



**MEGAMAN<sup>®</sup>**

Catalogue

2024





# WHO WE ARE

Artificial light enhances the way we live and work. It brings us safety, comfort and productivity. Originated in Germany, MEGAMAN® is committed to providing light in a way that is truly sustainable, energy saving and of such a quality that it brings a positive difference into the lives of all who use our innovative LED lighting solutions.

MEGAMAN® is proud to be a major lighting brand to have exclusively manufactured low-energy lighting products throughout its entire history, offering more than 25 years of industry expertise and innovation to the lighting market.

Beginning in 1994 with the highly successful production of CFL light sources, MEGAMAN® has evolved to become a complete low-energy LED lighting solutions provider. MEGAMAN® has built a reputation for producing high-performance LED light sources that offer a true replacement for traditional metal halide and halogen – combining quality lighting performance with substantial energy savings.

MEGAMAN® is now applying its market-leading experience to an even wider range of lighting solutions including revolutionary Smart Lighting System and a suite of integrated LED luminaires.

- *INGENIUM*® ZB Smart Lighting Solution provides further energy saving potential for users and allows them have full control of smart devices via mobile app from anywhere in the world
- An extensive range of LED Luminaires are developed for both indoor and outdoor applications across diverse industries
- MEGAMAN®'s lighting products are distributed throughout the world mainly in Europe, Middle East and Asia
- Our advanced Research and Development facilities will ensure a continuous supply of innovative and sustainable lighting products in the market.

MEGAMAN® continues to play a leading role in combating climate change and carbon emissions by pursuing continuous innovation in the production of low-energy lighting solutions.

## MILESTONES

- 2023 Launched *INGENIUM*® MATTER smart lighting, works with various platforms
- 2022 Infinite IoT lighting solution developed based on Bluetooth Low Energy which is widely adopted in smartphones and tablets
- 2019 Extended product range of *INGENIUM*® ZB smart lighting released
- 2018 Launched Dual Beam Technology (DBT) which empowers users to have two beam angles in one LED luminaire or lamp
- 2016 Launched U-DIM™ technology which offers seamless dimming and is compatible with the widest range of existing dimmers
- 2015 Being one of the first companies to use plastic extrusion to produce water-proof battens; Launched *INGENIUM*® ZB smart lighting solution which adopts Zigbee technology
- 2014 Launched first smart lighting range, *INGENIUM*® BLU; Industry first full range of Dim to Warm LED products
- 2013 Integrated LED luminaires introduced
- 2012 Patented LED module and light engine - *TECOH*® MHx and *TECOH*® CFx  
*TECOH*® CFx - World's first 2000lm Zhaga Book2 Certified Light Engine
- 2011 High R9 Technology first introduced to LED range
- 2010 Launched the first MEGAMAN® LED Candle and Classic Lamp
- 2009 Innovative Thermal Conductive Highway™ (TCH) technology incorporated into MEGAMAN® LED reflectors
- 2008 Revolutionary patents and technologies invented for CFL products including: Patented Cooling-Tube technology, Silicone Protection technology, Award-winning industry first CFL GU10 reflector, Industry first Long Life CFL reaches 15,000 hours lifetime, Dimmable CFLs using DorS Step Dimming and DIMMERABLE Linear Dimming technology, Amalgam technology which prevents the use of liquid mercury.
- 1999
- 1997 Industry first candle-shaped CFL launched
- 1996 Industry first classic-shaped CFL launched
- 1994 MEGAMAN® incorporated in Germany



## Rigorous Quality and Management Systems

All MEGAMAN® products are designed, tested and produced in our own factories in Xiamen, China. Standards have been implemented factory-wide to ensure the MEGAMAN® manufacturing processes deliver innovative, reliable and safe products with high-quality standards now and in the future.

To ensure that MEGAMAN® products comply with the highest quality standards, company manufacturing plants are equipped with their own assembly lines.

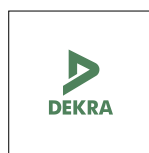
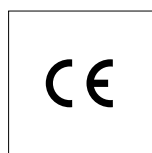
The MEGAMAN® business runs under the most stringent management and quality systems. The green elements of the production process are maximised, employee welfare is prioritised and the company is socially responsible to the local community. To continually develop these areas, MEGAMAN® has undertaken a range of international accreditations. These include:

### Quality Management System

MEGAMAN® lamps and luminaires are manufactured and certified to ISO 9001:2015.

### Product Quality Assurance

MEGAMAN® lamps and luminaires are made using premium quality materials and innovative technologies within stringent control measures, to deliver maximum performance and energy efficiencies.



## Innovative and Unique Products

With our patented LED design and technology, the MEGAMAN® LED luminaires and lamps are able to deliver superb performance, including low power consumption, excellent light output and low maintenance costs. They provide the highest quality lighting performance of any LED-based product on the market consuming the same power!

### Entering a New Era in LED Lighting and Luminaire Solutions

#### Unique Features

- Deliver superb lighting performance
- High lumen maintenance: rated lumen maintenance of 70% (L70) at up to 50,000 hours life
- High colour rendering up to Ra97
- High colour temperature consistency
- Long rated life up to 50,000 hours
- Simple installation and servicing
- High energy savings
- No UV and IR radiation

#### Additional Benefits

- Mercury-free
- Instant start-up
- Wide range of operating temperatures

#### Applications

- Hospitality
- Retail lighting
- Office
- Residential
- Industrial
- Outdoor
- Parking garage



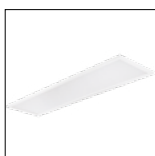


## Contents



Explore infinite possibilities

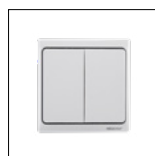
### Smart Lighting



Infinite Panel  
10



Infinite MILENA  
12



Infinite Switch  
14



Infinite Sensor  
15



Infinite Relay  
16

### Technical luminaires

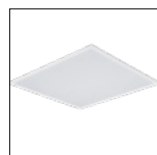
#### Panel Products



BERTO SIDELIT P  
20



BERTO BACKLIT P  
22



BERTO BACKLIT E  
24



ESTELA 2  
26

#### Linear Products

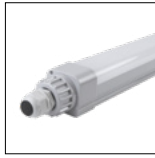


GABIO 2  
30

## Waterproof Products



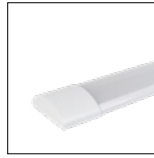
**ROCCA**  
34



**HAGON**  
36



**DINO 2 FARM**  
38



**TONO 2**  
42

## Downlight Products



**MILENA**  
46



**MILENA DALI**  
48



**MILENA PRO**  
50



**KANA**  
52



**TEGO 2**  
54



**FICO**  
56

## Highbay Products



**GEO 2**  
60



**KEO**  
62

## Bulkhead Products



**FRANCO**  
66



**RONDA**  
68

## Ceiling Products



**RENZO**  
72

## Floodlight Products



**TITO**  
76



**TOTT 2**  
78



**VOSS**  
80



**EKON**  
82

## Emergency Lighting



**TEMPUS**  
86



**TEMPUS**  
87



**TEMPUS**  
88

## Electrical data

**ROCCA**  
90

**MILENA & KANA**  
91

**TOTT 2 & VOSS**  
92

# Smart Lighting Products

**Infinite**  
Explore infinite possibilities









## Panel

### Features

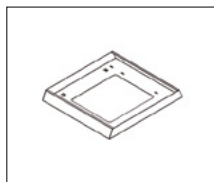
- Works with Infinite® IoT Lighting
- Slim integrated panel lighting design facilitates easy installation and maintenance
- UGR19 to provide visual comfort
- Screwless assembly design which can reach IP40 rating
- Driver with loop through function to further enhance ease of installation
- Easy plug & play connector
- Wireless communication through Bluetooth® Low Energy (BLE)



### Products

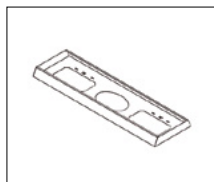
Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
711769	4892657117691	Panel-P-SL-SQ595-33W-830-840-UGR19-SMART	33	3700/4000	112/120	3000/4000	90	595x595x17	2,200
711770	4892657117707	Panel-P-SL-RE295-33W-830-840-UGR19-SMART	33	3700/4000	112/120	3000/4000	90	1195x295x17	2,500

### Accessories



**711901**

Surface mounted frame for 595 x 595mm panel



**711903**

Surface mounted frame for 1195 x 295mm panel



**709965**

Suspension kit



# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Standby power consumption	<0.50W
Power factor	> 0.9
THD	10%
Dimmability	Smart dimming via Infinite IoT Lighting app
Inrush current Ipeak	11A
Inrush current time	206µs
Max. number of luminaires per miniature circuit breaker B10	23
Max. number of luminaires per miniature circuit breaker B16	36
Max. number of luminaires per miniature circuit breaker C10	37
Max. number of luminaires per miniature circuit breaker C16	61
Surge protection	1000V
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	UGR19
SDCM	4
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Recessed / surface mounted / suspended
Loop through	Yes
Driver	External
IP	IP40
IK	IK02
Glow wire test	650°C
Lifetime L70/B50	N/A
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

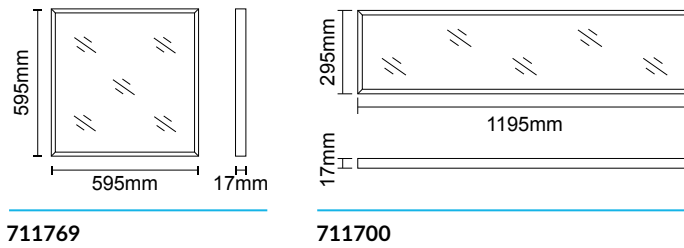
## Materials & colours

Housing material	Aluminium
Cover material	PMMA + PS
Finishing colour	White

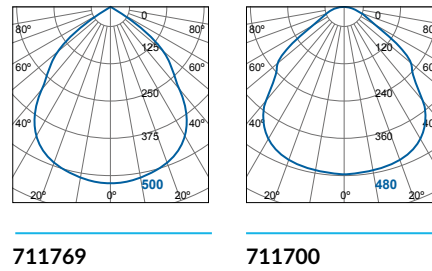
## Certificates

Certification	CE
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## Dimensional drawings



## Diagrams





## MILENA

### Features

- Works with Infinite® IoT Lighting
- Modular downlight with dual CCT
- High cut-off angle for better glare control
- IP54 rated for damp location such as bathroom and kitchen
- Toolless terminal block facilitates easy installation and maintenance
- Through wiring possible
- Wireless communication through Bluetooth® Low Energy (BLE)



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	ø x H (mm)	Cut-out ø (mm)	Net weight (kg)
711398	4892657113983	DL-MILENA-P-Ref-R150-18W-830-840-SMART	18	1450/1600	81/89	3000/4000	65	172 x 99	150	0,774
711399	4892657113990	DL-MILENA-P-Ref-R200-24W-830-840-SMART	24	1900/2100	79/88	3000/4000	65	225 x 99	200	0,857

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Standby power consumption	<0,50W
Power factor	> 0.9
THD	10%
Dimmability	Smart dimming via Infinite IoT Lighting app
Inrush current Ipeak	11A
Inrush current time	218µs
Max. number of luminaires per miniature circuit breaker B10	23
Max. number of luminaires per miniature circuit breaker B16	36
Max. number of luminaires per miniature circuit breaker C10	37
Max. number of luminaires per miniature circuit breaker C16	61
Surge protection	1000V
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	UGR22
SDCM	4
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Recessed
Loop through	Yes
Driver	External
IP	IP54
IK	IK02
Glow wire test	650°C
Lifetime L70/B50	N/A
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

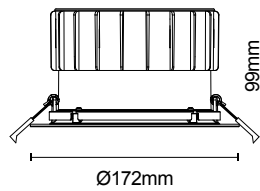
## Materials & colours

Housing material	Aluminium + PC
Cover material	PC
Other material	Aluminium reflector
Finishing colour	White

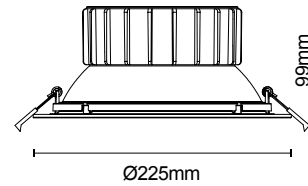
## Certificates

Certification	CE
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## Dimensional drawings

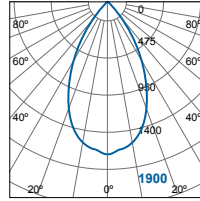


711398

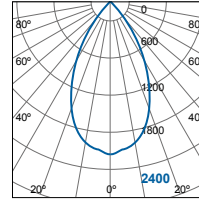


711399

## Diagrams



711398



711399





## Switch

### Features

- Works with Infinite® IoT Lighting
- Easy installation
- Kinetic switch: no batteries or AC power are needed
- Control the lights in group: on/off, brightness, colour temperature and 2 scenes
- Wireless communication through Bluetooth® Low Energy (BLE)



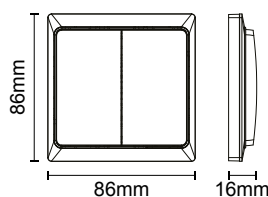
### Products

Item number	EAN code	Description	Switching cycles	Standby power consumption (W)	LxWxH (mm)	Net weight (kg)
711400	4892657114003	Smart lighting Switch kinetic 4 buttons	100000	< 0,50	86x86x16	0,079

### Specifications

IP	IP20
Installation	Surface mounted
Certification	CE
Finishing colour	White
Housing material	PC
Operating temperature	-10 to +40°C
Application temperature	40°C
Storage temperature	-30 to +65°C

