

# EU Declaration of Conformity



Document number: 2020 / 9C1-4011818-EN-00  
Manufacturer or representative: LEDVANCE GmbH  
Address: Parkring 29-33  
85748 Garching  
Germany  
Brand name or trade mark: LEDVANCE  
Product type: controlgear  
Product designation: Flash-Wave-II\_DALI Driver  
 See attached list

The designated product(s) is (are) in conformity with the relevant Union harmonisation legislation:

- |                                     |   |  |
|-------------------------------------|---|--|
| <input checked="" type="checkbox"/> | <b>2014/35/EU</b><br>and amendments                                     | <b>Directive of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits</b>   |
| <input checked="" type="checkbox"/> | <b>2014/30/EU</b><br>and amendments                                     | <b>Directive of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility</b>   |
| <input checked="" type="checkbox"/> | <b>2009/125/EC</b><br>and amendments, incl.<br><b>2019/2020, Art. 7</b> | <b>Directive of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products</b><br><b>Article 7 of Commission Regulation (EU) 2019/2020 of 1 October 2019 laying down ecodesign requirements for light sources and separate control gears pursuant to Directive 2009/125/EC of the European Parliament and of the Council</b> |
| <input type="checkbox"/>            | <b>244/2009</b><br>and amendments                                       | <b>Commission Regulation (EC) implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for non-directional household lamps</b>   |
| <input type="checkbox"/>            | <b>245/2009</b><br>and amendments                                       | <b>Commission Regulation (EC) implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps</b>  |
| <input checked="" type="checkbox"/> | <b>1194/2012</b><br>and amendments                                      | <b>Commission Regulation (EU) No 1194/2012 of 12 December 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for directional lamps, light emitting diode lamps and related equipment</b>  |
| <input checked="" type="checkbox"/> | <b>2011/65/EU</b><br>and amendments                                     | <b>Directive of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment</b>   |
| <input type="checkbox"/>            | <b>2014/53/EU</b><br>and amendments                                     | <b>Directive of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC</b>  |

Last two digits of the year in which the CE marking was affixed: 20

Place and date of signatures: Jun.29, 2020

Signatures:

  
Quality Management

  
Quality Assurance

Names: Scheyer, Yannick

Shufen Chen

Customer service contact: LEDVANCE GmbH, Steinerne Furt 62, 86167 Augsburg, Deutschland

This declaration of conformity is issued under the sole responsibility of the manufacturer or representative. It certifies compliance with the indicated Directives, but implies no warranty of properties

**EU Declaration of Conformity**  
**Annex**

The conformity of the designated product(s) with the provisions of the European **Low Voltage Directive 2014/35/EU** is given by the compliance with the following European Standard(s) or other specifications. If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

