

OPTOTRONIC - 1DIM NFC IP20 G3

AstroDIM – constant current LED drivers



Product family features

- Supply voltage: 220...240 V
- Easy and fast wireless luminaire programming via NFC
- Flexible current setting with one additional wire (LEDset2)
- AstroDIM for autonomous dimming with five independent levels (astro, time mode)
- Allows for energy saving in twilight phases
- Standby power consumption: < 0.35 W
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)
- Wide current output range: 150 mA...1050 mA

Product family benefits

- Easy and fast wireless luminaire programming
- Very high efficiency
- High surge protection: up to 10 kV (in protection class I or II)
- Great flexibility due to wide operating temperature range of -40...55 °C or 60 °C
- Protection through double isolation between mains input and LED output
- Optimized NFC for programming from the top: easy accessibility in luminaires

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 20/170-240/1A0 1DIM NFC G3 CE	220...240 V	170...264 V ¹⁾	0.12 A	0/50/60 Hz	0.39C...0.99 ₂₎	< 5 % ³⁾
OT 40/170-240/0A7 1DIM NFC G3 CE	220...240 V	170...264 V ¹⁾	0.20 A	0/50/60 Hz	0.62C...0.99 ₂₎	< 5 % ³⁾
OT 40/170-240/1A0 1DIM NFC G3 CE	220...240 V	170...264 V ¹⁾	0.20 A	0/50/60 Hz	0.50C...0.99 ₂₎	< 5 % ³⁾
OT 75/170...240/0A7 1DIM NFC G3 CE	220...240 V	170...264 V ¹⁾	0.39 A	0/50/60 Hz	0.54C...0.99 ₂₎	< 5 % ³⁾
OT 75/170-240/1A0 1DIM NFC G3 CE	220...240 V	170...264 V ¹⁾	0.39 A	0/50/60 Hz	0.43C...0.99 ₂₎	< 5 % ³⁾
OT 110/170-240/0A7 1DIM NFC G3 CE	220...240 V	170...264 V ¹⁾	0.52 A	0/50/60 Hz	0.60C...0.99 ₂₎	< 5 % ³⁾
OT 110/170-240/1A0 1DIM NFC G3 CE	220...240 V	170...264 V ¹⁾	0.52 A	0/50/60 Hz	0.51C...0.99 ₂₎	< 5 % ³⁾
OT 165/170-240/1A0 1DIM NFC G3 CE	220...240 V	170...264 V ¹⁾	0.80 A	0/50/60 Hz	0.65C...0.99 ₂₎	< 5 % ³⁾

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 20/170-240/1A0 1DIM NFC G3 CE	3.5 W	21 A ⁴⁾	30	48	74	10 kV
OT 40/170-240/0A7 1DIM NFC G3 CE	4.5 W	31 A ¹²⁾	18	30	46	10 kV
OT 40/170-240/1A0 1DIM NFC G3 CE	4.5 W	31 A ¹²⁾	18	30	46	10 kV
OT 75/170...240/0A7 1DIM NFC G3 CE	6.5 W	62 A ¹⁴⁾	6	10	16	10 kV
OT 75/170-240/1A0 1DIM NFC G3 CE	6.5 W	62 A ¹⁴⁾	6	10	16	10 kV
OT 110/170-240/0A7 1DIM NFC G3 CE	8.3 W	102 A ¹⁶⁾	7	12	19	10 kV
OT 110/170-240/1A0 1DIM NFC G3 CE	8.3 W	102 A ¹⁶⁾	7	12	19	10 kV
OT 165/170-240/1A0 1DIM NFC G3 CE	11.5 W	71 A ¹⁸⁾	6	10	16	10 kV

Product description	Surge capability (L-N)	Nominal output power	Maximum output power	Efficiency in full-load	Input voltage DC
OT 20/170-240/1A0 1DIM NFC G3 CE	6 kV	22 W ⁵⁾	22 W	87 % ⁶⁾	176...276 V ₇₎
OT 40/170-240/0A7 1DIM NFC G3 CE	6 kV	40 W ⁵⁾	40 W	90 % ⁶⁾	176...276 V ₇₎
OT 40/170-240/1A0 1DIM NFC G3 CE	6 kV	40 W ⁵⁾	40 W	90 % ⁶⁾	176...276 V ₇₎

