

CC COMPACT DIP SWITCH DIMMABLE



PRIMELINE DIP SWITCH C DALI2 MEMORY DATA

187692

Typical Applications

Built-in in compact luminaires for

- Shop lighting
- Office lighting
- Downlights



PrimeLine DIP Switch C DALI2 Memory Data

- **SELECTABLE OUTPUT CURRENT VIA DIP SWITCH**
- **DIMMABLE: DALI (ED.2) MEMORY DATA SPECIFICATION (PARTS 251/252/253)**
- **VARIOUS CORD GRIPS CAN BE FITTED**
- **SELV**
- **SUITABLE FOR EMERGENCY ESCAPE LIGHTING SYSTEMS ACC. TO EN 50172**
- **LONG SERVICE LIFE: UP TO 100.000 HRS.**
- **PRODUCT GUARANTEE: 5 YEARS**



PrimeLine DIP Switch C DALI2 Memory Data

Product features

- Compact casing shape

Functions

- Selectable current output by DIP Switch
- Suitable for central battery system for emergency lighting acc. to EN 50172

Electrical features

- Mains voltage: 220–240 V $\pm 10\%$
- Mains frequency: 50–60 Hz, 0 Hz
- DC Operation: 176–276 V (range of application)
- Push-in terminals:
Input: 0.75–1.5 mm²
Output: 0.5–1.5 mm²
- Power factor at full load: > 0.95
- Open circuit voltage ($U_{max.}$): 60 V
- Secondary side switching of LED modules is not allowed.

Dimming

- Dimming range: 1–100%

Safety features

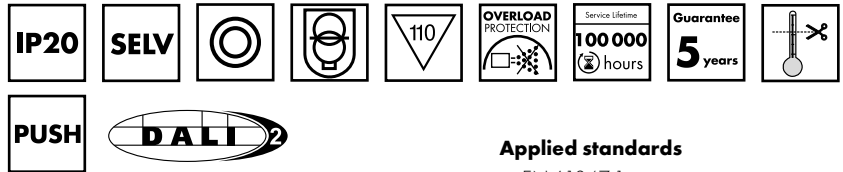
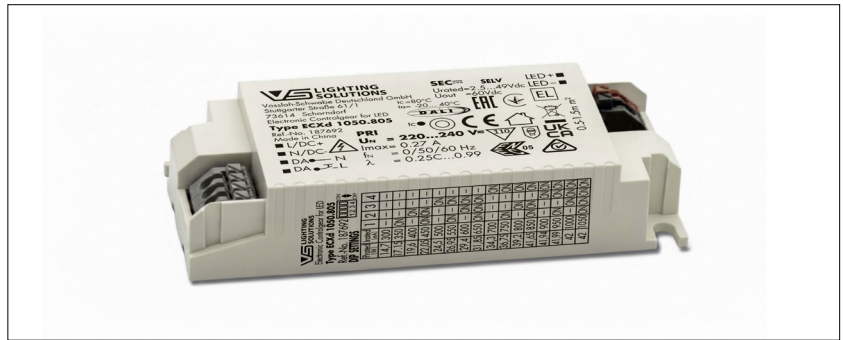
- Protection against transient main peaks up to 1 kV (between L and N)
- Electronic short-circuit protection
- Overload protection
- Degree of protection: IP20
- Protection class II
- SELV
- SVM: < 0.4
- PstLM: < 1

Packaging units

Ref. No.	Packaging unit		
	Pieces per box	Boxes per pallet	Weight g
187692	120	30	120

Product guarantee

- 5 years
for operation at recommended operation temperature (see table for expected service life time on the next page)
- 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.



