

## Features



- Independent super ultra design
- Non-dimmable constant voltage LED driver
- Flicker-free
- Captured terminal screws
- Protections: opencircuit, shortcircuit, overload, overtemperature
- SELV equivalent
- DC input compatible (176-280VDC)
- Differential mode 2kV and common mode 2kV surge immunity
- Suitable for protection class I&II luminaires
- Protection class II



## Selection Guide

| Model No. | Nominal Voltage (V) | Nominal Current (A) | Power Factor (λ) | THD Full load (%) | Max. Output (W) | Output Current (A) | Output Voltage (V) | No Load Voltage (V) | Efficiency Full Load (%) |
|-----------|---------------------|---------------------|------------------|-------------------|-----------------|--------------------|--------------------|---------------------|--------------------------|
| UT-50-12  | 220-240             | 0.30                | 0.95             | 20                | 50              | 0-4.17             | 12                 | 12.6                | 88                       |
| UT-50-24  | 220-240             | 0.30                | 0.95             | 20                | 50              | 0-2.08             | 24                 | 25.2                | 88                       |

## Input Parameters

| Parameter                                                                                                                                                                                                                                                                                      | Condition               | Min.      | Typ.    | Max.   |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------|---------|--------|-----------------|-------------------------|--|--|--|------|-----|-----|-----|-----|---|---|---|----|----|---|----|----|----|----|
| Input Voltage Range                                                                                                                                                                                                                                                                            | AC Input                | 198VAC    | --      | 264VAC |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |
|                                                                                                                                                                                                                                                                                                | DC Input                | 176VDC    | --      | 280VDC |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |
| Rated Input Frequency                                                                                                                                                                                                                                                                          | AC Input                | --        | 50/60Hz | --     |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |
| No-load Power Consumption                                                                                                                                                                                                                                                                      |                         | --        | --      | 0.5W   |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |
| Standby Power Consumption                                                                                                                                                                                                                                                                      |                         | --        | --      | N/A    |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |
| Inrush Current                                                                                                                                                                                                                                                                                 | Cold Start@230V         | 35A/200us |         |        |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |
| Max.units Per Circuit Breaker                                                                                                                                                                                                                                                                  |                         |           |         |        |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |
| <table><tr><td>Circuit Breaker</td><td colspan="4">Circuit Breaker Current</td></tr><tr><td>Typ.</td><td>10A</td><td>13A</td><td>16A</td><td>20A</td></tr><tr><td>B</td><td>7</td><td>9</td><td>11</td><td>14</td></tr><tr><td>C</td><td>15</td><td>20</td><td>25</td><td>31</td></tr></table> |                         |           |         |        | Circuit Breaker | Circuit Breaker Current |  |  |  | Typ. | 10A | 13A | 16A | 20A | B | 7 | 9 | 11 | 14 | C | 15 | 20 | 25 | 31 |
| Circuit Breaker                                                                                                                                                                                                                                                                                | Circuit Breaker Current |           |         |        |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |
| Typ.                                                                                                                                                                                                                                                                                           | 10A                     | 13A       | 16A     | 20A    |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |
| B                                                                                                                                                                                                                                                                                              | 7                       | 9         | 11      | 14     |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |
| C                                                                                                                                                                                                                                                                                              | 15                      | 20        | 25      | 31     |                 |                         |  |  |  |      |     |     |     |     |   |   |   |    |    |   |    |    |    |    |

## Output Parameters

| Parameter                      | Condition                               | Min. | Typ. | Max. |
|--------------------------------|-----------------------------------------|------|------|------|
| Output Accuracy                | Full Load@230V                          | --   | ±5%  | --   |
| Ripple & Noise                 | Low Frequency < 120Hz, Full Load@230VAC | --   | --   | 15%  |
| Pst LM                         |                                         | --   | --   | 1    |
| SVM                            |                                         | --   | --   | 0.4  |
| Galvanic Isolation             | SELV                                    |      |      |      |
| Short-Circuit Protection (SCP) | Auto-Recover If Fault Is Removed        |      |      |      |

|                                   |                                  |
|-----------------------------------|----------------------------------|
| Over-Temperature Protection (OTP) | Auto-Recover If Fault Is Removed |
| Over-Voltage Protection (OVP)     | N/A                              |
| Over-Current Protection (OCP)     | Auto-Recover If Fault Is Removed |