### Dimensional drawings



711400



## Sensor

### Features

- Works with Infinite® IoT Lighting
- Easy installation
- Adjustable light sensitivity, timer, microwave strength and detection range
- Wireless communication through Bluetooth® Low Energy (BLE)



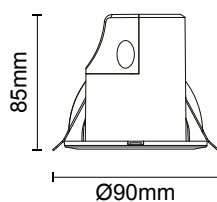
### Products

Item number	EAN code	Description	Switching cycles	Standby power consumption (W)	Frequency (Hz)	Nominal voltage (V)	Ø x H (mm)	Cut-out Ø (mm)	Weight (kg)
711401	4892657114010	Smart Lighting Sensor	100000	< 0,50	50/60	AC120~277	90 x 85	70-80	0,141

### Specifications

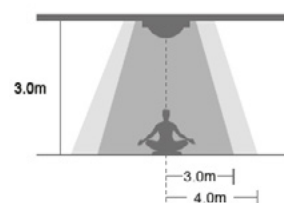
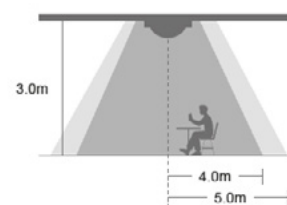
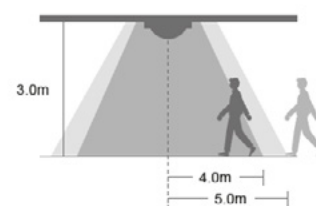
IP	IP20
Installation	Recessed
Certification	CE
Finishing colour	White
Housing material	PC
Operating temperature	-25 ~ +50°C
Application temperature	25°C
Storage temperature	-30 ~ +65°C

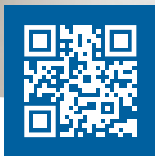
### Dimensional drawings



711401

### Detection range





## Relay

### Features

- Works with Infinite® IoT Lighting
- Easy installation
- Control different types of non-Smart luminaires in the app (on/off)
- Compatible with Infinite® Smart switch and Smart sensor
- Wireless communication through Bluetooth® Low Energy (BLE)



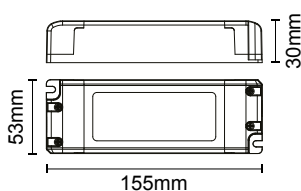
### Products

Item number	EAN code	Description	Switching cycles	Standby power consumption (W)	Frequency (Hz)	Nominal voltage (V)	Input current (mA)	Rated power (W)	LxWxH (mm)	Net weight (kg)
711402	4892657114027	Smart lighting Relay	100000	< 0,50	50/60	AC220~240	5000	Max. 600 LED	155x53x30	0,093

### Specifications

Power factor	> 0.9
IP	IP20
Certifications	CE
Finishing colour	White
Housing material	PC
Operating temperature	-20 to +40°C
Application temperature	40°C
Storage temperature	-30 to +65°C

### Dimensional drawings



711402



Technical  
**Luminaires**



# Panel Products









## BERTO SIDELIT P

### Features

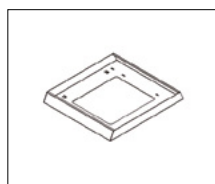
- Light weight panel facilitates easy installation and maintenance
- Equipped with flicker free ( $\leq 3\%$ ) driver
- Dual CCT 3000/4000K
- Efficacy up to 120lm/W
- Long lifetime with 50,000hrs L80B10 at Ta 25°C
- DALI2.0 dimmable driver available
- Warranty 5 years

<b>UGR</b> 19	<b>CRI</b> 80	<b>L80</b> 50000
<b>RG</b> 0	<b>IP</b> 40	<b>IK</b> 02
<b>CLASS I</b>	<b>5yrs</b> warranty	<b>CE</b>

### Products

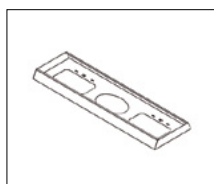
Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
711507	4892657115079	Panel-BERTO PLUS-P-SL-SQ595-33W-830-840-UGR19	33	4000 3720	120 112	4000 3000	90	595x595x15	2,100
711508 	4892657115086	Panel-BERTO PLUS-P-SL-SQ595-33W-830-840-UGR19-DALI2	33	4000 3720	120 112	4000 3000	90	595x595x15	2,200
711509	4892657115093	Panel-BERTO PLUS-P-SL-RE295-33W-830-840-UGR19	33	4000 3720	120 112	4000 3000	90	1195x295x15	2,400
711510 	4892657115109	Panel-BERTO PLUS-P-SL-RE295-33W-830-840-UGR19-DALI2	33	4000 3720	120 112	4000 3000	90	1195x295x15	2,500

### Accessories



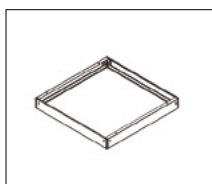
**711901**

Surface mounted frame for 595 x 595mm panel



**711903**

Surface mounted frame for 1195 x 295mm panel



**710933**

Surface mounted kit for 595 x 595mm panel (not for DALI versions)



**710934**

Surface mounted kit for 1195 x 295mm panel (not for DALI versions)



**709965**

Suspension kit

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	≥ 0,9
THD	20%
Dimmability	No / DALI DIM
Inrush current I <sub>peak</sub>	11A
Inrush current time	50µs
Max. number of luminaires per miniature circuit breaker B10	14
Max. number of luminaires per miniature circuit breaker B16	23
Max. number of luminaires per miniature circuit breaker C10	24
Max. number of luminaires per miniature circuit breaker C16	39
Surge protection	1000V
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	UGR19
SDCM	4
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Recessed, surface mounted, suspended
Loop through	Yes
Driver	External
IP	IP40
IK	IK02
Glow wire test	650°C
Lifetime L70/B50	70000h
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

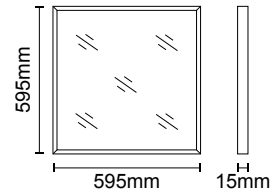
## Materials & colours

Housing material	Aluminium
Cover material	PMMA + PS
Finishing colour	White

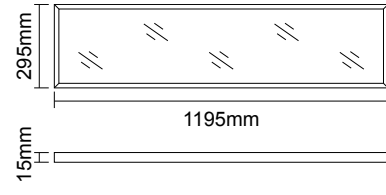
## Certificates

Certification	CE, ENEC
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# Dimensional drawings

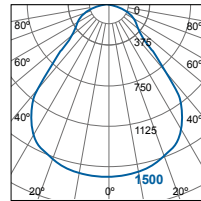


711507 | 711508



711509 | 711510

# Diagrams



711507 | 711508  
711509 | 711510





## BERTO BACKLIT P

### Features

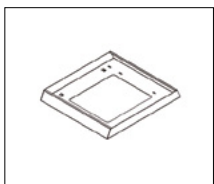
- Light weight panel facilitates easy installation and maintenance
- Equipped with flicker free ( $\leq 3\%$ ) driver
- Four-step lumen output switching via driver
- Efficacy up to 120lm/W
- Long lifetime with 50,000hrs L80B10 at Ta 25°C
- DALI2.0 dimmable driver available
- Warranty 5 years



### Products

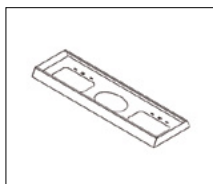
Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
711445	4892657114454	Panel-BERTO-P-BL-SQ595-4MP-24-36W-830-UGR19	24/28/32/36	2650/3100/3550/3900	110/110/110/108	3000	90	595x595x33	2,100
711447 	4892657114478	Panel-BERTO-P-BL-SQ595-36W-830-UGR19-DALI2	36	3900	108	3000	90	595x595x33	2,200
711446	4892657114461	Panel-BERTO-P-BL-SQ595-4MP-24-36W-840-UGR19	24/28/32/36	2880/3360/3840/4200	120/120/120/117	4000	90	595x595x33	2,100
711448 	4892657114485	Panel-BERTO-P-BL-SQ595-36W-840-UGR19-DALI2	36	4200	120	4000	90	595x595x33	2,200
711716	4892657117165	Panel-BERTO-P-BL-RE295-36W-830-840-UGR19	36	3300/3600	92/100	3000/4000	90	1195x295x33	2,400

### Accessories



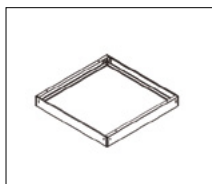
711901

Surface mounted frame for 595 x 595mm panel



711903

Surface mounted frame for 1195 x 295mm panel



710933

Surface mounted kit for 595 x 595mm panel (not for DALI versions)



710934

Surface mounted kit for 1195 x 295mm panel (not for DALI versions)



710820

Suspension kit

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	≥ 0,9
THD	20%
Dimmability	No / DALI DIM
Inrush current I <sub>peak</sub>	11A
Inrush current time	50µs
Max. number of luminaires per miniature circuit breaker B10	14
Max. number of luminaires per miniature circuit breaker B16	23
Max. number of luminaires per miniature circuit breaker C10	24
Max. number of luminaires per miniature circuit breaker C16	39
Surge protection	1000V
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	UGR19
SDCM	4
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Recessed, surface mounted, suspended
Loop through	Yes
Driver	External
IP	IP40
IK	IK02
Glow wire test	650°C
Lifetime L70/B50	70000h
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

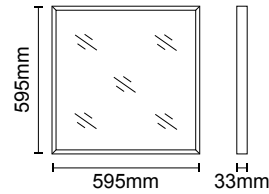
## Materials & colours

Housing material	Aluminium
Cover material	PS diffuser
Finishing colour	White

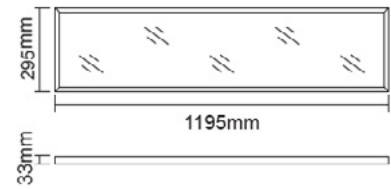
## Certificates

Certification	CE, ENEC
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# Dimensional drawings

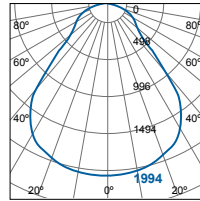


711445 | 711446 | 711447 | 711448



711716

# Diagrams



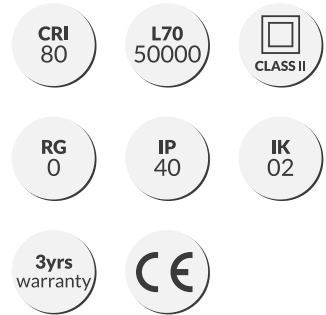
711445 | 711446  
711447 | 711448  
711716



## BERTO BACKLIT E

### Features

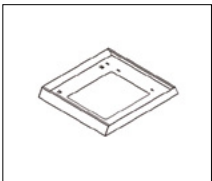
- Light weight panel facilitates easy installation and maintenance
- Easy plug & play connector
- Equipped with flicker free ( $\leq 3\%$ ) driver
- DALI2 dimmable driver available
- Long lifetime with 50,000hrs L70B10 at Ta 25°C



### Products

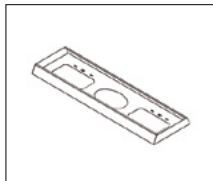
Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
711449	4892657114492	Panel-BERTO-BL-SQ595-36W-830	36	3300	92	3000	110	595x595x33	2,000
711450	4892657114508	Panel-BERTO-BL-SQ595-36W-840	36	3600	100	4000	110	595x595x33	2,000
711451	4892657114515	Panel-BERTO-BL-RE295-36W-830-840	36	3300 3600	92 100	3000 4000	110	1195x295x33	2,300

### Accessories



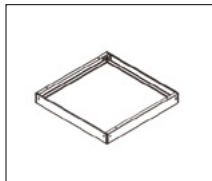
**711901**

Surface mounted frame for 595 x 595mm panel



**711903**

Surface mounted frame for 1195 x 295mm panel



**710933**

Surface mounted kit for 595 x 595mm panel



**710934**

Surface mounted kit for 1195 x 295mm panel



**710820**

Suspension kit

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	> 0,9
THD	20%
Dimmability	No
Inrush current I <sub>peak</sub>	38,8A
Inrush current time	100µs
Max. number of luminaires per miniature circuit breaker B10	14
Max. number of luminaires per miniature circuit breaker B16	23
Max. number of luminaires per miniature circuit breaker C10	24
Max. number of luminaires per miniature circuit breaker C16	39
Surge protection	1000V
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	UGR22
SDCM	6
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Recessed, surface mounted, suspended
Loop through	No
Driver	External
IP	IP40
IK	IK02
Glow wire test	650°C
Lifetime L70/B50	50000h
Lifetime L80/B10	N/A
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	3 years

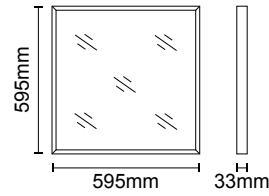
## Materials & colours

Housing material	Aluminium
Cover material	PS diffuser
Finishing colour	White

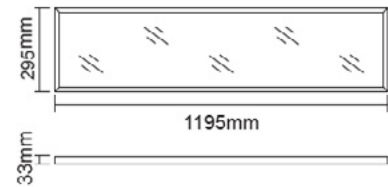
## Certificates

Certification	CE
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# Dimensional drawings

