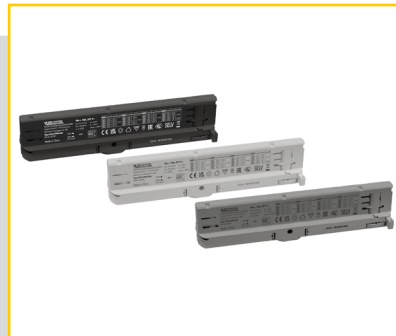


CC TRACK DIP SWITCH



EASYLINE DIP SWITCH UT-200 120-277 V

187396, 187397, 187398

Typical Applications

For common track systems

- Retail lighting

EasyLine DIP switch UT-160 Gen. 3

- **SELECTABLE OUTPUT CURRENT VIA DIP SWITCH**
- **COMPATIBLE WITH DIFFERENT 3-PHASE TRACK SYSTEMS**
- **WIDE INPUT VOLTAGE RANGE: 120-277 V**
- **SELV**
- **LONG SERVICE LIFE: UP TO 100,000 HRS.**
- **PRODUCT GUARANTEE: 5 YEARS**



EasyLine DIP switch UT-200 120–277 V

Product features

- Adapter with integrated LED driver electronics for common 3-phase track systems (compatibility see page 5)
- Available in three different casing colours: white (RAL 9003), black (RAL 9005) and grey (RAL 7040).

Functions

- Selectable current output by DIP switches
- The output current can be freely adjusted between 200 mA and 1050 mA

Electrical features

- Mains voltage: 120–277 V $\pm 10\%$
- Mains frequency: 50–60 Hz
- Power factor at full load: > 0.95
- Open circuit voltage ($U_{max.}$): 60 V
- Secondary side switching of LED modules is not allowed.
- SVM: < 0.4
- PstLM: < 1

Safety features

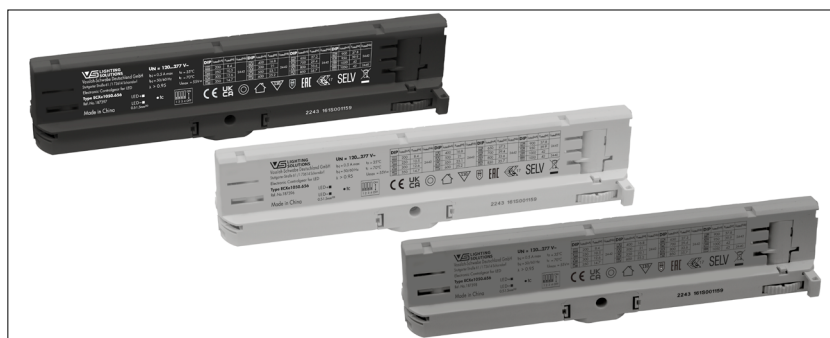
- Protection against transient main peaks up to 1 kV (between L and N)
- Electronic short-circuit protection
- Overload protection
- Degree of protection: IP20
- Protection class II
- SELV

Packaging units

Type	Packaging unit		
	Pieces per box	Boxes per pallet	Weight g
ECXe 1050.656	40	30	140

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.



Applied standards

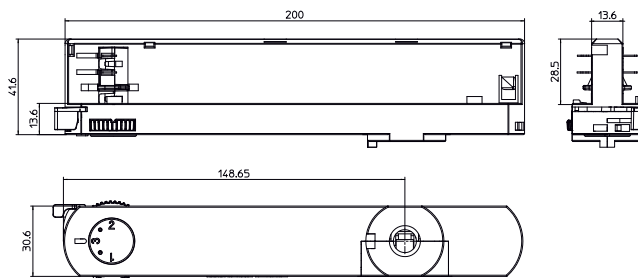
- EN 61347-1
- EN 61347-2-13
- EN 61547
- EN 61000-3-2
- EN 61000-3-3
- EN 62384
- EN 55015
- UL 1574 (incl. UL 8750)



Dimensions

Type	Casing	Length mm	Width mm	Height (mm) visible
ECXe 1050.656	UT-200	200	30.6	41.6 13.6

