

# PRODUCT DATASHEET

## TRUSYS UNIV P 50W 840 VW OP DALI

TRUSYS UNIVERSAL DALI | The DALI solution for refurbishment - universal fitting to existing trunking luminaire system



PERFOR-  
MANCE  
CLASS

### Areas of application

- Direct replacement for luminaires with compact fluorescent lamps
- Industry halls, high rack warehouse, hardware stores
- Discounters, supermarkets

### Product benefits

- The solution for refurbishment: universal fitting to existing trunking luminaire system
- Easy installation, no tools required for connection
- Energy saving and cost-effective
- Flexible application due to a range of different lumen packages and beam angles

### Product features

- IoT-ready DALI-2 driver
- Beam angles: 120° (VW), 90° (W), 60° (N), 30° (VN)
- Click into place solution with smart click buttons
- Luminous efficacy: up to 180 lm/W
- Lifetime (L80/B10): up to 100,000 h (at 25 °C)
- Initial color consistency:  $\leq 3$  SDCM



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**TECHNICAL DATA****Electrical data**

|                                                             |                       |
|-------------------------------------------------------------|-----------------------|
| Nominal wattage                                             | 50.00 W               |
| Nominal voltage                                             | 220...240 V           |
| Mains frequency                                             | 0/50/60 Hz            |
| Nominal current                                             | 230.000 mA            |
| Inrush current                                              | 20.75 A               |
| Inrush current time $T_{h50}$                               | 266 $\mu$ s           |
| Max. number of luminaires per miniature circuit breaker B16 | 12                    |
| Max. number of luminaires per miniature circuit breaker C10 | 12                    |
| Max. number of luminaires per miniature circuit breaker C16 | 19                    |
| Power factor $\lambda$                                      | $\geq 0.90$           |
| Total harmonic distortion                                   | < 15 %                |
| Protection class                                            | I                     |
| Operating mode                                              | Integrated LED driver |
| Dimming interface                                           | DALI-2 / IoT          |

**Photometrical data**

|                                              |            |
|----------------------------------------------|------------|
| Luminous flux                                | 8150 lm    |
| Luminous efficacy                            | 163 lm/W   |
| Color temperature                            | 4000 K     |
| Light color (designation)                    | Cool White |
| Color rendering index Ra                     | > 80       |
| Standard deviation of color matching         | < 3 sdcn   |
| Low flicker                                  | Yes        |
| Flickering metric (Pst LM)                   | <1         |
| Stroboscope effect metric (SVM)              | <0.4       |
| Photobiological safety group acc. to EN62778 | RG1        |
| Beam angle                                   | 120 °      |

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|                |            |
|----------------|------------|
| Length         | 1504.00 mm |
| Width          | 68.00 mm   |
| Height         | 35.00 mm   |
| Product weight | 1710.00 g  |



## Materials & Colors

|                                            |                    |
|--------------------------------------------|--------------------|
| Product color                              | White              |
| Housing color                              | White              |
| Body material                              | Aluminum           |
| Cover material                             | Polycarbonate (PC) |
| Light emitting surface 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           | -40...+80 °C       |
| Type of connection                     | Plug-In connection |
| Type of protection                     | IP20               |
| Protection class IK (shock resistance) | IK02               |
| Dimmable                               | Yes                |
| Type of dimming                        | DALI2              |
| Mounting type                          | Surface/Suspended  |
| Mounting location                      | Mounting rail      |
| Application environment                | Indoor             |
| Adjustable                             | No                 |
| With light source                      | Yes                |
| Replaceable light source               | No                 |

### Lifespan

|                            |                        |
|----------------------------|------------------------|
| Lifespan L70/B50 at 25 °C  | 120000 h <sup>1)</sup> |
| Lifespan L80/B10 at 25 °C  | 100000 h <sup>1)</sup> |
| Lifespan L90/B10 at 25 °C  | 54000 h                |
| Number of switching cycles | 50000                  |

<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              | 550 mA |
| ECG - Output ripple current | < 5 %  |

