

OPTOTRONIC - DEXAL NFC IP20 G2

D4i, DEXAL, AstroDIM, StepDIM - constant current LED drivers



Product family features

- DEXAL interface based on DALI-2 communication
- Current output range: 35...1,050 mA
- Available with different wattage: 40 W, 75 W, 110 W, 165 W and 200 W
- AstroDIM for autonomous dimming with five independent levels (astro, time mode)
- Standby power consumption: < 0.35 W
- Integrated customizable thermal management (Driver Guard)
- Constant Lumen Output (CLO)
- Easy and fast wireless luminaire programming via NFC
- Flexible current setting with one additional wire (LEDset2)

Product family benefits

- For Zhaga Book18 Luminaires and D4i certified incl. Parts 25x + AUX
- Electrical interface and data communication fully based on open standards
- Fully programmable via software (DALI Interface, NFC)
- Low luminous efficacy tolerance through low output current tolerance of $\pm 1,5\%$
- High surge protection: up to 10 kV in protection class I or II
- Lifetime: up to 100,000 h (depending on T_c temperature, max. 10 % failure rate)
- Mains input undervoltage protection
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection
- DEXAL interface (with 15V current supply on DALI-2 lines - DALI Part 250)
- SELV DEXAL and 24V AUX interface (DALI Part 150) up to 6W
- Standardized DALI-2 communication (incl. monitoring data, energy metering)
- Integrated ESD protection: more robust for installation on non-conductive poles
- Optimized NFC for programming from the top: easy accessibility in luminaires
- Surge and overvoltage protection on DALI interface for DALI installations
- Full compatibility with Tuner4TRONIC and T4T Field App
- BOX Programming: all drivers in one BOX can be programmed in one step



Product family datasheet

Areas of application

- Street and urban lighting
- Industry
- Suitable for outdoor applications in luminaires with IP > 54
- Suitable for use in outdoor luminaires of protection class I and II

Product family datasheet

Technical data

Product description	Electrical data					
	Nominal voltage	Input voltage AC	Nominal current	Mains frequency	Power factor λ	Total harmonic distortion
OT DX 40/170-240/1A0 DIMA NFC G2 CE	220...240 V	170...264 V ¹⁾	0.22 A	0/50/60 Hz ²⁾	0.77C...0.99 ³⁾	< 5 % ⁴⁾
OT DX 75/170-240/1A0 DIMA NFC G2 CE	220...240 V	170...264 V ¹⁾	0.39 A	0/50/60 Hz ²⁾	0.98/0.95 ³⁾	< 5 % ⁴⁾
OT DX 110/170-240/1A0 DIMA NFC G2 CE	220...240 V	170...264 V ¹⁾	0.53 A	0/50/60 Hz ²⁾	0.99/0.95 ³⁾	< 5 % ⁴⁾
OT DX 165/170-240/1A0 DIMA NFC G2 CE	220...240 V	170...264 V ¹⁾	0.78 A	0/50/60 Hz ²⁾	0.98/0.95 ³⁾	< 5 % ⁴⁾
OT DX 200/170-240/1A0 DIMA NFC G2 CE	220...240 V	170...264 V		0/50/60 Hz ²⁾	0.99/0.95 ³⁾	< 5 % ⁴⁾

Product description	Device power loss	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)
OT DX 40/170-240/1A0 DIMA NFC G2 CE	4.5 W ⁵⁾	27 A ⁶⁾	18 ⁷⁾	30 ⁷⁾	46 ⁷⁾	10 kV ⁸⁾
OT DX 75/170-240/1A0 DIMA NFC G2 CE	5.3 W ⁵⁾	3.3 A ²⁴⁾	21 ⁷⁾	33 ⁷⁾	52 ⁷⁾	10 kV ⁸⁾
OT DX 110/170-240/1A0 DIMA NFC G2 CE	7.7 W ⁵⁾	3.3 A ²⁴⁾	18 ⁷⁾	29 ⁷⁾	45 ⁷⁾	10 kV ⁸⁾
OT DX 165/170-240/1A0 DIMA NFC G2 CE	9.9 W ⁵⁾	3.3 A ²⁴⁾	12 ⁷⁾	20 ⁷⁾	30 ⁷⁾	10 kV ⁸⁾
OT DX 200/170-240/1A0 DIMA NFC G2 CE	14 W ⁵⁾	3.3 A ²⁷⁾	6	10	16	10 kV

