CC COMPACT SIMPLE FIX

EASYLINE SIMPLE FIX C-R30 100 V

186916, 186917, 186918, 186919, 186920, 186921

Typical Applications

Built-in in or independent version for

- Shop lighting
- Downlights
- Residential lighting

EasyLine Simple Fix C-R30 100 V

- **WITH INTEGRATED CORD GRIP FOR INDEPENDENT OPERATION**
- **SELV**
- **LONG SERVICE LIFE: UP TO 50,000 HRS.**
- **PRODUCT GUARANTEE: 5 YEARS**

5 YEARS GUARANTEE

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EasyLine Simple Fix C-R30 100 V

Product features
- Compact casing shape
- Fixed output current

Electrical features
- Mains voltage: 100–240 V ±10%
- Mains frequency: 50–60 Hz
- Push-in terminals: 0.5–1.5 mm²
- Power factor at full load:

Ref. No.	Power factor
186916	0.93
186917, 186918, 186919	0.90
186920, 186921	0.95

- Open circuit voltage ($U_{max.}$): 60 V
- Secondary side switching of LED modules is not allowed.

Safety features
- Protection against transient main peaks up to 0.5 kV (between L and N) and up to 1 kV (between L and N for 186920, 186921)
- Electronic short-circuit protection
- Overload protection
- Protection against "no load" operation
- Degree of protection: IP20
- Protection class II
- SELV

Packaging units

Ref. No.	Packaging unit		
	Pieces per box	Boxes per pallet	Weight g
186916	20	180	82
186917	20	180	70
186918	20	150	70
186919	20	150	70
186920	20	100	149
186921	20	100	161

IP20 · SELV · OVERLOAD PROTECTION · 0% NO LOAD OPERATION · 30 000 hours Min. Service Lifetime · Guarantee 5 years

Dimensions

Ref. No.	Casing	leads	Length a (mm)	Width b (mm)	Height c (mm)
EasyLine SimpleFix C-R30 100 V					
186916	K52	–	123	45	19
186917	K52	–	123	45	19
186918	K51.2	–	115	45	29
186919	K51.2	–	115	45	29
186920	K27	–	105	68	32
186921	K27	–	105	68	32

Product guarantee
- 5 years
  for operation at recommended operation temperature (see table for expected service life time on page 4)
- 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.

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

CE

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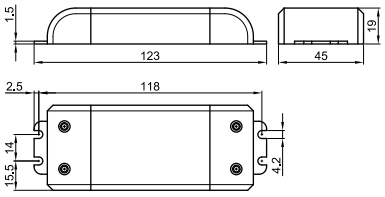
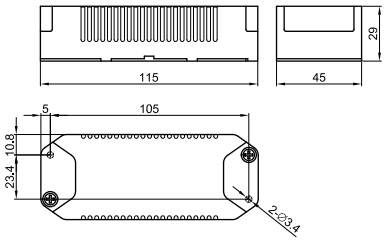
Product drawings and photos

