

Light is OSRAM

OSRAM

OTi DX 75/220-240/600 D NFC L

Constant current LED driver with DEXAL Interface – non isolated

Wide operating area up to 600mA, 1...100% dimmable

Innovative non isolated driver with OSRAM DEXAL technology*
 Ready for luminaire design with wireless lighting controls / sensors
 Prepared for DALI-PMD standard
 Including additional features such as Driver Guard, Soft Switch Off...


Benefits

Versatile DEXAL LED driver 75W, non isolated
 Integrated DALI-2 Bus power supply for sensors and wireless radios
 Simplified luminaire design for wireless lighting control systems / sensors
 Prepared for DALI standard (-250, -251, -252, -253)
 Locking / unlocking of luminaire monitoring data
 Wide operating range up to 600mA
 Fast programming / current set via NFC** / LEDSet
 Suitable for emergency lighting units
 Selectable AM/PWM dimming 0.1...100%

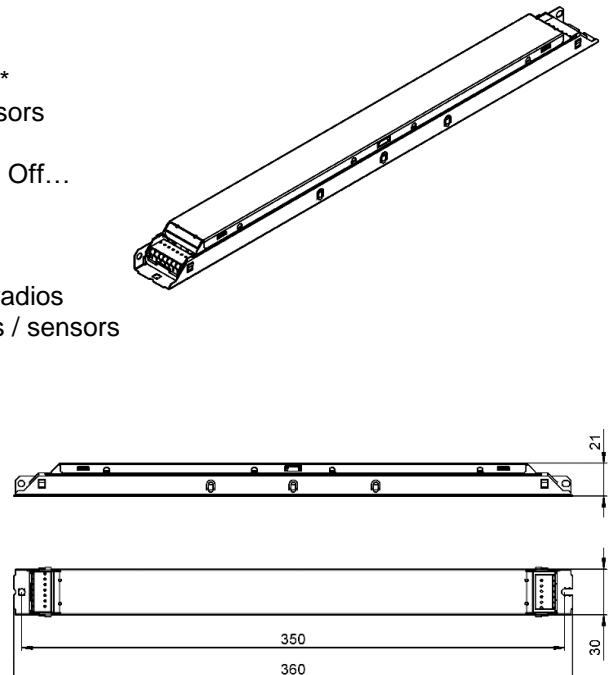
Applications

Linear and area lighting
 Office – Industry – Shop - Hospitality

Approbations & Certifications

CE, VDE-ENEC, VDE-EMC, RCM, , EL, CCC, EAC, BIS
 In preparation, if not already printed on the label

*see DEXAL application guide **For more information please refer to Tuner4TRONIC



Housing material: metal, white painted

Product Features

- Output current range up to 600mA
- NFC & LEDSet Interface
- Selectable AM/PWM dimming
- Very high efficiency up to 93%
- Low stand-by consumption <0.4 W
- Output power up to 75 W
- Suitable for emergency lighting
- OSRAM DEXAL technology
- Prepared for -250, 251, 252, 253
- Very low ripple $\leq 4\%$
- 100'000 h lifetime at $t_c = 65^\circ\text{C}$
- $t_c \text{ max} = 75^\circ\text{C}$
- Wide t_a range up to $-25 - +55^\circ\text{C}$
- 5 years guarantee