Product family datasheet

Product description	Surge capability (L-N)	Nominal output power	Maximum output power	Efficiency in full-load	Input voltage DC
OT 75/170...240/0A7 1DIM NFC G3 CE	6 kV	75 W ⁵⁾	75 W	92 % ⁶⁾	176...276 V ⁷⁾
OT 75/170-240/1A0 1DIM NFC G3 CE	6 kV	75 W ⁵⁾	75 W	92 % ⁶⁾	176...276 V ⁷⁾
OT 110/170-240/0A7 1DIM NFC G3 CE	6 kV	110 W ⁵⁾	110 W	93 % ⁶⁾	176...276 V ⁷⁾
OT 110/170-240/1A0 1DIM NFC G3 CE	6 kV	110 W ⁵⁾	110 W	93 % ⁶⁾	176...276 V ⁷⁾
OT 165/170-240/1A0 1DIM NFC G3 CE	6 kV	165 W ⁵⁾	165 W	94 % ⁶⁾	176...276 V ⁷⁾

Product description	Nominal output current	Default output current	Output current tolerance	Output ripple current (100 Hz)	Output PSTLM
OT 20/170-240/1A0 1DIM NFC G3 CE	150...1050 mA	700 mA	±3 % ⁸⁾	< 4 %	≤1
OT 40/170-240/0A7 1DIM NFC G3 CE	150...700 mA	700 mA	±3 % ⁸⁾	< 4 %	≤1
OT 40/170-240/1A0 1DIM NFC G3 CE	150...1050 mA	700 mA	±3 % ⁸⁾	< 4 %	≤1
OT 75/170...240/0A7 1DIM NFC G3 CE	150...700 mA	700 mA	±3 % ⁸⁾	< 4 %	≤1
OT 75/170-240/1A0 1DIM NFC G3 CE	150...1050 mA	700 mA	±3 % ⁸⁾	< 4 %	≤1
OT 110/170-240/0A7 1DIM NFC G3 CE	150...700 mA	700 mA	±3 % ⁸⁾	< 4 %	≤1
OT 110/170-240/1A0 1DIM NFC G3 CE	150...1050 mA	700 mA	±3 % ⁸⁾	< 4 %	≤1
OT 165/170-240/1A0 1DIM NFC G3 CE	150...1050 mA	700 mA	±3 % ⁸⁾	< 4 %	≤1

Product description	Output SVM	Minimum output current	Galvanic isolation	Nominal output voltage
OT 20/170-240/1A0 1DIM NFC G3 CE	≤0.4	70 mA	SELV	10...38 V
OT 40/170-240/0A7 1DIM NFC G3 CE	≤0.4	70 mA	SELV	30...77 V
OT 40/170-240/1A0 1DIM NFC G3 CE	≤0.4	70 mA	SELV	15...56 V
OT 75/170...240/0A7 1DIM NFC G3 CE	≤0.4	70 mA	Double	50...150 V
OT 75/170-240/1A0 1DIM NFC G3 CE	≤0.4	70 mA	SELV	35...115 V
OT 110/170-240/0A7 1DIM NFC G3 CE	≤0.4	70 mA	Double	80...220 V
OT 110/170-240/1A0 1DIM NFC G3 CE	≤0.4	70 mA	Double	55...157 V
OT 165/170-240/1A0 1DIM NFC G3 CE	≤0.4	70 mA	Double	90...260 V