UT-200

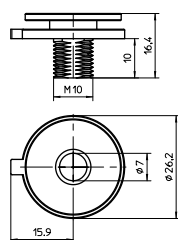


Connector nipple for track adapter

Material: zinc die-cast

Ref. No.: 187360

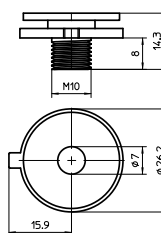
M10x1, length: 10 mm



Material: aluminium

Ref. No.: 187275

M10x1, length: 8 mm



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

LED Drivers – EasyLine DIP switch UT-200 120–277 V

Electrical characteristics

Max. output W	Type	Ref. No.	Casing colour	Voltage 50–60 Hz V	Mains current mA	Inrush current A / μ s	Current output DC mA ($\pm$ 7%)	Voltage output DC (V)	THD at full load % (230 V)	Efficiency at full load % (230 V)	Ripple 100 Hz %
42	ECXe 1050.656	187396	white (RAL 9003)	120–277	413–178	17 / 172	200–1050	see table DIP settings	4	85	5
		187397	black (RAL 9005)								
		187398	grey (RAL 7040)								

Maximum ratings

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

Type	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.		
ECXe 1050.656	–20	+35	10	90	–40	+85	10	90	+80	IP20

Expected service life time

at operation temperatures at t_c point

Operation current	Ref. No. 187396, 187397, 187398	
All	70 °C	80 °C
hrs.	100,000	50,000

ECXe 1050.656									
Pin 1	2	3	4	Power W	Current mA	Voltage V	Factory settings (mA)		
OFF	OFF	OFF	OFF	8.4	200	24–42	1050		
ON	OFF	OFF	OFF	10.5	250				
OFF	ON	OFF	OFF	12.6	300				
ON	ON	OFF	OFF	14.7	350				
OFF	OFF	ON	OFF	16.8	400				
ON	OFF	ON	OFF	21.0	500				
OFF	ON	ON	OFF	23.1	550				
ON	ON	ON	OFF	25.2	600				
OFF	OFF	OFF	ON	27.3	650				
ON	OFF	OFF	ON	29.4	700				
OFF	ON	OFF	ON	33.6	800				
ON	ON	OFF	ON	35.7	850				
OFF	OFF	ON	ON	37.8	900				
ON	OFF	ON	ON	39.9	950				
OFF	ON	ON	ON	42.0	1000				
ON	ON	ON	ON	42.0	1050	24–40			

Product labels

ECXe 1050.656



Vossloh-Schwabe Deutschland GmbH
Stuttgarter Straße 61/1 73614 Schorndorf
Electronic Controlgear for LED

Type ECXe1050.656
Ref.-No. 187396

Made in China

U_N = 120...277 V~
 I_{N1} = 0.5 A max. t_a = 35°C
 I_{N2} = 50/60 Hz t_c = 80°C
 λ : 0.45C/0.95 U_{max} = 59V_{ac}

DIP	200	250	300	350	400	500	550	600	650	700	800	850	900	950	1000	1050
Power (W)	8.4	10.5	12.6	14.7	16.8	21	23.1	25.2	27.3	29.4	33.6	35.7	37.8	39.9	42	44.0

LED+ ■ **tc** 

LED- ■ 

0.5-1.5mm²

CE UK EAC    

RECOGNIZED COMPONENT



5027993

CONFORMS TO
UL STD. 1574
CERTIFIED TO CSA STD.
C22.2 No. 250.570

CAUTION:
Risk of Electric Shock
Suitable for dry location use

ATTENTION:
Risque de choc électrique
Convient pour une
utilisation en milieu humide



Vossloh-Schwabe Deutschland GmbH
Stuttgarter Straße 61/1 73614 Schorndorf
Electronic Controlgear for LED

Type ECXe1050.656
Ref.-No. 187397

Made in China

U_N = 120...277 V~
 I_{N1} = 0.5 A max. t_a = 35°C
 I_{N2} = 50/60 Hz t_c = 80°C
 λ : 0.45C/0.95 U_{max} = 59V_{ac}

DIP	200	250	300	350	400	500	550	600	650	700	800	850	900	950	1000	1050
Power (W)	8.4	10.5	12.6	14.7	16.8	21	23.1	25.2	27.3	29.4	33.6	35.7	37.8	39.9	42	44.0

