

ICUTRONIC Intelligent – DALI (non-isolated)

Linear constant current LED driver – Dimmable



Areas of application

- Linear and area lighting
- Industry lighting
- Suitable for luminaires of protection class I

Product family benefits

- Versatile non-isolated DALI driver up to 75 W due to flexible output characteristic
- Fully programmable via software (DALI Interface)
- Flexible current setting (RSet)
- Lifetime: up to 100,000 h (temperature at $T_C = 65\text{ }^\circ\text{C}$, max. 10 % failure rate)
- High-quality dimming of 10...100 % by amplitude dimming
- No TouchDIM nor Corridor Function
- High quality of light thanks to <4% output ripple current
- High efficiency
- Low standby power consumption: < 0.25 W
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection

Product family datasheet

Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile scope of application due to output power range of up to 75 W
- Supply voltage: 220...240 V
- Available with output current range: up to 500 mA
- Non-isolated drivers

Product family datasheet

Technical data

Electrical data

| Product description | Nominal input voltage | Mains frequency | Input voltage AC | Input voltage DC | Current set |
|-----------------------------------|-----------------------|-----------------|------------------|------------------|----------------------------|
| ETi DALI 25/220...240/300 D LT2 L | 220...240 V | 0/50/60 Hz | 198...264 V | 176...276 V | DALI / Rset / Programmable |
| ETi DALI 35/220...240/400 D LT2 L | 220...240 V | 0/50/60 Hz | 198...264 V | 176...276 V | DALI / Rset / Programmable |
| ETi DALI 75/220...240/500 D LT2 L | 220...240 V | 0/50/60 Hz | 198...264 V | 176...276 V | DALI / Rset / Programmable |

| Product description | Total harmonic distortion | Power factor λ | Efficiency in full-load | Device power loss | Inrush current |
|-----------------------------------|---------------------------|------------------------|-------------------------|-------------------|----------------|
| ETi DALI 25/220...240/300 D LT2 L | < 10 % | 0.31C...0.95 | 90 % ¹⁾ | 2.0 W | ≤ 28 A |
| ETi DALI 35/220...240/400 D LT2 L | < 10 % | 0.46C...0.97 | 92 % ¹⁾ | 3.0 W | ≤ 28 A |
| ETi DALI 75/220...240/500 D LT2 L | < 10 % | 0.52C...0.98 | 94 % ¹⁾ | 6.0 W | ≤ 34 A |

| Product description | Max. ECG no. on circuit breaker 10 A (C) | Max. ECG no. on circuit breaker 10 A (B) | 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) |
|-----------------------------------|--|--|--|--|--|
| ETi DALI 25/220...240/300 D LT2 L | - | 18 | 30 | - | - |
| ETi DALI 35/220...240/400 D LT2 L | - | 18 | 30 | - | - |
| ETi DALI 75/220...240/500 D LT2 L | - | 15 | 25 | - | - |

| Product description | Surge capability (L/N-Ground) | Surge capability (L-N) | Nominal output voltage | U-OUT (working voltage) | Nominal output current |
|-----------------------------------|-------------------------------|------------------------|------------------------|-------------------------|------------------------|
| ETi DALI 25/220...240/300 D LT2 L | 2 kV | 1 kV | 54...240 V | < 250 V | 35...300 mA |
| ETi DALI 35/220...240/400 D LT2 L | 2 kV | 1 kV | 54...240 V | < 250 V | 75...400 mA |
| ETi DALI 75/220...240/500 D LT2 L | 2 kV | 1 kV | 54...240 V | < 250 V | 125...500 mA |

| Product description | Output current LEDset open | Output current LEDset shorted | Default output current |
|-----------------------------------|----------------------------|-------------------------------|------------------------|
| ETi DALI 25/220...240/300 D LT2 L | 15 mA | 35 mA | 15 mA ²⁾ |
| ETi DALI 35/220...240/400 D LT2 L | 35 mA | 75 mA | 35 mA ²⁾ |
| ETi DALI 75/220...240/500 D LT2 L | 60 mA | 125 mA | 60 mA ²⁾ |

| Product description | Output current tolerance | Output ripple current (100 Hz) | Output PSTLM |
|-----------------------------------|--------------------------|--------------------------------|--------------|
| ETi DALI 25/220...240/300 D LT2 L | ±5 % | < 4 % | ≤1 |
| ETi DALI 35/220...240/400 D LT2 L | ±5 % | < 4 % | ≤1 |
| ETi DALI 75/220...240/500 D LT2 L | ±5 % | < 4 % | ≤1 |