K52



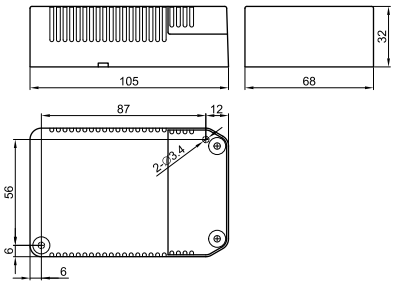
K52 – 186916, 186917

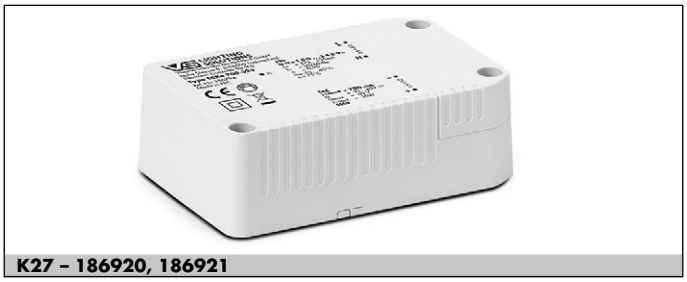
K51.2



K51.2 – 186918, 186919

K27





K27 – 186920, 186921

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Electrical characteristics

Max. output W	Type	**Ref. No.**	Voltage 50–60 Hz V	Mains current mA	Inrush current A / µs	Current output DC mA (± 7.5 %)	Voltage output DC (V)	THD at full load % (230 V)	Efficiency at full load % (230 V)	% (100 V)	Ripple 100 Hz %
9	ECXe 700.315	**186916**	100–240	105–45	2.05 / 35	700	5–13	15	> 83.5	> 76.0	≤ 30
16	ECXe 350.318	**186917**	100–240	209–81	5.00 / 48	350	23–46	18	> 86.5	> 80.0	≤ 30
21	ECXe 500.319	**186918**	100–240	259–99	18.00 / 90	500	21–42	14	> 88.5	> 80.0	≤ 30
21	ECXe 700.321	**186919**	100–240	252–98	17.55 / 90	700	10–29	17	> 87.5	> 79.0	≤ 30
30	ECXe 700.323	**186920**	100–240	372–135	21.00 / 86	700	21–43	19	> 91.0	> 82.0	≤ 30
44	ECXe 1050.324	**186921**	100–240	372–135	23.00 / 88	1050	21–42	17	> 91.5	> 85.0	≤ 30

Maximum ratings

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

Ref. No.	Ambient temperature range °C min.	°C max.	Operation humidity range % min.	% max.	Storage temperature range °C min.	°C max.	Storage humidity range % min.	% max.	Max. operation temperature at t_c point °C	Degree of protection
186917	–15	+45	20	60	–40	+80	5	95	+85	IP20
186916, 186918, 186919 186920, 186921	–15	+45	20	60	–40	+80	5	95	+75	IP20

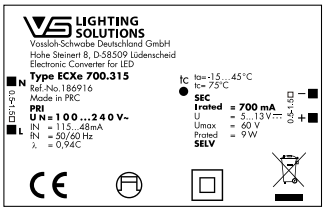
Expected service life time

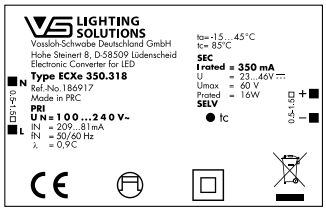
at operation temperatures at t_c point

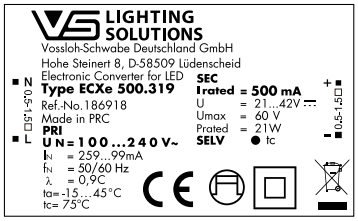
Operation current	Ref. No. 186917		186916, 186918, 186919, 186920, 186921	
All	75 °C*	85 °C	65 °C*	75 °C
hrs.	50.000	30.000	50.000	30.000