LED+ ■ **tc** 

LED- ■ 

0.5-1.5mm²

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Vossloh-Schwabe Deutschland GmbH
Stuttgarter Straße 61/1 73614 Schorndorf
Electronic Controlgear for LED

Type ECXe1050.656
Ref.-No. 187398

Made in China

U_N = 120...277 V~
 I_{N1} = 0.5 A max. t_a = 35°C
 I_{N2} = 50/60 Hz t_c = 80°C
 λ : 0.45C/0.95 U_{max} = 59V_{ac}

DIP	200	250	300	350	400	500	550	600	650	700	800	850	900	950	1000	1050
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LED+ ■ **tc** 

LED- ■ 

0.5-1.5mm²

CE UK EAC    

RECOGNIZED COMPONENT



5027993

CONFORMS TO
UL STD. 1574
CERTIFIED TO CSA STD.
C22.2 No. 250.570

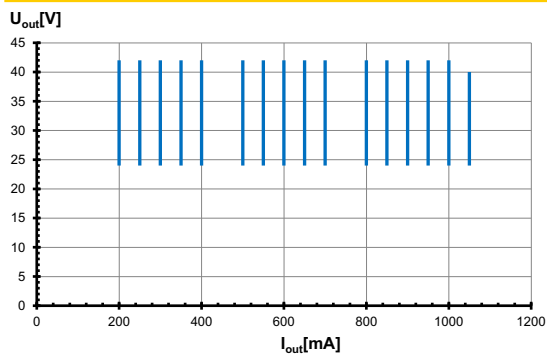
CAUTION:
Risk of Electric Shock
Suitable for dry location use

ATTENTION:
Risque de choc électrique
Convient pour une
utilisation en milieu humide

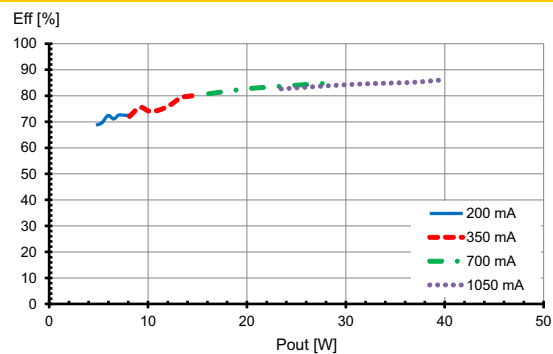
The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