### General Parameters

| Parameter                        | Condition                                              | Value                        |
|----------------------------------|--------------------------------------------------------|------------------------------|
| Ambient Temperature Range $t_a$  |                                                        | -20...+45°C                  |
| Maximum Case Temperature $t_c$   | Measured on $t_c$ point indicated of the product label | 90°C                         |
| Max.Case Temp.In Fault Condition |                                                        | 110°C                        |
| Storage Temperature Range        |                                                        | -20...+70°C                  |
| Relative Humidity                | Non Condensing                                         | 5...85%                      |
| Withstand Voltage                | I/P-O/P                                                | 3.75kVAC, I leakage<5mA, 60s |
| Surge Transient Protection       | L-N, L/N-PE                                            | 2kV, 2kV                     |
| Environmental Rating             |                                                        | Indoor                       |
| IP Rating                        |                                                        | IP20                         |
| Mains Switching Cycles           |                                                        | > 100,000                    |
| Expected Lifetime                | $T_{max}=90^{\circ}\text{C}$ , 0.2%/1000h failure rate | 50,000h                      |

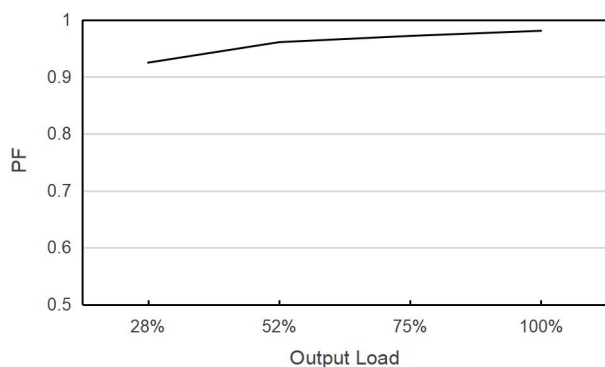
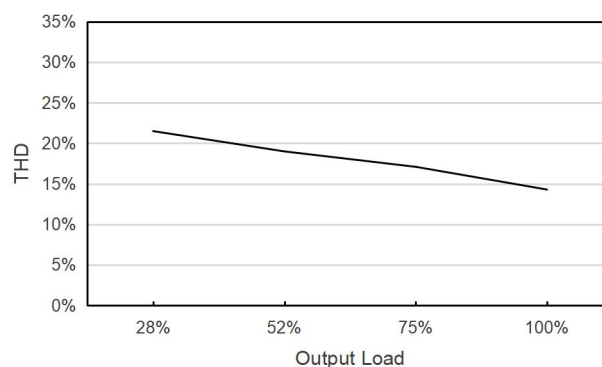
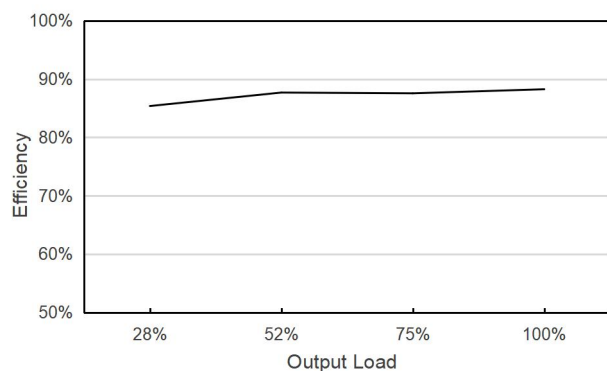
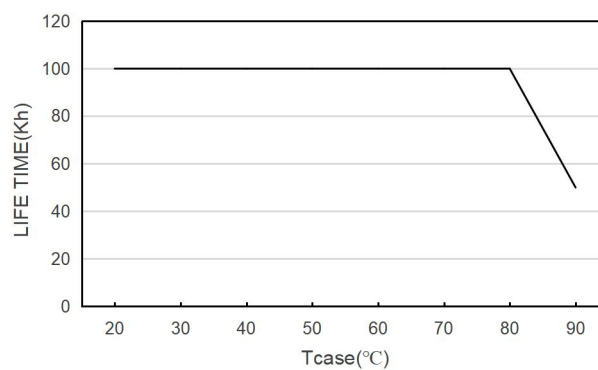
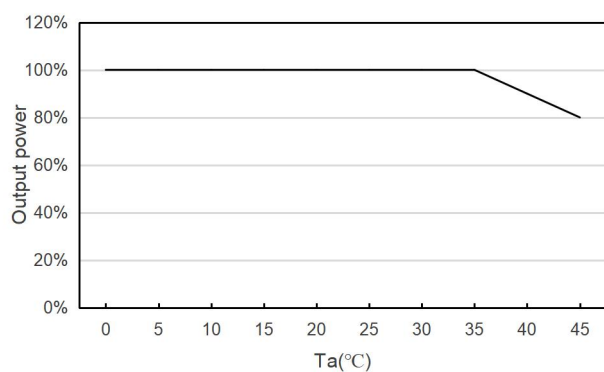
### Physical Parameters