Product description	Surge capability (L-N)	Nominal output power	Maximum output power	Efficiency in full-load	Networked standby power
OT DX 40/170-240/1A0 DIMA NFC G2 CE	6 kV ⁹⁾	40 W ¹⁰⁾	40 W	90 % ¹¹⁾	0.35 W ¹²⁾
OT DX 75/170-240/1A0 DIMA NFC G2 CE	6 kV ⁹⁾	75 W ¹⁰⁾	75 W	93 % ¹¹⁾	0.35 W ¹²⁾
OT DX 110/170-240/1A0 DIMA NFC G2 CE	6 kV ⁹⁾	110 W ¹⁰⁾	110 W	93 % ¹¹⁾	0.35 W ¹²⁾
OT DX 165/170-240/1A0 DIMA NFC G2 CE	6 kV ⁹⁾	165 W ¹⁰⁾	165 W	94 % ¹¹⁾	0.35 W ¹²⁾
OT DX 200/170-240/1A0 DIMA NFC G2 CE	6 kV	200 W	200 W	93% ¹¹⁾	0.38 W ¹²⁾

Product family datasheet

Product description	Input voltage DC	Nominal output current	Default output current	Output current tolerance	Output ripple current (100 Hz)
OT DX 40/170-240/1A0 DIMA NFC G2 CE	170...276 V ²⁾	150...1050 mA	700 mA	±1.5 % ¹³⁾	4 %
OT DX 75/170-240/1A0 DIMA NFC G2 CE	170...276 V ²⁾	150...1050 mA	700 mA	±1.5 % ¹³⁾	4 %
OT DX 110/170-240/1A0 DIMA NFC G2 CE	170...276 V ²⁾	150...1050 mA	700 mA	±1.5 % ¹³⁾	4 %
OT DX 165/170-240/1A0 DIMA NFC G2 CE	170...276 V ²⁾	150...1050 mA	700 mA	±1.5 % ¹³⁾	4 %
OT DX 200/170-240/1A0 DIMA NFC G2 CE	170...276 V ²⁾	150...1050 mA	700 mA	±1.5 % ¹³⁾	4 %

Product description	Output PSTLM	Output SVM	Minimum output current	Galvanic isolation
OT DX 40/170-240/1A0 DIMA NFC G2 CE	≤1	≤0.4	35 mA	Double
OT DX 75/170-240/1A0 DIMA NFC G2 CE	≤1	≤0.4	35 mA	Double
OT DX 110/170-240/1A0 DIMA NFC G2 CE	≤1	≤0.4	35 mA	Double
OT DX 165/170-240/1A0 DIMA NFC G2 CE	≤1	≤0.4	35 mA	Double
OT DX 200/170-240/1A0 DIMA NFC G2 CE	≤1	≤0.4	35 mA	Double

Product description	Nominal output voltage	Output current LEDset shorted	Auxiliary Power Supply	U-OUT (working voltage)
OT DX 40/170-240/1A0 DIMA NFC G2 CE	15...65 V	Not allowed	24 V ¹⁴⁾	60 V
OT DX 75/170-240/1A0 DIMA NFC G2 CE	35...150 V	Not allowed	24 V ¹⁴⁾	120 V
OT DX 110/170-240/1A0 DIMA NFC G2 CE	65...230 V	Not allowed	24 V ¹⁴⁾	250 V
OT DX 165/170-240/1A0 DIMA NFC G2 CE	90...260 V	Not allowed	24 V ¹⁴⁾	300 V
OT DX 200/170-240/1A0 DIMA NFC G2 CE	140...300 V	Not allowed	24 V ¹⁴⁾	375 V

