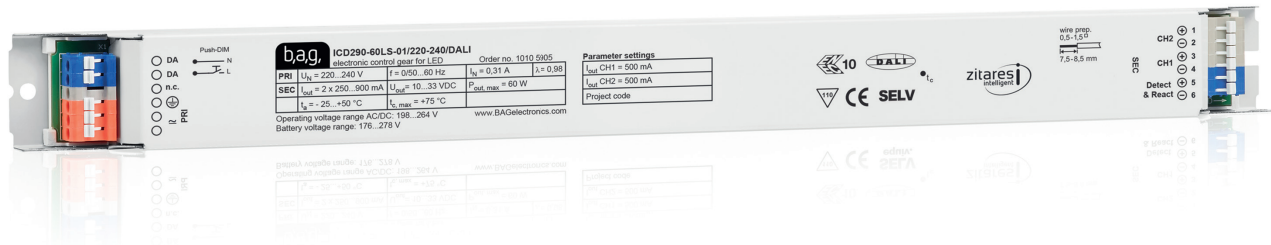


Galvanic isolation (SELV)
2 individual channels

DALI & Push-DIM
Programmable functions and current



exemplary image

Performance characteristics

- Intelligent and DALI dimmable 2-channel ECG for constant current operation of LED modules
- DALI DT8 version for easy CCT control in HCL application or version with individually controllable output channels via 2 DALI addresses for full flexibility
- SELV output voltage $\sim 60^{\circ}\text{VDC}$ for simplified luminaire construction
- Advanced range of functions through individual adjustable features via software EXELIQO
 - precisely adjustable output currents for each channel in a wide range
 - constant luminous flux during operating time by compensation of the LED degradation (CLO)
 - maximum life time by control of the output current in dependency of the ECG temperature
 - DC detection: adjustable light level for DC operation
 - monitoring and realtime display of operating and performance data
 - selection between 1 and 2 DALI addresses
 - simultaneous programming of up to 64 ECG
- Detect & React interface (DRI): analogue interface for connecting resistors, e.g. for current setting or temperature monitoring
- Maximum energy efficiency of up to 90 % at maximum output load
- Suitable for direct current operation and application in combination with central battery installations
- Flicker-free and noise-free dimming in the range of 1 ... 100 % luminous flux
- Push-Dim function: dimming and switching via push-button, with memory function
- ECG extensively protected against abnormal operating conditions at the output e.g. short-circuit, open circuit or overload
- Conformance with international regulations, regarding safety and operation, electromagnetic compatibility and immunity to interference
- Nominal service lifetime with a failure rate $\sim 10\%$:
50,000 h at $t_c = t_{c,max}$

General technical data

| Mains voltage supply | |
|---|--|
| Rated voltage range | 220 ... 240 V |
| Rated frequency | 0 / 50 ... 60 Hz |
| Max. admissible voltage range | 198 ... 264 V |
| Overtoltage protection | 350 V / 2 h |
| Battery operation | |
| Voltage range for continuous operation | 198 ... 278 V |
| Lowest limiting value (temporary) | 178 V |
| Output data | |
| Tolerance of output current | $\sim \pm 5\%$ |
| Ripple of output current low frequency | $\sim \pm 1\%$ |
| Galvanic isolation output to mains and dimming input | yes; testing voltage 3.75 kV |
| Max. working voltage (U-OUT) | 60 V |
| Dimming operation | |
| Dimming input | DALI / Push-Dim |
| Dimming range luminous flux | 1 ... 100 % |
| Dimming technology | Mixed Mode, Amplitude, PWM |
| Stand-by power loss | $\sim 0,5\text{ W}$ |
| Number ECG for Push-Dim operation | ~ 25 |
| Control input (DRI) | |
| Control current / voltage | $\sim 4\text{ mA} / 0 \dots 10\text{ V}$ |
| Galvanic isolation control input to mains input | yes; testing voltage 3.75 kV |
| Degree of protection | |
| Housing | IP 20 |

5 YEARS
warranty

This device fulfills the conditions of the 5-years warranty.

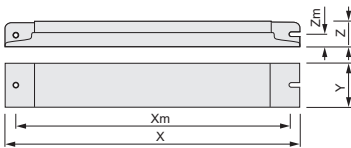
Operating data

| Designation | Order number | ECG efficiency ¹⁾ | Channels | Output data | | | Current adjustment |
|-------------------------------|--------------|------------------------------|----------|-----------------------|-----------|---------------------|--------------------|
| | | | | Current ³⁾ | Voltage | Power ²⁾ | |
| | | | | mA | VDC | W | |
| ICD290-60LS-01/220-240/DALI | 10105905 | 90 | 2 | 250 ... 900 | 10 ... 33 | 5 ... 60 | EXELIQO, DRI |
| ICD290-100LS-01/220-240/DALI | 10105906 | 90 | 2 | 250 ... 900 | 25 ... 53 | 12,5 ... 95 | EXELIQO, DRI |
| ICD290-30FR-01/220-240/DA/DT8 | 10129310 | 87 | 2 | 250 ... 900 | 10 ... 33 | 2,5 ... 30 | EXELIQO, DRI |
| ICD290-48FR-01/220-240/DA/DT8 | 10129311 | 87 | 2 | 250 ... 900 | 25 ... 53 | 6,3 ... 48 | EXELIQO, DRI |

- 1) All data at nominal operation 230 VAC and 100 % load
 2) Asymmetric load distribution on the outputs is permissible
 3) Parallel connection of the outputs is allowed

Dimensions | Temperatures

| Designation | Dimensions | | | | | Temperatures | |
|-------------------------------|------------|-----|----|----|----|------------------------|-----------------------------|
| | X | Xm | Y | Z | Zm | Ambient t _a | Housing t _{c,max.} |
| | mm | mm | mm | mm | mm | °C | °C |
| ICD290-60LS-01/220-240/DALI | 360 | 350 | 30 | 21 | 9 | -25 ... 50 | 75 |
| ICD290-100LS-01/220-240/DALI | 360 | 350 | 30 | 21 | 9 | -25 ... 50 | 75 |
| ICD290-30FR-01/220-240/DA/DT8 | 360 | 350 | 30 | 21 | 9 | -25 ... 60 | 75 |
| ICD290-48FR-01/220-240/DA/DT8 | 360 | 350 | 30 | 21 | 9 | -25 ... 60 | 75 |



Wiring diagrams

| | Page | Figure |
|---------------------------------------|------|--------|
| Connection of ECG input / output side | 135 | D |

Logistic data

| Order number | KG | | |
|--------------|-------|----|-----|
| 10105905 | 0,305 | 30 | 900 |
| 10105906 | 0,305 | 30 | 900 |
| 10129310 | 0,305 | 30 | 900 |
| 10129311 | 0,305 | 30 | 900 |

Digital & open interface

DRI Analogue interface for connection of a current sink, e.g. ohmic resistance, electronic potentiometer; for direct control of the ECG output current. Programmable characteristic curve via software EXELIQO.

Programming software

EXELIQO Software for comfortable programming and monitoring of ZITARES ECG and commissioning of DALI installations, see page 130

Approval and markings

