

OPTOTRONIC Phase-cut OT FIT

Compact constant current LED drivers



Areas of application

- Decorative illumination
- Downlights, flat luminaires
- Hospitality
- Living areas
- Museums, residential buildings
- Offices
- Shop lighting
- Suitable for indoor SELV installations
- Suitable for luminaires of protection class I and II

Product family benefits

- Compatible with the most common leading-edge and trailing-edge phase dimmers
- Flexible current setting (DIPswitch – 4 currents)
- Flicker-free dimming
- Higher quality of light thanks to < 5% output ripple current

Product family features

- Cable clamp housing for independent mounting
- Dimmable on the leading edge and trailing edge
- Housing for independent installation



Product family datasheet

Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Total harmonic distortion	Power factor λ	ECG efficiency
OT FIT 8/220...240/180 CS PC	220...240 V	50/60 Hz	198...264 V ¹⁾	< 20 %	> 0.95 ²⁾	80 % ³⁾
OT FIT 8/220...240/180 CS PC SC	220...240 V	50/60 Hz	198...264 V ¹⁾	< 20 %	> 0.95 ²⁾	80 % ³⁾
OT FIT 18/220...240/450 CS PC	220...240 V	50/60 Hz	198...264 V ¹⁾	< 20 %	> 0.95 ²⁾	>82 % ³⁾
OT FIT 18/220...240/450 CS PC SC	220...240 V	50/60 Hz	198...264 V ¹⁾	< 20 %	> 0.95 ²⁾	>82 % ³⁾

Product description	Device power loss	Protective conductor current	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 10 A (C)	Max. ECG no. on circuit breaker 16 A (B)
OT FIT 8/220...240/180 CS PC	1.8 W ⁴⁾	<0.7 mA	< 10 A ⁵⁾	80	132	128
OT FIT 8/220...240/180 CS PC SC	1.8 W ⁴⁾	<0.7 mA	< 10 A ⁵⁾	80	132	128
OT FIT 18/220...240/450 CS PC	4.0 W ⁴⁾	<0.7 mA	< 10 A ⁵⁾	33	55	53
OT FIT 18/220...240/450 CS PC SC	4.0 W ⁴⁾	<0.7 mA	< 10 A ⁵⁾	33	55	53

Product description	Max. ECG no. on circuit breaker 16 A (C)	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)	Surge capability (L-N)
OT FIT 8/220...240/180 CS PC	212	-	2 kV	1 kV
OT FIT 8/220...240/180 CS PC SC	212	-	2 kV	1 kV
OT FIT 18/220...240/450 CS PC	88	-	2 kV	1 kV
OT FIT 18/220...240/450 CS PC SC	88	-	2 kV	1 kV

Product description	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Output current tolerance	Output ripple current (100 Hz)
OT FIT 8/220...240/180 CS PC	27...40 V ⁶⁾	60 V	100 / 120 / 155 / 180 mA ⁷⁾	±7.5 %	< 5 %
OT FIT 8/220...240/180 CS PC SC	27...40 V ⁶⁾	60 V	100 / 120 / 155 / 180 mA ⁷⁾	±7.5 %	< 5 %
OT FIT 18/220...240/450 CS PC	27...40 V ⁶⁾	60 V	225 / 325 / 350 / 450 mA ⁷⁾	±7.5 %	< 5 %
OT FIT 18/220...240/450 CS PC SC	27...40 V ⁶⁾	60 V	225 / 325 / 350 / 450 mA ⁷⁾	±7.5 %	< 5 %

Product description	Nominal output power	Galvanic isolation
OT FIT 8/220...240/180 CS PC	7.2 W ⁸⁾	SELV
OT FIT 8/220...240/180 CS PC SC	7.2 W ⁸⁾	SELV
OT FIT 18/220...240/450 CS PC	18 W ⁹⁾	SELV
OT FIT 18/220...240/450 CS PC SC	18 W ⁹⁾	SELV

Product family datasheet

- 1) Permitted voltage range
- 2) Full load at 230 V/Minimum load at 230 V
- 3) At full load and 230 V / At 50 Hz
- 4) Maximum
- 5) $t_{width} = 100 \mu s$ (measured at 50 % I_{peak})
- 6) Maximum 60 V
- 7) $\pm 7.5\%$
- 8) Partial load 2.7...7.2W
- 9) Partial load 6.1...18W