- |                          |   |   |
|--------------------------|---|---|
| <input type="checkbox"/> | <b>EN 60155:</b><br>1995 + A1:1995 + A2:2007                            | Glow-starters for fluorescent lamps   |
| <input type="checkbox"/> | <b>EN 60432-1:</b><br>2000 + A1:2005 + A2:2012                          | Incandescent lamps — Safety specifications — Part 1: Tungsten filament lamps for domestic and similar general lighting purposes |
| <input type="checkbox"/> | <b>EN 60432-2:</b><br>2000 + A1:2005 + A2:2012                          | Incandescent lamps — Safety specifications — Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes  |
| <input type="checkbox"/> | <b>EN 60432-3:</b><br>2013  | Incandescent lamps — Safety specifications — Part 3: Tungsten halogen lamps (non-vehicle)                                       |
| <input type="checkbox"/> | <b>EN 60598-1:</b><br>2015 + A1:2018                                    | Luminaires — Part 1: General requirements and tests   |
| <input type="checkbox"/> | <b>EN 60598-2-1:</b><br>1989  | Luminaires — Part 2-1: Particular requirements — Fixed general purpose luminaires   |
| <input type="checkbox"/> | <b>EN 60598-2-2:</b><br>2012  | Luminaires — Part 2-2: Particular requirements — Recessed luminaires  |
| <input type="checkbox"/> | <b>EN 60598-2-3:</b><br>2003 + A1:2011                                  | Luminaires — Part 2-3: Particular requirements — Luminaires for road and street lighting  |
| <input type="checkbox"/> | <b>EN 60598-2-4:</b><br>2018  | Luminaires — Part 2-4: Particular requirements — Portable general purpose luminaires  |
| <input type="checkbox"/> | <b>EN 60598-2-5:</b><br>2015  | Luminaires — Part 2-5: Particular requirements — Floodlights  |
| <input type="checkbox"/> | <b>EN 60598-2-6:</b><br>1994 + A1:1997                                  | Luminaires — Part 2-6: Particular requirements — Luminaires with built-in transformers for filament lamps                       |
| <input type="checkbox"/> | <b>EN 60598-2-7:</b><br>1989 + A2:1996 + A13:1997                       | Luminaires — Part 2-7: Particular requirements — Portable luminaires for garden use   |
| <input type="checkbox"/> | <b>EN 60598-2-8:</b><br>2013  | Luminaires — Part 2-8 : Particular requirements — Handlamps   |
| <input type="checkbox"/> | <b>EN 60598-2-10:</b><br>2003   | Luminaires — Part 2-10: Particular requirements — Portable luminaires for children  |
| <input type="checkbox"/> | <b>EN 60598-2-12:</b><br>2013   | Luminaires — Part 2-12: Particular requirements — Mains socket-outlet mounted nightlights                                       |
| <input type="checkbox"/> | <b>EN 60598-2-13:</b><br>2006 + A1 2012                                 | Luminaires — Part 2-13: Particular requirements — Ground recessed luminaires  |
| <input type="checkbox"/> | <b>EN 60598-2-20:</b><br>2015   | Luminaires — Part 2-20: Particular requirements — Lighting chains   |
| <input type="checkbox"/> | <b>EN 60598-2-22:</b><br>2014   | Luminaires — Part 2-22: Particular requirements — Luminaires for emergency lighting   |
| <input type="checkbox"/> | <b>EN 60598-2-24:</b><br>2013   | Luminaires - Part 2-24: Particular requirements - Luminaires with limited surface temperatures                                  |
| <input type="checkbox"/> | <b>EN 60950-1:</b> 2006 +<br>A11:2009 + A1:2010 +<br>A12:2011 + A2:2013 | Information technology equipment – Safety – Part 1: General requirements  |
| <input type="checkbox"/> | <b>EN 60968:</b><br>2015  | Self-ballasted lamps for general lighting services — Safety requirements  |
| <input type="checkbox"/> | <b>EN 61195:</b><br>1999 + A1:2013 + A2:2015                            | Double-capped fluorescent lamps — Safety specifications   |