Product description	Dimensions & weight					
	Length	Width	Height	Mounting hole spacing, length	Product weight	Cable cross-section, input side
OT DX 40/170-240/1A0 DIMA NFC G2 CE	133.0 mm	77.0 mm	40.0 mm	122.5 mm	230.00 g	0.2...1.5 mm ² ¹⁵⁾
OT DX 75/170-240/1A0 DIMA NFC G2 CE	150.0 mm	85.0 mm	40.0 mm	134.0 mm	315.00 g	0.2...1.5 mm ² ¹⁵⁾

Product family datasheet

Product description	Dimensions & weight					
	Length	Width	Height	Mounting hole spacing, length	Product weight	Cable cross-section, input side
OT DX 110/170-240/1A0 DIMA NFC G2 CE	150.0 mm	85.0 mm	40.0 mm	134.0 mm	790.00 g	0.2...1.5 mm ^{2 15)}
OT DX 165/170-240/1A0 DIMA NFC G2 CE	150.0 mm	85.0 mm	40.0 mm	134.0 mm	790.00 g	0.2...1.5 mm ^{2 15)}
OT DX 200/170-240/1A0 DIMA NFC G2 CE	170.0 mm	100.0 mm	40.0 mm	160.0 mm	980.00 g	0.2...1.5 mm ^{2 15)}

Product description	Cable cross-section, output side	Wire preparation length, input side	Mounting hole spacing, width	Temperatures & operating conditions	
				Ambient temperature range	Temperature range at storage
OT DX 40/170-240/1A0 DIMA NFC G2 CE	0.2...1.5 mm ^{2 16)}	8.5...9.5 mm		-40...+55 °C	-40...+85 °C
OT DX 75/170-240/1A0 DIMA NFC G2 CE	0.2...1.5 mm ^{2 16)}	8.5...9.5 mm		-40...+55 °C	-40...+85 °C
OT DX 110/170-240/1A0 DIMA NFC G2 CE	0.2...1.5 mm ^{2 16)}	8.5...9.5 mm		-40...+55 °C	-40...+85 °C
OT DX 165/170-240/1A0 DIMA NFC G2 CE	0.2...1.5 mm ^{2 16)}	8.5...9.5 mm		-40...+55 °C	-40...+85 °C
OT DX 200/170-240/1A0 DIMA NFC G2 CE	0.2...1.5 mm ^{2 16)}	8.5...9.5 mm	90.0 mm	-40...+55 °C	-40...+85 °C

Product description	Maximum temperature at tc test point	Max.housing temperature in case of fault	Permitted rel. humidity during operation	Lifespan
				ECG lifetime
OT DX 40/170-240/1A0 DIMA NFC G2 CE	75 °C	110 °C	5...95 % ¹⁷⁾	50000 / 100000 h ¹⁸⁾
OT DX 75/170-240/1A0 DIMA NFC G2 CE	85 °C	110 °C	5...95 % ¹⁷⁾	50000 / 100000 h ²⁵⁾
OT DX 110/170-240/1A0 DIMA NFC G2 CE	85 °C	110 °C	5...95 % ¹⁷⁾	50000 / 100000 h ²⁵⁾
OT DX 165/170-240/1A0 DIMA NFC G2 CE	95 °C	110 °C	5...95 % ¹⁷⁾	50000 / 100000 h ²⁶⁾
OT DX 200/170-240/1A0 DIMA NFC G2 CE	90 °C	110 °C	5...95 % ¹⁷⁾	50000 / 100000 h ²⁸⁾

Product family datasheet

Product description	Additional product data	Capabilities			
	Predecessor EAN	Dimmable	Dimming interface	Dimming range	Suitable for fixtures with prot. class
OT DX 40/170-240/1A0 DIMA NFC G2 CE	4052899999664	Yes	AstroDIM / DALI/DEXAL/D4i / StepDIM ¹⁹⁾	3...100 %	I / II
OT DX 75/170-240/1A0 DIMA NFC G2 CE	4052899999671	Yes	AstroDIM / DALI/DEXAL/D4i / StepDIM ¹⁹⁾	3...100 %	I / II
OT DX 110/170-240/1A0 DIMA NFC G2 CE	4052899999688	Yes	AstroDIM / DALI/DEXAL/D4i / StepDIM ¹⁹⁾	3...100 %	I / II
OT DX 165/170-240/1A0 DIMA NFC G2 CE	4052899999695	Yes	AstroDIM / DALI/DEXAL/D4i / StepDIM ¹⁹⁾	3...100 %	I / II
OT DX 200/170-240/1A0 DIMA NFC G2 CE		Yes	AstroDIM / DALI/DEXAL/D4i / StepDIM ¹⁹⁾	3...100 %	I / II