Dimensions & weight

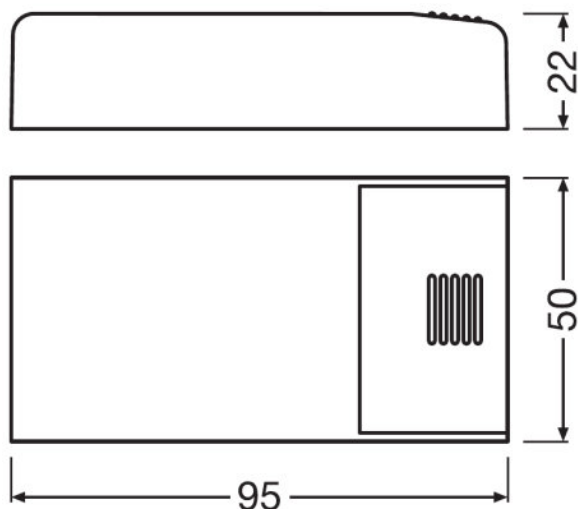
Product description	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side	Wire preparation length, output side
OT FIT 8/220...240/180 CS PC	59.20 g	0.75...1.5 mm ² ¹⁾	0.75...1.5 mm ² ¹⁾	5...6 mm	5...6 mm
OT FIT 8/220...240/180 CS PC SC	59.20 g	0.75...1.5 mm ² ¹⁾	0.75...1.5 mm ² ¹⁾	5...6 mm	5...6 mm
OT FIT 18/220...240/450 CS PC	77.70 g	0.75...1.5 mm ² ¹⁾	0.75...1.5 mm ² ¹⁾	5...6 mm	5...6 mm
OT FIT 18/220...240/450 CS PC SC	77.70 g	0.75...1.5 mm ² ¹⁾	0.75...1.5 mm ² ¹⁾	5...6 mm	5...6 mm

Product description	Height	Length	Width
OT FIT 8/220...240/180 CS PC	22.0 mm	95.0 mm	50.0 mm
OT FIT 8/220...240/180 CS PC SC	22.0 mm	95.0 mm	50.0 mm
OT FIT 18/220...240/450 CS PC	22.0 mm	95.0 mm	50.0 mm
OT FIT 18/220...240/450 CS PC SC	22.0 mm	95.0 mm	50.0 mm

¹⁾ Flexible / Solid leads

Product family datasheet

Product line drawing



OT FIT 8/220...240/180 CS PC, OT FIT 8/220...240/180 CS PC SC, OT FIT 18/220...240/450 CS PC, OT FIT 18/220...240/450 CS PC SC

Colors & materials

Product description	Casing material
OT FIT 8/220...240/180 CS PC	Plastic
OT FIT 8/220...240/180 CS PC SC	Plastic
OT FIT 18/220...240/450 CS PC	Plastic
OT FIT 18/220...240/450 CS PC SC	Plastic

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Temperature range at storage
OT FIT 8/220...240/180 CS PC	-20...+50 °C	70 °C ¹⁾	110 °C	-20...80 °C
OT FIT 8/220...240/180 CS PC SC	-20...+50 °C	70 °C ¹⁾	110 °C	-20...80 °C
OT FIT 18/220...240/450 CS PC	-20...+50 °C	80 °C ¹⁾	110 °C	-20...80 °C
OT FIT 18/220...240/450 CS PC SC	-20...+50 °C	80 °C ¹⁾	110 °C	-20...80 °C

Product description	Permitted rel. humidity during operation
OT FIT 8/220...240/180 CS PC	5...85 % ²⁾
OT FIT 8/220...240/180 CS PC SC	5...85 % ²⁾

Product family datasheet

Product description	Permitted rel. humidity during operation
OT FIT 18/220...240/450 CS PC	5...85 % ²⁾
OT FIT 18/220...240/450 CS PC SC	5...85 % ²⁾

¹⁾ Maximum at the T_c-point

²⁾ Non-condensing

Lifespan

Product description	ECG lifetime
OT FIT 8/220...240/180 CS PC	50000 / 30000 h ¹⁾
OT FIT 8/220...240/180 CS PC SC	50000 / 30000 h ¹⁾
OT FIT 18/220...240/450 CS PC	50000 / 30000 h ²⁾
OT FIT 18/220...240/450 CS PC SC	50000 / 30000 h ²⁾

¹⁾ At T_{case} = 60°C at T_c point / 10% failure rate / At T_{case} = 70°C at T_c point / 10% failure rate

