

CV Power supplies with DALI



Product family features

- Dimmable via Touch DIM (if supported)
- LED driver whose output power can be shared arbitrarily among the 2 or 4 channels
- Dimming range: 0...100 %
- Line frequency: 0 Hz | 50 Hz | 60 Hz

Product family benefits

- Intelligent power matching thanks to Smart power supply
- Slim form factor for mounting on the cove or in linear luminaires
- Minimized flicker thanks to high PWM frequency
- Suitable for installation in emergency lighting systems according to EN 60598-2-22
- Available as Tunable White version (DALI Device Type 8)
- DALI message detection "LED Module failure"
- IP rating: IP20

Areas of application

- Cove lighting, wall washer, corridor, handrail
- Suitable for use in luminaires of protection class I and II

Product family datasheet

Technical data

Product description	Electrical data					
	Nominal input voltage	Mains frequency	Input voltage AC	Total harmonic distortion	Power factor λ	ECG efficiency
OTi DALI 50/220...240/24 1...4 CH ¹⁾	220...240 V	50/60 Hz	198...264 V	< 5 %	> 0.95	92 %
OTi DALI 50/220...240/24 TW ¹⁾	220...240 V	50/60 Hz	198...264 V	< 5 %	0.98	92 %
OTi DALI 80/220...240/24 1...4 CH ¹⁾	220...240 V	50/60 Hz	198...264 V	< 5 %	> 0.95	93 %
OTi DALI 80/220...240/24 TW ¹⁾	220...240 V	50/60 Hz	198...264 V	< 5 %	0.98	93 %
OTi DALI 160/220...240/24 1-2 CH ¹⁾	220...240 V	50/60 Hz	198...264 V	< 5 %	0.99	93 %
OTi DALI 160/220...240/24 TW ¹⁾	220...240 V	50/60 Hz	198...264 V	< 5 %	0.99	93 %

Product description	Device power loss	Power loss in stand-by mode	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)
OTi DALI 50/220...240/24 1...4 CH ¹⁾	5.0 W	0.3 W	43 A	9	15	27
OTi DALI 50/220...240/24 TW ¹⁾	4.4 W	0.36 W	43 A	9	15	25
OTi DALI 80/220...240/24 1...4 CH ¹⁾	6.2 W	0.3 W	48 A	6	10	18
OTi DALI 80/220...240/24 TW ¹⁾	6.0 W	0.36 W	48 A	6	10	16
OTi DALI 160/220...240/24 1-2 CH ¹⁾	11 W	0.36 W	69 A	5	8	13
OTi DALI 160/220...240/24 TW ¹⁾	11 W	0.36 W	69 A	5	8	13

Product description	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output power
OTi DALI 50/220...240/24 1...4 CH ¹⁾	2 kV	1 kV	24 V ²⁾	24.2 V	50 W
OTi DALI 50/220...240/24 TW ¹⁾		1 kV	24 V ²⁾	24.2 V	50 W
OTi DALI 80/220...240/24 1...4 CH ¹⁾	2 kV	1 kV	24 V ²⁾	24.2 V	80 W
OTi DALI 80/220...240/24 TW ¹⁾		1 kV	24 V ²⁾	24.2 V	80 W
OTi DALI 160/220...240/24 1-2 CH ¹⁾		1 kV	24.2 V ²⁾	24.2 V	160 W
OTi DALI 160/220...240/24 TW ¹⁾		1 kV	24 V ²⁾	24.2 V	160 W

Product description	Galvanic isolation	Galvanic isolation primary/secondary	Input voltage DC	Dimensions & weight	
				Mounting hole spacing, length	Product weight
OTi DALI 50/220...240/24 1...4 CH ¹⁾	SELV	3.75 kV	176...276 V	300.6 mm	191.00 g
OTi DALI 50/220...240/24 TW ¹⁾	SELV	3.75 kV	176...276 V	300.6 mm	191.00 g
OTi DALI 80/220...240/24 1...4 CH ¹⁾	SELV	3.75 kV	176...276 V	300.6 mm	191.00 g
OTi DALI 80/220...240/24 TW ¹⁾	SELV	3.75 kV	176...276 V	300.6 mm	191.00 g
OTi DALI 160/220...240/24 1-2 CH ¹⁾	SELV	3 kV	176...276 V	258.0 mm	380.00 g
OTi DALI 160/220...240/24 TW ¹⁾	SELV	3 kV	176...276 V	258.0 mm	380.00 g