Dimming

Analogue

Isolation

Symbol	Description
	Installation type: Built-in Double isolated
	The isolation type between the input and the output power circuits in the LED driver: SELV output

Applied standards

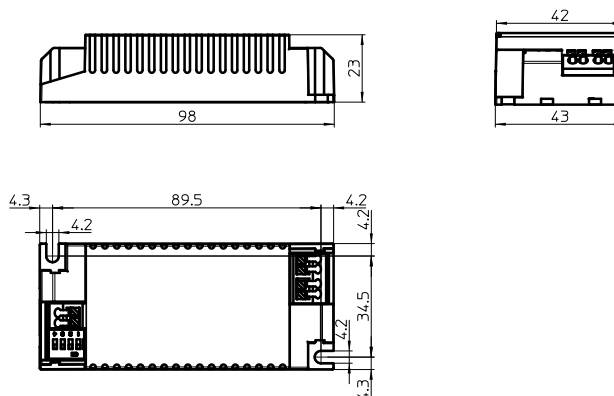
- EN 61347-1
- EN 61347-2-13
- EN 61547
- EN 61000-3-2/EN 61000-3-3
- EN 62384
- EN 55015
- EN 61000-4-2/EN 61000-4-5
- IEC 62386 ed.2 part 101/102/207/251/252/253



Dimensions

Ref. No.	Casing	Length mm	Width mm	Height mm
187692	K107.1	98	43	23

K107.1



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

Recommended cables – Built-in operation

Without cord grip

Input:

2x H03VVH2-F: 2x 0.5-1.5 mm²

Output:

H05VVH2-F: 2x 0.5-1.5 mm² / H05VV-F: 2x 0.5-1.5 mm²

Recommended cables – Independent operation

Cord grip "sl" for K107/K110

Available for independent operation

1 cord grip contains one upper and one lower part

Separately available

Input:

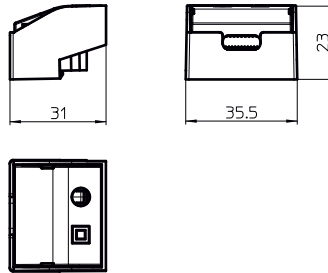
2x H05VV-F: 2x 1.5 mm²

Output:

H05VVH2-F: 2x 0.5-1.5 mm² / H05VV-F: 2x 0.5-1.5 mm²

Best.-Nr.: 187450 (1 pcs. cord grip sl for K107/K110)

Packaging unit: 20 pcs. (suffix -1702) / 120 pcs. (suffix -1703)



Cord grip "ws" for K107/K110

Available for independent operation

1 cord grip contains one upper and one lower part and a screw

Separately available

Input:

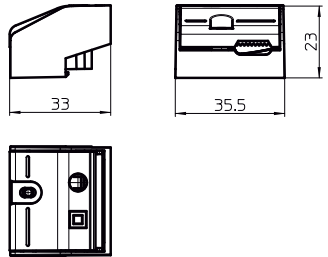
2x H05VV-F: 2x 1.5 mm²

Output:

H05VVH2-F: 2x 0.5-1.5 mm² / H05VV-F: 2x 0.5-1.5 mm²

Best.-Nr.: 187451 (1 pcs. cord grip ws for K107/K110)

Packaging unit: 20 pcs. (suffix -1702) / 120 pcs. (suffix -1703)



Cord grip "LILLO" for K107/K110

Available for independent operation

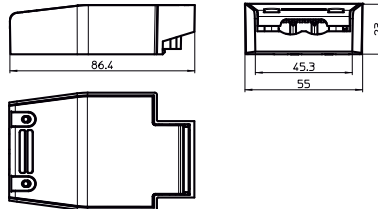
1 cord grip contains one upper and one lower part and two screws

Input:

2x H05VV-F: 2x 1.5 mm²

Best.-Nr.: 187452 (1 pcs. LILLO (5pin) for K107/K110)

Packaging unit: 20 pcs. (suffix -1702) / 120 pcs. (suffix -1703)



Any wires deviating from the recommendations provided in this datasheet must be professionally evaluated, tested, and approved prior to use in the intended application.