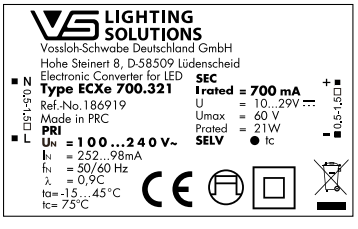
* recommended operation temperature

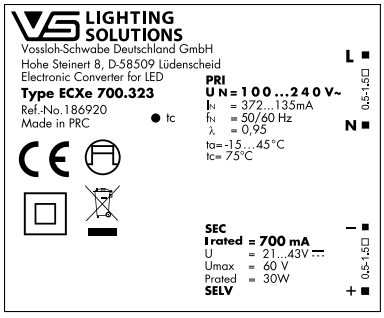
Product labels

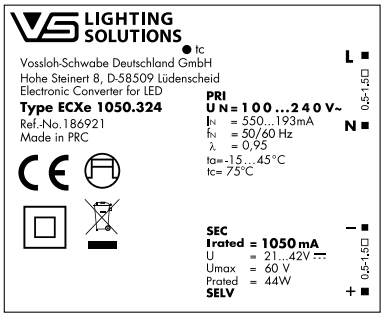












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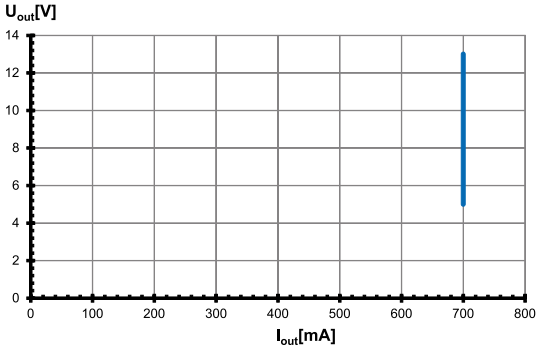
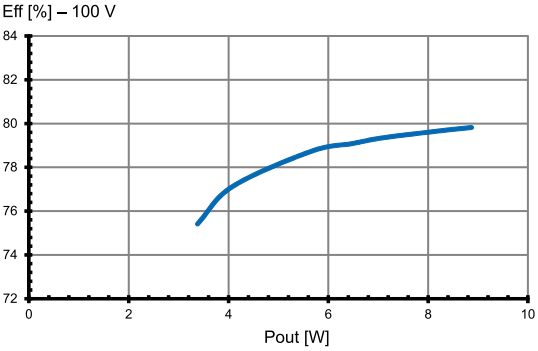
Typ. performance graphs for 186916 / Type ECXe 700.315

