

# PRODUCT DATASHEET

## TruSys® PFM EM N 50 W 4000 K AT 3H

TruSys® PERFORMANCE EMERGENCY NARROW | Luminaire inserts with narrow light distribution for standard and emergency lighting



### Areas of application

- Emergency illumination of escape routes
- Antipanic lighting
- Buildings requiring up to 3 h emergency light operation
- Direct replacement for luminaires with fluorescent lamps
- Industry halls, high rack warehouse, garages, hardware stores

### Product benefits

- Seamless integration of luminaires with emergency lighting function into general lighting
- Easy wiring thanks to included prewired driver and battery for Emergency lighting function
- Simple testing of luminaires with emergency lighting function thanks to integrated automatic test function
- Convenient visualization of results of automatic test with an included control LED
- Operation of integrated emergency lighting function with long life LiFePO4 battery with 3h battery discharge time
- High luminous efficacy in normal operation
- 3 years guarantee
- Directed light distribution for high heights
- 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
- Rows of up to 57 luminaires possible

### Product features



- Certified according to European norms (EN 60598-1:2015; EN 60598-2-22:2014)
- Luminaire suitable for normal lighting and emergency lighting
- Self-contained luminaires
- Emergency lighting function: battery discharge time of 3 h
- Function test of emergency lighting: automatic (AT)
- Battery technology: LiFePO<sub>4</sub>
- Beam angle narrow: 60°
- Click into place solution with smart click buttons
- Luminous efficacy: up to 160 lm/W
- Fixed luminaire taps
- Steel-sheet housing

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

|                                                             |                       |
|-------------------------------------------------------------|-----------------------|
| Nominal wattage                                             | 50.00 W               |
| Nominal voltage                                             | 220...240 V           |
| Mains frequency                                             | 50...60 Hz            |
| Nominal current                                             | 270.000 mA            |
| Inrush current                                              | 30 A                  |
| Inrush current time $T_{h50}$                               | 265 $\mu$ s           |
| Max. number of luminaires per miniature circuit breaker B16 | 8                     |
| Max. number of luminaires per miniature circuit breaker C10 | 8                     |
| Max. number of luminaires per miniature circuit breaker C16 | 13                    |
| Power factor $\lambda$                                      | > 0.90                |
| Total harmonic distortion                                   | < 20 %                |
| Protection class                                            | I                     |
| Operating mode                                              | Integrated LED driver |

**Photometrical data**

|                                              |                           |
|----------------------------------------------|---------------------------|
| Luminous flux                                | 8000 lm                   |
| Luminous efficacy                            | 160 lm/W                  |
| Color temperature                            | 4000 K                    |
| Light color (designation)                    | Cool White                |
| Color rendering index Ra                     | $\geq 80$                 |
| Standard deviation of color matching         | $\leq 3$ sdc <sub>m</sub> |
| Low flicker                                  | Yes                       |
| Photobiological safety group acc. to EN62778 | RG1                       |
| Beam angle                                   | 60 °                      |
| UGR                                          | 21                        |



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Dimensions & Weight

|                |            |
|----------------|------------|
| Length         | 1500.00 mm |
| Width          | 66.80 mm   |
| Height         | 39.40 mm   |
| Product weight | 1660.00 g  |



Materials & Colors

|                                 |                               |
|---------------------------------|-------------------------------|
| Product color                   | White                         |
| Housing color                   | White                         |
| Body material                   | Steel                         |
| Cover material                  | Polymethylmethacrylate (PMMA) |
| Light emitting surface material | PMMA                          |

|                                            |        |
|--------------------------------------------|--------|
| Glow Wire Test according to IEC 60695-2-12 | 650 °C |
| Mercury content                            | 0.0 mg |

### Application & Mounting

|                                        |                    |
|----------------------------------------|--------------------|
| Ambient temperature range              | -25...+40 °C       |
| Temperature range at storage           | 5...+35 °C         |
| Type of connection                     | Plug-In connection |
| Type of protection                     | IP20               |
| Protection class IK (shock resistance) | IK04               |
| Dimmable                               | Yes                |
| Mounting type                          | Suspended/Surface  |
| Mounting location                      | Mounting rail      |
| Application environment                | Indoor             |
| With light source                      | Yes                |
| Replaceable light source               | No                 |