Typ. performance graphs for 187396, 187397, 187398 / Type ECXe 1050.656

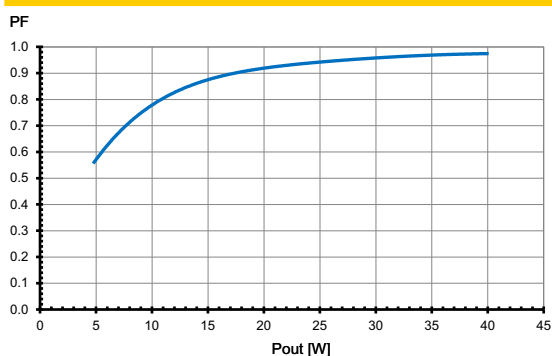
Working area at 230 V



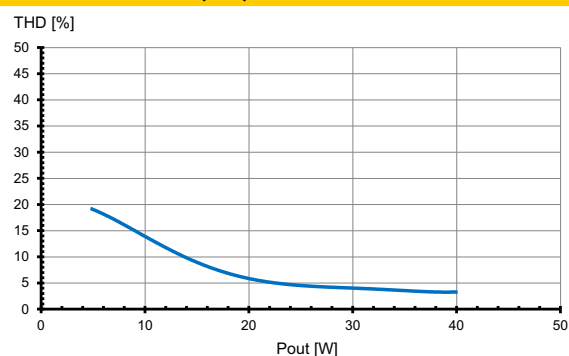
Efficiency at 230 V



Power factor at 230 V

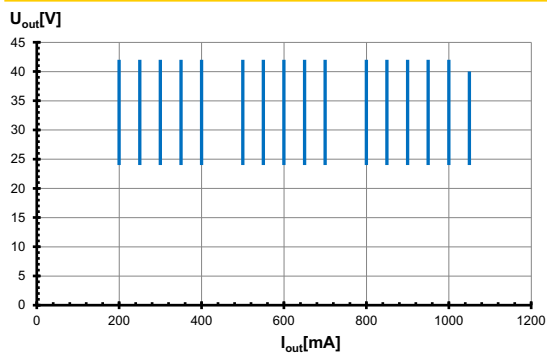


Total harmonic factor (THD) at 230 V

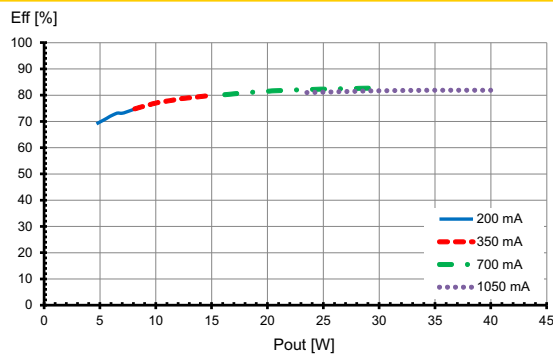


Typ. performance graphs for 187396, 187397, 187398 / Type ECXe 1050.656

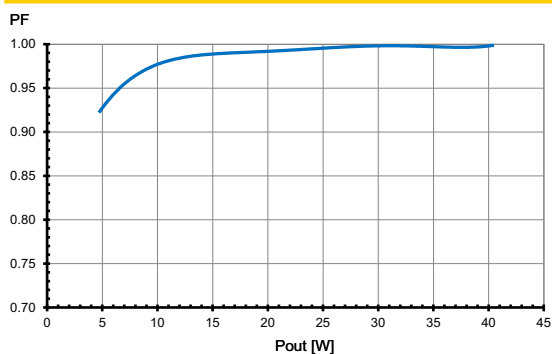
Working area at 120 V



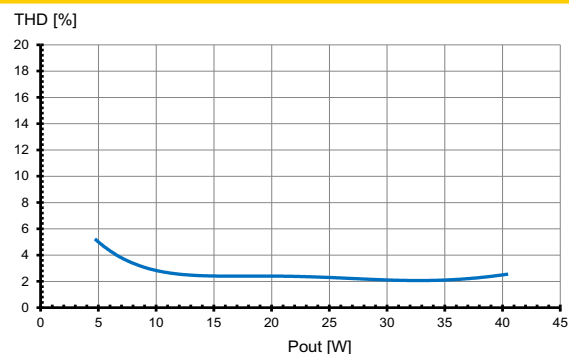
Efficiency at 120 V



Power factor at 120 V

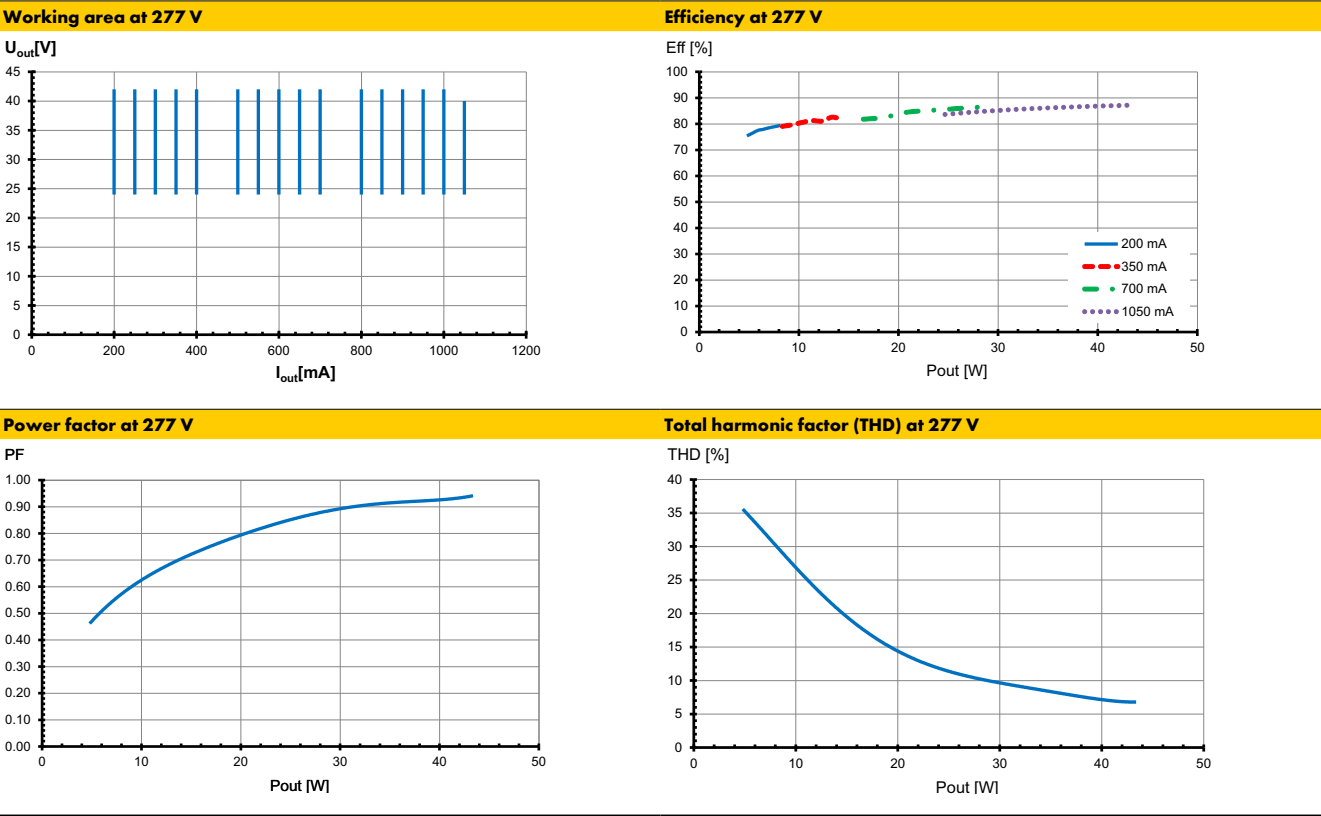


Total harmonic factor (THD) at 120 V



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Typ. performance graphs for 187396, 187397, 187398 / Type ECXe 1050.656



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Safety functions

- Transient mains peaks protection:
Values are in compliance with EN 61547
(interference immunity).
Surges between L–N: up to 1 kV
- Short-circuit protection: The control gear is protected against
permanent short-circuit with shut down
function.
- Overload protection: The control gear only works in range of rated
output power and voltage problemfree.
Please check before switch-on mains power
supply that the selected LED load is suitable
(see electrical characteristics on data sheet).
- Overheating: The control gear has overheating protection
acc. to IEC 61347-1 C 5a. In case of over-
heating the control gear will shut down and
auto resume after temperature problem is