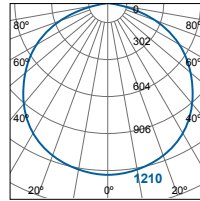


711449 | 711450



711451

# Diagrams



711449 | 711450 | 711451





## ESTELA 2

### Features

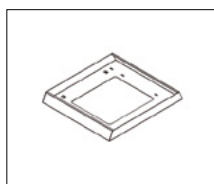
- Light weight panel facilitates easy installation and maintenance
- Equipped with flicker free ( $\leq 3\%$ ) driver
- Four-step lumen output switching via driver
- Efficacy up to 125lm/W
- Long lifetime with 50,000hrs L80B10 at Ta 25°C
- DALI2.0 dimmable driver available
- Warranty 5 years



### Products

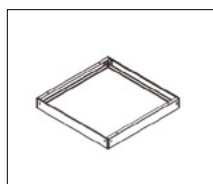
Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
712083	4892657120837	Panel-ESTELA2-P-SQ595-4MP-24-36W-830-UGR19	24/28/32/36	2800/3160/3580/3900	117/113/112/108	3000	75	595x595x27	2,480
710976	4892657109764	Panel-ESTELA2-P-SQ595-4MP-24-36W-840-UGR19	24/28/32/36	3000/3400/3852/4200	120/120/120/117	4000	75	595x595x27	2,480

### Accessories



711901

Surface mounted frame for 595 x 595mm panel



710933

Surface mounted kit for 595 x 595mm panel



# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	≥ 0,9
THD	20%
Dimmability	No
Inrush current Ipeak	38,8A
Inrush current time	100µs
Max. number of luminaires per miniature circuit breaker B10	14
Max. number of luminaires per miniature circuit breaker B16	23
Max. number of luminaires per miniature circuit breaker C10	24
Max. number of luminaires per miniature circuit breaker C16	39
Surge protection	1000V
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	UGR19
SDCM	4
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Recessed, surface mounted, suspended
Loop through	Yes
Driver	External
IP	IP40
IK	IK02
Glow wire test	650°C
Lifetime L70/B50	70000h
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

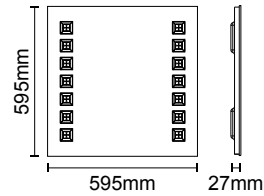
## Materials & colours

Housing material	Aluminium
Cover material	N/A
Other material	Aluminium reflector, PC lens
Finishing colour	White

## Certificates

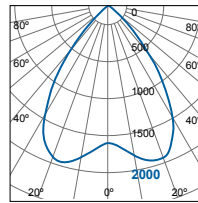
Certification	CE
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# Dimensional drawings

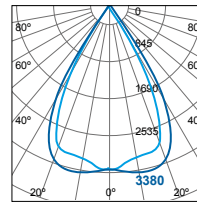


710976

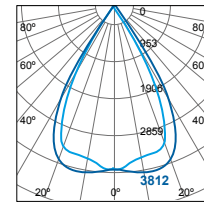
# Diagrams



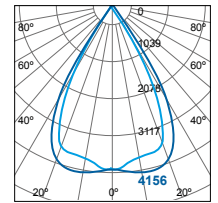
710976 24W



710976 28W



710976 32W



710976 36W



# Linear Products







## GABIO 2

### Features

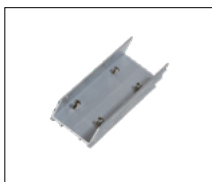
- New generation of slim aluminium linear profile fixtures with understated design fits any interior
- Louvre cell design with low glare rating UGR16 for high visual comfort, ideal for individual task lighting
- Modular system for linear series connection available by different joints
- Dual CCT 3000K/4000K & Dual Power
- Dali2.0 available



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
712004	4892657120042	Linear-GABIO2-P-L1200-16-29W-830-840-UGR16	16 / 29	1750/3200 1900/3500	110 120	3000 4000	65	1147x50x70	1,950
712005 	4892657120059	Linear-GABIO2-P-L1200-29W-830-840-UGR16-DALI2	29	3200 3500	110 120	3000 4000	65	1147x50x70	2,200
712006	4892657120066	Linear-GABIO2-P-L1500-18-35W-830-840-UGR16	18 / 35	2000/3850 2150/4200	110 120	3000 4000	65	1432x50x70	2,150
712007 	4892657120073	Linear-GABIO2-P-L1500-35W-830-840-UGR16-DALI2	35	3850 4200	110 120	3000 4000	65	1432x50x70	2,400

### Accessories



712008  
Connector

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	> 0.9
THD	15%   25%
Dimmability	On/off or DALI
Inrush current I <sub>peak</sub>	22A   4,1A (DALI)
Inrush current time	185µs   182µs DALI
Max. number of luminaires per miniature circuit breaker B10	18 ON
Max. number of luminaires per miniature circuit breaker B16	28   72 DALI
Max. number of luminaires per miniature circuit breaker C10	25   45 DALI
Max. number of luminaires per miniature circuit breaker C16	40   72 DALI
Surge protection	1000V
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	UGR16
SDCM	≤ 4
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Surface mounted / Suspended
Loop through	No
Driver	Integrated
IP	IP20
IK	IK06
Glow wire test	650°C
Lifetime L70/B50	70000h
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-20 to +45°C
Application temperature	45°C
Storage temperature	-30 to +65°C
Warranty	5 years

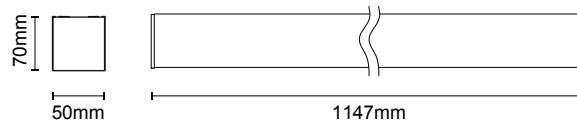
## Materials & colours

Housing material	Aluminum
Cover material	PET diffuser
Finishing colour	White

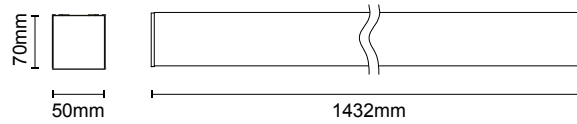
## Certificates

Certification	CE
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# Dimensional drawings

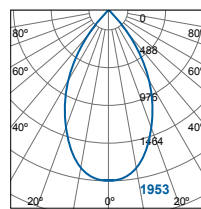


712004 | 712005

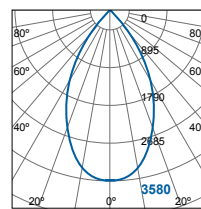


712006 | 712007

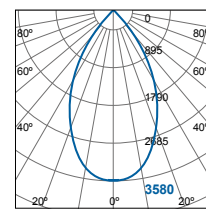
# Diagrams



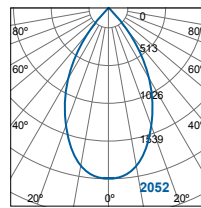
712004 16W



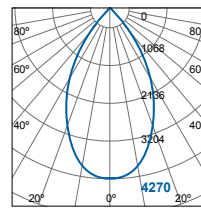
712004 29W



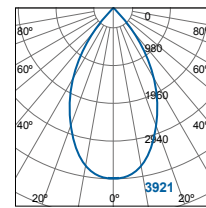
712005 29W



712006 18W



712006 35W



712007 35W



# Waterproof Products

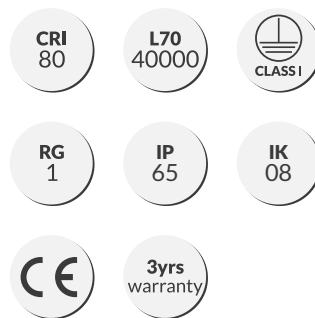









## ROCCA

### Features

- Replacement for traditional waterproof batten
- Built in Microwave sensor and Emergency provide a consistent outlook with standard version
- Durable water and vandal resistant construction with IP65 and IK08 rating
- 4 different lengths 600mm, 1200mm, 1500mm & 1800mm
- Easy installation and Toolless wiring
- Sensor and Emergency options available
- Durable stainless steel clips
- Capable to mount in UK Beza Box



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
711345	4892657113457	WP-ROCCA-E-L1270-20W-840-IP65-IK08	20	2500	125	4000	110	1270x76x83	1,200
711346	4892657113464	WP-ROCCA-E-L1570-28W-840-IP65-IK08	28	3600	128	4000	110	1270x76x83	1,700
711438	4892657114386	WP-ROCCA-E-L655-30W-840-IP65-IK08	30	3600	120	4000	110	655x102x86	0,800
711439	 4892657114393	WP-ROCCA-E-L655-34W-840-IP65-IK08-EM3h	34	3600	105	4000	110	655x102x86	0,850
711440	4892657114409	WP-ROCCA-E-L1265-40W-840-IP65-IK08	40	4800	120	4000	110	1265x102x86	1,300
712018	 4892657120189	WP-ROCCA-E-L1265-41W-840-IP65-IK08-sensor	41	4800	117	4000	110	1265x102x86	1,320
711441	 4892657114416	WP-ROCCA-E-L1265-44W-840-IP65-IK08-EM3h	44	4800	109	4000	110	1265x102x86	1,350
711442	4892657114423	WP-ROCCA-E-L1565-56W-840-IP65-IK08	56	6800	121	4000	110	1565x102x86	2,000
712019	 4892657120196	WP-ROCCA-E-L1565-57W-840-IP65-IK08-sensor	57	6800	119	4000	110	1565x102x86	2,200
711443	 4892657114430	WP-ROCCA-E-L1565-60W-840-IP65-IK08-EM3h	60	6800	113	4000	110	1565x102x86	2,100
711344	4892657114447	WP-ROCCA-E-L1865-70W-840-IP65-IK08	70	9100	130	4000	110	1865x148x86	3,100



# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	≥ 0,9
THD	See last pages
Dimmability	No
Inrush current Ipeak	See last pages
Inrush current time	See last pages
Max. number of luminaires per miniature circuit breaker B10	See last pages
Max. number of luminaires per miniature circuit breaker B16	See last pages
Max. number of luminaires per miniature circuit breaker C10	See last pages
Max. number of luminaires per miniature circuit breaker C16	See last pages
Surge protection	See last pages
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	≤3%@100Hz
Photobiological safety group	RG1

## Mounting & application

Mounting method	Surface mounted / suspended
Loop through	No
Driver	Built in
IP	IP65
IK	IK08
Glow wire test	850°C
Lifetime L70/B50	40000h
Switching cycles	100000
Operating temperature	-30 to +50°C
Application temperature	25°C
Storage temperature	-30 to +70°C
Warranty	3 years

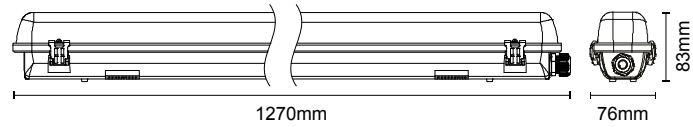
## Materials & colours

Housing material	ABS
Cover material	Anti-UV Polycarbonate, Opal
Finishing colour	Silver

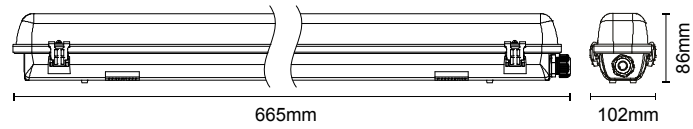
## Certificates

Certification	CE
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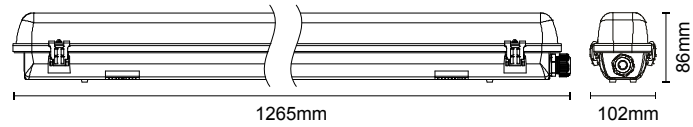
# Dimensional drawings



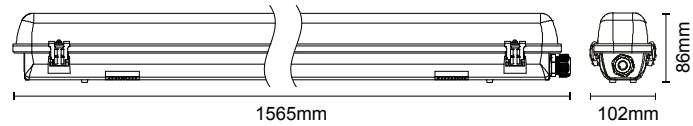
711345 | 711346



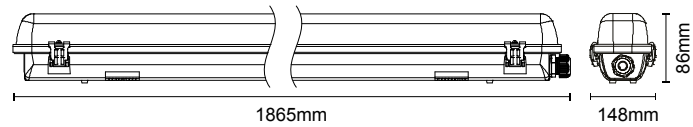
711438 | 711439



711440 | 712018 | 711441

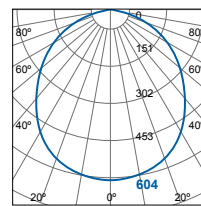


711442 | 712019 | 711443

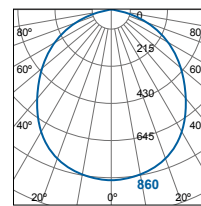


711344

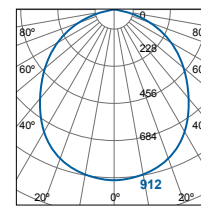
# Diagrams



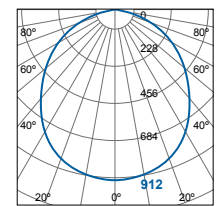
711345 20W



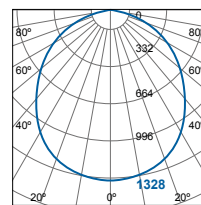
711346 28W



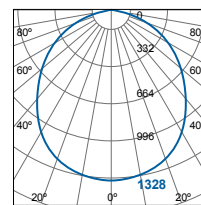
711348 30W



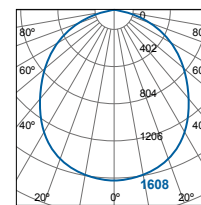
711349 34W



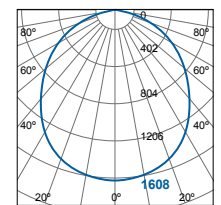
711440 40W



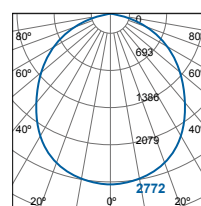
711441 44W



711442 56W



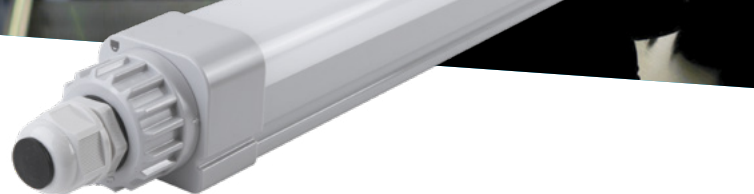
711443 60W



711344 70W



## HAGON





### Features

- No cable twisting during installation design
- Smooth and high transparency opal polycarbonate diffuser
- Built in aluminium heatsink with excellent heat dissipation
- Loop in and loop out Toolless installation
- Loop through by 4 wires for non dim version, 6 wires for Dali version
- IP66 and IK08 rated
- M20 waterproof cable gland
- Workable with PIR Sensor Module with Interchange adaptor