Product family datasheet

Product description	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side	Wire preparation length, output side	Length
OTi DALI 50/220...240/24 1...4 CH ¹⁾	0.5...2.5 mm ²	0.2...1.5 mm ²	6.0 mm	5.0 mm	346.0 mm
OTi DALI 50/220...240/24 TW ¹⁾	0.75...2.5 mm ²	0.2...1.5 mm ²	5.0 mm	5.0 mm	346.0 mm
OTi DALI 80/220...240/24 1...4 CH ¹⁾	0.5...2.5 mm ²	0.2...1.5 mm ²	6.0 mm	5.0 mm	346.0 mm
OTi DALI 80/220...240/24 TW ¹⁾	0.75...2.5 mm ²	0.2...1.5 mm ²	5.0 mm	5.0 mm	346.0 mm
OTi DALI 160/220...240/24 1-2 CH ¹⁾	0.5...2.5 mm ²	0.5...2.5 mm ²	6.0 mm	6.0 mm	300.0 mm
OTi DALI 160/220...240/24 TW ¹⁾	0.5...2.5 mm ²	0.5...2.5 mm ²	6.0 mm	6.0 mm	300.0 mm

Product description	Height	Width	Mounting hole spacing, width	Colors & materials	Temperatures & operating conditions	
				Casing material	Ambient temperature range	Maximum temperature at tc test point
OTi DALI 50/220...240/24 1...4 CH ¹⁾	22.0 mm	32.0 mm		Plastic	-20...+45 °C	70 °C
OTi DALI 50/220...240/24 TW ¹⁾	22.0 mm	32.0 mm		Plastic	-20...+45 °C	75 °C
OTi DALI 80/220...240/24 1...4 CH ¹⁾	22.0 mm	32.0 mm		Plastic	-20...+45 °C	85 °C
OTi DALI 80/220...240/24 TW ¹⁾	22.0 mm	32.0 mm		Plastic	-20...+45 °C	85 °C
OTi DALI 160/220...240/24 1-2 CH ¹⁾	35.0 mm	50.0 mm	-	Plastic	-20...+45 °C	90 °C
OTi DALI 160/220...240/24 TW ¹⁾	35.0 mm	50.0 mm	-	Plastic	-20...+45 °C	90 °C

Product description	Max.housing temperature in case of fault	Temperature range at storage	Permitted rel. humidity during operation	Lifespan	Capabilities
				ECG lifetime	Dimmable
OTi DALI 50/220...240/24 1...4 CH ¹⁾	115 °C	-40...+85 °C	5...85 % ³⁾	50000 h ⁴⁾	Yes
OTi DALI 50/220...240/24 TW ¹⁾	115 °C	-40...+85 °C	5...85 % ³⁾	50000 h ⁵⁾	Yes
OTi DALI 80/220...240/24 1...4 CH ¹⁾	115 °C	-40...+85 °C	5...85 % ³⁾	50000 h ⁶⁾	Yes
OTi DALI 80/220...240/24 TW ¹⁾	115 °C	-40...+85 °C	5...85 % ³⁾	50000 h ⁷⁾	Yes
OTi DALI 160/220...240/24 1-2 CH ¹⁾	115 °C	-20...85 °C	5...85 % ³⁾	50000 h ⁸⁾	Yes
OTi DALI 160/220...240/24 TW ¹⁾	120 °C	-25...85 °C	5...85 % ³⁾	50000 h ⁸⁾	Yes

Product description	Dimming interface	Dimming range	Dimming method	Overheating protection
OTi DALI 50/220...240/24 1...4 CH ¹⁾	DALI-2	0...100 %	Pulse Width Modulation	Automatic reversible
OTi DALI 50/220...240/24 TW ¹⁾	DALI-2	0...100 %	Pulse Width Modulation	Automatic reversible
OTi DALI 80/220...240/24 1...4 CH ¹⁾	DALI-2	0...100 %	Pulse Width Modulation	Automatic reversible
OTi DALI 80/220...240/24 TW ¹⁾	DALI-2	0...100 %	Pulse Width Modulation	Automatic reversible

Product family datasheet

Product description	Dimming interface	Dimming range	Dimming method	Overheating protection
OTi DALI 160/220...240/24 1-2 CH ¹⁾	DALI-2	0...100 %	Pulse Width Modulation	Automatic reversible
OTi DALI 160/220...240/24 TW ¹⁾	DALI-2	0...100 %	Pulse Width Modulation	Automatic reversible

Product description	Overload protection	Short-circuit protection	No-load proof
OTi DALI 50/220...240/24 1...4 CH ¹⁾	Automatic reversible	Automatic reversible	Yes
OTi DALI 50/220...240/24 TW ¹⁾	Automatic reversible	Automatic reversible	Yes
OTi DALI 80/220...240/24 1...4 CH ¹⁾	Automatic reversible	Automatic reversible	Yes
OTi DALI 80/220...240/24 TW ¹⁾	Automatic reversible	Automatic reversible	Yes
OTi DALI 160/220...240/24 1-2 CH ¹⁾	Automatic reversible	Automatic reversible	Yes
OTi DALI 160/220...240/24 TW ¹⁾	Automatic reversible	Automatic reversible	Yes

