

PRODUCT FAMILY DATASHEET

CV Power supplies with DALI



AREAS OF APPLICATION

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

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

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

TECHNICAL DATA

Electrical data

Product description	Nominal voltage	Mains frequency	Input voltage AC	Total harmonic distortion	Power factor λ	ECG efficiency	Device power loss
OTi DALI 50/220...240/24 1...4 CH	220...240 V	50/60 Hz	198...264 V	< 5 %	> 0.95	92 %	5.0 W
OTi DALI 50/220...240/24 TW	220...240 V	50...60 Hz	198...264 V	< 5 %	0.98	92 %	4.4 W
OTi DALI 75/220...240/24 1...4 CH	220...240 V	50...60 Hz	198...264 V ²⁾	< 20 %	0.95/0.90 ³⁾	89 % ⁴⁾	8.5 W ⁵⁾
OTi DALI 80/220...240/24 1...4 CH	220...240 V	50...60 Hz	198...264 V	< 5 %	> 0.95	93 %	6.2 W
OTi DALI 80/220...240/24 TW	220...240 V	50...60 Hz	198...264 V	< 5 %	0.98	93 %	6.0 W
OTi DALI 160/220...240/24 1-2 CH	220...240 V	50...60 Hz	198...264 V	< 5 %	0.99	93 %	11.5 W
OTi DALI 160/220...240/24 TW	220...240 V	50...60 Hz	198...264 V	< 5 %	0.99	93 %	11 W

Product description	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	0.3 W	43 A	9	15	27
OTi DALI 50/220...240/24 TW	0.36 W	43 A	9	15	25
OTi DALI 75/220...240/24 1...4 CH	<1 W	35.6 A ⁶⁾	7	12	-
OTi DALI 80/220...240/24 1...4 CH	0.3 W	48 A	6	10	18
OTi DALI 80/220...240/24 TW	0.36 W	48 A	6	10	16
OTi DALI 160/220...240/24 1-2 CH	<0.3 W	69 A	5	8	13
OTi DALI 160/220...240/24 TW	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	2 kV	1 kV	24 V ¹⁾	24.2 V	50 W
OTi DALI 50/220...240/24 TW		1 kV	24 V ¹⁾	24.2 V	50 W
OTi DALI 75/220...240/24 1...4 CH		2 kV	24 V ⁷⁾	24 V	75 W ⁸⁾
OTi DALI 80/220...240/24 1...4 CH	2 kV	1 kV	24 V ¹⁾	24.2 V	80 W
OTi DALI 80/220...240/24 TW		1 kV	24 V ¹⁾	24.2 V	80 W
OTi DALI 160/220...240/24 1-2 CH		1 kV	24.2 V ¹⁾	24.2 V	160 W
OTi DALI 160/220...240/24 TW		1 kV	24 V ¹⁾	24.2 V	160 W

Product description	Galvanic isolation	Galvanic isolation primary/secondary
OTi DALI 50/220...240/24 1...4 CH	SELV	3.75 kV
OTi DALI 50/220...240/24 TW	SELV	3.75 kV
OTi DALI 75/220...240/24 1...4 CH	SELV equivalent	3.75 kV ⁹⁾
OTi DALI 80/220...240/24 1...4 CH	SELV	3.75 kV
OTi DALI 80/220...240/24 TW	SELV	3.75 kV
OTi DALI 160/220...240/24 1-2 CH	SELV	3.1 kV
OTi DALI 160/220...240/24 TW	SELV	3 kV

¹⁾ DC voltage

²⁾ Permitted voltage range

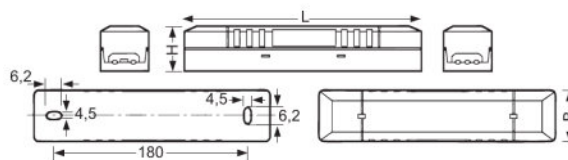
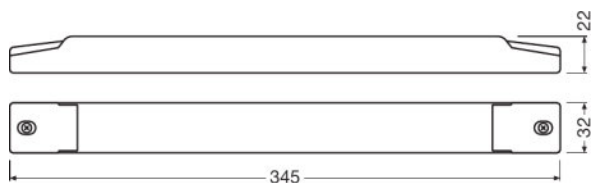
³⁾ Full load at 230 V/Half load at 230 V/Minimum