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|                                     |   |   |
|-------------------------------------|---|---|
| <input type="checkbox"/>            | <b>EN 61199:</b><br>2011 + A2:2015                        | Single-capped fluorescent lamps — Safety specifications   |
| <input checked="" type="checkbox"/> | <b>EN 61347-1:</b><br>2015                                | Lamp controlgear — Part 1: General and safety requirements  |
| <input type="checkbox"/>            | <b>EN 61347-2-1:</b><br>2001 + A1:2006 + A2:2014          | Lamp controlgear — Part 2-1: Particular requirements for starting devices (other than glow starters)  |
| <input type="checkbox"/>            | <b>EN 61347-2-2:</b><br>2012                              | Lamp controlgear — Part 2-2: Particular requirements for d. c. or a. c. supplied electronic step-down converters for filament lamps   |
| <input type="checkbox"/>            | <b>EN 61347-2-3:</b><br>2011                              | Lamp controlgear — Part 2-3: Particular requirements for a. c. and/or d. c. supplied electronic ballasts for fluorescent lamps  |
| <input type="checkbox"/>            | <b>EN 61347-2-7:</b><br>2012                              | Lamp controlgear — Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained)                                      |
| <input type="checkbox"/>            | <b>EN 61347-2-8:</b><br>2001 + A1:2006                    | Lamp controlgear — Part 2-8: Particular requirements for ballasts for fluorescent lamps   |
| <input type="checkbox"/>            | <b>EN 61347-2-9:</b><br>2013                              | Lamp controlgear — Part 2-9: Particular requirements for ballasts for discharge lamps (excluding fluorescent lamps)   |
| <input type="checkbox"/>            | <b>EN 61347-2-10:</b><br>2001 + A1:2009                   | Lamp controlgear — Part 2-10: Particular requirements for electronic invertors and converters for high-frequency operation of cold start tubular discharge lamps (neon tubes) |
| <input type="checkbox"/>            | <b>EN 61347-2-11:</b><br>2001                             | Lamp controlgear — Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires  |
| <input type="checkbox"/>            | <b>EN 61347-2-12:</b><br>2005 + A1:2010                   | Lamp controlgear — Part 2-12: Particular requirements for d. c. or a. c. supplied electronic ballasts for discharge lamps (excluding fluorescent lamps)                       |
| <input checked="" type="checkbox"/> | <b>EN 61347-2-13:</b><br>2014/A1:2017                     | Lamp controlgear — Part 2-13: Particular requirements for d. c. or a. c. supplied electronic controlgear for LED modules  |
| <input type="checkbox"/>            | <b>EN 61549:</b><br>2003 + A1:2005 + A2:2010<br>+ A3:2012 | Miscellaneous lamps   |
| <input type="checkbox"/>            | <b>EN 62031:</b><br>2008 + A1:2013 + A2:2015              | LED modules for general lighting — Safety specifications  |
| <input type="checkbox"/>            | <b>EN 62034:</b><br>2012                                  | Automatic test systems for battery powered emergency escape lighting  |
| <input type="checkbox"/>            | <b>EN 62035:</b> 2014                                     | Discharge lamps (excluding fluorescent lamps) — Safety specifications   |
| <input type="checkbox"/>            | <b>EN 62368-1:</b> 2014                                   | Audio/video, information and communication technology equipment – Part 1: Safety requirements   |

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The conformity of the designated product(s) with the provisions of the European **Low Voltage Directive 2014/35/EU** is given by the compliance with the following European Standard(s) or other specifications. If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

- |                                     |   |   |
|-------------------------------------|---|---|
| <input checked="" type="checkbox"/> | <b>EN 62493:</b><br>2015                          | Assessment of lighting equipment related to human exposure to electromagnetic fields  |
| <input type="checkbox"/>            | <b>EN 62532:</b><br>2011                          | Fluorescent induction lamps — Safety specifications   |
| <input type="checkbox"/>            | <b>EN 62560:</b><br>2012 + A1:2015                | Self-ballasted LED-lamps for general lighting services by voltage > 50 V — Safety specifications  |
| <input type="checkbox"/>            | <b>EN 62838:</b><br>2016                          | LEDs lamps for general lighting services with supply voltages not exceeding 50 V a.c. r.m.s. or 120 V ripple free d.c. - Safety specifications<br>Consumer goods with a voltage below 50 V are dealt with by the General Product Safety Directive (GPSD) 2001/95/EC |
| <input type="checkbox"/>            | <b>EN 60669-2-1:</b><br>2004 + A1:2009 + A12:2010 | Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic switches (IEC 60669-2-1:2002, modified) / Corrected and reprinted in 2007-12   |
| <input type="checkbox"/>            | <b>EN 62471:</b><br>2008                          | Photobiological safety of lamps and lamp systems  |
| <input type="checkbox"/>            | <b>EN 62733:</b><br>2015                          | Programmable components in electronic lamp controlgear  |
| <input type="checkbox"/>            | <b>EN 62776:</b><br>2015                          | Double-capped LED lamps designed to retrofit linear fluorescent lamps - Safety specifications   |
| <input type="checkbox"/>            |   |   |

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The conformity of the designated product(s) with the provisions of the European **EMC Directive, 2014/30/EU** is given by the compliance with the following European Standard(s) or other specifications. If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

