

# PRODUCT DATASHEET

## DL CMFT DA D100 P 13W ML 93040 OP WT

DOWNLIGHT COMFORT DALI OPAL | Downlight luminaires with aluminum housing, high luminous efficacy and external DALI-2 driver



PERFOR-  
MANCE  
CLASS

### Areas of application

- Direct replacement for recessed luminaires with fluorescent lamps
- Offices, conference rooms
- Reception areas, foyers, corridors, elevators

### Product benefits

- Suitable luminaire for VIVARES and other DALI-2 Light Management Systems
- Extended services such as energy monitoring and remote maintenance possible with DALI versions
- Energy savings thanks to high system efficacy: up to 120 lm/W
- Highly versatile due to Multi Select functions
- High color rendering index CRI > 90
- External driver for extended flexibility and easy installation
- Through wiring possible via additional connector box accessory
- Type of protection: IP44
- Easy installation with fast connection
- Further variants with DALI-2 driver, Zigbee driver or Emergency Conversion Kit available

### Product features

- IoT-ready luminaire with DALI-2 technology
- Aluminum luminaires with 4 different cut-outs and opal diffuser



- Very homogenous light distribution
- External driver with Multi Lumen function of up to 5000 lm
- Multi Color function
- Consistent lighting color  $\leq 3$  SDCM
- Lifetime (L80/B10): 70,000 h (at 25 °C)

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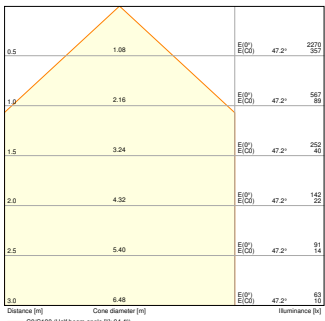
## TECHNICAL DATA

### Electrical data

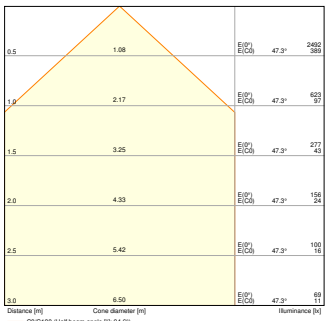
|                                                             |                         |
|-------------------------------------------------------------|-------------------------|
| Nominal wattage                                             | 13 W / 10 W / 7 W       |
| Nominal voltage                                             | 220...240 V             |
| Mains frequency                                             | 0/50/60 Hz              |
| Nominal current                                             | 60/51.7/41.6 mA         |
| Inrush current                                              | 24.8 A                  |
| Inrush current time $T_{h50}$                               | 6.2 $\mu$ s             |
| Max. number of luminaires per miniature circuit breaker B16 | 30                      |
| Max. number of luminaires per miniature circuit breaker C10 | 24                      |
| Max. number of luminaires per miniature circuit breaker C16 | 38                      |
| Power factor $\lambda$                                      | $\geq 0.90$             |
| Total harmonic distortion                                   | $\leq 15 \%$            |
| Protection class                                            | II                      |
| Operating mode                                              | External LED driver     |
| Dimming interface                                           | DALI-2 / IoT / Push-DIM |

### Photometrical data

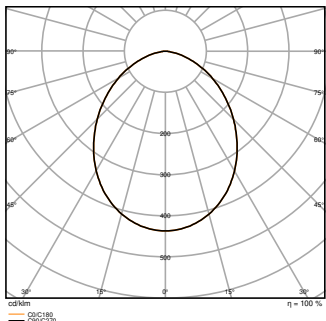
|                                                              |                            |
|--------------------------------------------------------------|----------------------------|
| Luminous flux                                                | 1430 lm / 1100 lm / 770 lm |
| Luminous efficacy                                            | 110 lm/W                   |
| Color temperature                                            | 3000 K / 4000 K            |
| Reference control setting of contained light source (Kelvin) | 4000 K                     |
| Light color (designation)                                    | Warm White / Cool White    |
| Color rendering index Ra                                     | > 90                       |
| Standard deviation of color matching                         | $\leq 3$ sdc <sub>m</sub>  |
| Luminous intensity                                           | -                          |
| Low flicker                                                  | Yes                        |
| Flickering metric (Pst LM)                                   | <1                         |
| Stroboscope effect metric (SVM)                              | <0.4                       |
| Photobiological safety group acc. to EN62778                 | RG0                        |
| Photobiological safety group acc. to EN62471                 | RG0                        |
| Beam angle                                                   | 95 °                       |



