LED-Treiber

CV 24 V DALI2





COMFORTLINE 24 V L DALI2

187361, 187362, 187363, 187430

Typical Applications

Built-in in luminaires for 24 V systems

- Retail lighting
- Office lighting
- Residential lighting
- Furniture lighting





ComfortLine 24 V L DALI2

- DIMMABLE: DALI (ED. 2)
- VERY LOW RIPPLE: < 1%</p>
- WITH INTEGRATED CORD GRIP FOR INDEPENDENT OPERATION

PRODUCT GUARANTEE: 5 YEARS

- SELV
- SUITABLE FOR BUILT-IN INTO FURNITURE
- LONG SERVICE LIFE: UP TO 50,000 HRS.
- *** 5 YEARS GUARANTEE

ComfortLine 24 V L DALI2

Product features

- Compact casing shape
- For use in applications with medium and high capacity range of up to 45, 80, 150 and 250W

Electrical features

- Mains voltage: 220-240 V ±10%
- Mains frequency: 50–60 Hz
- Plug-in terminals: 0.5–1.5 mm²
 1-2.5 mm² for 250W output
- Power factor at full load: > 0.95 C
- SVM: < 0.4
- PstLM: < 1

Safety features

- Protection against transient main peaks
- Electronic short-circuit protection
- Overload protection: reversible
- Protection against "no load" operation
- Degree of protection: IP20
- Protection class II
- SELV



Suarantee 5 years PUSH



Applied standards • EN 61347-1

• EN 61347-2-13

• EN 62386 ed. part 101/102/207

 (\mathbf{m})

EN 62384EN 55015



Packaging units

50 000

😰 hours

Ref. No.	Packaging unit						
	Pieces	Weight					
	per box	per pallet	g				
187361	60	32	230				
187362	30	32	310				
187363	30	30	570				
187430	30	24	785				



Product guarantee

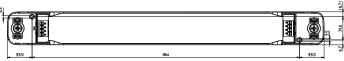
- 5 years
- for operation at recommended operation temperature (see table for expected service life time on the next page)
- The conditions for the Product Guarantee of the Vossloh-Schwabe Group shall apply aspublished on our homepage (www.vossloh-schwabe.com).
 We will be happy to send you these conditions upon request.



- Ref. No.: 187361
- Length: 187 mm
- Width: 45 mm
- Height: 31 mm
- Casing: K102
- Ref. No.: 187362, 187363
- Length: 290 mm
- Width: 45 mm
- Height: 31 mm

Casing: K105
Ref. No.: 187430
Length: 431 mm
Width: 45 mm
Height: 31 mm





Electrical characteristics

Max.	Туре	Ref. No.	Voltage	Mains	Inrush	Current	Voltage	THD	Efficiency	Ripple
output			50–60 Hz	current	current	output DC	output DC	at full load	at full load	100 Hz
W			V	mA	A / μs	mA	V (± 5%)	% (230 V)	% (230 V)	%
45	EDXd 145/24.085	187361	220-240	236-217	18 / 240	0–1875	24	< 8	> 86	≤ 1
80	EDXd 185/24.086	187362	220-240	411-377	37 / 264	0–3333	24	< 7	> 88	≤ 1
150	EDXd 1150/24.087	187363	220-240	741-681	45 / 432	0-6250	24	< 7	> 92	≤ 1
250	EDXd 1250/24.088	187430	220-240	1240-1139	47/640	0-10416	24	<4	>93	≤ 1

Maximum ratings

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

Ref. N	o. A	Ambient temperature		Operation humidity		Storage temperature		Storage humidity range		Max. operation	Degree of
	range		range		range				temperature at t _c point	protection	
	o	°C min.	°C max.	% min.	% max.	°C min.	°C max.	% min.	% max.	°C	
18730	51 -	-20	+50	30	90	-30	+65	20	90	+85	IP20
18730	52 -	-20	+45	20	90	-20	+60				
18730	53										
18743	30										