Product description	Constant lumen function	NTC input	Short-circuit protection	No-load proof
OT DX 40/170-240/1A0 DIMA NFC G2 CE	Yes	Yes	Yes	Yes
OT DX 75/170-240/1A0 DIMA NFC G2 CE	Yes	Yes	Yes	Yes
OT DX 110/170-240/1A0 DIMA NFC G2 CE	Yes	Yes	Yes	Yes
OT DX 165/170-240/1A0 DIMA NFC G2 CE	Yes	Yes	Yes	Yes
OT DX 200/170-240/1A0 DIMA NFC G2 CE	Yes	Yes	Yes	Yes

Product description	Intended for no-load operation	Max. cable length to lamp/LED module	LEDset	Overload protection
OT DX 40/170-240/1A0 DIMA NFC G2 CE	No	2.0 m ²⁰⁾	Yes	Yes
OT DX 75/170-240/1A0 DIMA NFC G2 CE	No	2.0 m ²⁰⁾	Yes	Yes
OT DX 110/170-240/1A0 DIMA NFC G2 CE	No	2.0 m ²⁰⁾	Yes	Yes
OT DX 165/170-240/1A0 DIMA NFC G2 CE	No	2.0 m ²⁰⁾	Yes	Yes
OT DX 200/170-240/1A0 DIMA NFC G2 CE	No	2.0 m ²⁰⁾	Yes	Yes

Product family datasheet

Product description	Number of channels	DALI-2 Diagnostic Data	DALI-2 Energy Data	Programming
				Box programming
OT DX 40/170-240/1A0 DIMA NFC G2 CE	1	Yes ²¹⁾	Yes ²²⁾	Yes
OT DX 75/170-240/1A0 DIMA NFC G2 CE	1	Yes ²¹⁾	Yes ²²⁾	Yes
OT DX 110/170-240/1A0 DIMA NFC G2 CE	1	Yes ²¹⁾	Yes ²²⁾	Yes
OT DX 165/170-240/1A0 DIMA NFC G2 CE	1	Yes ²¹⁾	Yes ²²⁾	Yes
OT DX 200/170-240/1A0 DIMA NFC G2 CE	1	Yes ²¹⁾	Yes ²²⁾	Yes

Product description	Tuner4TRONIC	Programming device	Programmable features	
			Constant Lumen	Thermal Protection
OT DX 40/170-240/1A0 DIMA NFC G2 CE	Yes	DALI / NFC	Yes	Yes
OT DX 75/170-240/1A0 DIMA NFC G2 CE	Yes	DALI / NFC	Yes	Yes
OT DX 110/170-240/1A0 DIMA NFC G2 CE	Yes	DALI / NFC	Yes	Yes
OT DX 165/170-240/1A0 DIMA NFC G2 CE	Yes	DALI / NFC	Yes	Yes
OT DX 200/170-240/1A0 DIMA NFC G2 CE	Yes	DALI / NFC	Yes	Yes

Product description	Driver Guard	AstroDIM	StepDIM	MainsDIM
OT DX 40/170-240/1A0 DIMA NFC G2 CE	Yes	Yes	Yes ¹⁹⁾	No
OT DX 75/170-240/1A0 DIMA NFC G2 CE	Yes	Yes	Yes ¹⁹⁾	No
OT DX 110/170-240/1A0 DIMA NFC G2 CE	Yes	Yes	Yes ¹⁹⁾	No
OT DX 165/170-240/1A0 DIMA NFC G2 CE	Yes	Yes	Yes ¹⁹⁾	No
OT DX 200/170-240/1A0 DIMA NFC G2 CE	Yes	Yes	Yes ¹⁹⁾	No