	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V	
	Nominal frequency	0 / 50 / 60	Hz	
	AC voltage range	198 – 264	V	
	DC voltage range	176 – 276	V	DC or RAC
	Maximum voltage	350	Vac	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	0.36	A	
	Total Harmonic Distortion (THD)	< 10	%	Full load
	Power factor	> 0.95		Full load, 220 – 240 V, 50 Hz / see graphs
	Efficiency	Up to 93	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Starting time	≤ 0.9	s	
	Stand-by power DEXAL OFF	< 0.25	W	
	Stand-by power DEXAL ON	< 0.4	W	No load on DEXAL interface
	Protection class	I		PE can be connected either to terminal or housing
	Inrush current	27	A pk	th = 210 μs
	Max. units per circuit breaker	B16: 24 B10: 15		
	Protective conductor current	< 0.5	mA	Through PE
OUTPUT	Nominal voltage range	54 – 240	V	
	Maximum voltage	< 250	Vdc	w/ Open Circuit
	Nominal current range	120 – 600	mA	
	Current accuracy	+/- 5	%	
	Current ripple	< 4	%	100 Hz., low freq. ripple is negligible
	Nominal power range	6.75 – 75	W	
	Maximum power	75	W	
	Emergency output factor (EL)	15	%	Preset value, adjustable via software, at DC or RAC
Galvanic isolation	NO		Non isolated	
DEXAL / Dimming	Dimming control	yes		DEXAL (DALI)
	Dimming range	0.1...100	%	Selectable AM/PWM Dimming by software (Tuner4TRONIC)
	Dimming Standard	DEXAL (DALI)		
	Guaranteed DEXAL Supply current	53	mA	
	Maximum DEXAL Supply current	62	mA	
	Maximum DEXAL cable length	< 2	m	
	Insulation mains – DEXAL	Double		
ENVIRONMENT	Ambient temperature range t _a	-25 ... +55	°C	
	Maximum case temperature t _c	75	°C	Measured on t _c point indicated of the product label
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-25 ... +85	°C	
	Relative humidity	5 ... 85	%	Not condensing
	Surge transient protection	1 2	kV	L/N LN/PE acc to. EN 61547 Clause 5.7
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 150'000		
	Expected lifetime	50'000 100'000	h	t _c = 75°C, 0.2% / 1'000 h failure rate, 24h ON t _c = 65°C, 0.1% / 1'000 h failure rate, 24h ON

NFC compatible with MD SIG standard

Additional Features

Soft Switch Off (in analogue mode) – Driver Guard – Tuning Factor – Dim to Dark

DEXAL Power supply unit (acc. Part 250), DEXAL Settings, Luminaire Info (acc. Part 251), monitoring Data (acc. Part 252&253), Configuration Lock

