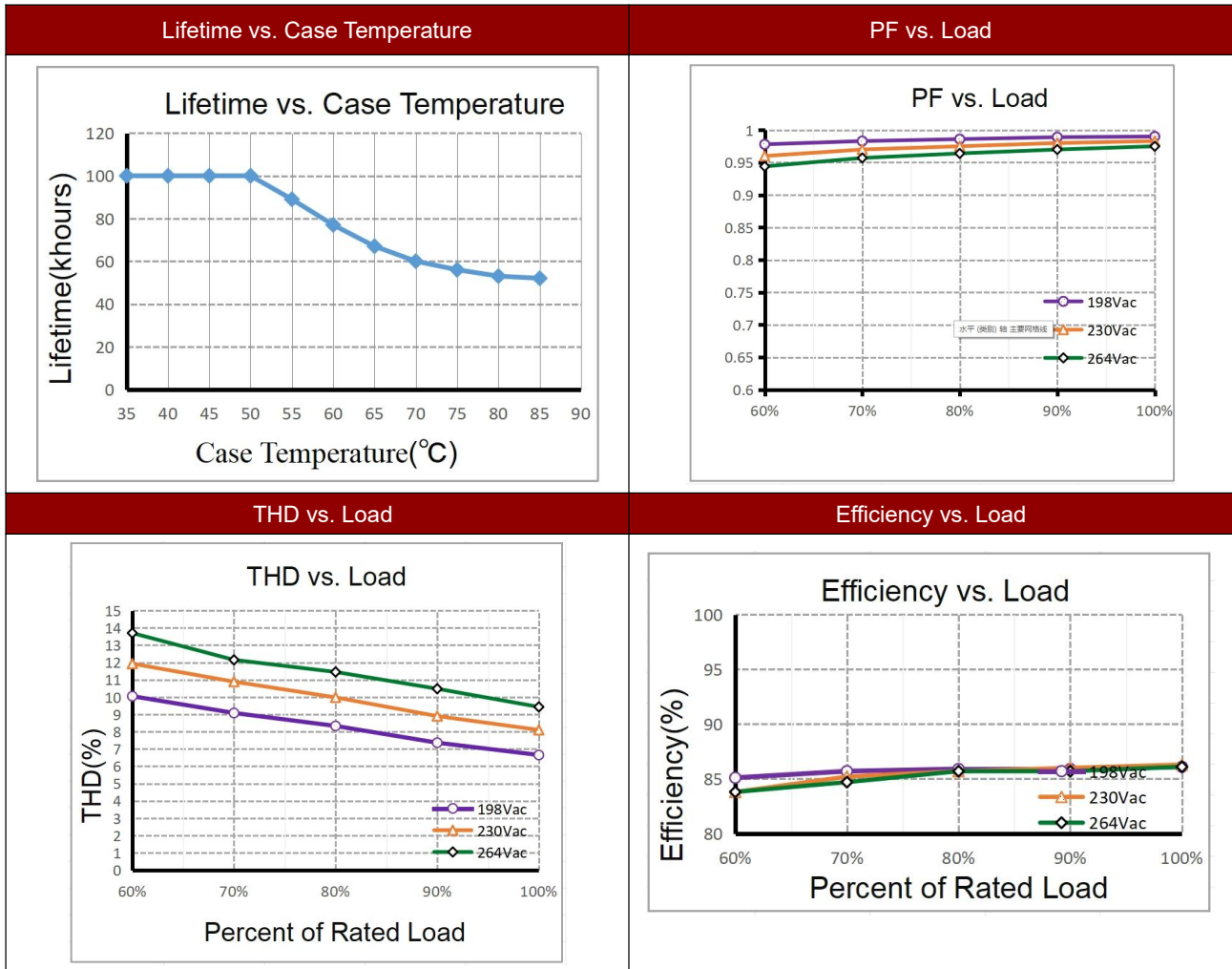
UK  
CA

CE  EAC 

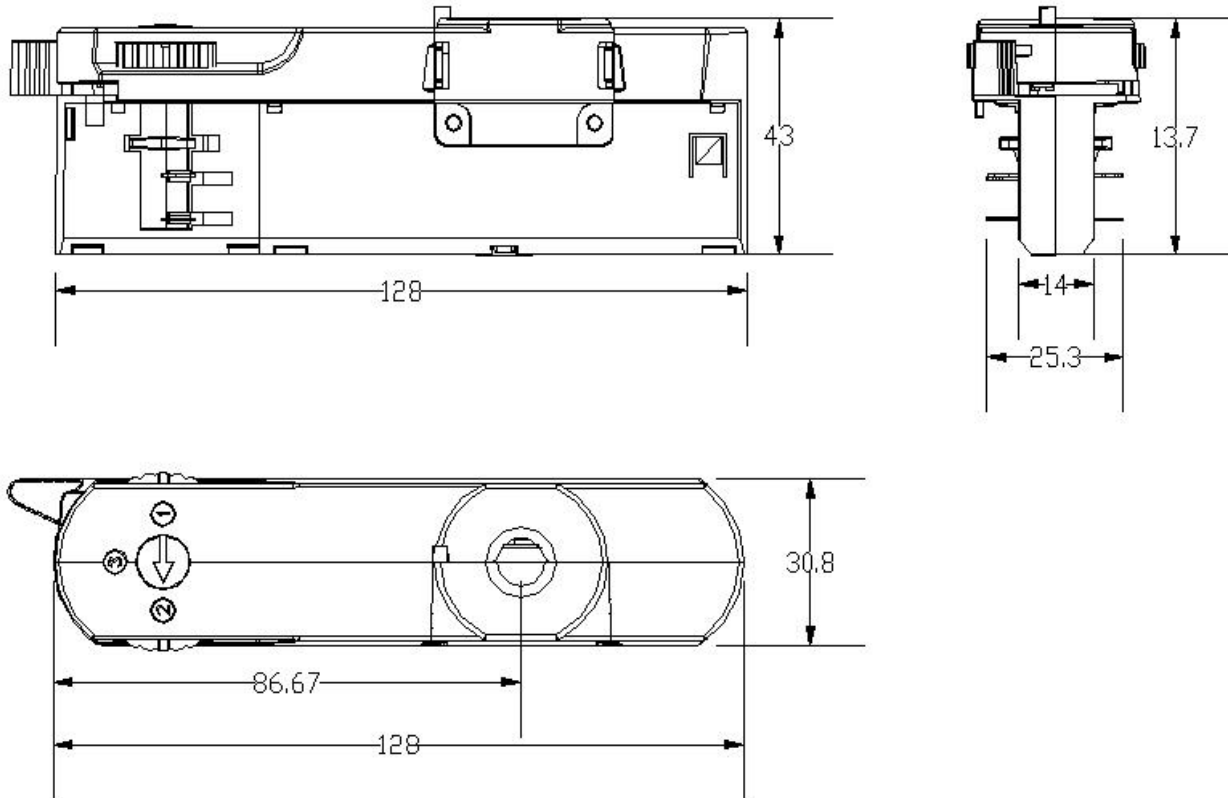