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
711425	4892657114256	WP-HAGON-P-L610-17W-840-IP66-IK08	17	2400	140	4000	120	610x55x55	0,500
711426	4892657114263	WP-HAGON-P-L1210-2MP-17-33W-840-IP66-IK08	17/33	2400 4600	140	4000	120	1210x55x55	0,900
710945 	4892657109450	WP-HAGON-P-L1210-33W-840-IP66-IK08-DALI2	33	4600	140	4000	120	1210x55x55	0,110
711427	4892657114270	WP-HAGON-P-L1510-2MP-33-50W-840-IP66-IK08	33/50	4600 7000	140	4000	120	1510x55x55	0,110
710946 	4892657109467	WP-HAGON-P-L1510-50W-840-IP66-IK08-DALI2	50	7000	140	4000	120	1510x55x55	0,130
711164	4892657111644	WP-HAGON-P-L1510-2MP-50-70W-840-IP66-IK08	50/70	7000 10000	140	4000	120	1510x55x55	0,120

### Accessories



711519

Motion Sensor



711520

3H Emergency Kit

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	≥ 0,9
THD	20%
Dimmability	No / DALI
Inrush current I <sub>peak</sub>	See last pages
Inrush current time	See last pages
Max. number of luminaires per miniature circuit breaker B10	See last pages
Max. number of luminaires per miniature circuit breaker B16	See last pages
Max. number of luminaires per miniature circuit breaker C10	See last pages
Max. number of luminaires per miniature circuit breaker C16	See last pages
Surge protection	500   1000V
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Surface mounted / suspended
Loop through	Yes
Driver	Built in
IP	IP66
IK	IK08
Glow wire test	850°C
Lifetime L70/B50	70000h
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +50°C
Application temperature	25°C
Storage temperature	-30 to +70°C
Warranty	5 years

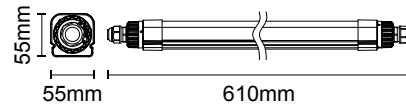
## Materials & colours

Housing material	Polycarbonate
Cover material	Polycarbonate
Finishing colour	Silver

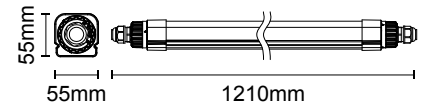
## Certificates

Certification	CE
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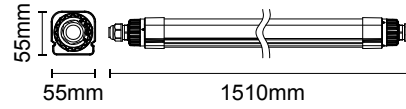
# Dimensional drawings



711425

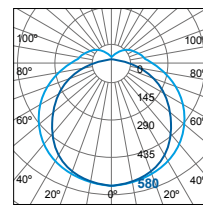


711426 | 710945

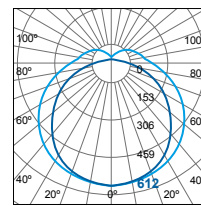


711427 | 710946 | 711164

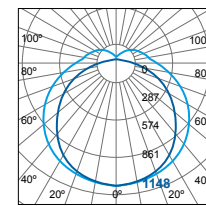
# Diagrams



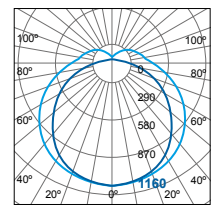
711425 17W



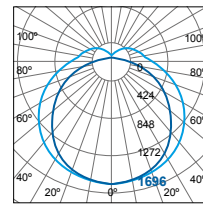
711426 17W



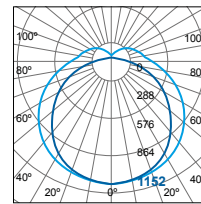
711426 33W



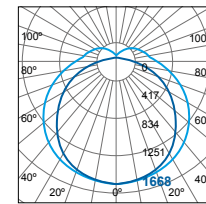
711427 33W



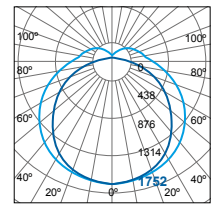
711427 50W



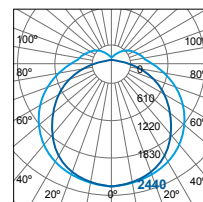
710945 33W



710946 50W



711164 50W



711164 70W



## DINO 2 FARM



### Features

- Special version of the popular DINO 2 waterproof batten for hostile agricultural environments
- Chemical resistant housing materials designed to withstand harsh farm locations
- Ideal for use in intensive animal husbandry such as pigsties and cowsheds where high levels of resistance to aggressive ammonia-containing gases is essential
- Airtight construction offers extra protection to the luminaire with the blockage of outside gas
- Durable and robust, sealed to IP66 for ingress protection with high impact resistance of IK04
- Energy saving with efficacies up to 123lm/W
- Long lifetime of 50,000 hrs L80, B10 for low maintenance and further cost saving
- Toolless wiring and fast-fix stainless steel mounting clips for easy installation
- DLG (Deutsche Landwirtschafts-Gesellschaft – German Agricultural Society) certified with ammonia resistant and is applicable for high pressure cleaning with a minimum distance of 15cm



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
710882	4892657108828	WP-DINO2FARM-P+-L720-19W-840-IP66-IK04	19	2300	121	4000	120	720x60x54	0,650
710036	4892657100365	WP-DINO2FARM-P+-L1323-36W-840-IP66-IK04	36	4300	119	4000	120	1323x60x54	0,900
710038	4892657100389	WP-DINO2FARM-P+-L1623-53W-840-IP66-IK04	53	6500	123	4000	120	1623x60x54	1,060

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	DC200-250V
Frequency	50/60Hz
Power factor	≥ 0,9
THD	< 10   15   25%
Dimmability	No
Inrush current Ipeak	7A
Inrush current time	100µs
Max. number of luminaires per miniature circuit breaker B10	12
Max. number of luminaires per miniature circuit breaker B16	18
Max. number of luminaires per miniature circuit breaker C10	19
Max. number of luminaires per miniature circuit breaker C16	31
Surge protection	500   1000V
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	≤30% @100Hz
Photobiological safety group	RG1

## Mounting & application

Mounting method	Surface mounted / suspended
Loop through	Yes
Driver	Built in
IP	IP66
IK	IK04
Glow wire test	650°C
Lifetime L70/B50	70000h
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +50°C
Application temperature	25°C
Storage temperature	-30 to +70°C
Warranty	5 years

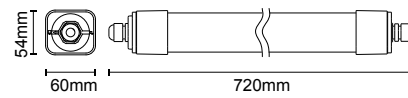
## Materials & colours

Housing material	PMMA
Cover material	Polyamide
Finishing colour	Silver

## Certificates

Certification	CE, DLG
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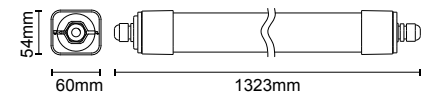
# Dimensional drawings



710882

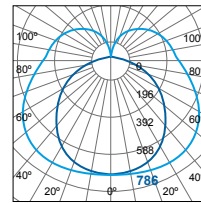


710038

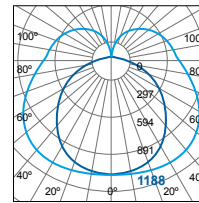


710036

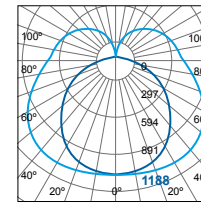
# Diagrams



710882 19W



710036 36W



710038 53W



# Batten Products

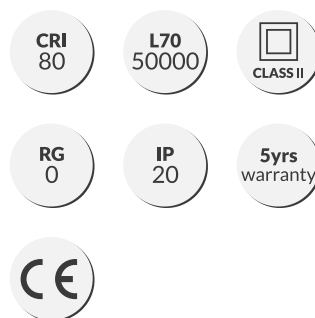




## TONO 2

### Features

- High competitive value-for-money batten
- Efficacy up to 114lm/W
- Slim design
- Equipped with 40cm 52(RVV) 2\*0.75mm<sup>2</sup> power cable



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
710239	4892657102390	Batten-TONO2-P-L900-29W-830	29	3050	105	3000	110	900x75x24	0,310
709982	4892657099829	Batten-TONO2-P-L900-29W-840	29	3300	114	4000	110	900x75x24	0,310
709955	4892657099553	Batten-TONO2-P-L1200-38W-830	38	4050	107	3000	110	1200x75x24	0,385
709956	4892657099560	Batten-TONO2-P-L1200-38W-840	38	4350	114	4000	110	1200x75x24	0,385



# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	≥ 0,9
THD	30%
Dimmability	No
Inrush current I <sub>peak</sub>	25,6
Inrush current time	250
Max. number of luminaires per miniature circuit breaker B10	6
Max. number of luminaires per miniature circuit breaker B16	10
Max. number of luminaires per miniature circuit breaker C10	10
Max. number of luminaires per miniature circuit breaker C16	16
Surge protection	1000V
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Surface mounted
Loop through	No
Driver	Integrated
IP	IP20
IK	N/A
Glow wire test	850°C
Lifetime L70/B50	50000h
Lifetime L80/B10	N/A
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

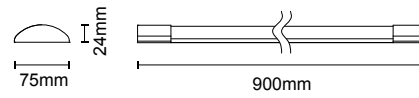
## Materials & colours

Housing material	PC
Cover material	PC
Finishing colour	White

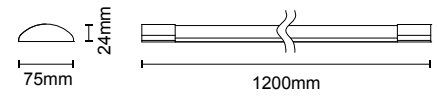
## Certificates

Certification	CE
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# Dimensional drawings

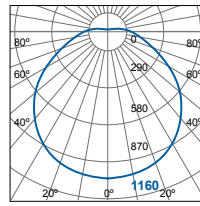


710239 | 709982

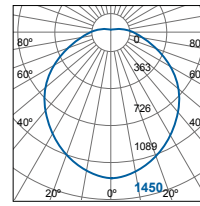


709955 | 709956

# Diagrams



710239 | 709982



709955 | 709956

# Downlight Products





## MILENA



### Features

- Modular downlight with dual power and dual CCT
- Available with reflector or diffuser
- High cut-off angle for better glare control in reflector version
- IP54 rated for damp location such as bathroom and kitchen
- Toolless terminal block facilitates easy installation and maintenance
- Through wiring possible



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	Ø x H (mm)	Cut-out Ø (mm)	Net weight (kg)
710708	4892657107081	DL-MILENA-P-Ref-R100-6.5-9W-830-840-IP54	6.5/9	600/830 650/900	92 100	3000 4000	90	130 x 87	100	0,270
710692	4892657106923	DL-MILENA-P-Ref-R150-18-23W-830-840-IP54	18/23	1670/2230 1800/2400	93/97 100/104	3000 4000	90	172 x 87	150	0,540
710694	4892657106947	DL-MILENA-P-Ref-R200-19.5-25W-830-840-IP54	19.5/25	1860/2500 2000/2700	95/100 103/108	3000 4000	90	225 x 97	200	0,630
710709	4892657107098	DL-MILENA-P-Dif-R100-6.5-9W-830-840-IP54	6.5/9	560/770 600/830	86 92	3000 4000	100	130 x 87	100	0,250
710625	4892657106251	DL-MILENA-P-Dif-R150-10-16W-830-840-IP54	10/16	930/1450 1000/1600	93/91 100	3000 4000	100	172 x 87	150	0,550
710689	4892657106893	DL-MILENA-P-Dif-R150-18-23W-830-840-IP54	18/23	1670/2140 1800/2300	93 100	3000 4000	100	172 x 87	150	0,550
710691	4892657106916	DL-MILENA-P-Dif-R200-19.5-25W-830-840-IP54	19.5/25	1860/2320 2000/2500	95/93 103/100	3000 4000	100	225 x 97	200	0,620

### Accessories



**711521**  
Surface mounted frame  
Cut-out Ø150mm



**711910**  
Surface mounted frame  
Cut-out Ø200mm

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	> 0.9
THD	See last pages
Dimmability	No
Inrush current Ipeak	See last pages
Inrush current time	See last pages
Max. number of luminaires per miniature circuit breaker B10	See last pages
Max. number of luminaires per miniature circuit breaker B16	See last pages
Max. number of luminaires per miniature circuit breaker C10	See last pages
Max. number of luminaires per miniature circuit breaker C16	See last pages
Surge protection	See last pages
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	4
Flicker percentage	≤3% @100Hz
Photobiological safety group	N/A