Product description	Emergency Mode	DALI-2 Luminaire Data	Configuration Lock	Certificates & standards
				Type of protection
OT DX 40/170-240/1A0 DIMA NFC G2 CE	Yes	Yes ²³⁾	Yes	IP20
OT DX 75/170-240/1A0 DIMA NFC G2 CE	Yes	Yes ²³⁾	Yes	IP20
OT DX 110/170-240/1A0 DIMA NFC G2 CE	Yes	Yes ²³⁾	Yes	IP20

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				Certificates & standards
Product description	Emergency Mode	DALI-2 Luminaire Data	Configuration Lock	Type of protection
OT DX 165/170-240/1A0 DIMA NFC G2 CE	Yes	Yes ²³⁾	Yes	IP20
OT DX 200/170-240/1A0 DIMA NFC G2 CE	Yes	Yes ²³⁾	Yes	IP20

			Logistical data	Environmental information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)
Product description	Standards	Approval marks – approval	Commodity code	Date of Declaration
OT DX 40/170-240/1A0 DIMA NFC G2 CE	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 62384/Acc. to EN 55015:2006 + A1:2007 + A2:2009/Acc. to EN 61547/Acc. to FCC 47 part 15 class B/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 62386-101/Acc. to IEC 62386-102/Acc. to IEC 62386-207/Acc. to IEC 62386-150/Acc. to IEC 62386-250/Acc. to IEC 62386-251, -252, -253	CCC / CE / D4i / DALI-2 / EL / ENEC / RCM / VDE	85044083900	14-11-2023
OT DX 75/170-240/1A0 DIMA NFC G2 CE	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 62384/Acc. to EN 55015:2006 + A1:2007 + A2:2009/Acc. to EN 61547/Acc. to FCC 47 part 15 class B/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 62386-101/Acc. to IEC 62386-102/Acc. to IEC 62386-207/Acc. to IEC 62386-150/Acc. to IEC 62386-250/Acc. to IEC 62386-251, -252, -253	CCC / CE / D4i / DALI-2 / EL / ENEC / RCM / VDE	85044083900	14-11-2023

Product family datasheet

Product description	Standards	Approval marks – approval	Logistical data	Environmental information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)
			Commodity code	Date of Declaration
OT DX 110/170-240/1A0 DIMA NFC G2 CE	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 62384/Acc. to EN 55015:2006 + A1:2007 + A2:2009/Acc. to EN 61547/Acc. to FCC 47 part 15 class B/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 62386-101/Acc. to IEC 62386-102/Acc. to IEC 62386-207/Acc. to IEC 62386-150/Acc. to IEC 62386-250/Acc. to IEC 62386-251, -252, -253	CCC / CE / D4i / DALI-2 / EL / ENEC / RCM / VDE	85044083900	14-11-2023
OT DX 165/170-240/1A0 DIMA NFC G2 CE	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 62384/Acc. to EN 55015:2006 + A1:2007 + A2:2009/Acc. to EN 61547/Acc. to FCC 47 part 15 class B/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 62386-101/Acc. to IEC 62386-102/Acc. to IEC 62386-207/Acc. to IEC 62386-150/Acc. to IEC 62386-250/Acc. to IEC 62386-251, -252, -253	CCC / CE / D4i / DALI-2 / EL / ENEC / RCM / VDE	85044083900	14-11-2023
OT DX 200/170-240/1A0 DIMA NFC G2 CE	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 62384/Acc. to EN 55015:2006 + A1:2007 + A2:2009/Acc. to EN 61547/Acc. to FCC 47 part 15 class B/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 62386-101/Acc. to IEC 62386-102/Acc. to IEC 62386-207/Acc. to IEC 62386-150/Acc. to IEC 62386-250/Acc. to IEC 62386-251, -252, -253	CCC / CE / D4i / DALI-2 / EL / ENEC / RCM / VDE	85044083900	14-11-2023

Product family datasheet

Product description	Primary Article Identifier	Candidate List Substance 1	CAS No. of substance 1	Safe Use Instruction
OT DX 40/170-240/1A0 DIMA NFC G2 CE	4052899631649	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OT DX 75/170-240/1A0 DIMA NFC G2 CE	4052899631663	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OT DX 110/170-240/1A0 DIMA NFC G2 CE	4052899631694	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OT DX 165/170-240/1A0 DIMA NFC G2 CE	4052899631717	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OT DX 200/170-240/1A0 DIMA NFC G2 CE	4052899631731	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.