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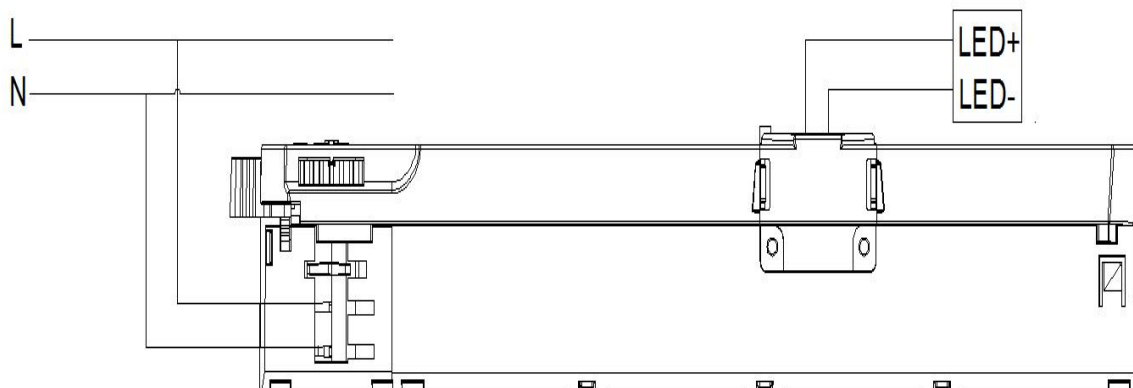
## 5. Electrical values