Wiring Diagram

Terminal:
Max. cable length - system: 2 m
Geometry (l x b x h): 360 x 30 x 21 mm

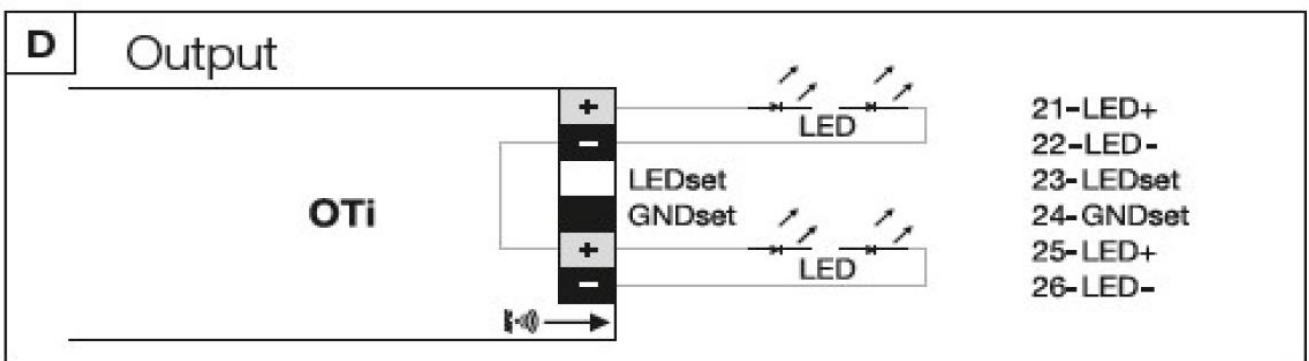