Product family datasheet

Product description	Dimensions & weight					
	Length	Width	Height	Mounting hole spacing, length	Mounting hole spacing, width	Product weight
OT 20/170-240/1A0 1DIM NFC G3 CE	123.0 mm	79.0 mm	33.0 mm	111.0 mm	67.0 mm	210.00 g
OT 40/170-240/0A7 1DIM NFC G3 CE	123.0 mm	79.0 mm	33.0 mm	111.0 mm	67.0 mm	210.00 g
OT 40/170-240/1A0 1DIM NFC G3 CE	123.0 mm	79.0 mm	33.0 mm	111.0 mm	67.0 mm	210.00 g
OT 75/170...240/0A7 1DIM NFC G3 CE	123.0 mm	79.0 mm	33.0 mm	111.0 mm	67.0 mm	210.00 g
OT 75/170-240/1A0 1DIM NFC G3 CE	123.0 mm	79.0 mm	33.0 mm	111.0 mm	67.0 mm	210.00 g
OT 110/170-240/0A7 1DIM NFC G3 CE	133.0 mm	77.0 mm	40.0 mm	122.5 mm		590.00 g
OT 110/170-240/1A0 1DIM NFC G3 CE	133.0 mm	77.0 mm	40.0 mm	122.5 mm		590.00 g
OT 165/170-240/1A0 1DIM NFC G3 CE	150.0 mm	90.0 mm	40.0 mm	134.0 mm		780.00 g

Product description	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side	Temperatures & operating conditions	
				Ambient temperature range	Temperature range at storage
OT 20/170-240/1A0 1DIM NFC G3 CE	0.2...1.5 mm ²	0.2...1.5 mm ²	8.5...9.5 mm	-40...+60 °C	-40...+85 °C
OT 40/170-240/0A7 1DIM NFC G3 CE	0.2...1.5 mm ²	0.2...1.5 mm ²	8.5...9.5 mm	-40...+60 °C	-40...+85 °C
OT 40/170-240/1A0 1DIM NFC G3 CE	0.2...1.5 mm ²	0.2...1.5 mm ²	8.5...9.5 mm	-40...+60 °C	-40...+85 °C
OT 75/170...240/0A7 1DIM NFC G3 CE	0.2...1.5 mm ²	0.2...1.5 mm ²	8.5...9.5 mm	-40...+55 °C	-40...+85 °C
OT 75/170-240/1A0 1DIM NFC G3 CE	0.2...1.5 mm ²	0.2...1.5 mm ²	8.5...9.5 mm	-40...+55 °C	-40...+85 °C
OT 110/170-240/0A7 1DIM NFC G3 CE	0.2...1.5 mm ²	0.2...1.5 mm ²	8.5...9.5 mm	-40...+55 °C	-40...+85 °C
OT 110/170-240/1A0 1DIM NFC G3 CE	0.2...1.5 mm ²	0.2...1.5 mm ²	8.5...9.5 mm	-40...+55 °C	-40...+85 °C
OT 165/170-240/1A0 1DIM NFC G3 CE	0.2...1.5 mm ²	0.2...1.5 mm ²	8.5...9.5 mm	-40...+55 °C	-40...+85 °C

Product family datasheet

				Lifespan	Additional product data
Product description	Maximum temperature at tc test point	Max.housing temperature in case of fault	Permitted rel. humidity during operation	ECG lifetime	Predecessor EAN
OT 20/170-240/1A0 1DIM NFC G3 CE	75 °C	120 °C	5...95 % ⁹⁾	50000 / 100000 h ¹⁰⁾	405289951 7400
OT 40/170-240/0A7 1DIM NFC G3 CE	80 °C	120 °C	5...95 % ⁹⁾	50000 / 100000 h ¹³⁾	
OT 40/170-240/1A0 1DIM NFC G3 CE	80 °C	120 °C	5...95 % ⁹⁾	50000 / 100000 h ¹³⁾	405289951 7424
OT 75/170...240/0A7 1DIM NFC G3 CE	90 °C	120 °C	5...95 % ⁹⁾	50000 / 100000 h ¹⁵⁾	
OT 75/170-240/1A0 1DIM NFC G3 CE	90 °C	120 °C	5...95 % ⁹⁾	50000 / 100000 h ¹⁵⁾	405289954 1092
OT 110/170-240/0A7 1DIM NFC G3 CE	80 °C	120 °C	5...95 % ⁹⁾	50000 / 100000 h ¹³⁾	
OT 110/170-240/1A0 1DIM NFC G3 CE	85 °C	120 °C	5...95 % ⁹⁾	50000 / 100000 h ¹⁷⁾	405289954 1115
OT 165/170-240/1A0 1DIM NFC G3 CE	90 °C	120 °C	5...95 % ⁹⁾	50000 / 100000 h ¹⁵⁾	405289960 5381