## 6. Dimension (Unit: mm)



## 7. Wiring Diagram



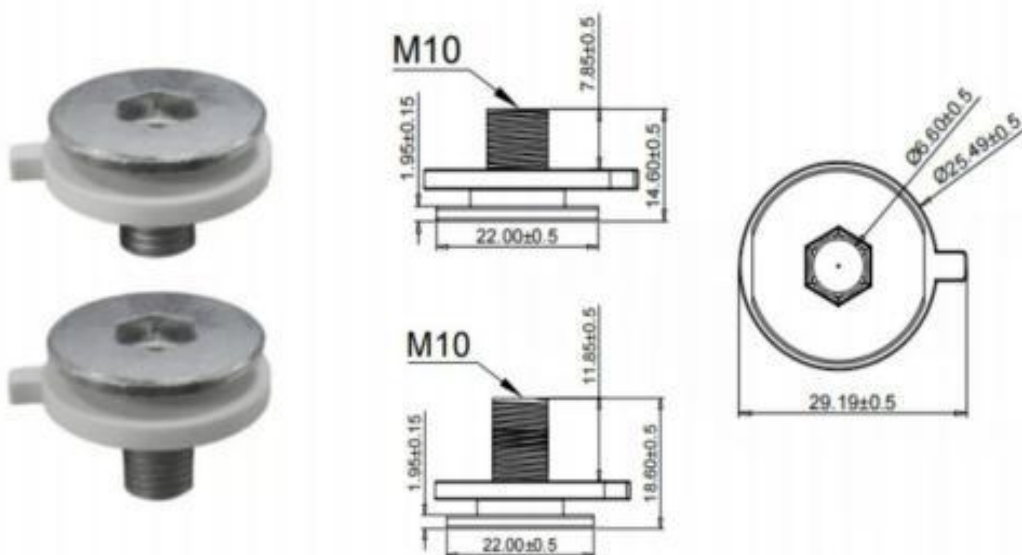
### 8. Packing information

| Packing way | Model             | Colour | Carton L*W*H(mm) | Pcs/ Carton | Net weight/ Pcs(kg) | Net weight/ Carton(kg) | Gross weight/ Carton(kg) |
|-------------|-------------------|--------|------------------|-------------|---------------------|------------------------|--------------------------|
| Industrial  | SC20W150-500CG-4W | White  | L525*W285*H 390  | 150         | 0.078               | 11.7                   | 12.2                     |
|             | SC20W150-500CG-4B | Black  |                  |             |                     |                        |                          |
|             | SC20W150-500CG-4G | Grey   |                  |             |                     |                        |                          |

### 9. Ordering data

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

| Model No          | Item Code | Qty/ctn | Weight/pcs |
|-------------------|-----------|---------|------------|
| SC20W150-500CG-4W | 145561    | 150     | 78         |
| SC20W150-500CG-4B | 145541    | 150     | 78         |
| SC20W150-500CG-4G | 145551    | 150     | 78         |
| NIP M10x1x8 B G2  | 142261    | 1600    | 9.31       |
| NIP M10x1x8 G G2  | 142271    | 1600    | 9.31       |
| NIP M10x1x8 W G2  | 142281    | 1600    | 9.31       |
| NIP M10x1x12 B G2 | 142211    | 1600    | 10.01      |
| NIP M10x1x12 G G2 | 142221    | 1600    | 10.01      |
| NIP M10x1x12 W G2 | 142231    | 1600    | 10.01      |



