

CV PROTECTED Power supplies with DALI



Areas of application

- Public squares and architecture lighting
- In building facades, luminous signage
- Suitable for indoor and outdoor SELV installations
- Suitable for use in luminaires of protection class I

Product family benefits

- Long lasting and high reliability
- From 1 to 4 channels to arbitrarily distribute the power
- Suitable for installation under sunlight
- IP66/IP67 Salt mist resistant and DC functionality
- AstroDim functionality for automatic dimming and turn on/off

Product family features

- 1 to 4 DALI addressable channels
- LED driver whose output power can be shared arbitrarily among the 1 or 4 channels
- AstroDim functionality
- Dimming range: 0/0, 1...100 %
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- High level surge protection: up to 6 kV (L-N), 8 kV (L/N-PE)
- Inrush current limiter circuit

Product family datasheet

Technical data

Electrical data

| Product description | Nominal input voltage | Mains frequency | Input voltage AC | Total harmonic distortion | Power factor λ |
|--|-----------------------|-----------------|------------------|---------------------------|------------------------|
| OTi DALI 210/220-240/24 1-4 CH | 230...240 V | 50/60 Hz | 198...264 V | < 5 % | > 0.95 |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 220...240 V | 50/60 Hz | 198...264 V | < 5 % | > 0.95 |

| Product description | Efficiency in full-load | Device power loss | Inrush current | Max. ECG no. on circuit breaker 10 A (C) | Max. ECG no. on circuit breaker 10 A (B) |
|--|-------------------------|-------------------|----------------|--|--|
| OTi DALI 210/220-240/24 1-4 CH | 93% ²⁾ | 18.4 W | 3.7 A | 7 | 7 |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 93 % ²⁾ | 7 W | 55 A | 18 | 11 |

| Product description | Max. ECG no. on circuit breaker 16 A (B) | Max. ECG no. on circuit breaker 16 A (C) | Max. ECG no. on circuit breaker 25 A (B) | Surge capability (L/N-Ground) |
|--|--|--|--|-------------------------------|
| OTi DALI 210/220-240/24 1-4 CH | 11 | 11 | 17 | 8 kV |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 17 | 29 | 27 | 8 kV |

| Product description | Surge capability (L-N) | Nominal output voltage | U-OUT (working voltage) | Nominal output power | Maximum output power |
|--|------------------------|------------------------|-------------------------|----------------------|----------------------|
| OTi DALI 210/220-240/24 1-4 CH | 6 kV | 24.7 V ³⁾ | 24.7 V | 210 W ⁴⁾ | 210 W ⁵⁾ |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 6 kV | 24 V ³⁾ | 24.7 V | 100 W | 100 W ⁵⁾ |

| Product description | Galvanic isolation | Galvanic isolation primary/secondary | Output ripple Voltage (100 Hz) |
|--|--------------------|--------------------------------------|--------------------------------|
| OTi DALI 210/220-240/24 1-4 CH | SELV | 3 kV | < 5 % |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | SELV | 3 kV | < 5 % |

| Product description | Output PWM frequency | Input voltage DC |
|--|----------------------|---------------------------|
| OTi DALI 210/220-240/24 1-4 CH | 1k Hz | 176...276 V ⁶⁾ |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 1k Hz | 176...276 V |

¹⁾ See product remark

²⁾ at 230 V, 50 Hz

³⁾ DC voltage

⁴⁾ Lamp failure detection: minimum load per channel that doesn't trigger open circuit detection is 30 W

⁵⁾ at steady state

⁶⁾ with external fuse

Product family datasheet

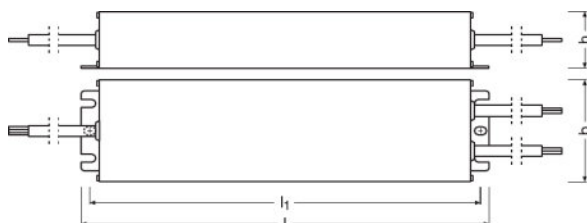
Dimensions & weight

| Product description | Mounting hole spacing, length | Product weight | Cable cross-section, input side | Cable cross-section, output side | Wire preparation length, input side |
|--|-------------------------------|----------------|---------------------------------|----------------------------------|-------------------------------------|
| OTi DALI 210/220-240/24 1-4 CH | 320.0 mm | 1415.00 g | 1.0 mm ² | 1.5 mm ² | 90 mm |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 227.0 mm | 1150.00 g | 1.0 mm ² | 1.5 mm ² | 90 mm |

| Product description | Wire preparation length, output side | Mounting hole spacing, width | Height | Width | Length |
|--|--------------------------------------|------------------------------|---------|---------|----------|
| OTi DALI 210/220-240/24 1-4 CH | 90 mm | 320.0 mm | 37.0 mm | 69.0 mm | 330.0 mm |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 90 mm | 227 mm | 37.0 mm | 69.0 mm | 237.0 mm |

¹⁾ See product remark

Product line drawing



OTi DALI 210/220-240/24 1-4 CH, OTi DALI 100/220-240/24 1-4 CH P

Colors & materials

| Product description | Casing material |
|--|-----------------|
| OTi DALI 210/220-240/24 1-4 CH | Aluminium |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | Aluminium |

Product family datasheet

¹⁾ See product remark

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 |
|--|---------------------------|--------------------------------------|--|------------------------------|
| OTi DALI 210/220-240/24 1-4 CH | -20...+60 °C | 85 °C | 110 °C | -40...+85 °C |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | -20...+60 °C | 75 °C | 110 °C | -40...+85 °C |

| Product description | Permitted rel. humidity during operation |
|--|--|
| OTi DALI 210/220-240/24 1-4 CH | 5...85 % ²⁾ |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 5...85 % ²⁾ |