### Emergency lighting

|                                 |                                                                                 |
|---------------------------------|---------------------------------------------------------------------------------|
| Type of Emergency Lighting (EL) | EL certified driver (0Hz / DC operation) for central battery operation included |
|---------------------------------|---------------------------------------------------------------------------------|

|                                           |         |
|-------------------------------------------|---------|
| Type of emergency operation test          | None    |
| Wattage in emergency operation mode       | 7.5 W   |
| Luminous flux in emergency operation mode | 1230 lm |

### Certificates & Standards

|                                                      |                                   |
|------------------------------------------------------|-----------------------------------|
| Standards                                            | CE / CB / UKCA / ENEC / TÜV / EAC |
| Luminaire with limited surface temperature, "D sign" | No                                |
| Ball shot safe                                       | No                                |
| Replaceable light source (EPREL)                     | Not replaceable                   |

### Additional product data

|                |         |
|----------------|---------|
| Added function | VIVARES |
|----------------|---------|

### EQUIPMENT / ACCESSORIES

– Various accessories available

### Upgrade and replacement components

| Components Light Control                                                            |                                                         |               |
|-------------------------------------------------------------------------------------|---------------------------------------------------------|---------------|
| Product image                                                                       | Product name                                            | EAN           |
|  | MANUAL CONTROL UNIT SELECT DALI-2                       | 4058075837485 |
|  | MANUAL CONTROL UNIT SELECT DALI-2 TW                    | 4058075837508 |
|  | MANUAL CONTROL UNIT SELECT DALI-2 EXCHANGEABLE COVER TW | 4058075837522 |
|  | MANUAL CONTROL UNIT TOUCH DALI-2 TW                     | 4058075837560 |
|  | MANUAL CONTROL UNIT TOUCH DALI-2                        | 4058075837546 |

| Product image                                                                      | Product name                                                   | EAN           |
|------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------|
|    | PUSH CONTROL UNIT FLUSH MOUNT DALI-2 TW                        | 4058075837584 |
|    | SURFACE MOUNT FRAME                                            | 4058075843561 |
|    | PUSHBUTTON COUPLER DALI-2                                      | 4058075837607 |
|    | FLEX CONTROL UNIT IOT DALI-2 HCL TW                            | 4058075841888 |
|    | FLEX CONTROL UNIT FLUSH MOUNT DALI-2 TW                        | 4058075841901 |
|  | FLEX CONTROL UNIT DALI-2 TW                                    | 4058075843844 |
|  | FLEX CONTROL UNIT REAL-TIME-CLOCK DALI-2 HCL TW                | 4058075841925 |
|  | SENSOR DALI-2 LIGHT/PRESENCE-6 INFRARED CEILING INTEGRATION    | 4058075837621 |
|  | SENSOR DALI-2 LIGHT/PRESENCE-8 INFRARED CEILING INTEGRATION    | 4058075841949 |
|  | SENSOR DALI-2 LIGHT/PRESENCE-40X5 INFRARED CEILING INTEGRATION | 4058075843868 |
|  | SENSOR DALI-2 LIGHT/PRESENCE-24 INFRARED CEILING MOUNTING      | 4058075843882 |

| Product image                                                                     | Product name                | EAN           |
|-----------------------------------------------------------------------------------|-----------------------------|---------------|
|  | SENSOR CEILING MOUNTING KIT | 4058075843905 |