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LED Drivers – Primeline DIP Switch C DALI2 Memory Data

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 ($\pm 5\%$; for 1.4W $\pm 7.5\%$)	Voltage output DC (V)	THD at full load % (230 V)	Efficiency at full load % (230 V)	Ripple 100 Hz %
42	ECXd 1050.805	187692	220–240	211–194	4 / 40	300/350/400/450/500/550/ 600/650/700/750/800/850/ 900/950/1000/1050	2.5–49	< 4	90	< 1

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 $^{\circ}$ C	Degree of protection
	$^{\circ}$ C min.	$^{\circ}$ C max.	% min.	% max.	$^{\circ}$ C min.	$^{\circ}$ C max.	% min.	% max.		
187692	–20	+40	20	90	–25	+60	20	90	+80	IP20

Expected service life time

at operation temperatures at t_c point

Operation current	Ref. No. 187692	
All	70 $^{\circ}$ C*	80 $^{\circ}$ C
hrs.	100.000	50.000

* recommended operation temperature

Product label

**V LIGHTING SOLUTIONS**
Vossloh-Schwabe Deutschland GmbH
Stuttgarter Straße 61/1
73614 Schorndorf
Electronic Controlgear for LED
Type ECXd 1050.805
Ref.-No. 187692
Made in China

SEC= SELV
Urated=2.5...49Vdc
Uout =60Vdc
LED+ ■
LED- ■
EL
0.5-1.5m m2

PRI
U_N = 220...240 V~
I_{max} = 0.27 A
f_N = 0/50/60 Hz
 λ = 0.25C...0.99

CE
DALI2
CCC
05

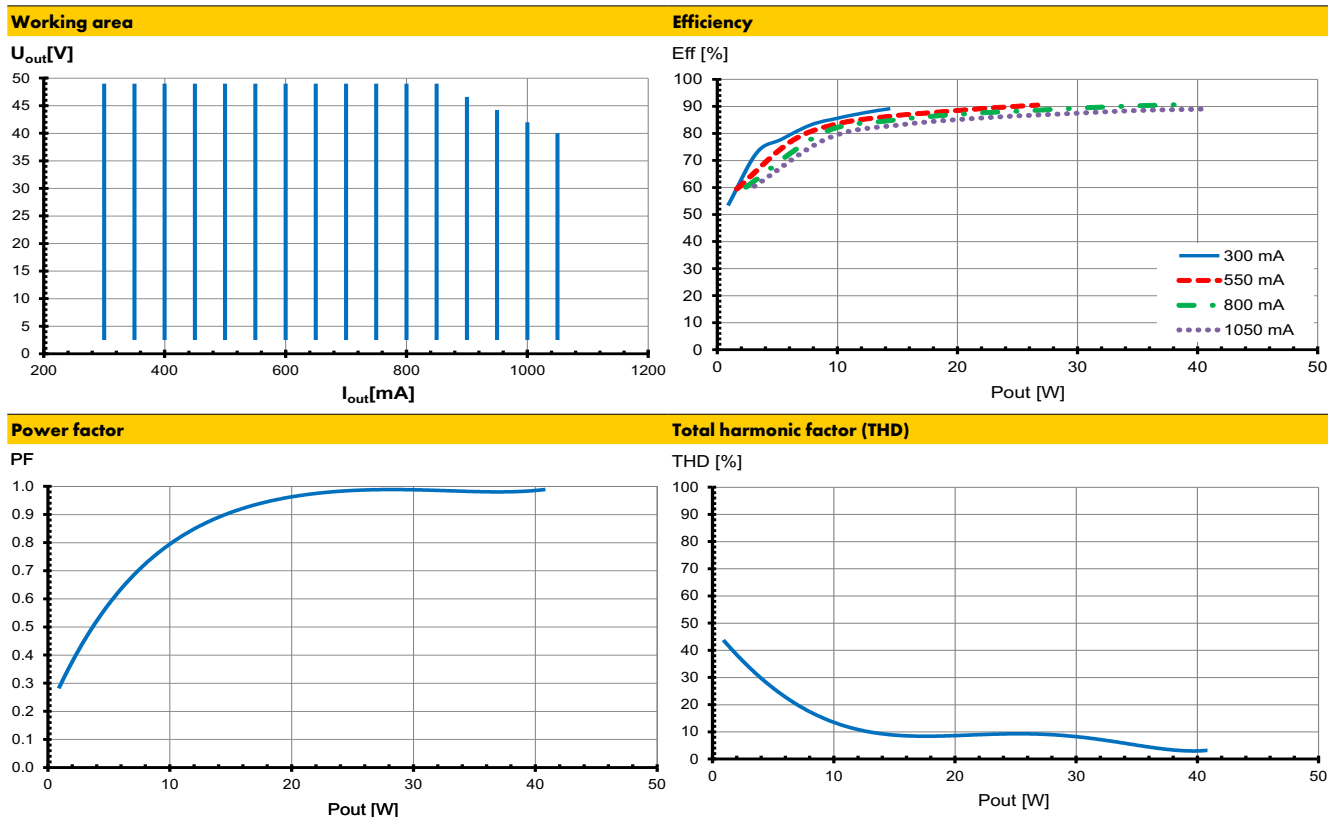
VS LIGHTING SOLUTIONS Electronic Controlgear for LED Type ECXd 1050.805 Ref.-No. 187692				
DIP SETTINGS				
Protet (W)	Irated (mA)	1	2	3 4
14.7	300	–	–	–
17.15	350	ON	–	–
19.6	400	–	ON	–
22.05	450	ON	ON	–
24.5	500	–	–	ON
26.95	550	ON	–	ON
29.4	600	–	ON	ON
31.85	650	ON	ON	ON
34.3	700	–	–	ON
36.75	750	ON	–	ON
39.2	800	–	ON	ON
41.65	850	ON	ON	ON
41.94	900	–	–	ON
41.99	950	ON	ON	ON
42	1000	ON	ON	ON
42	1050	ON	ON	ON