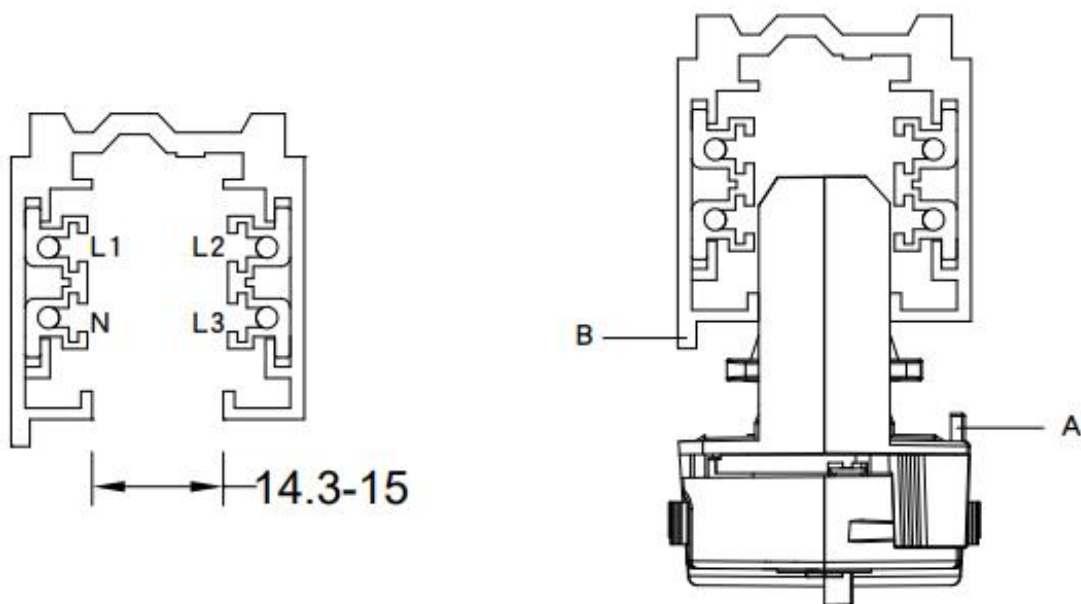
## 10. Suitable for following tracks

| Serial number | Brand         | Track model     | System |
|---------------|---------------|-----------------|--------|
| 1             | Global        | XTS11 & XTSC611 | 3P     |
| 2             | A.A.G STUCCHI | 9000A-2-ST      | 3P     |
| 3             | Eutrac        | 25-106          | 3P     |
| 4             | Unipro        | T32B            | 3P     |
| 5             | PowerGEAR     | Pro-0431L       | 3P     |
| 6             | 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 9000A-2-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 T32B tracks, and its brand is Unipro.
5. The model name is Pro-0431L tracks, and its brand is PowerGEAR.
6. The model name is 1079301000 tracks, and its brand is ERCO.
7. If other brands are suitable, please communicate and consult first

## 11. Phase track light rail specification:



## 12. Lighting track adapter and rail system installation diagram:



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

## 13. 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.
- This can be done via mains reset or via interface (DALI, DSI, switch DIM).

## 14. 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

**15. REVISION HISTORY**

| <b>DATE</b> | <b>REV</b> | <b>Modification details</b>                                    |
|-------------|------------|----------------------------------------------------------------|
| 2022-04-18  | V1.0       | Initial release.                                               |
| 2024-09-02  | V1.1       | Update nipple and compatible track                             |
| 2024-09-21  | V1.2       | Update Efficiency ,Tc and Life Time                            |
| 2024-09-21  | V1.3       | Update nipple                                                  |
| 2025-08-12  | V1.4       | Insert item code ,ordering number and update label and picture |
|             |            |                                                                |