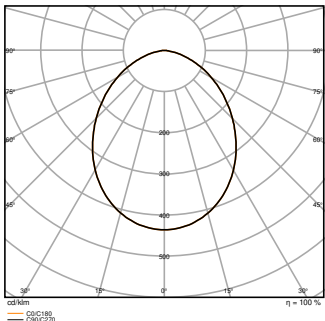
DL CMFT DA D100 P 13W MS 930  
OP WT



DL CMFT DA D100 P 13W MS 940  
OP WT



DL CMFT DA D100 P 13W MS 930  
OP WT



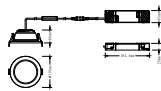
DL CMFT DA D100 P 13W MS 940  
OP WT

Adjustable attributes

| Nominal wattage | Color temperature | Luminous flux | Luminous efficacy |
|-----------------|-------------------|---------------|-------------------|
| 13 W            | 3000 K            | 1300 lm       | 100 lm/W          |
| 13 W            | 4000 K            | 1430 lm       | 110 lm/W          |
| 10 W            | 3000 K            | 1000 lm       | 100 lm/W          |
| 10 W            | 4000 K            | 1100 lm       | 110 lm/W          |
| 7 W             | 3000 K            | 700 lm        | 100 lm/W          |
| 7 W             | 4000 K            | 770 lm        | 110 lm/W          |

Dimensions & Weight

|                |           |
|----------------|-----------|
| Diameter       | 116.00 mm |
| Height         | 48.00 mm  |
| Product weight | 280.00 g  |



DL CMFT DA D100 P 13W MS 940  
OP WT

Materials & Colors

|                                            |                    |
|--------------------------------------------|--------------------|
| Product color                              | White              |
| Housing color                              | White              |
| RAL Color (most similar)                   | RAL 9003           |
| Body material                              | Aluminum           |
| Cover material                             | Polycarbonate (PC) |
| Glow Wire Test according to IEC 60695-2-12 | 650 °C             |
| Mercury content                            | 0.0 mg             |

Application & Mounting

|                                        |                                                            |
|----------------------------------------|------------------------------------------------------------|
| Ambient temperature range              | -20...+40 °C                                               |
| Temperature range at storage           | -20...+80 °C                                               |
| Type of connection                     | Screwless terminal, 5-Pole                                 |
| Type of protection                     | IP44/IP20                                                  |
| Protection class IK (shock resistance) | IK03                                                       |
| Dimmable                               | Yes                                                        |
| Type of dimming                        | DALI                                                       |
| IoT ready                              | Support of DALI data type PART 251, 252, 253 <sup>1)</sup> |
| Mounting type                          | Recessed                                                   |
| Mounting location                      | Ceiling                                                    |
| Application environment                | Indoor                                                     |
| Mounting width                         | 100 mm                                                     |
| Mounting diameter                      | 100 mm                                                     |
| Mounting depth                         | 48 mm                                                      |
| With light source                      | Yes                                                        |
| Replaceable light source               | No                                                         |

<sup>1)</sup> Internet of Things. Supports data transfer via gateway to cloud-based monitoring platforms, such as LEDVANCE VIVARES Cloud

### Lifespan

|                            |                        |
|----------------------------|------------------------|
| Lifespan L70/B50 at 25 °C  | 100000 h <sup>1)</sup> |
| Lifespan L80/B10 at 25 °C  | 70000 h <sup>1)</sup>  |
| Lifespan L80/B50 at 25 °C  | 70000 h                |
| Lifespan L90/B10 at 25 °C  | 40000 h                |
| Number of switching cycles | 100000                 |

<sup>1)</sup> t[h]: L70 / B50 @ 25 °C (Ta), t[h]: L80 / B10 @ 25 °C (Ta), t[h]: L90 / B10 @ 25 °C (Ta)

### Control gear

|                             |                          |
|-----------------------------|--------------------------|
| Output current              | 400/300/200 mA           |
| ECG - Output ripple current | ≤ 10 %                   |
| ECG - Length                | 164 mm                   |
| ECG - Width                 | 45 mm                    |
| ECG - Height                | 25 mm                    |
| Recommended control gear    | DR DALI-P-30/220-240/700 |

### Emergency lighting

|                                           |                                                                                                                                                                          |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of Emergency Lighting (EL)           | EL certified driver (0Hz / DC operation) for central battery operation included / Optional EL unit (battery and controller) for decentral operation available separately |
| Type of emergency operation test          | None                                                                                                                                                                     |
| Wattage in emergency operation mode       | 3 W                                                                                                                                                                      |
| Luminous flux in emergency operation mode | 339 lm                                                                                                                                                                   |