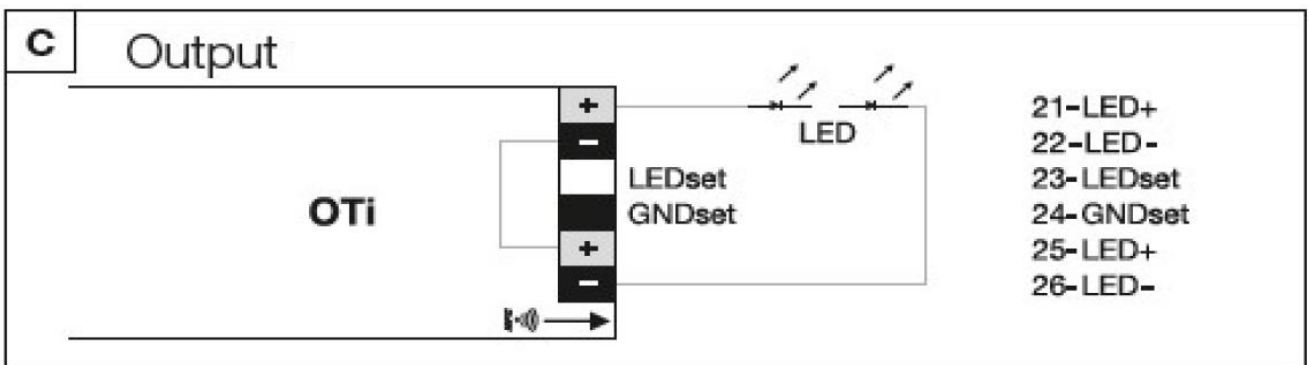
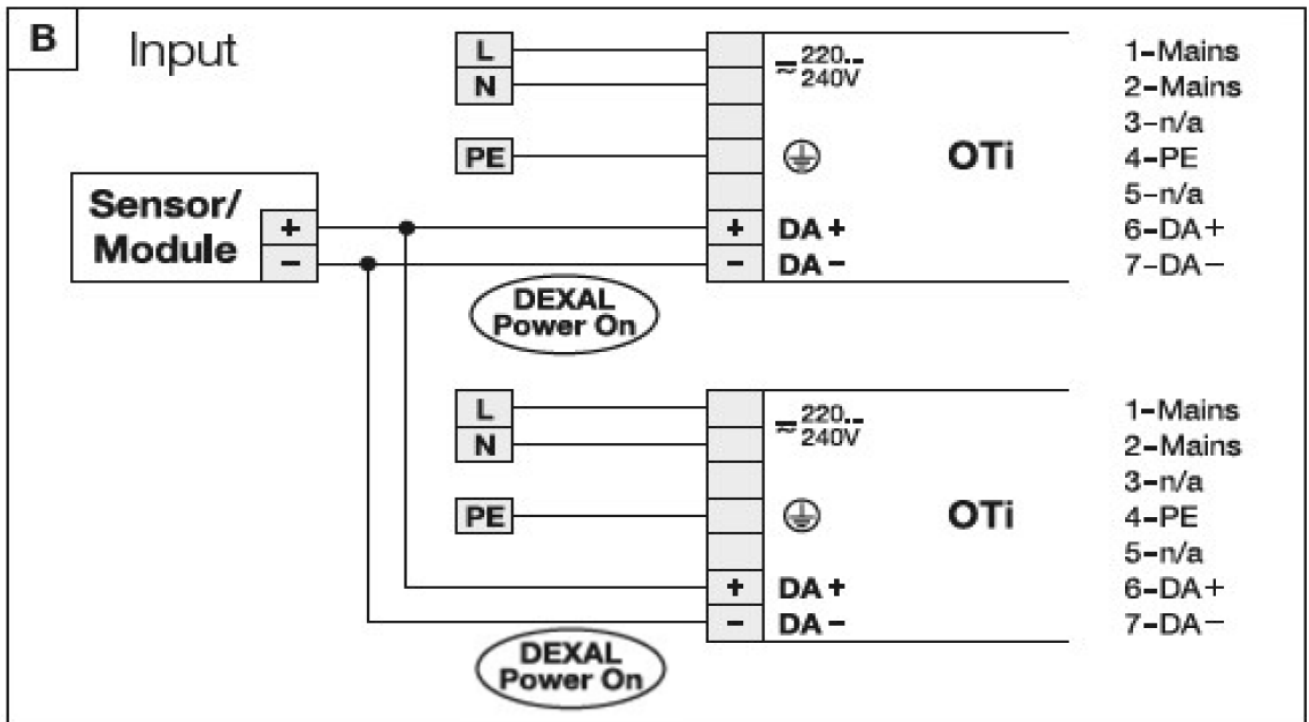
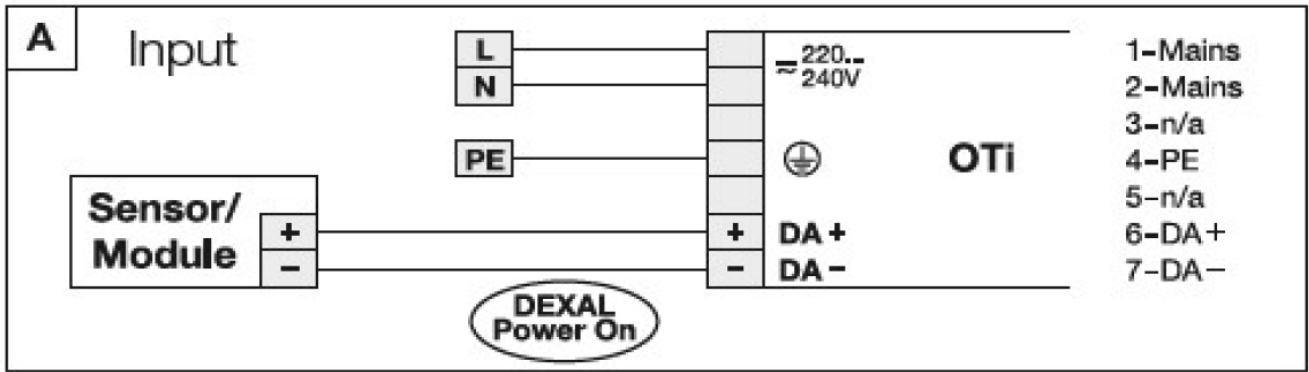
Wire preparation:

Push in
s: 0.5-1.5

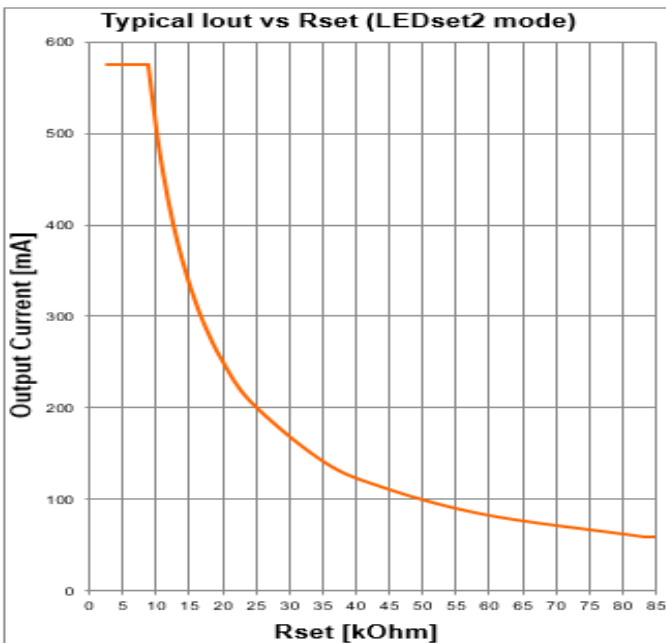
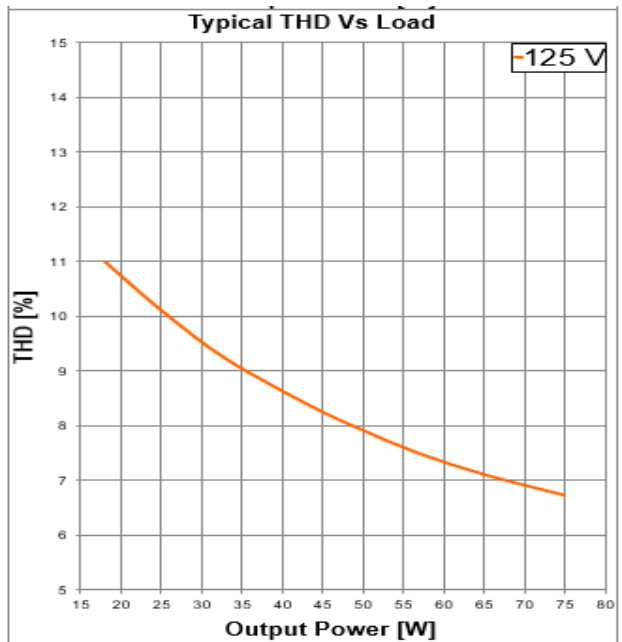
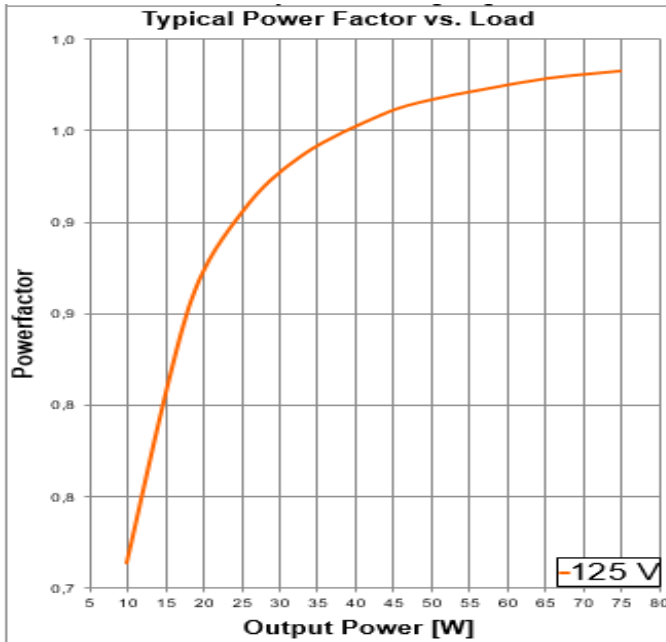
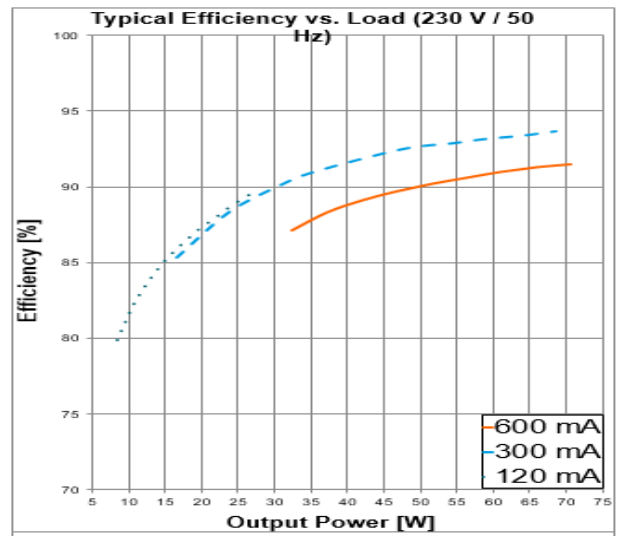
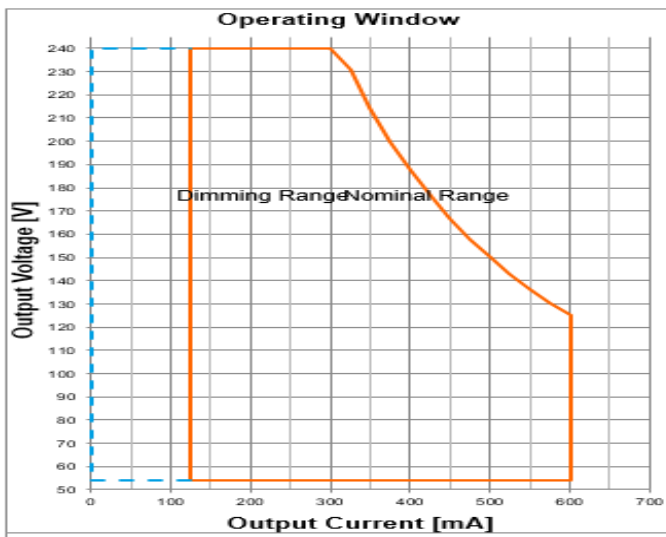