Product description	Capabilities			
	Dimmable	Dimming interface	Dimming range	Suitable for fixtures with prot. class
OT 20/170-240/1A0 1DIM NFC G3 CE	Yes	AstroDIM	10...100 %	I / II
OT 40/170-240/0A7 1DIM NFC G3 CE	Yes	AstroDIM	10...100 %	I / II
OT 40/170-240/1A0 1DIM NFC G3 CE	Yes	AstroDIM	10...100 %	I / II
OT 75/170...240/0A7 1DIM NFC G3 CE	Yes	AstroDIM	10...100 %	I / II
OT 75/170-240/1A0 1DIM NFC G3 CE	Yes	AstroDIM	10...100 %	I / II
OT 110/170-240/0A7 1DIM NFC G3 CE	Yes	AstroDIM	10...100 %	I / II
OT 110/170-240/1A0 1DIM NFC G3 CE	Yes	AstroDIM	10...100 %	I / II
OT 165/170-240/1A0 1DIM NFC G3 CE	Yes	AstroDIM	10...100 %	I / II

Product description	Constant lumen function	NTC input	Short-circuit protection	No-load proof
OT 20/170-240/1A0 1DIM NFC G3 CE	Programmable	Yes	Automatic reversible	Yes
OT 40/170-240/0A7 1DIM NFC G3 CE	Programmable	Yes	Automatic reversible	Yes
OT 40/170-240/1A0 1DIM NFC G3 CE	Programmable	Yes	Automatic reversible	Yes
OT 75/170...240/0A7 1DIM NFC G3 CE	Programmable	Yes	Automatic reversible	Yes
OT 75/170-240/1A0 1DIM NFC G3 CE	Programmable	Yes	Automatic reversible	Yes
OT 110/170-240/0A7 1DIM NFC G3 CE	Programmable	Yes	Automatic reversible	Yes

Product family datasheet

Product description	Constant lumen function	NTC input	Short-circuit protection	No-load proof
OT 110/170-240/1A0 1DIM NFC G3 CE	Programmable	Yes	Automatic reversible	Yes
OT 165/170-240/1A0 1DIM NFC G3 CE	Programmable	Yes	Automatic reversible	Yes

Product description	Intended for no-load operation	Max. cable length to lamp/LED module	Overload protection	Number of channels
OT 20/170-240/1A0 1DIM NFC G3 CE	No	2.0 m ¹¹⁾	Automatic reversible	1
OT 40/170-240/0A7 1DIM NFC G3 CE	No	2.0 m ¹¹⁾	Automatic reversible	1
OT 40/170-240/1A0 1DIM NFC G3 CE	No	2.0 m ¹¹⁾	Automatic reversible	1
OT 75/170...240/0A7 1DIM NFC G3 CE	No	2.0 m ¹¹⁾	Automatic reversible	1
OT 75/170-240/1A0 1DIM NFC G3 CE	No	2.0 m ¹¹⁾	Automatic reversible	1
OT 110/170-240/0A7 1DIM NFC G3 CE	No	2.0 m ¹¹⁾	Automatic reversible	1
OT 110/170-240/1A0 1DIM NFC G3 CE	No	2.0 m ¹¹⁾	Automatic reversible	1
OT 165/170-240/1A0 1DIM NFC G3 CE	No	2.0 m ¹¹⁾	Automatic reversible	1