### Lifespan

|                            |                       |
|----------------------------|-----------------------|
| Lifespan L70/B50 at 25 °C  | 65000 h <sup>1)</sup> |
| Lifespan L80/B10 at 25 °C  | 60000 h <sup>1)</sup> |
| Lifespan L80/B50 at 25 °C  | 60000 h               |
| Lifespan L90/B10 at 25 °C  | 50000 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

|                             |        |
|-----------------------------|--------|
| ECG - Output ripple current | < 20 % |
|-----------------------------|--------|

### BATTERY

|                             |          |
|-----------------------------|----------|
| Type of Battery             | LiFePO4  |
| Nominal voltage of battery  | 3.2 V    |
| Nominal capacity of battery | 9000 mAh |
| Battery charging time       | < 24 h   |

### Emergency lighting

|                                   |                                             |
|-----------------------------------|---------------------------------------------|
| Area of emergency application     | Anti-panic lighting / Escape route lighting |
| Type of emergency light operation | Maintained / Non-maintained                 |
| Type of emergency operation test  | Automatic                                   |

|                                            |         |
|--------------------------------------------|---------|
| Wattage in maintained operation mode       | 50 W    |
| Wattage in emergency operation mode        | 4 W     |
| Luminous flux in maintained operation mode | 8000 lm |
| Luminous flux in emergency operation mode  | 600 lm  |
| Battery life in emergency operation mode   | 3 h     |
| Integrated test switch                     | No      |

### Certificates & Standards

|                                  |                      |
|----------------------------------|----------------------|
| Standards                        | CE / CB / ENEC / EAC |
| Ball shot safe                   | No                   |
| Replaceable light source (EPREL) | Not replaceable      |

### EQUIPMENT / ACCESSORIES

- Mounting rail with fixed integrated 8-pole cable

### DOWNLOAD DATA

| Documents and certificates                                                         |                                        | Document name                            |
|------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------|
|  | User instruction / safety instructions | UI_Trusys_Trunking-System_Performance_EM |
|  | User instruction / safety instructions | TRUNKING SYSTEM PFM EM                   |
|  | Legal information                      | LS Insert Trusys PFM EM                  |
|  | Declarations of conformity             | TRUSYS PFM EM AT 3H                      |

| Photometric and lighting design files                                              |                     | Document name                   |
|------------------------------------------------------------------------------------|---------------------|---------------------------------|
|  | IES file (IES)      | TRUSYS PFM 50W 4000K N EM AT 3H |
|  | LDT file (Eulumdat) | TRUSYS PFM 50W 4000K N EM AT 3H |
|  | ULD file (DIALux)   | TRUSYS PFM 50W-4000K N          |
|  | ROLF file (RELUX)   | TRUSYS PFM 50W-4000K            |

| Photometric and lighting design files                                             |                                     | Document name                                            |
|-----------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------|
|  | UGR file (UGR table)                | TRUSYS PFM 50W 4000K N EM AT 3H                          |
|   | Light distribution curve type cone  | TRUSYS PFM 50W 4000K N EM AT 3H                          |
|   | Light distribution curve type polar | TRUSYS PFM 50W 4000K N EM AT 3H                          |
| CAD/BIM files                                                                     |                                     | Document name                                            |
|   | BIM Revit 3D                        | TruSys®-Performance                                      |
|   | CAD STEP 3D                         | TRUSYS PFM INSERT                                        |
| Tender texts                                                                      |                                     | Document name                                            |
|   | Tender documents                    | TruSys PERFORMANCE EMERGENCY NARROW 50 W 4000 K AT 3H-EN |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4058075291232 | Folding box<br>1             | 83 mm x 1,571 mm x 88 mm             | 1835.00 g    | 11.47 dm <sup>3</sup> |
| 4058075291249 | Shipping box<br>4            | 1,589 mm x 194 mm x 198 mm           | 8133.00 g    | 61.04 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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