- 4) At full load and 230 V
- 5) Maximum
- 6) $t_{width} = 270 \mu s$ (measured at 50 % I_{peak})
- 7) +1.0/-0.5 V
- 8) Partial load 0...75 W
- 9) SELV-equivalent

Dimensions & weight

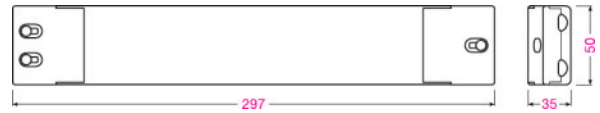
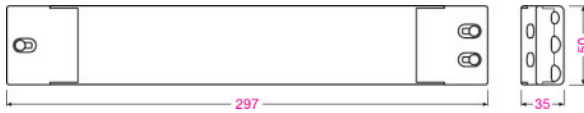
Product description	Length	Width	Height	Product weight
OTi DALI 50/220...240/24 1...4 CH	346.0 mm	32.0 mm	22.0 mm	191.00 g
OTi DALI 50/220...240/24 TW	346.0 mm	32.0 mm	22.0 mm	191.00 g
OTi DALI 75/220...240/24 1...4 CH	220.0 mm	46.2 mm	43.6 mm	350.00 g
OTi DALI 80/220...240/24 1...4 CH	346.0 mm	32.0 mm	22.0 mm	191.00 g
OTi DALI 80/220...240/24 TW	346.0 mm	32.0 mm	22.0 mm	191.00 g
OTi DALI 160/220...240/24 1-2 CH	300.0 mm	50.0 mm	35.0 mm	380.00 g
OTi DALI 160/220...240/24 TW	300.0 mm	50.0 mm	35.0 mm	380.00 g

Product line drawing



OTi DALI 50/220...240/24 1...4 CH, OTi DALI 50/220...240/24 TW, OTi DALI 80/220...240/24 1...4 CH, OTi DALI 80/220...240/24 TW

OTi DALI 75/220...240/24 1...4 CH



OTi DALI 160/220...240/24 1-2 CH

OTi DALI 160/220...240/24 TW

Colors & materials

Product description	Casing material
OTi DALI 50/220...240/24 1...4 CH	Plastic
OTi DALI 50/220...240/24 TW	Plastic
OTi DALI 75/220...240/24 1...4 CH	Plastic
OTi DALI 80/220...240/24 1...4 CH	Plastic
OTi DALI 80/220...240/24 TW	Plastic
OTi DALI 160/220...240/24 1-2 CH	Plastic
OTi DALI 160/220...240/24 TW	Plastic

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Permitted rel. humidity during operation
OTi DALI 50/220...240/24 1...4 CH	-20...+45 °C	70 °C	115 °C	5...85 % ¹⁾
OTi DALI 50/220...240/24 TW	-20...+45 °C	75 °C	115 °C	5...85 % ¹⁾
OTi DALI 75/220...240/24 1...4 CH	-20...+50 °C	75 °C ²⁾	110 °C	5...85 % ¹⁾
OTi DALI 80/220...240/24 1...4 CH	-20...+45 °C	85 °C	115 °C	5...85 % ¹⁾
OTi DALI 80/220...240/24 TW	-20...+45 °C	85 °C	115 °C	5...85 % ¹⁾
OTi DALI 160/220...240/24 1-2 CH	-20...+45 °C	90 °C	115 °C	5...85 % ¹⁾
OTi DALI 160/220...240/24 TW	-20...+45 °C	90 °C	120 °C	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

²⁾ Maximum at the Tc-point

Lifespan

Product description	ECG lifetime
OTi DALI 50/220...240/24 1...4 CH	50000 h ¹⁾
OTi DALI 50/220...240/24 TW	50000 h ²⁾
OTi DALI 75/220...240/24 1...4 CH	50000 h ¹⁾
OTi DALI 80/220...240/24 1...4 CH	50000 h ³⁾
OTi DALI 80/220...240/24 TW	50000 h ⁴⁾
OTi DALI 160/220...240/24 1-2 CH	50000 h ⁵⁾
OTi DALI 160/220...240/24 TW	50000 h ⁵⁾