8-9 mm

Connections



Technical Data – DEXAL Power OFF



Insulation information

Insulation	Mains input	PE	DEXAL	LEDset	LED output
Mains input		basic	double		
PE	basic		basic	basic	basic
DEXAL	double	basic		double	double
LEDset		basic	double		
LED output		basic	double		

Remarks

- **Input overvoltage protection:** mains up to 350 Vac, for two hours maximum, will not destroy both the unit and the load; shut down of the load might occur in this condition.
- **Input surge protection:** the unit is protected against surge up to 1kV between L-N (symmetric surge) and 2kV between L/N-PE (asymmetric surge). During an asymmetric surge, the voltage between the LED outputs and PE is equal or lower than the applied surge voltage.
- **Output short circuit / undervoltage protection:** shut down of the load happens if Vout is out of the operating range.
- **Output overload protection:** the unit automatically reduces the output current to keep the output power below 75W.
- **Output over voltage protection:** shut down of the load might happen if Vout exceeds 240V.
 - o **Step 1:** output current reduction to decrease Vout;
 - o **Step 2:** shut down of the load at longer or extreme overvoltage.
- **No load operation:** the unit automatically switches off, the maximum output voltage is <250V.
- **Overtemperature protection:** the unit is protected against temporary overheating by automatic reduction of the output current when $t_c > 75^\circ\text{C}$.
- **Enhanced programmable options:**
 - o **Driver Guard:** when active, the unit limits the maximum temperature of the driver according the prestart derating range.
 - o **Soft Switch Off:** when active, at DALI switch-off the LED current goes smoothly to zero.
 - o **Dim to dark:** when active, the minimum dimming current is the minimum physical one provided by the unit. Compliance with local regulations must be checked.
- **Switchover time:** lower than 0.5 s, from AC to DC mains and viceversa.
- **Output power hold time:** > 4 ms, in case of mains dips.
- **Emergency lighting:** this LED power supply is suitable for emergency lighting fixtures acc. to IEC 60598-2-22; according to IEC 61347-2-13 Annex J.
- **Surge Protection:** the surge protection level in the system can be increased by means of an external overvoltage protection element with a protection level Up smaller than 1.5 kV

Standards

IEC 61347-1
IEC 61347-2-13
IEC 62384
IEC 62386
IEC 61000-3-2
IEC 61000-3-3
IEC 61547
CISPER 15

Ordering information

Product name	Type	EAN10	NAED	Pieces / box
OTI DX 75/220-240/600 D NFC L	AM18536	4052899590380	n.a.	20

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