DIP Switch settings

Pin 1	Pin 2	Pin 3	Pin 4	Operation current (mA) 187692
OFF	OFF	OFF	OFF	300
ON	OFF	OFF	OFF	350
OFF	ON	OFF	OFF	400
ON	ON	OFF	OFF	450
OFF	OFF	ON	OFF	500
ON	OFF	ON	OFF	550
OFF	ON	ON	OFF	600
ON	ON	ON	OFF	650
OFF	OFF	OFF	ON	700
ON	OFF	OFF	ON	750
OFF	ON	OFF	ON	800
ON	ON	OFF	ON	850
OFF	OFF	ON	ON	900
ON	OFF	ON	ON	950
OFF	ON	ON	ON	1000
ON	ON	ON	ON	1050

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Typ. performance graphs for 187692 / Type ECXd 1050.805



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 shutdown.
- Overload protection: The control gear is protected against overload with shutdown.
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. In case of overheating the control gear will reduce the power.
- 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

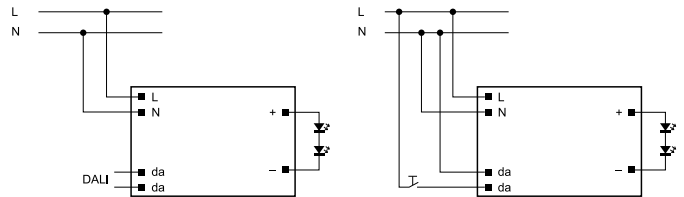
Mechanical mounting

- Mounting position: Built-in: Any position inside a luminaire is allowed
Independent application: Drivers are allowed to use for independent applications with separate cord grip.
- Mounting location: LED drivers are designed for integration into luminaires or comparable devices.
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 M4 screws in the designated holes
- Tightening torque: 0.2 Nm

Electrical installation

- Connection terminals: Please see page 2/3
- Stripped length: 7–8 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: 2 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:



Note: Max. quantity of drivers at one push button: 30

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 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 m Ω (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 10 A	B 13 A	B 16 A	C 10 A	C 13 A	C 16 A
ECXd 1050.805	187692	42	55	68	42	55	68

- 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.

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