Expected service life time

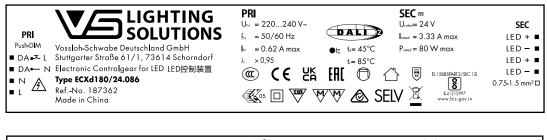
at operation temperatures at t_c point

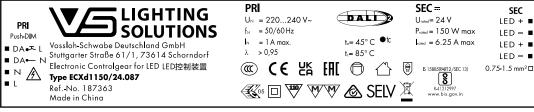
Operation current	Ref. No. all types	
tc-temp	75 °C*	85 °C
hrs.	100,000	50,000

* recommended operation temperature

Product labels

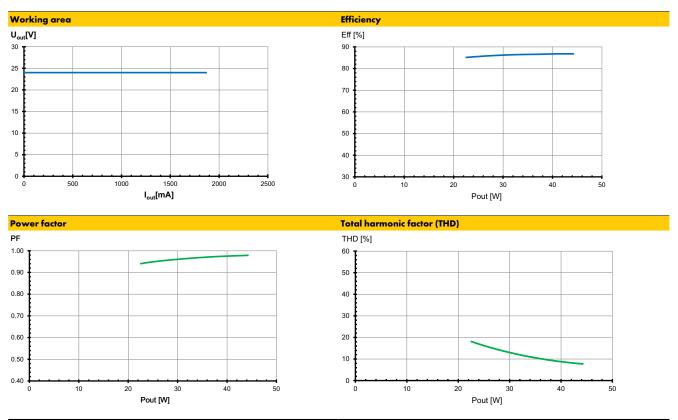
	LIGHTING SOLUTIONS SEC = Univ = 24 V	SEC LED + ■
PRI Push-DIM	Vossloh-Schwabe Deutschland GmbH ta= 50°C Proved = 45 W max Stuttgarter Straße 61/1, 73614 Schorndorf ta= 85°C Lased = 1.88 A max	LED -
■ DA• ⁷ -L	Electronic Controlgear for LED LED控制装置	LED + ■
	IREFNo. 187361 PRI Nade in China U. = 220240 V- € 158839472/35C 13	75-1.5 mm ²
	SELV $I_{1}^{(n)} = \frac{50/60}{12} Hz$ $I_{2}^{(n)} = 0.35 \text{ A max}$ $\lambda > 0.95$ $I_{2}^{(n)} I_{2}^{(n)} I_{2}^{(n$	W W



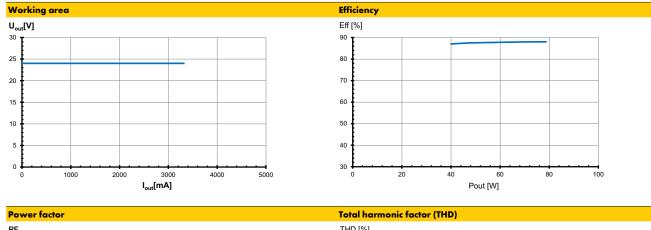


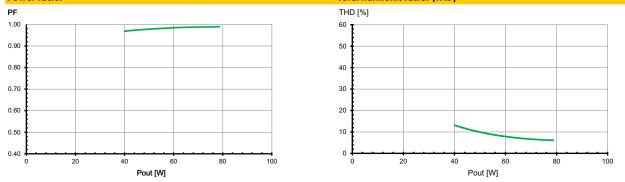
PRI Push-DIM		PRI U _N = 220240 V~	SEC = Uconel 24 V	SEC
$ DA \bullet \overline{F} L DA \bullet \overline{F} N N $	Vossloh-Schwabe Deutschland GmbH Stuttgarter Straße 61/1, 73614 Schorndorf Electronic Controlgear for LED LED控制装置	$f_N = 50/60 \text{ Hz}$ $I_N = 1.5 \text{ A max}.$ $\lambda \ge 0.95$	$I_{outual} = 10.41 \text{ A max}.$ $P_{outual} = 250 \text{ W max}.$ $t_a = 45^{\circ}\text{C}$ t_a 85^{\circ}\text{C}	LED - ILED + ILED - ILE
■ L 0.75-1.5□	Type EDXd1250/24.088 RefNo. 187430 Made in China	₩¥ ₩ ₩		1.0-2.5□