				Programming
Product description	DALI-2 Diagnostic Data	DALI-2 Energy Data	LEDset	Box programming
OT 20/170-240/1A0 1DIM NFC G3 CE	No	No	Yes	Yes
OT 40/170-240/0A7 1DIM NFC G3 CE	No	No	Yes	Yes
OT 40/170-240/1A0 1DIM NFC G3 CE	No	No	Yes	Yes
OT 75/170...240/0A7 1DIM NFC G3 CE	No	No	Yes	Yes
OT 75/170-240/1A0 1DIM NFC G3 CE	No	No	Yes	Yes
OT 110/170-240/0A7 1DIM NFC G3 CE	No	No	Yes	Yes
OT 110/170-240/1A0 1DIM NFC G3 CE	No	No	Yes	Yes
OT 165/170-240/1A0 1DIM NFC G3 CE	No	No	Yes	Yes

				Programmable features
Product description	Tuner4TRONIC	Tuner4TRONIC Field App	Programming device	Configuration Lock
OT 20/170-240/1A0 1DIM NFC G3 CE	Yes	Yes	NFC	Yes
OT 40/170-240/0A7 1DIM NFC G3 CE	Yes	Yes	NFC	Yes
OT 40/170-240/1A0 1DIM NFC G3 CE	Yes	Yes	NFC	Yes
OT 75/170...240/0A7 1DIM NFC G3 CE	Yes	Yes	NFC	Yes
OT 75/170-240/1A0 1DIM NFC G3 CE	Yes	Yes	NFC	Yes

Product family datasheet

Product description	Tuner4TRONIC	Tuner4TRONIC Field App	Programming device	Programmable features
				Configuration Lock
OT 110/170-240/0A7 1DIM NFC G3 CE	Yes	Yes	NFC	Yes
OT 110/170-240/1A0 1DIM NFC G3 CE	Yes	Yes	NFC	Yes
OT 165/170-240/1A0 1DIM NFC G3 CE	Yes	Yes	NFC	Yes

Product description	DALI-2 Luminaire Data	Emergency Mode	MainsDIM	StepDIM
OT 20/170-240/1A0 1DIM NFC G3 CE	No	No	No	No
OT 40/170-240/0A7 1DIM NFC G3 CE	No	No	No	No
OT 40/170-240/1A0 1DIM NFC G3 CE	No	No	No	No
OT 75/170...240/0A7 1DIM NFC G3 CE	No	No	No	No
OT 75/170-240/1A0 1DIM NFC G3 CE	No	No	No	No
OT 110/170-240/0A7 1DIM NFC G3 CE	No	No	No	No
OT 110/170-240/1A0 1DIM NFC G3 CE	No	No	No	No
OT 165/170-240/1A0 1DIM NFC G3 CE	No	No	No	No

Product description	AstroDIM	Driver Guard	Thermal Protection	Constant Lumen
OT 20/170-240/1A0 1DIM NFC G3 CE	Yes	Yes	Yes	Yes
OT 40/170-240/0A7 1DIM NFC G3 CE	Yes	Yes	Yes	Yes
OT 40/170-240/1A0 1DIM NFC G3 CE	Yes	Yes	Yes	Yes
OT 75/170...240/0A7 1DIM NFC G3 CE	Yes	Yes	Yes	Yes
OT 75/170-240/1A0 1DIM NFC G3 CE	Yes	Yes	Yes	Yes
OT 110/170-240/0A7 1DIM NFC G3 CE	Yes	Yes	Yes	Yes
OT 110/170-240/1A0 1DIM NFC G3 CE	Yes	Yes	Yes	Yes
OT 165/170-240/1A0 1DIM NFC G3 CE	Yes	Yes	Yes	Yes