|                       |                |
|-----------------------|----------------|
| Housing Material      | PC             |
| Type of connection    | Screw terminal |
| Dimensions (LxWxH)    | 175x58x16mm    |
| Mounting hole spacing | 137x52mm       |
| Weight                | 153g $\pm$ 5g  |

### Standards

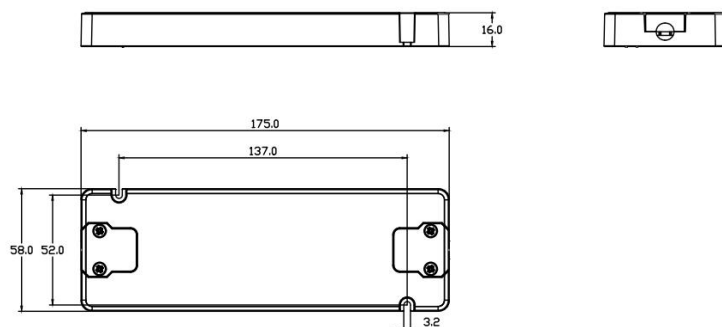
|                  |                                                |
|------------------|------------------------------------------------|
| Safety Standards | EN 61347-1, EN 61347-2-13, EN60335, IEC 60335  |
| Performance      | EN 62384                                       |
| EMC Standards    | EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547 |

\*ALL parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.

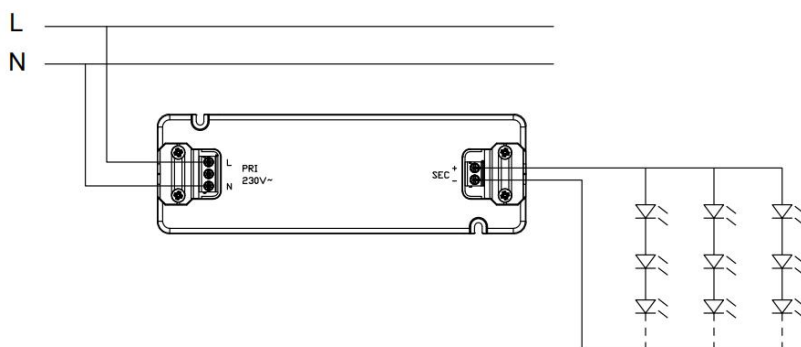
**Product Characteristic Curve****Power Factor vs Load****Total Harmonic Distortion vs Load****Efficiency vs Load****Life Time vs Case Temperature****Output power vs Ambient temperature**

## Appearance of Size

Dimension Drawing(mm)



Wiring Diagram



### PRI

Cable cross-section: 0.75-1.5mm<sup>2</sup>

Stripping: 6mm

### SEC

Cable cross-section: 0.5-1.5mm<sup>2</sup>

Stripping: 6mm

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.