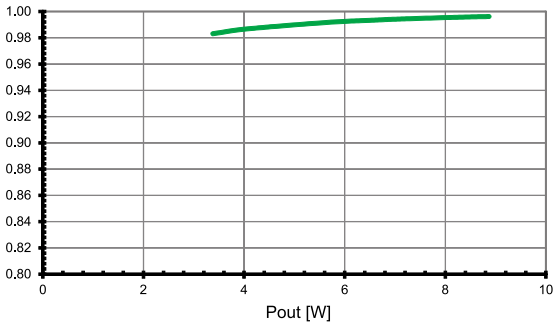
Working area



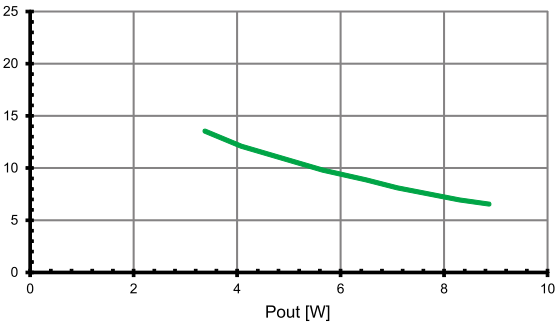
Efficiency at 100 V



Power factor at 100 V

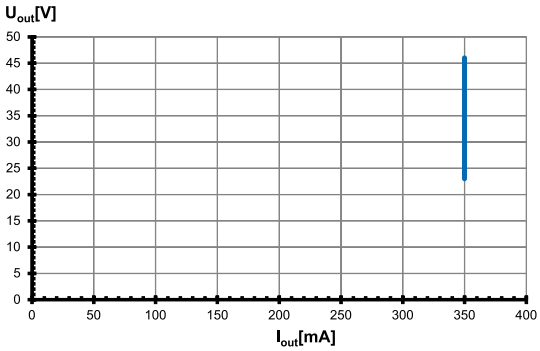


Total harmonic factor (THD) at 100 V

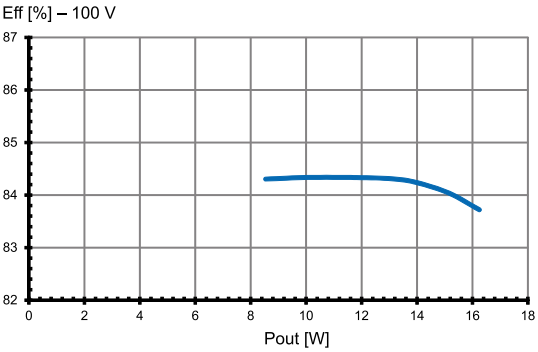


Typ. performance graphs for 186917 / Type ECXe 350.318

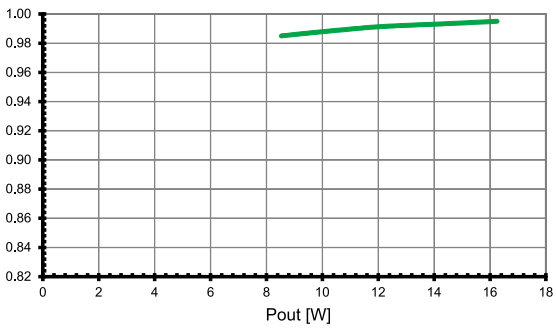
Working area



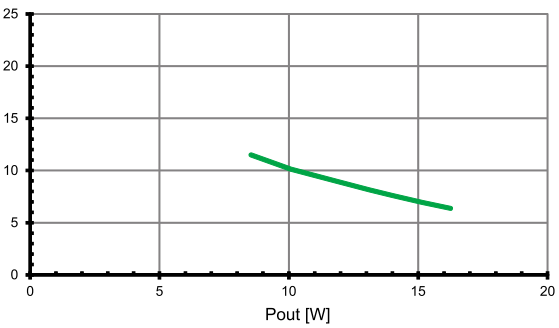
Efficiency at 100 V



Power factor at 100 V



Total harmonic factor (THD) at 100 V



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

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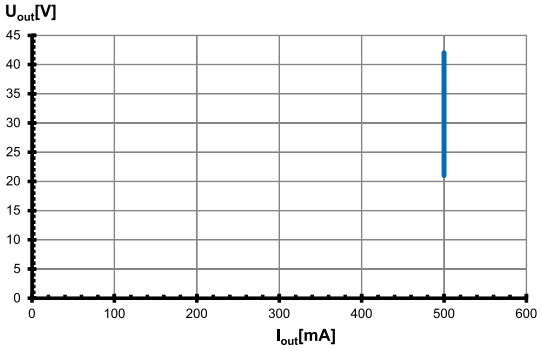
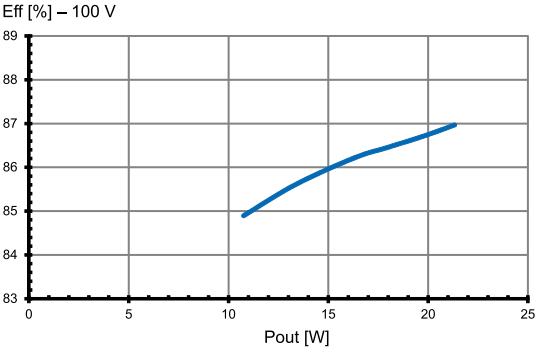
Typ. performance graphs for 186918 / Type ECXe 500.319