Product family datasheet

| Product description | Output SVM | Nominal output power | Maximum output power | Galvanic isolation |
|-----------------------------------|------------|----------------------|----------------------|--------------------|
| ETi DALI 25/220...240/300 D LT2 L | ≤0.4 | 3...25 W | 25 W | Non isolated |
| ETi DALI 35/220...240/400 D LT2 L | ≤0.4 | 4...35 W | 35 W | Non isolated |
| ETi DALI 75/220...240/500 D LT2 L | ≤0.4 | 8.0...75 W | 75 W | Non isolated |

| Product description | Power loss in stand-by mode |
|-----------------------------------|-----------------------------|
| ETi DALI 25/220...240/300 D LT2 L | <0.25 W |
| ETi DALI 35/220...240/400 D LT2 L | <0.25 W |
| ETi DALI 75/220...240/500 D LT2 L | <0.25 W |

¹⁾ at 230 V, 50 Hz

²⁾ LEDset deactivated

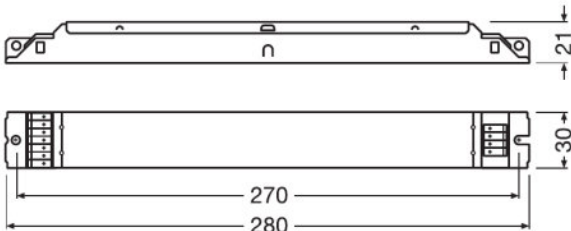
Dimensions & weight

| Product description | Mounting hole spacing, length | Product weight | Cable cross-section, input side | Cable cross-section, output side | Wire preparation length, input side |
|-----------------------------------|-------------------------------|----------------|---------------------------------|----------------------------------|-------------------------------------|
| ETi DALI 25/220...240/300 D LT2 L | 270.0 mm | 205.00 g | 0.5...1.5 mm ² | 0.5...1.5 mm ² | 8.0...9.0 mm |
| ETi DALI 35/220...240/400 D LT2 L | 270.0 mm | 205.00 g | 0.5...1.5 mm ² | 0.5...1.5 mm ² | 8.0...9.0 mm |
| ETi DALI 75/220...240/500 D LT2 L | 270.0 mm | 205.00 g | 0.5...1.5 mm ² | 0.5...1.5 mm ² | 8.0...9.0 mm |

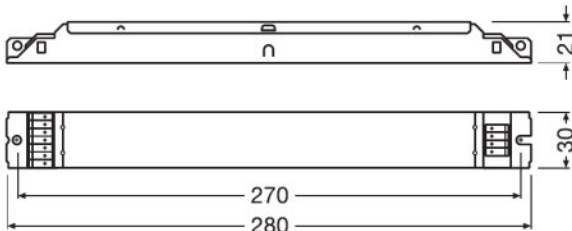
| Product description | Wire preparation length, output side | Width | Length | Height |
|-----------------------------------|--------------------------------------|---------|----------|---------|
| ETi DALI 25/220...240/300 D LT2 L | 8.0...9.0 mm | 30.0 mm | 280.0 mm | 21.0 mm |
| ETi DALI 35/220...240/400 D LT2 L | 8.0...9.0 mm | 30.0 mm | 280.0 mm | 21.0 mm |
| ETi DALI 75/220...240/500 D LT2 L | 8.0...9.0 mm | 30.0 mm | 280.0 mm | 21.0 mm |

Product family datasheet

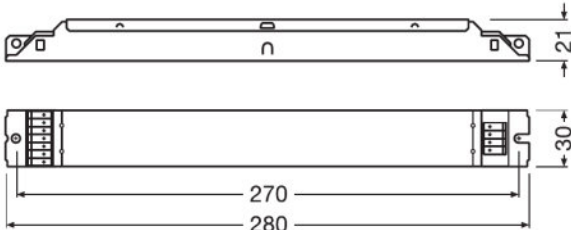
Product line drawing



ETi DALI 25/220...240/300 D LT2 L



ETi DALI 35/220...240/400 D LT2 L



ETi DALI 75/220...240/500 D LT2 L

Product family datasheet

Colors & materials

| Product description | Casing material |
|-----------------------------------|-----------------|
| ETi DALI 25/220...240/300 D LT2 L | Metal |
| ETi DALI 35/220...240/400 D LT2 L | Metal |
| ETi DALI 75/220...240/500 D LT2 L | Metal |