²⁾ At maximum T_c = 70°C / 10% failure rate / At maximum T_c = 80°C / 10% failure rate

Additional product data

Product description	Encapsulated
OT FIT 8/220...240/180 CS PC	No
OT FIT 8/220...240/180 CS PC SC	No
OT FIT 18/220...240/450 CS PC	No
OT FIT 18/220...240/450 CS PC SC	No

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OT FIT 8/220...240/180 CS PC	Yes	Phase Cut ¹⁾	5...100 %	Amplitude Modulation
OT FIT 8/220...240/180 CS PC SC	Yes	Phase Cut ¹⁾	5...100 %	Amplitude Modulation
OT FIT 18/220...240/450 CS PC	Yes	Phase Cut ¹⁾	5...100 %	Amplitude Modulation
OT FIT 18/220...240/450 CS PC SC	Yes	Phase Cut ¹⁾	5...100 %	Amplitude Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OT FIT 8/220...240/180 CS PC	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT FIT 8/220...240/180 CS PC SC	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT FIT 18/220...240/450 CS PC	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT FIT 18/220...240/450 CS PC SC	Automatic reversible	Automatic reversible	Automatic reversible	Yes

Product description	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Type of connection, input side	Type of connection, output side
OT FIT 8/220...240/180 CS PC	2.0 m	I / II	Push terminal	Push terminal
OT FIT 8/220...240/180 CS PC SC	2.0 m	I / II	Screw terminal	Screw terminal
OT FIT 18/220...240/450 CS PC	2.0 m	I / II	Push terminal	Push terminal

Product family datasheet

Product description	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Type of connection, input side	Type of connection, output side
OT FIT 18/220...240/450 CS PC SC	2.0 m	I / II	Screw terminal	Screw terminal

Product description	Number of channels
OT FIT 8/220...240/180 CS PC	1
OT FIT 8/220...240/180 CS PC SC	1
OT FIT 18/220...240/450 CS PC	1
OT FIT 18/220...240/450 CS PC SC	1

¹⁾ Leading edge / Trailing edge

Programming

Product description	Tuner4TRONIC	Tuner4TRONIC Field App	Programming device
OT FIT 8/220...240/180 CS PC	No	No	DIPswitch
OT FIT 8/220...240/180 CS PC SC	No	No	DIPswitch
OT FIT 18/220...240/450 CS PC	No	No	DIPswitch
OT FIT 18/220...240/450 CS PC SC	No	No	DIPswitch

Certificates & standards

Product description	Approval marks – approval	Standards	Protection class	Type of protection
OT FIT 8/220...240/180 CS PC	CE / CCC / ENEC / EAC / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to CISPR 15/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	II	IP20
OT FIT 8/220...240/180 CS PC SC	CE / CCC / ENEC / EAC / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to CISPR 15/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	II	IP20
OT FIT 18/220...240/450 CS PC	CE / CCC / ENEC / EAC / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to CISPR 15/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	II	IP20
OT FIT 18/220...240/450 CS PC SC	CE / CCC / ENEC / EAC / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to CISPR 15/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	II	IP20

Product family datasheet

Logistical data

Product description	Commodity code
OT FIT 8/220...240/180 CS PC	850440829000
OT FIT 8/220...240/180 CS PC SC	850440829000
OT FIT 18/220...240/450 CS PC	850440829000
OT FIT 18/220...240/450 CS PC SC	850440829000





Application advice

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

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File
 User instruction OPTOTRONIC LED Power Supply
 User instruction OPTOTRONIC LED Power Supply
 Addon Technical Information OT FIT 8 PC CS DL 270120
 Addon Technical Information OT FIT 18 PC CS DL 270120

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172007535	OT FIT 8/220...240/180 CS PC	Shipping carton box 20	264 mm x 202 mm x 64 mm	3.41 dm ³	1301.00 g
4062172088688	OT FIT 8/220...240/180 CS PC SC	Shipping carton box 20	264 mm x 202 mm x 64 mm	3.41 dm ³	1301.00 g
4062172007559	OT FIT 18/220...240/450 CS PC	Shipping carton box 20	264 mm x 202 mm x 64 mm	3.41 dm ³	1671.00 g
4062172088701	OT FIT 18/220...240/450 CS PC SC	Shipping carton box 20	264 mm x 202 mm x 64 mm	3.41 dm ³	1671.00 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.