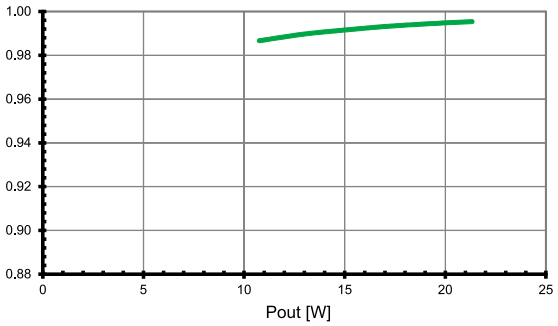
Working area



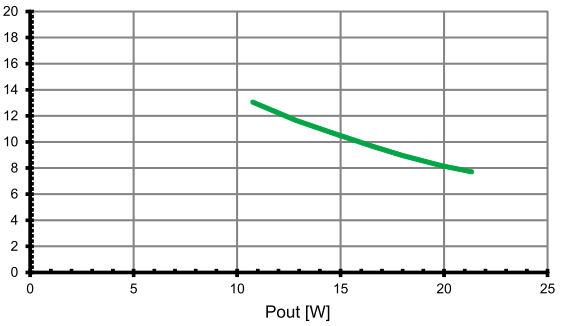
Efficiency at 100 V



Power factor at 100 V

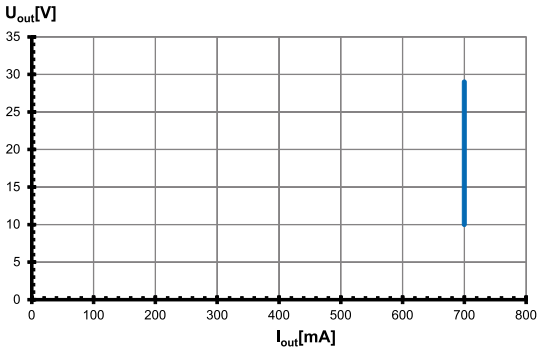


Total harmonic factor (THD) at 100 V

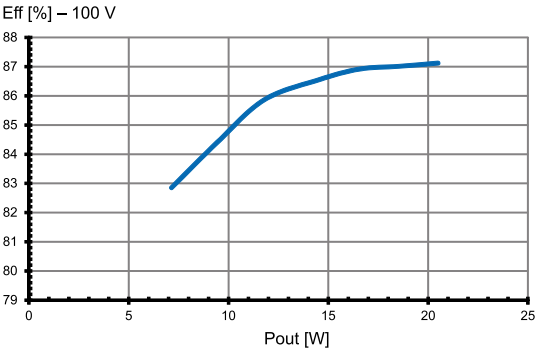


Typ. performance graphs for 186919 / Type ECXe 700.321

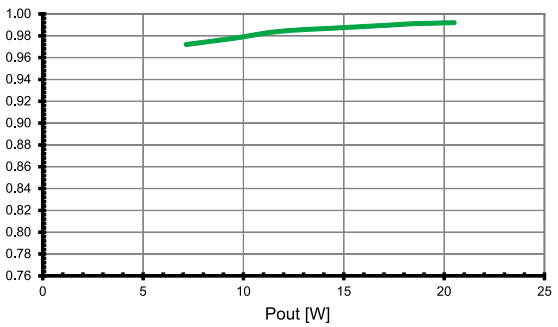
Working area



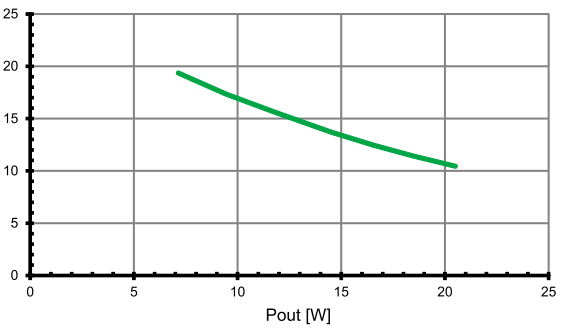
Efficiency at 100 V



Power factor at 100 V



Total harmonic factor (THD) at 100 V



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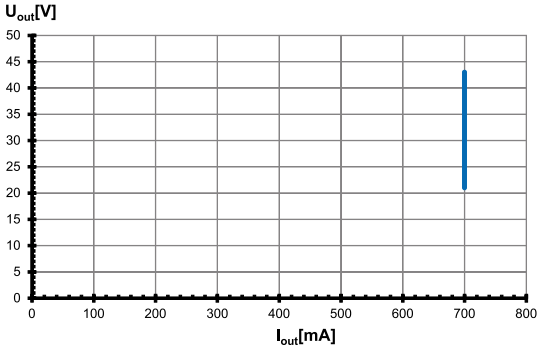
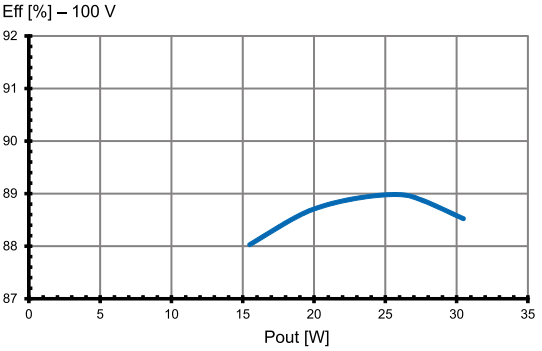
Typ. performance graphs for 186920 / Type ECXe 700.323