## Mounting & application

Mounting method	Recessed
Loop through	Yes
Driver	Integrated
IP	IP54
IK	N/A
Glow wire test	850°C
Lifetime L70/B50	N/A
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

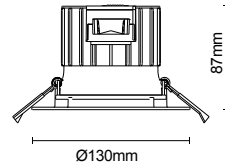
## Materials & colours

Housing material	Aluminium + PC
Cover material	PC
Other material	Aluminium reflector / PC diffuser
Finishing colour	White

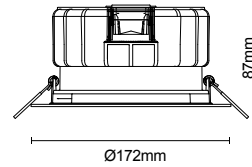
## Certificates

Certification	CE
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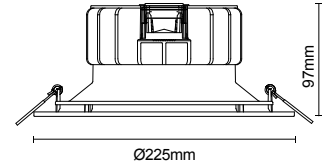
# Dimensional drawings



710708 | 710709

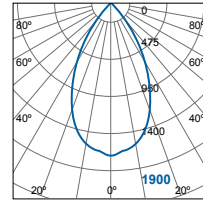


710692 | 710625 | 710689

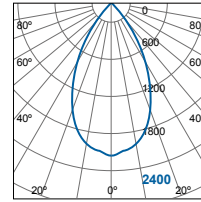


710694 | 710691

# Diagrams



710692 18W



710689 23W





## MILENA DALI

### Features

- Modular downlight with DALI and dual CCT
- High cut-off angle for better glare control in reflector version
- IP54 rated for damp location such as bathroom and kitchen
- Toolless terminal block facilitates easy installation and maintenance
- Through wiring possible



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	Ø x H (mm)	Cut-out Ø (mm)	Net weight (kg)
711000 	4892657110005	DL-MILENA-P-Ref-R150-27W-830-840-IP54-DALI2	27	2500 2700	93 100	3000 4000	90	172 x 87	150	0,760
711001 	4892657110012	DL-MILENA-P-Ref-R200-27W-830-840-IP54-DALI2	27	2500 2700	93 100	3000 4000	90	225 x 97	200	0,850



# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	> 0.9
THD	< 10%
Dimmability	DALI Dim
Inrush current Ipeak	11A
Inrush current time	50µs
Max. number of luminaires per miniature circuit breaker B10	33
Max. number of luminaires per miniature circuit breaker B16	52
Max. number of luminaires per miniature circuit breaker C10	54
Max. number of luminaires per miniature circuit breaker C16	88
Surge protection	1000V
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	4
Flicker percentage	≤3% @100Hz
Photobiological safety group	N/A

## Mounting & application

Mounting method	Recessed
Loop through	Yes
Driver	External
IP	IP54
IK	N/A
Glow wire test	850°C
Lifetime L70/B50	N/A
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

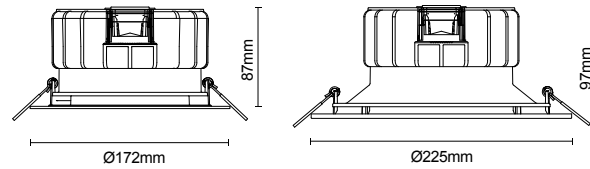
## Materials & colours

Housing material	Aluminium + PC
Cover material	PC
Other material	Aluminium reflector
Finishing colour	White

## Certificates

Certification	CE
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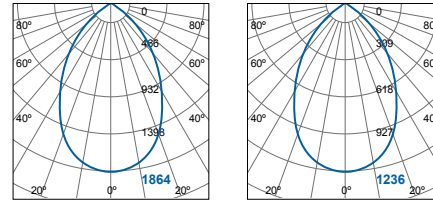
# Dimensional drawings



711000

711001

# Diagrams



711000 27W

711001 27W







## MILENA PRO

### Features

- High cut-off angle for low glare control (UGR19) in faceted reflector
- IP54 rated for damp location such as bathroom and kitchen
- Toolless terminal block facilitates easy installation and maintenance
- Through wiring possible



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	Ø x H (mm)	Cut-out Ø (mm)	Net weight (kg)
711691	4892657116915	DL-MILENA-P-Ref-R150-18W-830-IP54-UGR19	18	1450	95	3000	60	172 x 97	150	0,640
711692	4892657116922	DL-MILENA-P-Ref-R150-18W-840-IP54-UGR19	18	1600	105	4000	60	172 x 97	150	0,640
711693	4892657116939	DL-MILENA-P-Ref-R200-23W-830-IP54-UGR19	23	1900	97	3000	60	225 x 97	200	0,735
711694	4892657116946	DL-MILENA-P-Ref-R200-23W-840-IP54-UGR19	23	2000	102	4000	60	225 x 97	200	0,735

### Accessories



**711521**  
Surface mounted frame  
Cut-out Ø150mm



**711910**  
Surface mounted frame  
Cut-out Ø200mm

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	> 0.9
THD	< 10%
Dimmability	No
Inrush current Ipeak	15A
Inrush current time	5µs
Max. number of luminaires per miniature circuit breaker B10	47
Max. number of luminaires per miniature circuit breaker B16	60
Max. number of luminaires per miniature circuit breaker C10	77
Max. number of luminaires per miniature circuit breaker C16	100
Surge protection	500V
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	UGR19
SDCM	4
Flicker percentage	≤8 @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Recessed
Loop through	Yes
Driver	Integrated
IP	IP54
IK	N/A
Glow wire test	850°C
Lifetime L70/B50	N/A
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

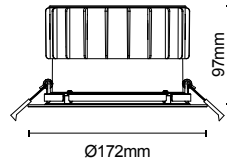
## Materials & colours

Housing material	Aluminium + PC
Cover material	PC
Other material	Aluminium reflector
Finishing colour	White

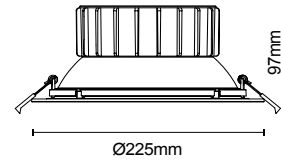
## Certificates

Certification	CE
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# Dimensional drawings

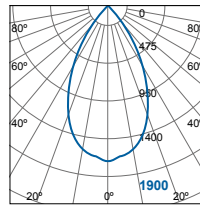


711691 | 711692

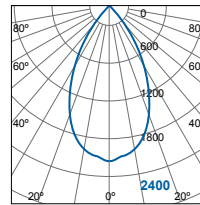


711693 | 711694

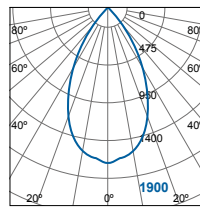
# Diagrams



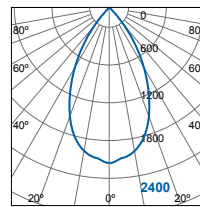
711691 18W



711693 23W



711692 18W



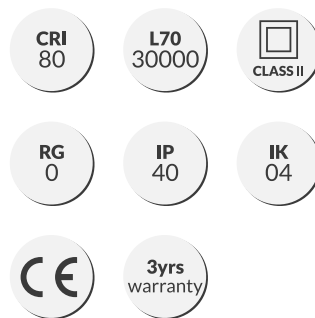
711694 23W



## KANA

### Features

- No external driver required which facilitates easy installation and maintenance
- Delivers uniform light distribution
- Wide range of sizes allowing retrofit downlights in existing ceiling cut-outs
- Slim design suitable for limited ceiling space



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	Ø x H (mm)	Cut-out Ø (mm)	Net weight (kg)
711695	4892657116953	DL-KANA-E-R75-R90-7W-830	7	530	76	3000	120	115 x 31	75-90	0,073
711417	4892657114171	DL-KANA-E-R75-R90-7W-840	7	560	80	4000	120	115 x 31	75-90	0,073
711696	4892657116960	DL-KANA-E-R105-R125-10W-830	10	760	76	3000	120	145 x 31	105-125	0,106
711418	4892657114188	DL-KANA-E-R105-R125-10W-840	10	800	80	4000	120	145 x 31	105-125	0,106
711697	4892657116977	DL-KANA-E-R125-R150-13W-830	13	990	76	3000	120	175 x 32	125-150	0,157
711419	4892657114195	DL-KANA-E-R125-R150-13W-840	13	1040	80	4000	120	175 x 32	125-150	0,157
711698	4892657116984	DL-KANA-E-R150-R175-19W-830	19	1440	76	3000	120	195 x 32	150-175	0,192
711420	4892657114201	DL-KANA-E-R150-R175-19W-840	19	1520	80	4000	120	195 x 32	150-175	0,192
711699	4892657116991	DL-KANA-E-R175-R200-25W-830	25	1900	76	3000	120	225 x 37	175-200	0,275
711421	4892657114218	DL-KANA-E-R175-R200-25W-840	25	2000	80	4000	120	225 x 37	175-200	0,275

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	> 0.9
THD	See last pages
Dimmability	No
Inrush current Ipeak	See last pages
Inrush current time	See last pages
Max. number of luminaires per miniature circuit breaker B10	See last pages
Max. number of luminaires per miniature circuit breaker B16	See last pages
Max. number of luminaires per miniature circuit breaker C10	See last pages
Max. number of luminaires per miniature circuit breaker C16	See last pages
Surge protection	See last pages
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Recessed
Loop through	No
Driver	Integrated
IP	IP40
IK	IK04
Glow wire test	850°C
Lifetime L70/B50	30000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	3 years

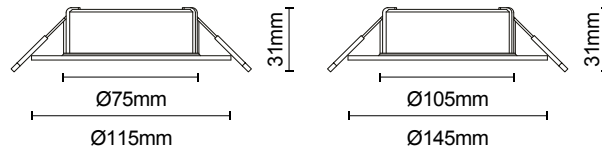
## Materials & colours

Housing material	PA
Cover material	PS
Finishing colour	White

## Certificates

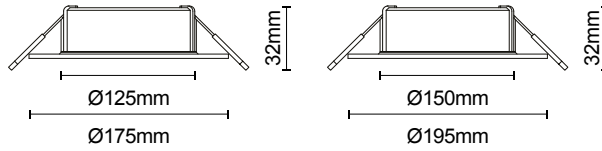
Certification	CE
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# Dimensional drawings



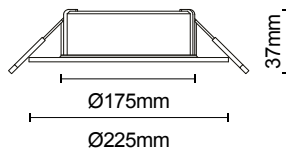
711695 | 711417

711696 | 711418



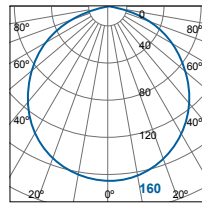
711697 | 711419

711698 | 711420

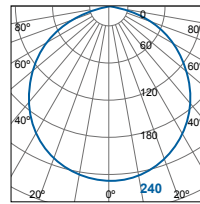


711699 | 711421

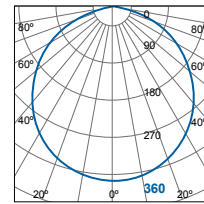
# Diagrams



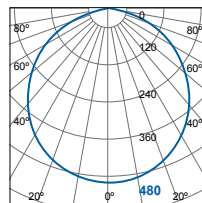
711695 | 711417 7W



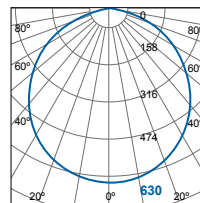
711696 | 711418 10W



711697 | 711419 13W



711698 | 711420 19W



711699 | 711421 25W



## TEGO 2

### Features

- Dual Beam Technology (DBT) and dual CCT
- Possible to change beam angle and CCT while installed
- Interchangeable bezels available in black and brushed nickel
- Triac dimming with smooth performance
- IP54 rated for damp location such as bathroom and kitchen
- Through wiring possible



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	Ø x H (mm)	Cut-out Ø (mm)	Net weight (kg)
710837	4892657108378	Spot-TEGO2-P-R68-7.5W-36-60D-828-840-IP54-DIM	7.5	450 500	80 87	2800 4000	36 / 60	86 x 73	68	0,220

### Accessories



**710937**  
Bezel in black



**710938**  
Bezel in brushed nickel





# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	DC180-260V
Frequency	50/60Hz
Power factor	> 0.8
THD	< 25%
Dimmability	U-Dim 10-100%
Inrush current Ipeak	1,32A
Inrush current time	10µs
Max. number of luminaires per miniature circuit breaker B10	169
Max. number of luminaires per miniature circuit breaker B16	268
Max. number of luminaires per miniature circuit breaker C10	279
Max. number of luminaires per miniature circuit breaker C16	456
Surge protection	500V
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	UGR24
SDCM	5
Flicker percentage	≤8% @100Hz
Photobiological safety group	N/A

## Mounting & application

Mounting method	Recessed
Loop through	Yes
Driver	Integrated
IP	IP54
IK	N/A
Glow wire test	850°C
Lifetime L70/B50	N/A
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	40°C
Storage temperature	-30 to +65°C
Warranty	5 years

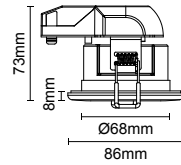
## Materials & colours

Housing material	Metal + PC
Cover material	PC
Finishing colour	White

## Certificates

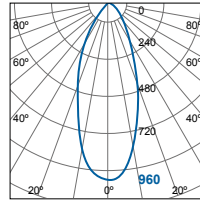
Certification	CE
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# Dimensional drawings