Product description	Declaration No. in SCIP database
OT DX 40/170-240/1A0 DIMA NFC G2 CE	3b2b8cb6-2c90-4bef-9300-d8824c39ddba
OT DX 75/170-240/1A0 DIMA NFC G2 CE	a491a4e3-3cf5-482f-92dc-a23244e90f0d
OT DX 110/170-240/1A0 DIMA NFC G2 CE	aeed06a2-bcf3-4ba6-a628-eab37c4ebf9c
OT DX 165/170-240/1A0 DIMA NFC G2 CE	89248295-e9cb-44da-8e61-77b2e68ce845
OT DX 200/170-240/1A0 DIMA NFC G2 CE	820f27c6-b566-48e6-9204-65e3f2bc1fe0

- 1) Permitted voltage range
- 2) Additional fuse needed in DC operation
- 3) Within the full operating window
- 4) Full load, 230V, 50 Hz
- 5) Maximum

Product family datasheet

- 6) At 217 μ s
- 7) Type B
- 8) Single pulse 10kV / 12 Ohm (1.2/50 μ s)
- 9) @ 2 Ohm, acc. to EN61547
- 10) Max. 75% in DC operating mode
- 11) at 230 V, 50 Hz
- 12) DEXAL power supply disabled
- 13) \pm 3% for Output current lower than 150 mA
- 14) 3W average, 6W peak power
- 15) Solid/ Flexible Leads
- 16) Wire cross section for LT2/NTC and LED-: 0.2...1.0 mm²
- 17) The luminaire manufacturer must ensure that condensation water cannot be created within the fixture.
- 18) At maximum $T_c = 75^\circ\text{C} / 10\%$ failure rate / At $T_c = 65^\circ\text{C} / 10\%$ failure rate
- 19) StepDIM functionality with external component 'OT DX SD BOX' only
- 20) Output wires must be routed as close as possible to each other
- 21) Acc. DALI part 253
- 22) Acc. DALI part 252
- 23) Acc. DALI part 251
- 24) At 3 ms
- 25) At maximum $T_c = 85^\circ\text{C} / 10\%$ failure rate / At $T_c = 75^\circ\text{C} / 10\%$ failure rate
- 26) At maximum $T_c = 95^\circ\text{C} / 10\%$ failure rate / At $T_c = 85^\circ\text{C} / 10\%$ failure rate
- 27) At 3.15 ms
- 28) At maximum $T_c = 90^\circ\text{C} / 10\%$ failure rate / At $T_c = 80^\circ\text{C} / 10\%$ failure rate

Product family datasheet

Application advice

For more detailed application information and graphics please see product datasheet.