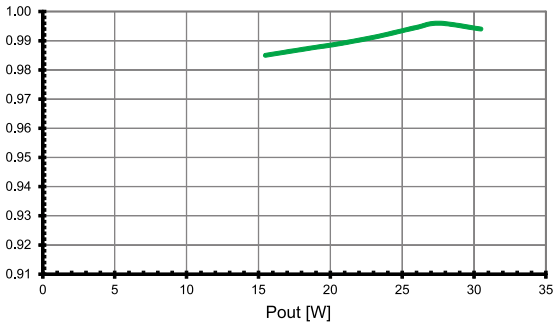
Working area



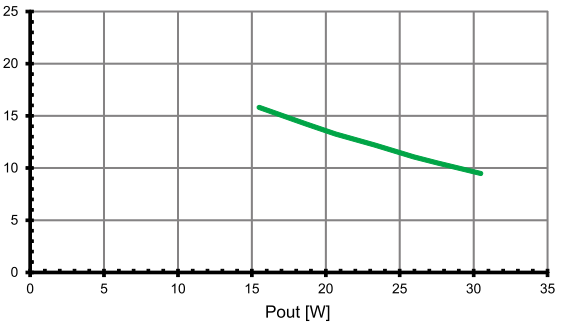
Efficiency at 100 V



Power factor at 100 V

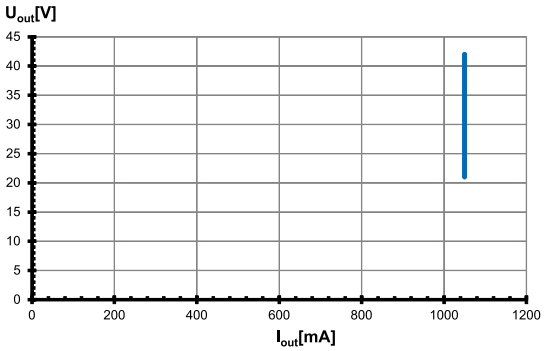


Total harmonic factor (THD) at 100 V

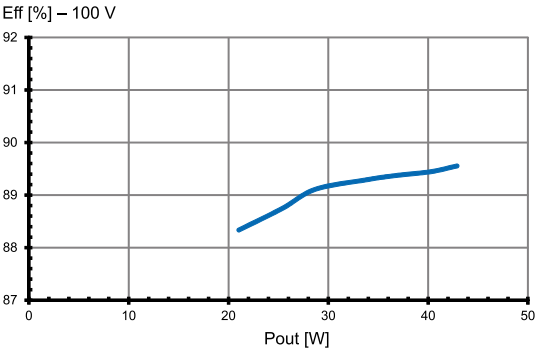


Typ. performance graphs for 186921 / Type ECXe 1050.324

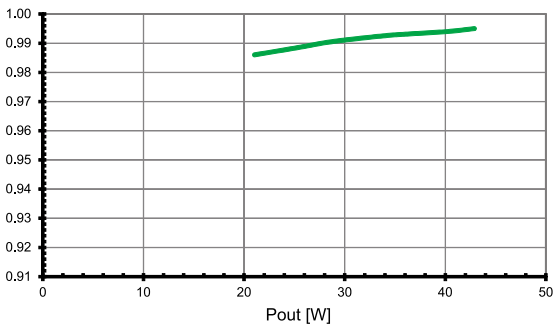
Working area



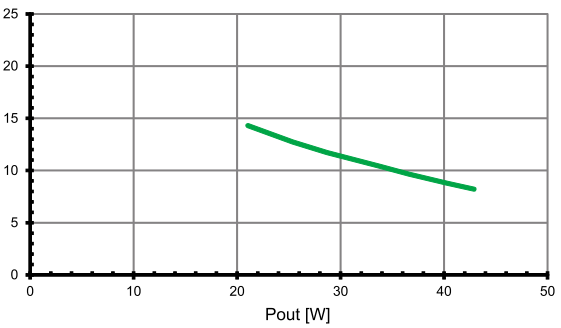
Efficiency at 100 V



Power factor at 100 V



Total harmonic factor (THD) at 100 V



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Safety functions

- Transient mains peaks protection:
  Values are in compliance with EN 61547 (interference immunity).
  Surges between L–N:
  186916, 186917, 186918, 186919, up to 0.5 kV
  186920, 186921 up to 1 kV
- Short-circuit protection: The control gear is protected against short-term short-circuit
- Overload protection: The control gear only works in range of rated output power and voltage problemfree (< 60 V DC).
  Please check before switch-on mains power supply that the selected LED load is suitable (see Electrical Characteristics on data sheet).
- No load operation: The control gear is protected against no load operation (open load).
- If any of the above mentioned safety functions will be triggered, disconnect the control gear from the power supply then find and eliminate the cause of the problem.