¹⁾ At $T_{case} = 70^{\circ}C$ at T_c point / 10% failure rate

²⁾ $T_c = 70^{\circ}C$, 0.1% / 1,000 h failure rate

³⁾ At $T_{case} = 85^{\circ}C$ at T_c point / 10% failure rate

⁴⁾ $T_c = 85^{\circ}C$, 0.2% / 1,000 h failure rate

⁵⁾ $T_c = 90^{\circ}C$ - 0.2% / 1,000 h failure rate

Additional product data

Product description	Encapsulated
OTi DALI 50/220...240/24 1...4 CH	Yes
OTi DALI 50/220...240/24 TW	Yes
OTi DALI 75/220...240/24 1...4 CH	No
OTi DALI 80/220...240/24 1...4 CH	Yes
OTi DALI 80/220...240/24 TW	Yes
OTi DALI 160/220...240/24 1-2 CH	Yes
OTi DALI 160/220...240/24 TW	No

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OTi DALI 50/220...240/24 1...4 CH	Yes	DALI-2	0...100 %	Pulse Width Modulation
OTi DALI 50/220...240/24 TW	Yes	DALI	0...100 %	Pulse Width Modulation
OTi DALI 75/220...240/24 1...4 CH	Yes	DALI / Touch DIM	0...100 %	Pulse Width Modulation
OTi DALI 80/220...240/24 1...4 CH	Yes	DALI-2	0...100 %	Pulse Width Modulation
OTi DALI 80/220...240/24 TW	Yes	DALI	0...100 %	Pulse Width Modulation
OTi DALI 160/220...240/24 1-2 CH	Yes	DALI-2	0...100 %	Pulse Width Modulation
OTi DALI 160/220...240/24 TW	Yes	DALI	0...100 %	Pulse Width Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OTi DALI 50/220...240/24 1...4 CH	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 50/220...240/24 TW	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 75/220...240/24 1...4 CH	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 80/220...240/24 1...4 CH	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 80/220...240/24 TW	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 160/220...240/24 1-2 CH	Automatic reversible	Automatic reversible	Automatic reversible	No
OTi DALI 160/220...240/24 TW	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, output side
OTi DALI 50/220...240/24 1...4 CH	10 m	I / II	Screw terminal
OTi DALI 50/220...240/24 TW	10 m	I / II	Screw terminal
OTi DALI 75/220...240/24 1...4 CH	10 m	II / I	Screw terminal
OTi DALI 80/220...240/24 1...4 CH	10 m	I / II	Screw terminal
OTi DALI 80/220...240/24 TW	10 m	I / II	Screw terminal
OTi DALI 160/220...240/24 1-2 CH	10 m	I / II	Screw terminal
OTi DALI 160/220...240/24 TW		I / II	Screw terminal

Certificates & standards

Product description	Approval marks – approval
OTi DALI 50/220...240/24 1...4 CH	CE / ENEC 10 / VDE / VDE-EMC / RCM / EAC / CCC / BIS
OTi DALI 50/220...240/24 TW	CE / ENEC 10 / VDE / VDE-EMC / RCM / EAC / CCC / BIS
OTi DALI 75/220...240/24 1...4 CH	CE / ENEC 10 / VDE / VDE-EMC / RCM
OTi DALI 80/220...240/24 1...4 CH	CE / ENEC 10 / VDE / VDE-EMC / RCM / EAC / CCC / BIS
OTi DALI 80/220...240/24 TW	CE / ENEC 10 / VDE / VDE-EMC / RCM / EAC / CCC / BIS
OTi DALI 160/220...240/24 1-2 CH	CE / ENEC 10 / VDE / VDE-EMC / RCM / EAC / CCC / BIS
OTi DALI 160/220...240/24 TW	EL / CCC / EAC / CE / ENEC 10 / VDE / EMC