DOWNLOAD DATA

| Documents and certificates                                                         |                                        | Document name                      |
|------------------------------------------------------------------------------------|----------------------------------------|------------------------------------|
|    | User instruction / safety instructions | UI TRUSYS UNIVERSAL                |
|    | Legal information                      | Informationstext 18 Abs 4 ElektroG |
|    | Legal information                      | Legal insert                       |
|    | Legal information                      | Safety Insert G11205497            |
|   | Declarations of conformity             | CE declaration TRUSYS UNIVERSAL    |
|  | Declarations of conformity UKCA        | UKCA declaration TRUSYS UNIVERSAL  |
|  | EU Data Act                            | DALI LED Driver and Luminaires     |
| Photometric and lighting design files                                              |                                        | Document name                      |
|  | IES file (IES)                         | TRUSYS UNIV P 50W 840 VW OP DALI   |
|  | LDT file (Eulumdat)                    | TRUSYS UNIV P 50W 840 VW OP DALI   |
|  | UGR file (UGR table)                   | TRUSYS UNIV P 50W 840 VW OP DALI   |
|  | Light distribution curve type cone     | TRUSYS UNIV P 50W 840 VW OP DALI   |
|  | Light distribution curve type polar    | TRUSYS UNIV P 50W 840 VW OP DALI   |
| CAD/BIM files                                                                      |                                        | Document name                      |
|  | BIM Revit 3D                           | TruSys Universal                   |
|  | CAD STEP 3D                            | TRUSYS UNIV OP                     |

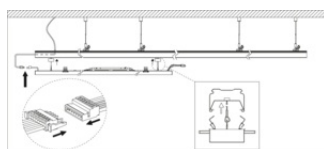
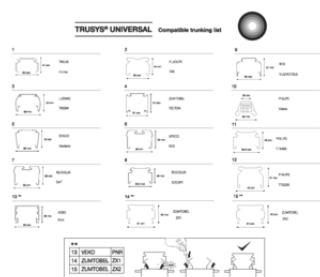
| Tender texts                                                                                      | Document name                               |
|---------------------------------------------------------------------------------------------------|---------------------------------------------|
|  Tender documents | TRUSYS UNIVERSAL DALI 50W 840 VW OP DALI-en |

## LOGISTICAL DATA

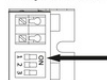
| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4099854496820 | Folding box<br>1             | 80 mm x 1,525 mm x 93 mm             | 2040.00 g    | 11.35 dm <sup>3</sup> |
| 4099854496837 | Shipping box<br>4            | 1,545 mm x 335 mm x 122 mm           | 9640.00 g    | 63.14 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.

## ADDITIONAL CATALOG INFORMATION

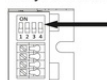


TruSys UNIVERSAL 50W ON/OFF

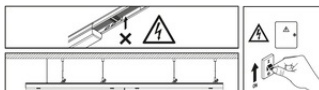


| W   | LM   | 1 | 2  | 3  |
|-----|------|---|----|----|
| 20W | 3700 | — | —  | —  |
| 30W | 5550 | — | ON | —  |
| 40W | 7400 | — | ON | —  |
| 50W | 9000 | — | ON | ON |

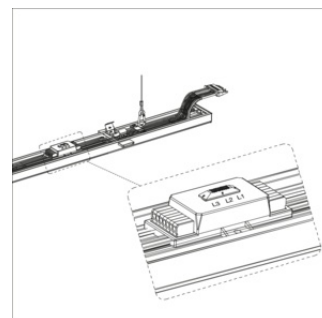
TruSys UNIVERSAL 73W ON/OFF



| W   | LM    | 1  | 2  | 3  | 4  |
|-----|-------|----|----|----|----|
| 41W | 7380  | —  | —  | —  | ON |
| 49W | 8720  | —  | —  | ON | —  |
| 57W | 10030 | —  | ON | —  | —  |
| 66W | 11420 | ON | —  | —  | —  |
| 73W | 12400 | —  | —  | —  | —  |



| 1x TRUSYS UNIV         |       | 2x TRUSYS UNIV |                | 3x TRUSYS UNIV     |         |
|------------------------|-------|----------------|----------------|--------------------|---------|
| C10 A                  | B16 A | C16 A          | Inrush current | Inrush Charge Time | DALI DM |
| TRUSYS UNIV 50W ON/OFF | 13    | 14             | 21             | 22.8 A             | 247 µs  |
| TRUSYS UNIV 73W ON/OFF | 9     | 8              | 14             | 25.5 A             | 302 µs  |
| TRUSYS UNIV 50W DALI   | 12    | 12             | 19             | 20.75 A            | 288 µs  |
| TRUSYS UNIV 73W DALI   | 7     | 9              | 12             | 31.4 A             | 190 µs  |



## References / Links

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

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