Typ. performance graphs for 187361 / Type EDXd 145/24.085

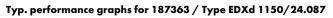


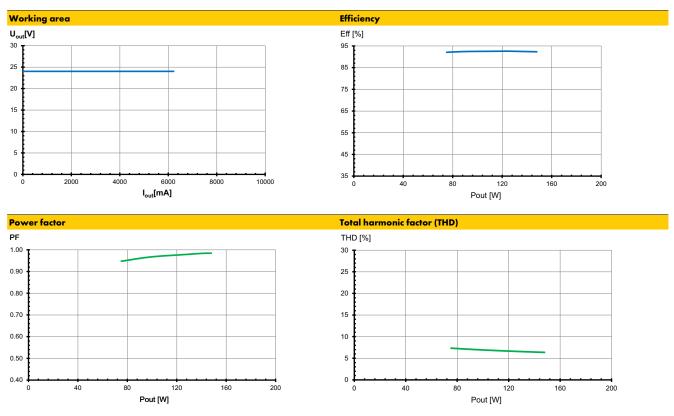
Typ. performance graphs for 187362 / Type EDXd 1250/24.088



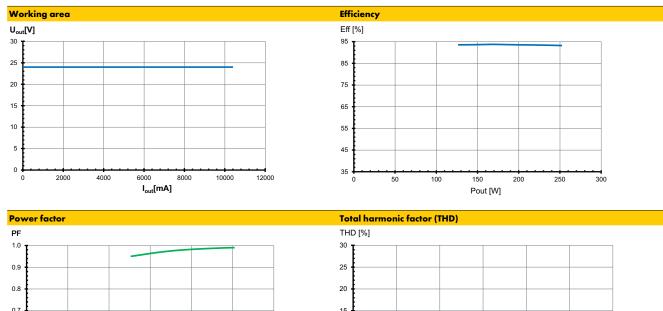


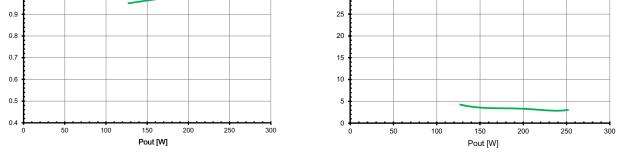
The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.





Typ. performance graphs for 187430 / Type EDXd 1150/24.087





LED-Drivers – ComfortLine 24 V L DALI2

Safety features

• 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 automatic restart function.

- Overload protection: The control gear only works in range of rated output power and voltage problemfree. Please check that the selected LED load is suitable (see Electrical Characteristics on this 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.

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

mechanical moonini	9
 Mounting position: 	Drivers are suitable for independent
	operation.
 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: 	0.10 m recommended 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

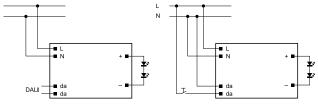
Electrical installation

 Connection terminals 	: Plug-in terminals for rigid or flexible
	conductors with a section of 0.5–1.5 mm ²
	1-2.5 mm ² for 250W output
 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.
 Polarity: 	Please ensure the correct polarity of the leads
	prior to commissioning. Reversed polarity can
	destroy the modules.

- Through-wiring: Is not allowed
- Cord-Grip:
- Permissible cable jacket diameter 3-7mm for 45, 80, 150W and 2-12mm for 250W

If two cables are used in one cord-grip, cables should have same diameter





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

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 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).

Туре	Ref. No.	Automatic cut-out type and possible no. of VS drivers pcs.						
Automatic cut-out ty	B 10 A	B 13 A	B 16 A	C 10 A	C 13 A	C 16 A		
EDXd 145/24.085	187361	18	24	29	31	40	49	
EDXd 180/24.086 187362		8	10	13	13	17	21	
EDXd 1150/24.087	4	5	6	6	8	10		
EDXd 1250/24.088	187430	2	3	4	4	5	6	

 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.