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 |
|-----------------------------------|---------------------------|--------------------------------------|--|------------------------------|
| ETi DALI 25/220...240/300 D LT2 L | -25...+50 °C | 75 °C | 110 °C | -40...+85 °C |
| ETi DALI 35/220...240/400 D LT2 L | -25...+50 °C | 75 °C | 110 °C | -40...+85 °C |
| ETi DALI 75/220...240/500 D LT2 L | -25...+50 °C | 75 °C | 110 °C | -40...+85 °C |

| Product description | Permitted rel. humidity during operation |
|-----------------------------------|--|
| ETi DALI 25/220...240/300 D LT2 L | 5...85 % ¹⁾ |
| ETi DALI 35/220...240/400 D LT2 L | 5...85 % ¹⁾ |
| ETi DALI 75/220...240/500 D LT2 L | 5...85 % ¹⁾ |

¹⁾ Maximum 56 days/year at 85 %

Lifespan

| Product description | ECG lifetime |
|-----------------------------------|------------------|
| ETi DALI 25/220...240/300 D LT2 L | 50000 / 100000 h |
| ETi DALI 35/220...240/400 D LT2 L | 50000 / 100000 h |
| ETi DALI 75/220...240/500 D LT2 L | 50000 / 100000 h |

Capabilities

| Product description | Programming interface | Dimmable | Dimming interface | Dimming range |
|-----------------------------------|-----------------------|----------|-------------------|---------------|
| ETi DALI 25/220...240/300 D LT2 L | Rset | Yes | DALI-2 | 10...100 % |
| ETi DALI 35/220...240/400 D LT2 L | Rset | Yes | DALI-2 | 10...100 % |
| ETi DALI 75/220...240/500 D LT2 L | Rset | Yes | DALI-2 | 10...100 % |

| Product description | Dimming method | Overheating protection | Overload protection |
|-----------------------------------|-----------------------|------------------------|----------------------|
| ETi DALI 25/220...240/300 D LT2 L | Full analogue dimming | Automatic reversible | Automatic reversible |
| ETi DALI 35/220...240/400 D LT2 L | Full analogue dimming | Automatic reversible | Automatic reversible |
| ETi DALI 75/220...240/500 D LT2 L | Full analogue dimming | Automatic reversible | Automatic reversible |

| Product description | Short-circuit protection | No-load proof | Intended for no-load operation | Max. cable length to lamp/LED module |
|-----------------------------------|--------------------------|---------------|--------------------------------|--------------------------------------|
| ETi DALI 25/220...240/300 D LT2 L | Automatic reversible | Yes | No | 2.0 m ¹⁾ |

Product family datasheet

| Product description | Short-circuit protection | No-load proof | Intended for no-load operation | Max. cable length to lamp/LED module |
|-----------------------------------|--------------------------|---------------|--------------------------------|--------------------------------------|
| ETi DALI 35/220...240/400 D LT2 L | Automatic reversible | Yes | No | 2.0 m ¹⁾ |
| ETi DALI 75/220...240/500 D LT2 L | Automatic reversible | Yes | No | 2.0 m ¹⁾ |

| Product description | Suitable for fixtures with prot. class | Suitable for emergency lighting | Type of connection, input side | Type of connection, output side |
|-----------------------------------|--|---------------------------------|--------------------------------|---------------------------------|
| ETi DALI 25/220...240/300 D LT2 L | I | Yes | Push terminal | Push terminal |
| ETi DALI 35/220...240/400 D LT2 L | I | Yes | Push terminal | Push terminal |
| ETi DALI 75/220...240/500 D LT2 L | I | Yes | Push terminal | Push terminal |

| Product description | DALI-2 Diagnostic Data | DALI-2 Energy Data | Number of channels |
|-----------------------------------|------------------------|--------------------|--------------------|
| ETi DALI 25/220...240/300 D LT2 L | No | No | 1 |
| ETi DALI 35/220...240/400 D LT2 L | No | No | 1 |
| ETi DALI 75/220...240/500 D LT2 L | No | No | 1 |

| Product description | Constant lumen function |
|-----------------------------------|-------------------------|
| ETi DALI 25/220...240/300 D LT2 L | Programmable |
| ETi DALI 35/220...240/400 D LT2 L | Programmable |
| ETi DALI 75/220...240/500 D LT2 L | Programmable |

¹⁾ Output wires must be routed as close as possible to each other

Programming

| Product description | Programming device |
|-----------------------------------|--------------------|
| ETi DALI 25/220...240/300 D LT2 L | DALI magic |
| ETi DALI 35/220...240/400 D LT2 L | DALI magic |
| ETi DALI 75/220...240/500 D LT2 L | DALI magic |

Programmable features

| Product description | DALI-2 Luminaire Data |
|-----------------------------------|-----------------------|
| ETi DALI 25/220...240/300 D LT2 L | No |
| ETi DALI 35/220...240/400 D LT2 L | No |
| ETi DALI 75/220...240/500 D LT2 L | No |