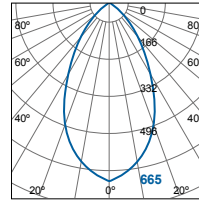


710837

# Diagrams

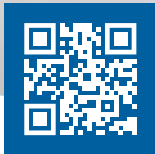


710837 36°



710837 60°





## FICO

### Features

- Three CCT in one product
- Triac dimming with smooth performance
- Water resistant IP65 rating, ideal for e.g. bathroom or outdoor use
- Slim design suitable for limited ceiling space
- Through wiring possible



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	Tilt angle (°)	Ø x H (mm)	Cut-out Ø (mm)	Net weight (kg)
711649	4892657116496	Spot-FICO-P-Fix-R68-7W-36D-827-830-840-IP65-DIM	7	470 490 520	71 79 86	2700 3000 4000	36	N/A	86 x 42	68	0,208
711653	4892657116533	Spot-FICO-P-Tilt-R68-7W-36D-827-830-840-IP65-DIM	7	470 490 520	71 79 86	2700 3000 4000	36	15	86 x 39	68	0,208

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50Hz
Power factor	>0.9
THD	< 25%
Dimmability	Triac Dim 10-100%
Inrush current I <sub>peak</sub>	6A
Inrush current time	100µs
Max. number of luminaires per miniature circuit breaker B10	77
Max. number of luminaires per miniature circuit breaker B16	128
Max. number of luminaires per miniature circuit breaker C10	123
Max. number of luminaires per miniature circuit breaker C16	209
Surge protection	500V
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	≤20% @100Hz
Photobiological safety group	RG1

## Mounting & application

Mounting method	Recessed
Loop through	Yes
Driver	External
IP	IP65
IK	IK02
Glow wire test	750°C
Lifetime L70/B50	50000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

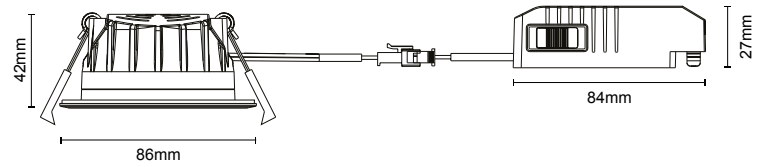
## Materials & colours

Housing material	Metal
Cover material	PC
Finishing colour	White

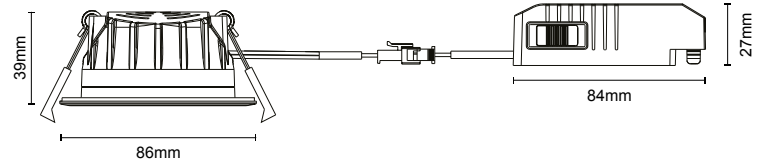
## Certificates

Certification	CE
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# Dimensional drawings

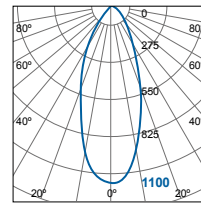


711649



711653

# Diagrams



711649 | 711653

# Highbay Products







## GEO 2





### Features

- Easy installation with single point hook mounting design
- High system luminous efficacy upto 165lm/W
- 5-step multi-lumen output switchable
- IP65/IK08 protection
- 50,000hrs L80B10 at Ta25°C
- Compatible with microwave sensor, with standby dimming (configuring by optional remote controller)
- Flicker free <3% (Pst ≤1.0 & SVM ≤ 0.4) to avoid stroboscopic effect in which get rid of danger of rotating components in machinery
- DALI 2.0 dimmable version available
- Reflector as optional accessories



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	Ø x H (mm)	Net weight (kg)
711247	4892657112474	HB-GEO2-P-5MP-70-150W-840-60D-IP65-IK08	150/125/100 90/70	21000/18900/15000 13500/10500	140/150/150 150/150	4000	60	300 x 173	3,570
711432 	4892657114324	HB-GEO2-P-150W-840-60D-IP65-IK08-DALI2	150	21000	140	4000	60	300 x 173	4,100
710931	4892657109313	HB-GEO2-P-5MP-70-150W-840-110D-IP65-IK08	150/125/100 90/70	21000/18900/15000 13500/10500	140/150/150 150/150	4000	110	300 x 173	3,570
710728	4892657107289	HB-GEO2-P-5MP-80-165W-840-110D-IP65-IK08	165/125/115 90/80	27200/21000/18900 15000/13500	165	4000	110	300 x 173	3,570
711143 	4892657111439	HB-GEO2-P-165W-840-110D-IP65-IK08-DALI2	165	27200	165	4000	110	300 x 173	4,100

### Accessories



710842

HB-GEO2-P-Remote control



710823

HB-GEO2-P-Bracket for surface mounting



190706

HB-GEO2-P-Reflector-Transparent-70D



710729

HB-GEO2-P-Microwave Motion Sensor Kit



# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	> 0.9
THD	15%
Dimmability	1-10V / DALI
Inrush current I <sub>peak</sub>	89,8A   16A DALI
Inrush current time	356µs   1000µs DALI
Max. number of luminaires per miniature circuit breaker B10	2   5 DALI
Max. number of luminaires per miniature circuit breaker B16	3   7 DALI
Max. number of luminaires per miniature circuit breaker C10	3   7 DALI
Max. number of luminaires per miniature circuit breaker C16	4   12 DALI
Surge protection	4000V
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	≤ 6
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG1

## Mounting & application

Mounting method	Surface mounted / Suspended
Loop through	No
Driver	Integrated
IP	IP65
IK	IK08
Glow wire test	650°C
Lifetime L70/B50	70000h
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +50°C
Application temperature	25°C
Storage temperature	-30 to +70°C
Warranty	5 years

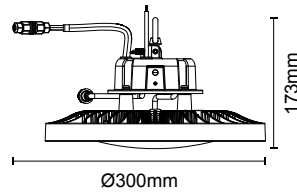
## Materials & colours

Housing material	Aluminum
Cover material	Lens
Finishing colour	Black

## Certificates

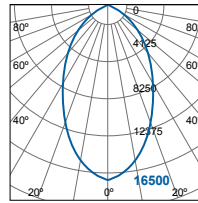
Certification	CE
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# Dimensional drawings

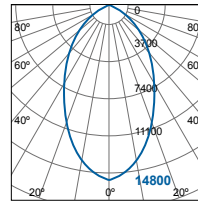


711247 | 710931 | 710728 | 711432 | 711143

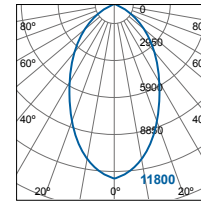
# Diagrams



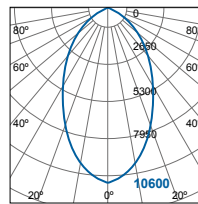
711247 150W



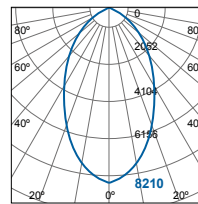
711247 125W



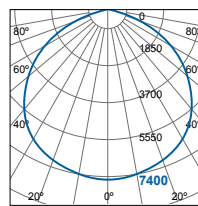
711247 100W



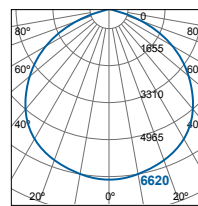
711247 90W



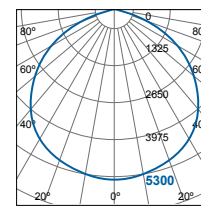
711247 70W



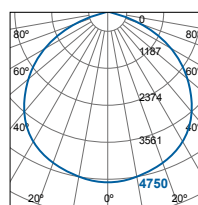
710931 150W



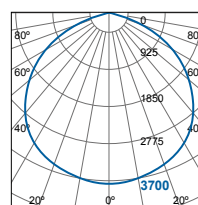
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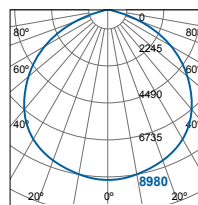
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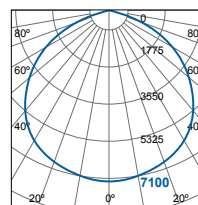
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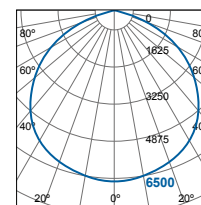
710931 70W



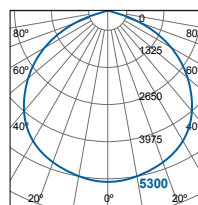
710728 165W



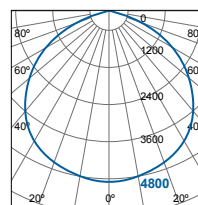
710728 125W



710728 115W



710728 90W



710728 80W



## KEO

### Features

- Replacement for traditional high bay
- High luminous efficacy with up to 135lm/W
- Easy installation with single point hook mounting design
- IP65/IK08 protection
- Modular plug and play microwave sensor, with standby dimming (configuring by optional remote controller)
- Durable die-cast aluminium with anti-corrosion powder coating
- High surge protection level: 4000V (L-N) ; 6000V (L,N-PE)
- Fixing bracket adjustable up to 180°
- Stainless steel 304 screws equipped
- Equipped with 100cm length H05RN-F 3\*1.0mm<sup>2</sup> power cable



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	∅ x H (mm)	Net weight (kg)
711260	4892657112603	HB-KEO-E-100W-840-110D-IP65-IK08	135	13500	100	4000	110	262 x 175	1,950
711261	4892657112610	HB-KEO-E-150W-840-110D-IP65-IK08	135	20300	150	4000	110	301 x 175	2,310
711263	4892657112634	HB-KEO-E-200W-840-110D-IP65-IK08	135	27000	200	4000	110	350 x 175	3,440

### Accessories



711264

Microwave Motion Sensor Kit



711320

Remote Control



711321 (100W)  
711322 (150W)  
711323 (200W)

Surface Bracket



711437

Safety Cable Kit

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	> 0.9
THD	10%
Dimmability	No
Inrush current I <sub>peak</sub>	12,4A   24,1A   53A
Inrush current time	310µs
Max. number of luminaires per miniature circuit breaker B10	3   6   11
Max. number of luminaires per miniature circuit breaker B16	4   9   18
Max. number of luminaires per miniature circuit breaker C10	4   10   19
Max. number of luminaires per miniature circuit breaker C16	7   16   31
Surge protection	4000V
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	≤ 6
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG1

## Mounting & application

Mounting method	Surface mounted / Suspended
Loop through	No
Driver	Integrated
IP	IP65
IK	IK08
Glow wire test	650°C
Lifetime L70/B50	50000h
Lifetime L80/B10	N/A
Switching cycles	100000
Operating temperature	-30 to +50°C
Application temperature	25°C
Storage temperature	-30 to +70°C
Warranty	5 years

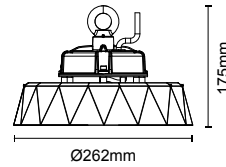
## Materials & colours

Housing material	Aluminium
Cover material	Lens
Finishing colour	Black

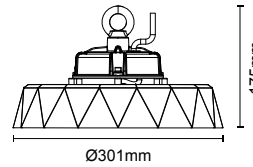
## Certificates

Certification	CE
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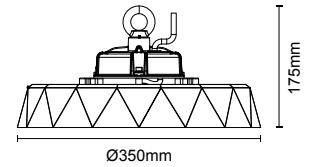
# Dimensional drawings



711260

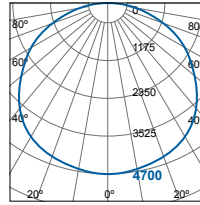


711261

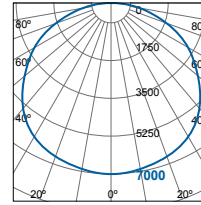


711263

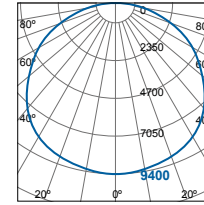
# Diagrams



711260 135W



711261 135W



711263 135W

# Bulkhead Products



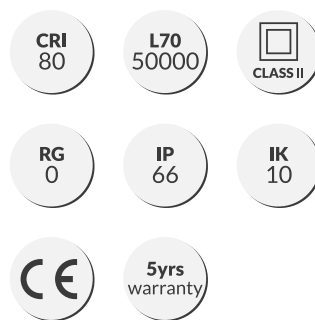




## FRANCO

### Features

- Plug-and-play modular design
- Multipower and dual CCT
- IP66 waterproof protection and IK10 rated vandal resistant
- Theft-proof screws
- Corrosion free tough polycarbonate enclosure & UV resistant
- High operating temperature allows use in outdoor environments under extreme weather
- Emergency kit available with 300lm output energy backup lasting for 3 hours
- Microwave motion sensor kit available with master-slave looping of maximum 250W
- Microwave sensor can sense movement within 6m radius, or within 9m directly front-facing



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	Ø x H (mm)	Net weight (kg)
710552	4892657105520	BH-FRANCO-P-3MP-10-22W-830-840-IP66-IK10-BK	10/15/22	930/1400/1860 1000/1500/2000	93/93/85 100/100/91	3000 4000	110	309 x 88	1,280
710551	4892657105513	BH-FRANCO-P-3MP-10-22W-830-840-IP66-IK10-WH	10/15/22	930/1400/1860 1000/1500/2000	93/93/85 100/100/91	3000 4000	110	309 x 88	1,280
710554	4892657105544	BH-FRANCO-P-3MP-10-22W-830-840-IP66-IK10-HBK	10/15/22	610/910/1210 650/980/1300	61/61/55 65/65/59	3000 4000	110	309 x 88	0,827
710553	4892657105537	BH-FRANCO-P-3MP-10-22W-830-840-IP66-IK10-HWH	10/15/22	641/956/1271 683/1029/1365	64/64/58 68/68/62	3000 4000	110	309 x 88	0,828