¹⁾ See product remark

²⁾ Maximum 56 days/year at 85 %

Lifespan

| Product description | ECG lifetime |
|--|--------------|
| OTi DALI 210/220-240/24 1-4 CH | 50000 h |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 50000 h |

¹⁾ See product remark

Capabilities

| Product description | Dimmable | Dimming interface | Dimming range | Dimming method |
|--|----------|-------------------|---------------|------------------------|
| OTi DALI 210/220-240/24 1-4 CH | Yes | DALI-2 | 0.1...100 % | Pulse Width Modulation |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | Yes | DALI-2 | 0.1...100 % | Pulse Width Modulation |

| Product description | Overheating protection | Overload protection | Short-circuit protection | No-load proof |
|--|------------------------|----------------------|--------------------------|---------------|
| OTi DALI 210/220-240/24 1-4 CH | Automatic reversible | Automatic reversible | Automatic reversible | Yes |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | Automatic reversible | Automatic reversible | Automatic reversible | Yes |

| Product description | Intended for no-load operation | Suitable for fixtures with prot. class | Type of connection, input side |
|--|--------------------------------|--|--------------------------------|
| OTi DALI 210/220-240/24 1-4 CH | No | I | Wires |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | No | I | Wires |

| Product description | Type of connection, output side | Number of channels |
|--|---------------------------------|--------------------|
| OTi DALI 210/220-240/24 1-4 CH | Wires | 4 |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | Wires | 4 |

¹⁾ See product remark

Product family datasheet

Certificates & standards

| Product description | Approval marks – approval | Standards | Protection class | Type of protection |
|--|--|---|------------------|--------------------|
| OTi DALI 210/220-240/24 1-4 CH | BIS / CCC / CE / EAC / ENEC 10 / RCM / VDE / VDE-EMC | Acc. to EN 61347-2-13/Acc. to EN 61547/Acc. to EN 55015/Acc. to EN 61000-3-2/Acc. to EN 61000-3-3/Acc. to EN 61347-1/Acc. to EN 62493 | I | IP66/IP67 |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | CE / EAC / ENEC 10 / RCM / VDE / VDE-EMC | Acc. to EN 61347-2-13/Acc. to EN 61547/Acc. to EN 55015/Acc. to EN 61000-3-2/Acc. to EN 61000-3-3/Acc. to EN 61347-1/Acc. to EN 62493 | I | IP66/IP67 |

¹⁾ See product remark

Logistical data

| Product description | Commodity code |
|--|----------------|
| OTi DALI 210/220-240/24 1-4 CH | 850440829000 |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 850440829000 |

¹⁾ See product remark

Environmental information

| Product description | Date of Declaration | Primary Article Identifier | Candidate List Substance 1 |
|--|---------------------|----------------------------|----------------------------|
| OTi DALI 210/220-240/24 1-4 CH | 23-12-2021 | 4062172032087 | Lead |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 23-12-2021 | 4062172119191 | Lead |

| Product description | CAS No. of substance 1 | Safe Use Instruction | Declaration No. in SCIP database |
|--|------------------------|--|--------------------------------------|
| OTi DALI 210/220-240/24 1-4 CH | 7439-92-1 | The identification of the Candidate List substance is sufficient to allow safe use of the article. | bbfff661-3b2d-4f1a-9331-773c62c440db |
| OTi DALI 100/220-240/24 1-4 CH P ¹⁾ | 7439-92-1 | The identification of the Candidate List substance is sufficient to allow safe use of the article. | 34982fbe-faf9-47e8-abad-e4d129a2a129 |

¹⁾ See product remark

Product remark

Product family datasheet

Emergency lighting: EL sign















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 |
|  | Product Datasheet OTi DALI 210 1-4CH Technical Datasheet (EN) |
|  | Brochures OPTOTRONIC constant-voltage LED power supplies and controls (EN) |
|  | Certificates CB TEST CERTIFICATE DE1-62077 |
|  | Certificates OT ENEC 40050684 060421 |
|  | Certificates OTi DALI 210 CB DE1 63487 280420 |
|  | Certificates OTI DALI 210 1 4 CH IEC DE1 63487 A1 220920 |
|  | Certificates VDE ENEC Certificate 40043863 |
|  | Certificates OT EMC 40038482 220421 |
|  | Declarations of conformity EU Declaration of Conformity 2019 9C1 3772470 EN 00 |
|  | CAD data 3-dim 3D STEP file |
|  | CAD data 3-dim OTi DALI 210 220-240 24 1-4 CH - 3D stp file |
|  | User instruction OPTOTRONIC LED Power Supply |
|  | Product Datasheet OTi DALI 100 1-4CH Technical Datasheet (EN) |

Product family datasheet

| | |
|---|--|
|  | Certificates OTi DALI 100 1_4CH P NSW27729 080620 |
|  | Declarations of conformity OTi DALI 100 CE 4187171 290120 |
|  | CAD data 3-dim OTi DALI 100 220-240 24 1-4 CH P - 3D stp file |

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 |
|---------------|----------------------------------|------------------------------|--------------------------------------|-----------------------|--------------|
| 4062172032087 | OTi DALI 210/220-240/24 1-4 CH | Shipping carton box 6 | 380 mm x 262 mm x 201 mm | 20.01 dm ³ | 9195.00 g |
| 4062172119191 | OTi DALI 100/220-240/24 1-4 CH P | Shipping carton box 6 | 287 mm x 262 mm x 201 mm | 15.11 dm ³ | 7478.00 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.