Product description	Standards	Protection class	Type of protection
OTi DALI 50/220...240/24 1...4 CH	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
OTi DALI 50/220...240/24 TW	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
OTi DALI 75/220...240/24 1...4 CH	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to EN 55015/Acc. to IEC 61000-3-2/Acc. to IEC 61547/Acc. to IEC 62386-101	II	IP20
OTi DALI 80/220...240/24 1...4 CH	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
OTi DALI 80/220...240/24 TW	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
OTi DALI 160/220...240/24 1-2 CH	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
OTi DALI 160/220...240/24 TW	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

Logistical data

Product description	Temperature range at storage
OTi DALI 50/220...240/24 1...4 CH	-40...+85 °C
OTi DALI 50/220...240/24 TW	-40...+85 °C
OTi DALI 75/220...240/24 1...4 CH	-40...+85 °C
OTi DALI 80/220...240/24 1...4 CH	-40...+85 °C
OTi DALI 80/220...240/24 TW	-40...+85 °C
OTi DALI 160/220...240/24 1-2 CH	-20...85 °C
OTi DALI 160/220...240/24 TW	-25...85 °C

Wiring Diagram



OTi DALI 75/220...240/24 1...4 CH

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.ledvance.com

COUNTRY SPECIFIC INFORMATION

Product description	Product code	METEL code	SEG-No.	STK number	UK Org
OTi DALI 75/220...240/24 1...4 CH	4008321371560	OSROTIDALI752414C H	-	4031252	-
OTi DALI 80/220...240/24 1...4 CH	4052899452893	-	7981950	-	-

DOWNLOAD DATA

File
 User instruction OPTOTRONIC LED Power Supply
 Product Datasheet OTi DALI 80220-24024 1-4 CH OTi DALI 50220-24024 1-4 CH (EN)
 Certificates VDE ENEC Certificate 40043863
 Certificates VDE EMC Certificate 40038482
 Certificates CB Certificate
 Certificates CCC certificate 2017011002969504
 Certificates 729875_OTi DALI 50220-24024 1-4 CH EATON Conformity
 Certificates 729877_OTi DALI 50220-24024 1-4 CH Inotec Conformity
 Certificates 729924_INOTEC OTi DALI 50220-24024 1-4 CH
 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
 Addon Technical Information 320646_ADDON TECHNICAL INFO OPTOTRONIC OTi DALI 75220-24024

	Certificates 730563_VDE Certificate
	Declarations of conformity 727843_Declaration OTi DALI 75
	Certificates 729876_OTi DALI 80220-24024 1-4 CH EATON Confrimty
	Certificates 729878_OTi DALI 80220-24024 1-4 CH Conformity Inotec
	Certificates 729923_EATON OTi DALI 50220-24024 1-4 CH
	Certificates 729925_INOTEC OTi DALI 80220-24024 1-4 CH
	User instruction OPTOTRONIC LED Power Supply
	Product Datasheet Datasheet OTI DALI 160220-24024 1-2 CH
	Certificates CB Test Certificate DE1-59703
	Certificates CEAG Certificate OTI DALI 1601-2 CH
	Certificates INOTEC Certificate OTI DALI 1601-2 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 160220-24024
	User instruction OPTOTRONIC LED Power Supply
	Product Datasheet Product Datasheet OTI DALI 160220-24024 TW

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4052899452923	Shipping carton box 20	370 mm x 170 mm x 116 mm	3998.00 g	7.30 dm ³
4052899490789	Shipping carton box 20	370 mm x 170 mm x 116 mm	3998.00 g	7.30 dm ³
4008321371577	Shipping carton box 20	348 mm x 247 mm x 265 mm	7918.00 g	22.78 dm ³
4052899452909	Shipping carton box 20	370 mm x 170 mm x 116 mm	3998.00 g	7.30 dm ³

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4052899490765	Shipping carton box 20	370 mm x 170 mm x 116 mm	3998.00 g	7.30 dm ³
4052899986329	Shipping carton box 20	335 mm x 268 mm x 167 mm	8065.00 g	14.99 dm ³
4052899986336	Shipping carton box 20	335 mm x 268 mm x 167 mm	8065.00 g	14.99 dm ³

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.