### Accessories



710286

Motion sensor kit



710354

Emergency kit

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	DC180-260V
Frequency	50/60Hz
Power factor	> 0.9
THD	< 30%
Dimmability	No
Inrush current Ipeak	25,4A
Inrush current time	200µs
Max. number of luminaires per miniature circuit breaker B10	8
Max. number of luminaires per miniature circuit breaker B16	13
Max. number of luminaires per miniature circuit breaker C10	14
Max. number of luminaires per miniature circuit breaker C16	22
Surge protection	500V
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Surface mounted
Loop through	Yes
Driver	Integrated
IP	IP66
IK	IK10
Glow wire test	850°C
Lifetime L70/B50	50000h
Lifetime L80/B10	N/A
Switching cycles	100000
Operating temperature	-30 to +50°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

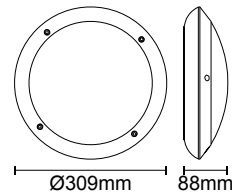
## Materials & colours

Housing material	PC
Cover material	Anti-UV PC
Other material	Aluminium ring
Finishing colour	Black / White

## Certificates

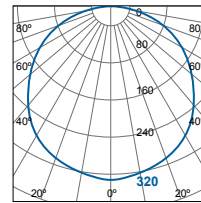
Certification	CE
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# Dimensional drawings

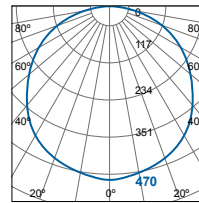


710552 | 710551 | 710554 | 710553

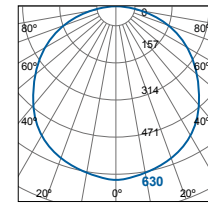
# Diagrams



710552 | 710551  
10W



710552 | 710551  
15W



710552 | 710551  
22W

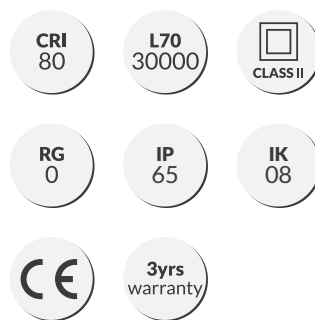




## RONDA

### Features

- Cost effective LED Outdoor Bulkhead solution for mains voltage with good system yield
- Microwave sensor option for energy saving operation
- IP65 protection and high vandal resistant with IK08
- Homogenous light output
- Through wiring possible



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	Ø x H (mm)	Net weight (kg)
711461	4892657114614	BH-RONDA-E-18W-830-IP65-IK08	18	1560	87	3000	120	300 x 100	0,750
711412	4892657114126	BH-RONDA-E-18W-840-IP65-IK08	18	1650	92	4000	120	300 x 100	0,750
711435	4892657114355	BH-RONDA-E-24W-830-IP65-IK08	24	2090	87	3000	120	300 x 100	0,750
711413	4892657114133	BH-RONDA-E-24W-840-IP65-IK08	24	2200	92	4000	120	300 x 100	0,750

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	> 0.9
THD	34%   33%
Dimmability	No
Inrush current I <sub>peak</sub>	7,88A   7,96A
Inrush current time	22,4µs   21,6µs
Max. number of luminaires per miniature circuit breaker B10	70
Max. number of luminaires per miniature circuit breaker B16	112
Max. number of luminaires per miniature circuit breaker C10	116
Max. number of luminaires per miniature circuit breaker C16	190
Surge protection	500V
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

## Mounting & application

Mounting method	Surface mounted
Loop through	Yes
Driver	Integrated
IP	IP65
IK	IK08
Glow wire test	650°C
Lifetime L70/B50	30000h
Lifetime L80/B10	N/A
Switching cycles	100000
Operating temperature	-30 to +50°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	3 years

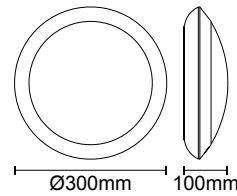
## Materials & colours

Housing material	PC
Cover material	PC
Finishing colour	White

## Certificates

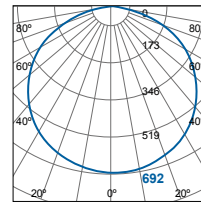
Certification	CE
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# Dimensional drawings

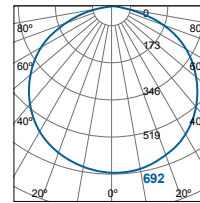


711461 | 711412 | 711435 | 711413

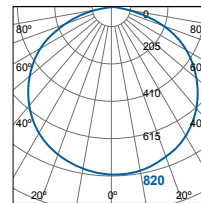
## Diagrams



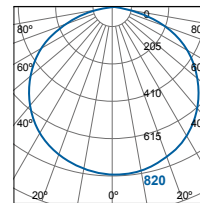
711461



711412



711435



711413



# Ceiling Products







## RENZO

### Features

- Plug-and-play modular design
- Multipower and dual CCT
- Homogenous light output
- Emergency version with 300lm output energy backup lasting for 3 hours
- Microwave motion sensor kit available with master-slave looping



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	Ø x H (mm)	Net weight (kg)
710274	4892657102741	CL-RENZO-P-3MP-10-22W-830-840-IP44	10/15/22	930/1300/1850 1000/1400/2000	93 100	3000 4000	120	390 x 115	0,720

### Accessories



**710286**  
Motion sensor kit



**710354**  
Emergency kit

## Specifications

### Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	> 0.9
THD	< 30%
Dimmability	No
Inrush current I <sub>peak</sub>	25,4A
Inrush current time	200µs
Max. number of luminaires per miniature circuit breaker B10	8
Max. number of luminaires per miniature circuit breaker B16	13
Max. number of luminaires per miniature circuit breaker C10	14
Max. number of luminaires per miniature circuit breaker C16	22
Surge protection	500V
Protection class	Class I

### Photometrical data

CRI	RA80
UGR	UGR23
SDCM	6
Flicker percentage	≤3% @100Hz
Photobiological safety group	RG0

### Mounting & application

Mounting method	Surface mounted
Loop through	Yes
Driver	Integrated
IP	IP44
IK	IK03
Glow wire test	650°C
Lifetime L70/B50	N/A
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +40°C
Application temperature	25°C
Storage temperature	-30 to +65°C
Warranty	5 years

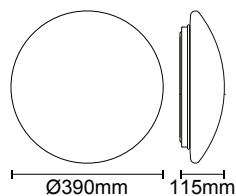
### Materials & colours

Housing material	Steel
Cover material	PMMA
Finishing colour	White

### Certificates

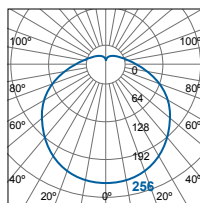
Certification	CE
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## Dimensional drawings

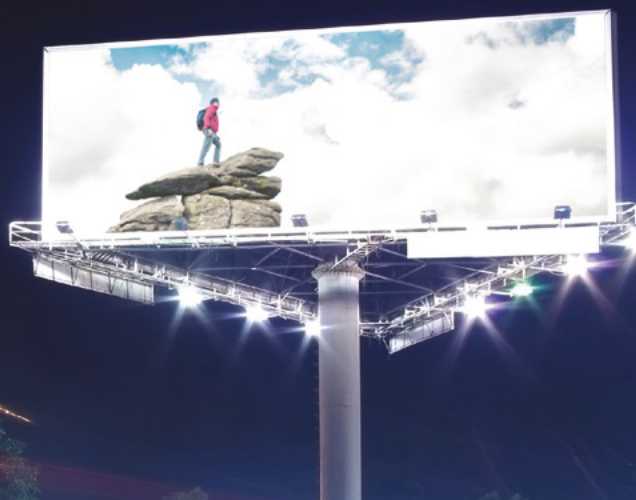


710274

## Diagrams



710274 10W



# Floodlight Products







## TITO

### Features

- Robust die-cast aluminum body, with slim and efficient heat dissipation profile
- Instant Light with flicker free performance
- Symmetrical / Asymmetrical optics can be used in a wide range of application areas
- IP66 rated fully waterproof enclosure
- IK08 for high impact resistance
- High Surge Protection up to 6kV (L/N-PE) and 4kV (L-N)
- Equipped with 1M cable, wiring required



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
711433	4892657114331	FL-TITO-E-70W-840-IP66-IK08	70	10000	144	4000	110	220x266x52	2,000
710825	4892657108255	FL-TITO-E-90W-840-IP66-IK08	90	13300	149	4000	110	245x300x91	3,200
710827	4892657108279	FL-TITO-E-120W-840-IP66-IK08	120	18200	153	4000	110	245x300x91	3,270
710829	4892657108293	FL-TITO-E-165W-840-IP66-IK08	165	27000	165	4000	110	295x346x91	3,600

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	≥ 0,9
THD	15%
Dimmability	No
Inrush current Ipeak	86.4A
Inrush current time	102µs
Max. number of luminaires per miniature circuit breaker B10	1
Max. number of luminaires per miniature circuit breaker B16	1
Max. number of luminaires per miniature circuit breaker C10	2
Max. number of luminaires per miniature circuit breaker C16	2
Surge protection	4000V
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	<3%@100Hz
Photobiological safety group	RG1

## Mounting & application

Mounting method	Surface mounted
Loop through	No
Driver	Built in
IP	IP66
IK	IK08
Glow wire test	850°C
Lifetime L70/B50	50000h
Lifetime L80/B50	30000h
Switching cycles	100000
Operating temperature	-30 to +50°C
Application temperature	25°C
Storage temperature	-30 to +70°C
Warranty	5 years

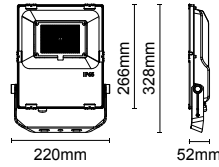
## Materials & colours

Housing material	Aluminum die-casting
Cover material	Tempered Glass
Finishing colour	Black

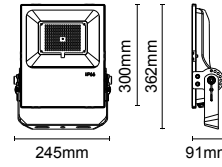
## Certificates

Certification	CE
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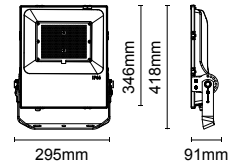
# Dimensional drawings



711433

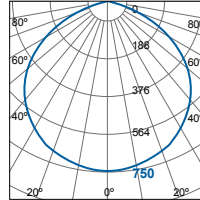


710825 | 710827

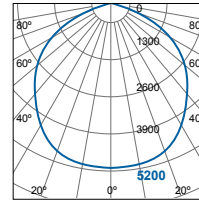


710829

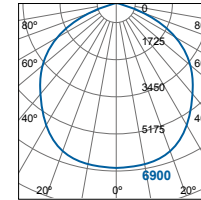
# Diagrams



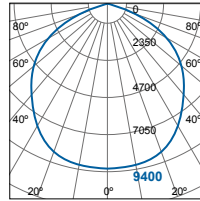
711433 70W



710825 90W



710827 120W



710829 165W



## TOTT2

### Features

- Quick & easy wiring thanks to the toolless installation
- Fixing bracket adjustable up to 355°
- Special design of mounting bracket allows more spacious for power drill
- Stainless 304 screws equipped
- Attachable PIR module as an optional accessory to floodlight
- DC input compatible (180V-260VDC)



### Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
710655	4892657106558	FL-TOTT2-E-9.5W-830-IP65-IK08	9.5	980	103	3000	110	105x132x60	0,180
710656	4892657106565	FL-TOTT2-E-24W-830-IP65-IK08	24	2470	104	3000	110	197x217x84	0,390
710657	4892657106572	FL-TOTT2-E-45W-830-IP65-IK08	45	4650	103	3000	110	197x260x84	0,550
710658	4892657106589	FL-TOTT2-E-85W-830 -IP65-IK08	85	9860	116	3000	110	297x338x89	1,450
710677	4892657106770	FL-TOTT2-E-85W-840 -IP65-IK08	85	10600	126	4000	110	297x338x89	1,450

### Accessories



**710830**

Motion sensor kit  
(not for 710655)

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	≥ 0,9
THD	20%
Dimmability	No
Inrush current I <sub>peak</sub>	See last pages
Inrush current time	See last pages
Max. number of luminaires per miniature circuit breaker B10	See last pages
Max. number of luminaires per miniature circuit breaker B16	See last pages
Max. number of luminaires per miniature circuit breaker C10	See last pages
Max. number of luminaires per miniature circuit breaker C16	See last pages
Surge protection	2000V
Protection class	Class II

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	<30% @100Hz
Photobiological safety group	RG1

## Mounting & application

Mounting method	Surface mounted
Loop through	No
Driver	Built in
IP	IP65
IK	IK08
Glow wire test	650°C
Lifetime L70/B50	50000h
Lifetime L80/B50	30000h
Switching cycles	100000
Operating temperature	-30 to +50°C
Application temperature	25°C
Storage temperature	-30 to +70°C
Warranty	5 years

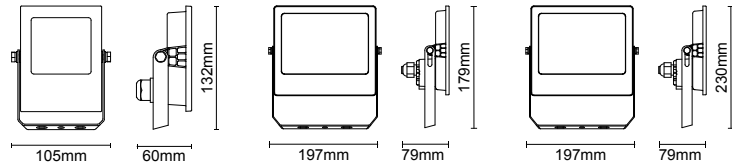
## Materials & colours

Housing material	Polycarbonate
Cover material	Polycarbonate
Finishing colour	Black