Product family datasheet

Product description	Certificates & standards			Logistical data
	Type of protection	Standards	Approval marks – approval	Commodity code
OT 20/170-240/1A0 1DIM NFC G3 CE	IP20	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/UL-8750	CCC / CE / ENEC / RCM / VDE	85044083900
OT 40/170-240/0A7 1DIM NFC G3 CE	IP20	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/UL-8750	CCC / CE / ENEC / RCM / VDE	85044083900
OT 40/170-240/1A0 1DIM NFC G3 CE	IP20	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/UL-8750	CCC / CE / ENEC / RCM / VDE	85044083900
OT 75/170...240/0A7 1DIM NFC G3 CE	IP20	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/UL-8750	CCC / CE / ENEC / RCM / VDE	85044083900

Product family datasheet

		Certificates & standards		Logistical data
Product description	Type of protection	Standards	Approval marks – approval	Commodity code
OT 75/170-240/1A0 1DIM NFC G3 CE	IP20	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/UL-8750	CCC / CE / ENEC / RCM / VDE	85044083900
OT 110/170-240/0A7 1DIM NFC G3 CE	IP20	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/UL-8750	CCC / CE / ENEC / RCM / VDE	85044083900
OT 110/170-240/1A0 1DIM NFC G3 CE	IP20	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/UL-8750	CCC / CE / ENEC / RCM / VDE	85044083900
OT 165/170-240/1A0 1DIM NFC G3 CE	IP20	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/UL-8750	CCC / CE / ENEC / RCM / VDE	85044083900
		Environmental information		
		Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)		
Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1	CAS No. of substance 1
OT 20/170-240/1A0 1DIM NFC G3 CE	24-11-2023	4052899631861	Lead	7439-92-1

Product family datasheet

Product description	Environmental information			
	Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)			
Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1	CAS No. of substance 1
OT 40/170-240/0A7 1DIM NFC G3 CE	22-11-2023	4052899631878	Lead	7439-92-1
OT 40/170-240/1A0 1DIM NFC G3 CE	22-11-2023	4052899631885	Lead	7439-92-1
OT 75/170...240/0A7 1DIM NFC G3 CE	22-11-2023	4052899631892	Lead	7439-92-1
OT 75/170-240/1A0 1DIM NFC G3 CE	22-11-2023	4052899631908	Lead	7439-92-1
OT 110/170-240/0A7 1DIM NFC G3 CE	22-11-2023	4052899631915	Lead	7439-92-1
OT 110/170-240/1A0 1DIM NFC G3 CE	22-11-2023	4052899631922	Lead	7439-92-1
OT 165/170-240/1A0 1DIM NFC G3 CE	22-11-2023	4052899631939	Lead	7439-92-1

Product description	Safe Use Instruction	Declaration No. in SCIP database
OT 20/170-240/1A0 1DIM NFC G3 CE	The identification of the Candidate List substance is sufficient to allow safe use of the article.	3b451187-c0e2-432b-8f43-b80fd09fcf3e
OT 40/170-240/0A7 1DIM NFC G3 CE	The identification of the Candidate List substance is sufficient to allow safe use of the article.	8dab5f99-5187-42e0-a6c3-17222d3f02a5
OT 40/170-240/1A0 1DIM NFC G3 CE	The identification of the Candidate List substance is sufficient to allow safe use of the article.	50e2a1ca-5769-403b-a3e7-c61bbba4111e
OT 75/170...240/0A7 1DIM NFC G3 CE	The identification of the Candidate List substance is sufficient to allow safe use of the article.	7b82f4e7-abb3-4421-8054-fdbb82195a77
OT 75/170-240/1A0 1DIM NFC G3 CE	The identification of the Candidate List substance is sufficient to allow safe use of the article.	1d204a0b-21db-44b4-8021-a81d63116a27
OT 110/170-240/0A7 1DIM NFC G3 CE	The identification of the Candidate List substance is sufficient to allow safe use of the article.	34742ab3-0774-4220-8bfb-f28922aeeb06

Product family datasheet

Product description	Safe Use Instruction	Declaration No. in SCIP database
OT 110/170-240/1A0 1DIM NFC G3 CE	The identification of the Candidate List substance is sufficient to allow safe use of the article.	dbacc410-5aba-42bd-8caf-7267afa8f386
OT 165/170-240/1A0 1DIM NFC G3 CE	The identification of the Candidate List substance is sufficient to allow safe use of the article.	2781d38b-c396-4507-8bc8-166bca243ef4