Product family datasheet

Additional product information


- Default output current is 700 mA without any resistor connected to the LEDset port. As soon as the driver detects one time a resistor value within the resistor range of 33.3 kOhm (1050 mA) and 24.9 kOhm (150 mA) for more than 3 s, the driver activates the LEDset2 mode.
- The driver withstands an input voltage of up to 350 V AC for a maximum of two hours. An output load shutdown can occur in case the supply voltage exceeds the input voltage range defined.
- Shut down of output load happens if the input voltage of the load is below the allowed minimum output voltage of the driver. The driver automatically tries to switch on the load cyclically.
- The driver automatically reduces the output current in case the maximum allowed output power is exceeded, as long as the input voltage of the load is within the declared output voltage range of the driver. In all other cases the driver may shut down the load.
- The driver is protected against temporary overheating by automatically reduction of the output current.
- Several external NTCs are supported for temperature protection of the LED module or luminaire. The type of NTC can be selected in the programming software in the temperature based mode. By default the resistor based mode is activated with following values: start derating: 6.3 kOhm, end derating 5.0 kOhm, shut off: 4.3 kOhm, derating level 50 %.
- If the dimming mode is changed via NFC while the driver is not powered, one additional power on/off cycle is needed before the dimming mode becomes active.
- The constant lumen feature is disabled by default.
- If any output level is below the physical min level, the physical min level will be used.
- The driver is intended for luminaire built-in use.
- Mind the polarity of the DALI lines. DA+ to DA+, DA- to DA- only.
- The DEXAL interface is polarity sensitive, even if the DEXAL bus power supply in the driver is turned off. Therefore the polarity of all connected drivers should not be mixed.
- For efficiency and standby power measurement, the D4i bus power supply shall be switched off by using Tuner4TRONIC. Refer to www.tuner4tronic.com.
- To ensure an optimal communication during the NFC programming, the NFC antenna should be placed on the top of the LED Driver, above the NFC marking. This improves the accessibility to the NFC tag also in application, for instance within Luminaires.
- In order to ensure an optimal NFC programming of the Led Driver during the luminaire production, the luminaire maker shall not place any metal parts in proximity of the NFC reader, at least within a distance of 10 cm.
- Default output current is supplied without any resistor connected to the LEDset port. As soon as the driver detects one time a resistor value within the allowed resistor range for more than 3 s, the driver activates the LEDset2 mode.
- The driver withstands an input voltage of up to 320 Vac with unlimited time. Shut down of output load might occur in case the supply voltage exceeds (270 Vac). Under operation conditions in which overvoltage level > 264 Vac occur, the product shall be additionally protected by an external fuse (400V 4A, time lag, 12 t > 160 160 A2s).
- The maximum number of units per circuit breaker is an indicative value due mainly to high tolerance for the tripping current for narrow pulses.
- The EQUI pin should be connected to the heat sink of the LED module to improve the surge withstand capability of the system and EMI in critical luminaires.
- The dimming mode feature is disabled by default. If the dimming mode is changed via NFC while the driver is not powered, one additional power on/off cycle is needed before the new dimming mode becomes active.
- For input voltage of 170...190 Vac, the maximum allowed output power is linear limited starting from 100 % at 190 Vac down to 85 % at 170 Vac.
- LEDset and NTC functionality share the same connection terminal; both features are not simultaneously available.
- LEDset functionalities are limited only to the current setting, via codified resistor, and thermal protection via PTC (5V supply, miswiring protection, thermal protection with NTC are not available).
- All functionalities are ensured for output cables up to 10 m. For cable length more than 2 m, EMI compliance has to be checked in the application.
- The luminaire manufacturer must ensure that condensation water cannot be created within the fixture and, in particular, cannot affect the functionality of the product. Failing to comply with this requirement will make invalid any warranty claim

Product family datasheet

Sales and Technical Support

Sales and Technical Support www.osram.com

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File	
	Certificates OT VDE ENEC 40050684 290923

Ecodesign regulation information:

Intended for use with LED modules.

The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899631649	OT DX 40/170-240/1A0 DIMA NFC G2 CE	Shipping carton box 18	285 mm x 268 mm x 156 mm	11.92 dm ³	4616.00 g
4052899631663	OT DX 75/170-240/1A0 DIMA NFC G2 CE	Shipping carton box 12	319 mm x 210 mm x 156 mm	10.45 dm ³	4168.00 g
4052899631694	OT DX 110/170-240/1A0 DIMA NFC G2 CE	Shipping carton box 12	319 mm x 210 mm x 156 mm	10.45 dm ³	9868.00 g
4052899631717	OT DX 165/170-240/1A0 DIMA NFC G2 CE	Shipping carton box 12	319 mm x 210 mm x 156 mm	10.45 dm ³	9868.00 g
4052899631731	OT DX 200/170-240/1A0 DIMA NFC G2 CE	Shipping carton box 8	443 mm x 303 mm x 115 mm	15.44 dm ³	8485.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

Product family datasheet

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.