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- |                                     |                                      |   |
|-------------------------------------|--------------------------------------|---|
| <input checked="" type="checkbox"/> | <b>EN 55015:</b><br>2019             | Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment   |
| <input checked="" type="checkbox"/> | <b>EN 61000-3-2:</b><br>2019         | Electromagnetic compatibility (EMC) — Part 3-2: Limits — Limits for harmonic current emissions (equipment input current $\leq 16$ A per phase)  |
| <input checked="" type="checkbox"/> | <b>EN 61000-3-3:</b><br>2013/A1:2019 | Electromagnetic compatibility (EMC) — Part 3-3: Limits — Limitation of voltage changes, voltage fluctuations and flicker in public low voltage supply systems, for equipment with rated current $\leq 16$ A per phase and not subjected to conditional connection |
| <input checked="" type="checkbox"/> | <b>EN 61547:</b><br>2009             | Equipment for general lighting purposes — EMC immunity requirements   |
| <input type="checkbox"/>            | <b>EN 50498:</b> 2010                | Electromagnetic compatibility (EMC) –<br>Product family standard for aftermarket electronic equipment in vehicles   |
| <input type="checkbox"/>            |                                      |   |

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The conformity of the designated product(s) with the provisions of the European **eco design (ERP) Directive 2009/125/EC** is given by the compliance with the following European Standard(s). If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

- EN 62442-1:**  
2018 Energy performance of lamp controlgear - Part 1: Controlgear for fluorescent lamps - Method of measurement to determine the total input power of controlgear circuits and the efficiency of the controlgear
  - EN IEC 62442-2:**  
2019 Energy performance of lamp controlgear –  
Part 2: Controlgear for high intensity discharge lamps (excluding fluorescent lamps) – Method of measurement to determine the efficiency of the controlgear
  - EN IEC 62442-3:**  
2019 Energy performance of lamp controlgear –  
Part 3: Controlgear for halogen lamps and LED modules – Method of measurement to determine the efficiency of the controlgear
  
  -
- 

## EU Declaration of Conformity Annex

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The conformity of the designated product(s) with the provisions of the European Directive **2011/65/EU (RoHS)** is given by the compliance with the following European Standard(s) or other specifications. If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

- EN 50581:**  
2012 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
  
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## Annex

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The conformity of the designated product(s) with the provisions of the European **Radio Equipment Directive 2014/53/EU** is given by the compliance with the following European Standard(s). If not elsewhere/otherwise indicated the edition/amendment as referenced below applies.

- |                          |  |   |
|--------------------------|--|---|
| <input type="checkbox"/> | <b>EN 300 328 V2.1.1</b>               | Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU  |
| <input type="checkbox"/> | <b>EN 300 440 V2.1.1&amp;V2.2.</b>     | Short Range Devices (SRD) ; Radio equipment to be used in the 1GHz to 40GHz frequency range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU   |
| <input type="checkbox"/> | <b>Draft ETSI EN 301 489-1 V2.2.0</b>  | Electro Magnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU and the essential requirements of article 6 of Directive 2014/30/EU    |
| <input type="checkbox"/> | <b>Draft EN 301 489-3 V2.1.1</b>       | Electro Magnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU |
| <input type="checkbox"/> | <b>Draft ETSI EN 301 489-17 V3.2.0</b> | Electro Magnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU   |
| <input type="checkbox"/> | <b>EN 62479: 2010</b>                  | Assessment of the compliance of low-power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)   |
| <input type="checkbox"/> |  |   |

# EU Declaration of Conformity

## Attached list

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### Product list

- AC23431 DR DALI-PFM-26/220-240/700
- AC23432 DR DALI-PFM-44/220-240/1050
- AC23433 DR DALI-PFM-60/220-240/1A4
- AC25717 DR AY DALI-PFM-26/44-CLAMP DUO
- AC25718 DR AY DALI-PFM-60-CLAMP
- AC23434 DR DALI-SUP-45/220-240/24
- AC23435 DR DALI-SUP-80/220-240/24
- AC23436 DR DALI-SUP-150/220-240/24