removed.
- 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.

Compatibility of track rails

Suitable for following tracks

- Global
- PowerGear
- Ivela
- Stucchi
- Side
- Eutrac
- Zumtobel

Vossloh-Schwabe does not guarantee the compatibility of the tracks and the track-adaptor, because manufacturing tolerances of the tracks or changes made at the tracks by the manufacturer could affect the compatibility between the tracks and the adaptor.

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

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

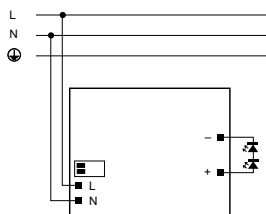
- DIN VDE 0100
- EN 60598-1

Mechanical mounting

- Mounting position and location:
Common track system
- 3-phase option:
3 phases are selectable with a rotary switch.
The neutral is in a fixed position in the track.
- Degree of protection: IP20
- Fastening:
Double mechanical locking for perfect track fixing
- Load:
max. up to 50 Nm

Electrical installation

- Connection terminals:
Push-in terminals for rigid or flexible conductors with a section of 0.2–0.75 mm²
- Stripped length:
8.5–10 mm
- 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 has to be within the tolerances which are mentioned in the table "Electrical Characteristics" in this data sheet.
- 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 B		B 10 A	B 16 A	B 20 A
ECXe 1050.656	187396, 187397, 187398	21	34	42
Automatic cut-out type C		C 10 A	C 16 A	C 20 A
ECXe 1050.656	187396, 187397, 187398	21	34	42

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