Product family datasheet

Certificates & standards

| Product description | Approval marks – approval | Standards | Type of protection |
|-----------------------------------|---|--|--------------------|
| ETi DALI 25/220...240/300 D LT2 L | CE / EL / ENEC 05 / EAC / CCC / BIS / RCM | Acc. to IEC 61347/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547 | IP20 |
| ETi DALI 35/220...240/400 D LT2 L | CE / EL / ENEC 05 / EAC / CCC / BIS / RCM | Acc. to IEC 61347/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547 | IP20 |
| ETi DALI 75/220...240/500 D LT2 L | CE / EL / ENEC 05 / EAC / CCC / BIS / RCM | Acc. to IEC 61347/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547 | IP20 |

Logistical data

| Product description | Commodity code |
|-----------------------------------|----------------|
| ETi DALI 25/220...240/300 D LT2 L | 85044083900 |
| ETi DALI 35/220...240/400 D LT2 L | 85044083900 |
| ETi DALI 75/220...240/500 D LT2 L | 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 |
|-----------------------------------|---------------------|----------------------------|----------------------------|
| ETi DALI 25/220...240/300 D LT2 L | 20-11-2023 | 4062172053280 | Lead |
| ETi DALI 35/220...240/400 D LT2 L | 20-11-2023 | 4062172053303 | Lead |
| ETi DALI 75/220...240/500 D LT2 L | 06-03-2024 | 4062172053327 | Lead |

| Product description | CAS No. of substance 1 | Safe Use Instruction | Declaration No. in SCIP database |
|-----------------------------------|------------------------|--|--------------------------------------|
| ETi DALI 25/220...240/300 D LT2 L | 7439-92-1 | The identification of the Candidate List substance is sufficient to allow safe use of the article. | 82a4603a-3d58-43dd-bdda-df733f04bb97 |
| ETi DALI 35/220...240/400 D LT2 L | 7439-92-1 | The identification of the Candidate List substance is sufficient to allow safe use of the article. | 849d6891-f6a3-48fb-ac7f-435b5f015481 |

Product family datasheet

| Product description | CAS No. of substance 1 | Safe Use Instruction | Declaration No. in SCIP database |
|-----------------------------------|------------------------|--|--------------------------------------|
| ETi DALI 75/220...240/500 D LT2 L | 7439-92-1 | The identification of the Candidate List substance is sufficient to allow safe use of the article. | 53dd4806-e7a2-4070-b12a-e9b22dd83453 |














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 ICUTRONIC INTELLIGENT LED Power Supply |
|  Certificates EATON(CEAG)-Conformity declaration AM28129 ETI DALI 25220-240300 D LT2 L |
|  Certificates INOTEC-Conformity declaration AM28129 ETI DALI 25220-240300 D LT2 L |
|  Certificates OT ENEC 40038085 010322 |
|  Declarations of conformity ETI DALI D LT2 L CE 3971160 190821 |
|  Declarations of conformity ETi DALI D LT2 L UK DoC 4281296 180221 |
|  CAD data ETI DALI D LT2 L IGS 270220 |
|  CAD data ETI DALI D LT2 L STEP 270220 |
|  CAD Data 2-dim ETI DALI D LT2 L CAD2PDF 270220 |
|  CAD data 3-dim ETI DALI D LT2 L CAD3PDF 270220 |
|  Certificates EATON(CEAG)-Conformity declaration AM28155 ETI DALI 35220-240400 D LT2 L |
|  Certificates INOTEC-Conformity declaration AM28155 ETI DALI 35220-240400 D LT2 L |
|  Certificates EATON(CEAG)-Conformity declaration AM28130 ETI DALI 75220-240500 D LT2 L |

Product family datasheet



Certificates

INOTEC-Conformity declaration AM28130 ETI DALI 75220-240500 D LT2 L

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 |
|---------------|--------------------------------------|------------------------------|--------------------------------------|----------------------|--------------|
| 4062172053280 | ETi DALI 25/220...240/300 D LT2 L | Shipping carton box 20 | 303 mm x 159 mm x 105 mm | 5.06 dm ³ | 4227.00 g |
| 4062172053303 | ETi DALI 35/220...240/400 D LT2 L | Shipping carton box 20 | 303 mm x 159 mm x 105 mm | 5.06 dm ³ | 4227.00 g |
| 4062172053327 | ETi DALI 75/220...240/500 D LT2 L | Shipping carton box 20 | 303 mm x 159 mm x 105 mm | 5.06 dm ³ | 4227.00 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.