### Certificates & Standards

|                                                      |                             |
|------------------------------------------------------|-----------------------------|
| Standards                                            | ENEC / CE / UKCA / EAC / CB |
| Luminaire with limited surface temperature, "D sign" | No                          |
| Ball shot safe                                       | No                          |
| EPD                                                  | LEDV-00053-V01.01-EN        |
| Replaceable light source (EPREL)                     | Not replaceable             |

### Additional product data

|                |                        |
|----------------|------------------------|
| Added function | MULTI SELECT / VIVARES |
|----------------|------------------------|

### Accessories Optional

| Product image                                                                    | Product name              | EAN           |
|----------------------------------------------------------------------------------|---------------------------|---------------|
|  | DL CMFT EXCH RING D100 GY | 4099854515408 |
|  | DL CMFT EXCH RING D100 BK | 4099854515286 |
|  | DL CMFT EXT RING D140 WT  | 4099854741456 |
|  | DL CMFT EXT RING D140 GY  | 4099854741517 |
|  | DL CMFT EXT RING D140 BK  | 4099854741487 |

## EQUIPMENT / ACCESSORIES

- Surface mounting frame only available for DALI versions D200 and D250 as separate accessory
- Security rope for luminaire included
- External control gear included
- Suitable for use with separate Emergency Conversion Box
- Gray and black exchangeable rings available as separate accessory
- Extension rings are available as separate accessory

## Safety advice

- All electrical connections must be made by a qualified person.
- Caution, risk of electric shock.
- The luminaires are not suitable for covering with thermally insulated material.

## DOWNLOAD DATA

| Documents and certificates                                                                                                | Document name |
|---------------------------------------------------------------------------------------------------------------------------|---------------|
|  User instruction / safety instructions | DL CMFT DA    |

| Documents and certificates                                                         |                                    | Document name                                             |
|------------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------------|
|    | Legal information                  | Informationstext 18 Abs 4 ElektroG                        |
|    | Legal information                  | DL CMFT DALI                                              |
|    | Legal information                  | Safety Insert G11207793                                   |
|    | Legal information                  | EM Insert DL CMFT                                         |
|    | Legal information                  | Legal insert DL UNIV                                      |
|    | Declarations of conformity         | DL CMFT                                                   |
|    | Declarations of conformity UKCA    | DL CMFT                                                   |
|    | EU Data Act                        | DALI LED Driver and Luminaires                            |
|   | EPD                                | ENVIRONMENTAL PRODUCT DECLARATION DOWNLIGHT COMFORT GEN 2 |
| Photometric and lighting design files                                              |                                    | Document name                                             |
|  | IES file (IES)                     | DL CMFT DA D100 P 13W MS 930 OP WT                        |
|  | IES file (IES)                     | DL CMFT DA D100 P 13W MS 940 OP WT                        |
|  | LDT file (Eulumdat)                | DL CMFT DA D100 P 13W MS 930 OP WT                        |
|  | LDT file (Eulumdat)                | DL CMFT DA D100 P 13W MS 940 OP WT                        |
|  | ULD file (DIALux)                  | DL CMFT DA D100 P 13W MS 940 OP WT                        |
|  | ROLF file (RELUX)                  | DL CMFT DA D100 P 13W MS 940 OP WT                        |
|  | UGR file (UGR table)               | DL CMFT DA D100 P 13W MS 930 OP WT                        |
|  | UGR file (UGR table)               | DL CMFT DA D100 P 13W MS 940 OP WT                        |
|  | Light distribution curve type cone | DL CMFT DA D100 P 13W MS 930 OP WT                        |

| Photometric and lighting design files                                            |                                     | Document name                                          |
|----------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------|
|  | Light distribution curve type cone  | DL CMFT DA D100 P 13W MS 940 OP WT                     |
|  | Light distribution curve type polar | DL CMFT DA D100 P 13W MS 930 OP WT                     |
|  | Light distribution curve type polar | DL CMFT DA D100 P 13W MS 940 OP WT                     |
| CAD/BIM files                                                                    |                                     | Document name                                          |
|  | BIM Revit 3D                        | DL CMFT MS                                             |
|  | CAD STEP 3D                         | DL CMFT D100 MS OP                                     |
| Tender texts                                                                     |                                     | Document name                                          |
|  | Tender documents                    | DOWNLIGHT COMFORT DALI OPAL D100 P 13W MS 940 OP WT-en |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4099854490866 | Folding box<br>1             | 185 mm x 185 mm x 100 mm             | 369.00 g     | 3.42 dm <sup>3</sup>  |
| 4099854490873 | Shipping box<br>12           | 390 mm x 390 mm x 330 mm             | 5052.00 g    | 50.19 dm <sup>3</sup> |

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.

## References / Links

– For Guarantee see [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee)

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