Product description	Suitable for fixtures with prot. class	Type of connection, output side	Number of channels	Certificates & standards Approval marks – approval
OTi DALI 50/220...240/24 1...4 CH ¹⁾	I / II	Screw terminal	4	CE / ENEC 10 / VDE / VDE-EMC / RCM / EAC / CCC / BIS / EL
OTi DALI 50/220...240/24 TW ¹⁾	I / II	Screw terminal	2	CE / ENEC 10 / VDE / VDE-EMC / RCM / EAC / CCC / BIS / EL
OTi DALI 80/220...240/24 1...4 CH ¹⁾	I / II	Screw terminal	4	CE / ENEC 10 / VDE / VDE-EMC / RCM / EAC / CCC / BIS / EL
OTi DALI 80/220...240/24 TW ¹⁾	I / II	Screw terminal	2	CE / ENEC 10 / VDE / VDE-EMC / RCM / EAC / CCC / BIS / EL
OTi DALI 160/220...240/24 1-2 CH ¹⁾	I / II	Screw terminal	2	EL / CCC / EAC / CE / ENEC 10 / VDE / VDE-EMC / BIS / RCM
OTi DALI 160/220...240/24 TW ¹⁾	I / II	Screw terminal	2	EL / CCC / EAC / CE / ENEC 10 / VDE / VDE-EMC / RCM / BIS

Product description	Standards	Protection class	Type of protection	Logistical data Commodity code
OTi DALI 50/220...240/24 1...4 CH ¹⁾	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 60598-2-22/Acc. to EN 62386/Acc. to EN 55015	II	IP20	850440829000

Product family datasheet

Product description	Standards	Protection class	Type of protection	Logistical data
				Commodity code
OTi DALI 50/220...240/24 TW ¹⁾	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 60598-2-22/Acc. to EN 62386	II	IP20	850440829000
OTi DALI 80/220...240/24 1...4 CH ¹⁾	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 60598-2-22/Acc. to EN 62386/Acc. to EN 55015	II	IP20	850440829000
OTi DALI 80/220...240/24 TW ¹⁾	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 60598-2-22/Acc. to EN 62386	II	IP20	850440829000
OTi DALI 160/220...240/24 1-2 CH ¹⁾	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 60598-2-22/Acc. to EN 62386	II	IP20	850440829000
OTi DALI 160/220...240/24 TW ¹⁾	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 60598-2-22/Acc. to EN 62386	II	IP20	850440829000

¹⁾ Emergency lighting: EL sign

²⁾ DC voltage

³⁾ Maximum 56 days/year at 85 %

⁴⁾ At $T_{case} = 70^{\circ}\text{C}$ at T_c point / 10% failure rate

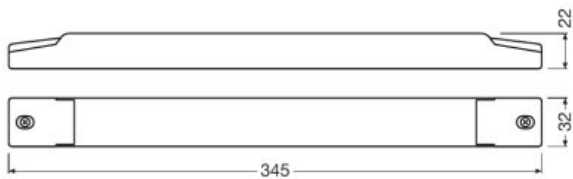
⁵⁾ $T_c = 70^{\circ}\text{C}$, 0.1% / 1,000 h failure rate