- 1) Permitted voltage range
- 2) Within the full operating window
- 3) At full power
- 4) At 180 µs
- 5) Max. 75% in DC operating mode
- 6) at 230 V, 50 Hz
- 7) Additional fuse needed in DC operation
- 8) +/- 5% for LEDset down to 150mA
- 9) The luminaire manufacturer must ensure that condensation water cannot be created within the fixture.
- 10) At maximum $T_c = 75^{\circ}\text{C}$ / 10% failure rate / At $T_c = 63^{\circ}\text{C}$ / 10% failure rate
- 11) Output wires must be routed as close as possible to each other
- 12) At 186 µs
- 13) At maximum $T_c = 80^{\circ}\text{C}$ / 10% failure rate / At $T_c = 68^{\circ}\text{C}$ / 10% failure rate
- 14) At 202 µs
- 15) At maximum $T_c = 90^{\circ}\text{C}$ / 10% failure rate / At $T_c = 78^{\circ}\text{C}$ / 10% failure rate
- 16) At 106 µs
- 17) At maximum $T_c = 85^{\circ}\text{C}$ / 10% failure rate / At $T_c = 73^{\circ}\text{C}$ / 10% failure rate
- 18) At 175 µs

Application advice

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

Additional product information

- 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.
- Typical resistor values: 4.76 kOhm for 1050 mA; 4.28 kOhm for 350 mA, 33.3 kOhm for 150 mA
- In case of miswiring the driver can withstand up to 350 Vac for up to two hours.
- 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, I₂ t > 160 160 A2s).
- 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.
- The driver automatically adjusts the output voltage to the maximum output voltage if no load is connected and switches off the load after some seconds. Hot-plug of the load or external switching on the secondary side is not allowed.
- The driver is protected against temporary overheating by automatic reduction of the output current down to 30 % and then switches off.
- 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.
- Several external NTCs are supported for temperature protection of the LED module or luminaire. By default, the following resistor values are set: start derating: 6.3 kOhm, end derating 5.0 kOhm, shut off: 4.5 kOhm, derating level 50 %.
- 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.
- The constant lumen feature is disabled by default.
- 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).
- If any output level is below the physical min level, the physical min level will be used.
- 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.

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File	
	User instruction OPTOTRONIC Outdoor

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
4052899631861	OT 20/170-240/1A0 1DIM NFC G3 CE	Shipping carton box 18	272 mm x 260 mm x 125 mm	8.84 dm ³	4152.00 g
4052899631878	OT 40/170-240/0A7 1DIM NFC G3 CE	Shipping carton box 18	272 mm x 260 mm x 125 mm	8.84 dm ³	4152.00 g
4052899631885	OT 40/170-240/1A0 1DIM NFC G3 CE	Shipping carton box 18	272 mm x 260 mm x 125 mm	8.84 dm ³	4152.00 g
4052899631892	OT 75/170...240/0A7 1DIM NFC G3 CE	Shipping carton box 18	272 mm x 260 mm x 125 mm	8.84 dm ³	4152.00 g
4052899631908	OT 75/170-240/1A0 1DIM NFC G3 CE	Shipping carton box 18	272 mm x 260 mm x 125 mm	8.84 dm ³	4152.00 g
4052899631915	OT 110/170-240/0A7 1DIM NFC G3 CE	Shipping carton box 18	285 mm x 268 mm x 156 mm	11.92 dm ³	11096.00 g
4052899631922	OT 110/170-240/1A0 1DIM NFC G3 CE	Shipping carton box 18	285 mm x 268 mm x 156 mm	11.92 dm ³	11096.00 g
4052899631939	OT 165/170-240/1A0 1DIM NFC G3 CE	Shipping carton box 12	319 mm x 210 mm x 156 mm	10.45 dm ³	9748.00 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.

Disclaimer

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