

CC STREET & INDUSTRY SIMPLE FIX



ComfortLine SIMPLE FIX I-HSP

186297, 186298, 186301, 186302

Typical Applications

Built-in in linear luminaires for

- Industry lighting



ComfortLine Simple Fix I-HSP

- **VERY LOW RIPPLE CURRENT: < 3%**
- **SURGE PROTECTION: UP TO 3 KV**
- **SUITABLE FOR EMERGENCY ESCAPE LIGHTING SYSTEMS ACC. TO EN 50172**
- **WITH INTEGRATED CORD GRIP FOR INDEPENDENT OPERATION**
- **LONG SERVICE LIFE: UP TO 100,000 HRS.**
- **PRODUCT GUARANTEE: 5 YEARS**



ComfortLine Simple Fix I-HSP

Product features

- Compact metal casing shape for built-in operation or plastic casing with integrated cord grip for independent operation.

Functions

- With 12 V interface: max. 2 W

Electrical features

- Mains voltage: 220–240 V $\pm 10\%$
- Mains frequency: 50–60 Hz
- DC operation: 198–264 V, 0 Hz (can be reduced to 176 V with reduced service life time)
- Push-in terminals: 0.2–1.5 mm²
- Power factor at full load: > 0.95
- Max. working voltage (U_{OUT}): 450 V
- Secondary side switching of LED modules is not allowed.

Safety features

- Electronic short-circuit protection
- Overload protection
- Overtemperature protection
- The LEDs are thermally protected by the driver's NTC interface, which ensures the current will be reduced when a critical temperature is reached.

NTC at LED module 10 k Ω

(Type Nurata NCP18XH103J03RB)

| R (k Ω) | Nominal current (%) |
|-----------------|---------------------|
| 10 | 100 |
| < 1.49 | 60 |
| < 1.13 | 0 (off) |

- Protection against "no load" operation
- Degree of protection: IP20
- Protection class I

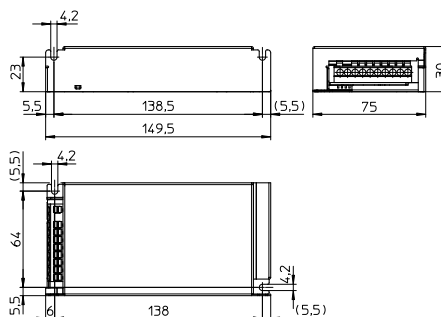


Packaging units

| Ref. No. | Packaging unit | | |
|----------------|----------------|------------------|----------|
| | Pieces per box | Boxes per pallet | Weight g |
| 186297, 186301 | 12 | 60 | 288 |
| 186298, 186302 | 7 | 75 | 335 |

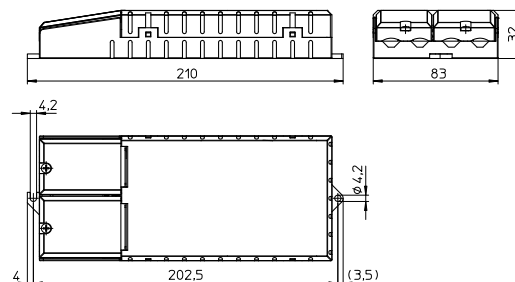
Dimensions built-in drivers

- Casing: M36
- Ref. No.: 186297, 186301
- Length: 149.5 mm
- Width: 75 mm
- Height: 30 mm



Dimensions independent drivers

- Casing: K38
- Ref. No.: 186298, 186302
- Length: 210 mm
- Width: 83 mm
- Height: 32 mm



Applied standards

- EN 61347-1
- EN 61347-2-13
- EN 61547
- EN 61000-3-2
- EN 62384
- EN 55015



Product guarantee

- 5 years
- The conditions for the Product Guarantee of the Vossloh-Schwabe Group shall apply as published on our homepage (www.vossloh-schwabe.com). We will be happy to send you these conditions upon request.

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

Electrical characteristics

| Max. output W | Type | Ref. No. | Voltage 50–60 Hz V | Mains current mA | Inrush current A / μ s | Current output DC mA (\pm 5%) | Voltage output DC (V) | THD at full load % (230 V) | Efficiency at full load % (230 V) | Ripple 100 Hz % |
|--------------------------|---------------|---------------|--------------------|------------------|----------------------------|----------------------------------|-----------------------|----------------------------|-----------------------------------|-----------------|
| M36 – Built-in | | | | | | | | | | |
| 112 | ECXe 700.057 | 186297 | 198–264 | 595–445 | 63 / 145 | 700 | 85–160 | > 20 | > 91 | < 1 |
| | | | 220–240 | 550–510 | | | | | | |
| 126 | ECXe 1050.059 | 186301 | 198–264 | 660–495 | 63 / 145 | 1050 | 85–120 | > 20 | > 91 | < 2 |
| | | | 220–240 | 630–590 | | | | | | |
| K38 – Independent | | | | | | | | | | |
| 112 | ECXe 700.057 | 186298 | 198–264 | 595–445 | 63 / 145 | 700 | 85–160 | > 20 | > 91 | < 1 |
| | | | 220–240 | 550–510 | | | | | | |
| 126 | ECXe 1050.059 | 186302 | 198–264 | 660–495 | 63 / 145 | 1050 | 85–120 | > 20 | > 91 | < 2 |
| | | | 220–240 | 630–590 | | | | | | |

Maximum ratings

Exceeding the maximum ratings can lead to reduction of service life or destruction of the drivers.

| Ref. No. | Ambient temperature range | | Operation humidity range | | Storage temperature range | | Storage humidity range | | Max. operation temperature at t_c point °C | Degree of protection |
|----------|---------------------------|---------|--------------------------|--------|---------------------------|---------|------------------------|--------|--|----------------------|
| | °C min. | °C max. | % min. | % max. | °C min. | °C max. | % min. | % max. | | |
| 186297 | -25 | +50 | 20 | 60 | -40 | +80 | 5 | 95 | +70 | IP20 |
| 186301 | | | | | | | | | +75 | |
| 186298 | | | | | | | | | +80 | |
| 186302 | | | | | | | | | +90 | |

Expected service life time

at operation temperatures at t_c point

| Operation current | Ref. No. | | | | | | | |
|-------------------|----------|--------|---------|--------|---------|--------|---------|--------|
| | 186297 | | 186301 | | 186298 | | 186302 | |
| All | 60 °C | 70 °C | 65 °C | 75 °C | 70 °C | 80 °C | 80 °C | 90 °C |
| hrs. | 100,000 | 50,000 | 100,000 | 50,000 | 100,000 | 50,000 | 100,000 | 50,000 |

Output voltage (U_{OUT})

According to EN 61347-1, U_{OUT} indicates which voltage can occur at the output terminals directly or between the output terminals and the PE terminal of the LED driver. This value is given for non-insulated drivers.

The used LED module must have an insulation voltage that is at least as high as the specified U_{OUT} voltage of the driver.

Leakage current

Leakage currents are present in all electronic converters or luminaires with PE connection and must be observed especially when using non-insulated LED drivers. The PCB surfaces of LED modules form a capacitance with grounded LED aluminum circuit boards, heat sinks or mounting plates. This leads to capacitive leakage currents between the connection poles of the LED (+ and -) and the PE terminal. These capacitances should be kept as small as possible, since they are responsible for a possible glowing or flickering of the LEDs in standby mode. In extreme cases, the maximum permissible leakage current of the luminaire according to EN 60598 paragraph 10.3 may be exceeded. The leakage current is also relevant when using RCD circuit breakers.

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