⁶⁾ At $T_{case} = 85^{\circ}\text{C}$ at T_c point / 10% failure rate

⁷⁾ $T_c = 85^{\circ}\text{C}$, 0.2% / 1,000 h failure rate

⁸⁾ $T_c = 90^{\circ}\text{C}$ - 0.2% / 1,000 h failure rate

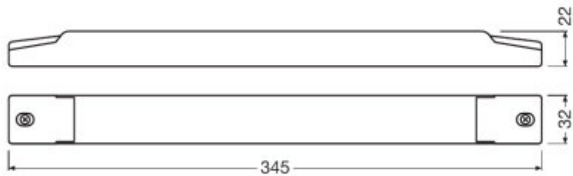
Product family datasheet



725433_OTi DALI 50220-24024 1-4 CH



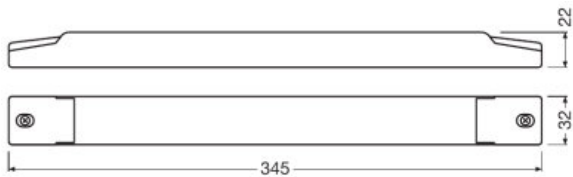
725437_OTi DALI 50220-24024 1-4 CH



730867_OTi DALI 50220-24024 TW



730875_OTi DALI 50220-24024 TW

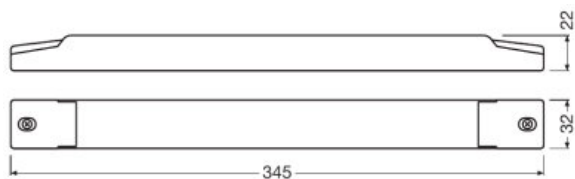


725432_OTi DALI 80220-24024 1-4 CH



725436_OTi DALI 80220-24024 1-4 CH

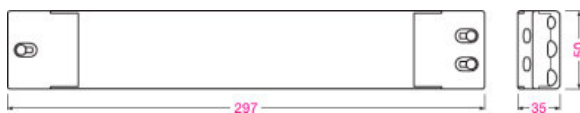
Product family datasheet



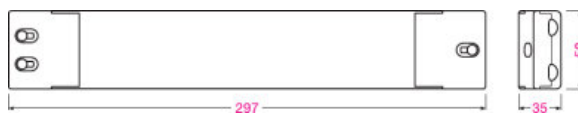
730866_OTi DALI 80220-24024 TW



730874_OTi DALI 80220-24024 TW



OTI DALI 160220-24024 1-2 CH



OTI DALI 160220-24024 TW

Equipment / Accessories

- Suitable for 24 V LED modules

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

Product family datasheet

	User instruction OPTOTRONIC LED Power Supply
	Product Datasheet OTi DALI 80220-24024 1-4 CH OTi DALI 50220-24024 1-4 CH (EN)
	Brochures OPTOTRONIC constant-voltage LED power supplies and controls (EN)
	Brochures 730792_Light is universal - Easy installation of efficient complete systems (DE)
	Brochures 730791_Light is universal - Easy installation of efficient complete systems (EN)
	Certificates OT ENEC 40050684 240221
	Certificates OTi DALI 50 80 CB DE1 63488 280420
	Certificates 729875_OTi DALI 50220-24024 1-4 CH EATON Conformity
	Certificates 729877_OTi DALI 50220-24024 1-4 CH Inotec Conformity
	Certificates VDE ENEC Certificate 40043863
	Certificates OT EMC 40038482 060720
	Certificates CB Certificate
	Certificates CCC certificate 2017011002969504
	Certificates Certificate of Approval NSW27729
	Certificates VDE ENEC Certificate 40043863 appendix
	Declarations of conformity 729793_EC OTi DALI 50,8024
	CAD data 3-dim CAD data OTi DALI 5080
	User instruction OPTOTRONIC LED Power Supply
	Product Datasheet Datasheet OTi DALI 5080 24 TW
	Certificates 729876_OTi DALI 80220-24024 1-4 CH EATON Conformity
	Certificates 729878_OTi DALI 80220-24024 1-4 CH Conformity Inotec
	User instruction OPTOTRONIC LED Power Supply
	Product Datasheet OTi DALI 160220-24024 1-2 CH (EN)

Product family datasheet

	Certificates OTi DALI 160 CB 63486 280420
	Certificates CB Test Certificate DE1-59703
	Certificates CEAG Certificate OTI DALI 160 1 2 CH
	Certificates INOTEC Certificate OTI DALI 160 220-24024 1 2 CH
	Certificates Certificate NSW27729.1 OTI DALI 160_24
	Certificates CCC Certificate 2018171002002183
	Declarations of conformity 3584656 EU Declaration of Conformity (EN)
	CAD data 3-dim OTI DALI 160 220 240 24
	User instruction OPTOTRONIC LED Power Supply
	Product Datasheet Product Datasheet OTI DALI 160220-24024 TW

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899452916	OTi DALI 50/220...240/24 1...4 CH	Shipping carton box 20	370 mm x 170 mm x 113 mm	7.11 dm ³	3998.00 g
4052899490772	OTi DALI 50/220...240/24 TW	Shipping carton box 20	370 mm x 170 mm x 113 mm	7.11 dm ³	3998.00 g
4052899452893	OTi DALI 80/220...240/24 1...4 CH	Shipping carton box 20	370 mm x 170 mm x 113 mm	7.11 dm ³	3998.00 g
4052899490758	OTi DALI 80/220...240/24 TW	Shipping carton box 20	370 mm x 170 mm x 113 mm	7.11 dm ³	3998.00 g
4052899986305	OTi DALI 160/220...240/24 1-2 CH	Shipping carton box 20	335 mm x 268 mm x 167 mm	14.99 dm ³	7918.00 g
4052899986312	OTi DALI 160/220...240/24 TW	Shipping carton box 20	335 mm x 268 mm x 167 mm	14.99 dm ³	7918.00 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.