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Assembly and Safety Information

Installation must be carried out under observation of the relevant regulations and standards. Installation must be carried out in a voltage-free state (i.e. disconnection from the mains). The following advices must be observed; non-observance can result in the destruction of the LED drivers, fire and/or other hazards.

Mandatory regulations

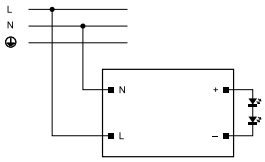
- DIN VDE 0100
- EN 60598-1

Mechanical mounting

- Mounting position: Independent application: Drivers are allowed to use for independent applications
- Mounting location: Independent LED drivers do not need to be integrated into a casing.
  Installation in outdoor luminaires: degree of protection for luminaire with water protection rate ≥ 4 (e.g. IP54 required).
- Degree of protection: IP20
- Clearance: Min. 0.10 m from walls. ceilings and insulation
- Surface: Solid and plane surface for optimum heat dissipation required.
- Heat transfer: If the driver is destined for installation in a luminaire. sufficient heat transfer must be ensured between the driver and the luminaire casing.
  LED drivers should be mounted with the greatest possible clearance to heat sources.
  During operation. the temperature measure at the driver's t_c point must not exceed the specified maximum value.
- Fastening: Using M3 screws in the designated holes
- Tightening torque: 0.2 Nm

Electrical installation

- Connection terminals: Push-in terminals for rigid or flexible conductors with a section of 0.5–2.5 mm²
- Stripped length: 8.5–10 mm
- Wiring: The mains conductor within the luminaire must be kept short (to reduce the induction of interference).
  Mains and lamp conductors must be kept separate and if possible should not be laid in parallel to one another.
  Max. secondary side lead length: 1 m
- Polarity: Please ensure the correct polarity of the leads prior to commissioning. Reversed polarity can destroy the modules.
- Through-wiring: Is not allowed.
- Secondary load: The sum of forward voltages of LED loads is within the tolerances which are mentioned in the Electrical Characteristics on the data sheet.
- Parallel wiring: Parallel connection of LED loads is not allowed.
- Wiring diagram:



Selection of automatic cut-outs for VS LED drivers

- Dimensioning automatic cut-outs
  High transient currents occur when an LED driver is switched on because the capacitors have to load. Ignition of LED modules occurs almost simultaneously. This also causes a simultaneous high demand for power. These high currents when the system is switched on put a strain on the automatic conductor cut-outs. which must be selected and dimensioned to suit.
- Release reaction
  The release reaction of the automatic conductor cut-outs comply with VDE 0641. part 11. for B. C characteristics. The values shown in the following tables are for guidance purposes only and are subject to system-dependent change.
- No. of LED drivers
  The maximum number of VS LED drivers applies to cases where the devices are switched on simultaneously. Specifications apply to single-pole fuses. The number of permissible drivers must be reduced by 20% for multi-pole fuses. The considered circuit impedance equals 400 mΩ (approx. 20 m [2.5 mm²] of conductor from the power supply to the distributor and a further 15 m to the luminaire).

Type	**Ref. No.**	Automatic cut-out type and possible no. of VS drivers pcs.			
Automatic cut-out type		B10	B13	B16	B20
ECXe 700.315	**186916**	78	101	125	156
ECXe 350.318	**186917**	46	60	74	93
ECXe 500.319	**186918**	38	50	61	77
ECXe 700.321	**186919**	37	48	59	74
ECXe 700.323	**186920**	27	35	44	55
ECXe 1050.324	**186921**	17	23	28	35
Automatic cut-out type		C10	C13	C16	C20
ECXe 700.315	**186916**	78	101	125	156
ECXe 350.318	**186917**	46	60	74	93
ECXe 500.319	**186918**	38	50	61	77
ECXe 700.321	**186919**	37	48	59	74
ECXe 700.323	**186920**	27	35	44	55
ECXe 1050.324	**186921**	17	23	28	35

– To limit capacitive inrush currents the current carrying capacity of each circuit breaker (fuse) can be increased by a factor of 2.5 with the help of our ESB (Ref. No.: 149820, 149821, 149822) inrush current limiters.

LIGHTING SOLUTIONS
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