## Certificates

Certification	CE
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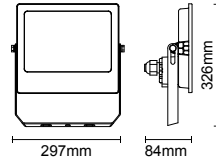
# Dimensional drawings



710655

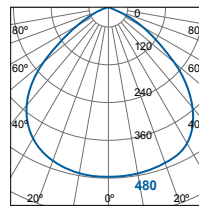
710656

710657

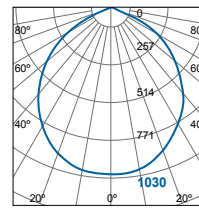


710658 | 710677

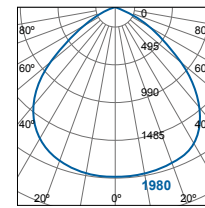
# Diagrams



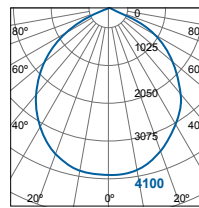
710655 9.5W



710656 24W



710657 45W



710658 | 710677 85W



## Features

- Slim and light but tough and robust
- Durable die-cast aluminium with anti-corrosion powder coating
- Durable tempered glass
- Wide beam angle 110° provide uniform illumination
- IP65 waterproof for standard version
- IK08 rated
- Fixing bracket adjustable up to 180°
- Stainless 304 screws equipped
- Equipped with 500mm H05RN-F 3G1.0mm<sup>2</sup> power cable

<b>CRI</b> 80	<b>L70</b> 30000	CLASS I
<b>RG</b> 1	<b>IP</b> 65	<b>IK</b> 08
<b>3yrs</b> warranty		

## Products

Item number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
711286	4892657112863	FL-VOSS-E-20W-L121-W24-H119-840-IP65	20	1800	90	4000	110	121x191x24	0,380
711287	4892657112870	FL-VOSS-E-30W-L160-W26-H145-840-IP65	30	2700	90	4000	110	160x145x26	0,500
711288	4892657112887	FL-VOSS-E-50W-L206-W32-H238-840-IP65	50	4500	90	4000	110	206x195x36	0,790
711289	4892657112894	FL-VOSS-E-100W-L274-W36-H195-840-IP65	100	9000	90	4000	110	274x238x32	1,250



# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	≥ 0,9
THD	15%
Dimmability	No
Inrush current I <sub>peak</sub>	See last pages
Inrush current time	See last pages
Max. number of luminaires per miniature circuit breaker B10	See last pages
Max. number of luminaires per miniature circuit breaker B16	See last pages
Max. number of luminaires per miniature circuit breaker C10	See last pages
Max. number of luminaires per miniature circuit breaker C16	See last pages
Surge protection	See last pages
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	>30% @100Hz
Photobiological safety group	RG1

## Mounting & application

Mounting method	Surface mounted
Loop through	No
Driver	Built in
IP	IP65
IK	IK08
Glow wire test	650°C
Lifetime L70/B50	30000h
Switching cycles	100000
Operating temperature	-30 to +50°C
Application temperature	25°C
Storage temperature	-30 to +70°C
Warranty	3 years

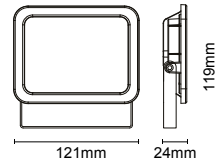
## Materials & colours

Housing material	Aluminum die-casting
Cover material	Tempered Glass
Finishing colour	Black

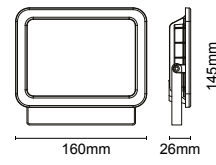
## Certificates

Certification	CE
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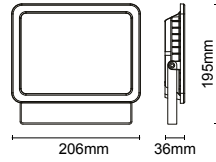
# Dimensional drawings



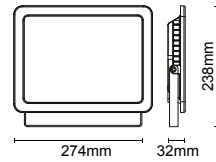
711286



711287

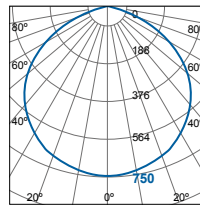


711288

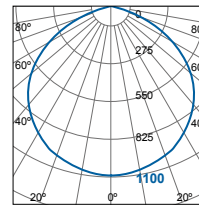


711289

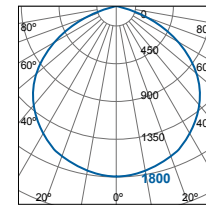
# Diagrams



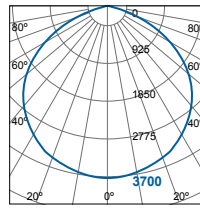
711286 20W



711287 30W



711288 50W



711289 100W



## EKON



### Features

- Modular design from 250W to 1250W
- Designed for high mounting application
- Vertically angle adjustment, easy way to adjust the tilting angle and create diversity of lighting environment
- Multiple optics option: symmetrical optics from 10° to 90°; asymmetrical optics 110°x25° / 110°x40° to provide wide lighting application
- Excellent optical glare control avoids light pollution
- Aluminium die-casting housing, driver box and bracket with anti-corrosion powder coating finishing
- Efficiency up to 140lm/W, more energy saving
- 10kV (L-N) / 20kV (LN-G) Surge Protection
- IP66 protection
- High vandal resistant with IK09
- 50,000hrs L80B10 at Ta 25°C
- Flicker free ≤3% @ 100Hz



### Products

Model number	EAN code	Description	Rated power (W)	Lumen (lm)	Light efficacy (lm/W)	CCT (K)	Beam angle (°)	LxWxH (mm)	Net weight (kg)
FFL73600v0		FL-EKON-P-Sym-250W-840or850or865-10-30-45-60-90D	250	35000	140	4000 or 5000 6500	10/30/45/60/90	405x276x117	6,800
FFL73700v0		FL-EKON-P-Sym-500W-840or850or865-10-30-45-60-90D	500	70000	140	4000 or 5000 6500	10/30/45/60/90	405x512x160	15,300
FFL73800v0		FL-EKON-P-Sym-750W-840or850or865-10-30-45-60-90D	750	105000	140	4000 or 5000 6500	10/30/45/60/90	475x719x160	20,500
FFL73900v0		FL-EKON-P-Sym-1000W-840or850or865-10-30-45-60-90D	1000	140000	140	4000 or 5000 6500	10/30/45/60/90	475x926x160	26,000
FFL74000v0		FL-EKON-P-Sym-1250W-840or850or865-10-30-45-60-90D	1250	175000	140	4000 or 5000 6500	10/30/45/60/90	475x1133x160	30,800
FFL73600v0		FL-EKON-P-Asym-250W-840or850or865-110x25D-110x40D	250	35000	140	4000 or 5000 6500	110x25/110x40	405x276x117	6,800
FFL73700v0		FL-EKON-P-Asym-500W-840or850or865-110x25D-110x40D	500	70000	140	4000 or 5000 6500	110x25/110x40	475x512x160	15,300
FFL73800v0		FL-EKON-P-Asym-750W-840or850or865-110x25D-110x40D	750	105000	140	4000 or 5000 6500	110x25/110x40	475x719x160	20,500
FFL73900v0		FL-EKON-P-Asym-1000W-840or850or865-110x25D-110x40D	1000	140000	140	4000 or 5000 6500	110x25/110x40	475x926x160	26,000
FFL74000v0		FL-EKON-P-Asym-1250W-840or850or865-110x25D-110x40D	1250	175000	140	4000 or 5000 6500	110x25/110x40	475x1133x160	30,800

# Specifications

## Electrical data

Nominal voltage	AC220-240V
DC Input voltage	N/A
Frequency	50/60Hz
Power factor	≥ 0,9
THD	20%
Dimmability	1-10V
Inrush current Ipeak	N/A
Inrush current time	N/A
Max. number of luminaires per miniature circuit breaker B10	N/A
Max. number of luminaires per miniature circuit breaker B16	N/A
Max. number of luminaires per miniature circuit breaker C10	N/A
Max. number of luminaires per miniature circuit breaker C16	N/A
Surge protection	10000V
Protection class	Class I

## Photometrical data

CRI	RA80
UGR	N/A
SDCM	6
Flicker percentage	<3% @100Hz
Photobiological safety group	RG1

## Mounting & application

Mounting method	Surface mounted
Loop through	No
Driver	External
IP	IP66
IK	IK09
Glow wire test	650°C
Lifetime L70/B50	70000h
Lifetime L80/B10	50000h
Switching cycles	100000
Operating temperature	-30 to +50°C
Application temperature	25°C
Storage temperature	-30 to +70°C
Warranty	5 years

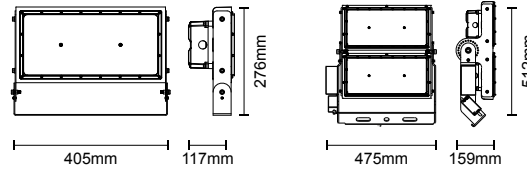
## Materials & colours

Housing material	Aluminum die-casting
Cover material	Tempered Glass
Finishing colour	Black

## Certificates

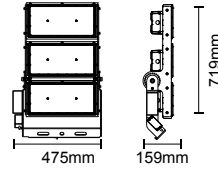
Certification	CE
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# Dimensional drawings



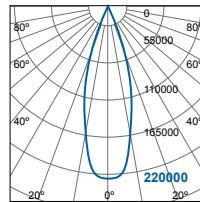
FFL73600v0

FFL73700v0



FFL73800v0

# Diagrams



FFL73700v0 500W

**MEGAMAN®**



# Emergency Lighting Products



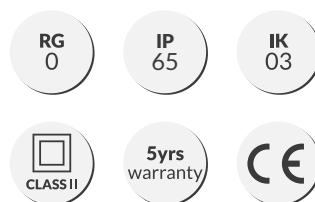




## TEMPUS Slim bulkhead

### Features

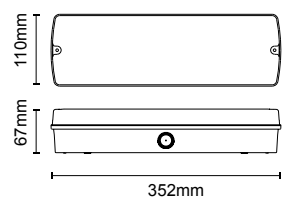
- 3 hours emergency duration
- Maintained / non-maintained operation mode
- IP65 protection from water and dust
- Multi- purpose application
- All direction exit sign stickers included
- Light in weight, easy installation
- Durable polycarbonate housing, corrosion resistant
- Integral status indicator



### Products

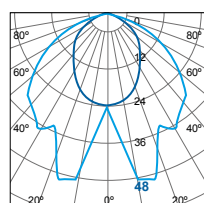
Item number	EAN code	Description	Rated power (W)	Lumen (lm)	CCT (K)	Beam angle (°)	Switching cycles	LxWxH (mm)	Battery	Net weight (kg)
710474	4892657104745	Emergency-TEMPUS-BH-EM3h-4W-865	4	140	6500	120	100000	352x110x67	3.6V 1000mAh Ni-MH	0,610
711052	4892657110524	Emergency-TEMPUS-BH-EM3h-4W-865-ST <b>Self-Test function</b>	4	140	6500	120	100000	352x110x67	3.6V 1000mAh Ni-MH	0,610

### Dimensional drawings



710474 | 711502

### Diagrams



710474 | 711502



## TEMPUS Downlight

### Features

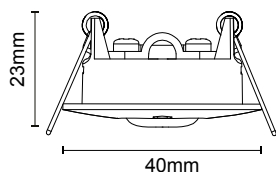
- 3 hours emergency duration
- Non-maintained operation mode
- Super slim design
- Open area or corridor optics version
- SELV Constant current output
- Comply with EN 60598-2-22, UN 38 3 and IES 62133
- Overcharge and over-discharge protection, over-temperature protection, short circuit protection
- Integral status indicator



### Products

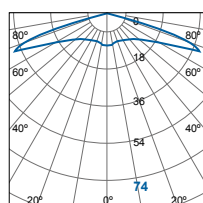
Item number	EAN code	Description	Rated power (W)	Lumen (lm)	CCT (K)	Beam angle (°)	Switching cycles	ØxH (mm)	Cut-out Ø (mm)	Battery	Net weight (kg)
710480	4892657104806	Emergency-TEMPUS-DL-Open-Area-EM3h-3W-860	3	120	6500	120	100000	40x23	36	3.3V 1500mAh LiFePO4	0,160
710481	4892657104813	Emergency-TEMPUS-DL-Corridor-EM3h-3W-860	3	120	6500	120	100000	40x23	36	3.3V 1500mAh LiFePO4	0,160

### Dimensional drawings

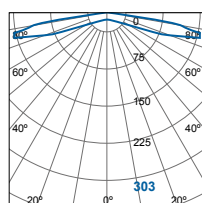


710480 | 710481

### Diagrams



710480



710481

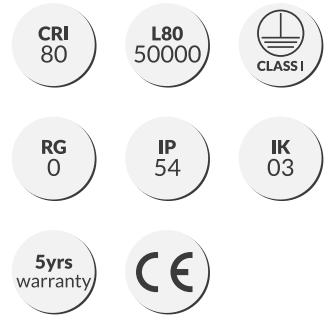


## TEMPUS Downlight



### Features

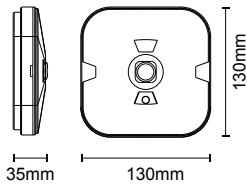
- 3 hours emergency duration
- Non-maintained operation mode
- IP54 protection
- Compact in size
- Surface mounted downlight
- Open area or corridor optics version
- Comply with EN 60598-2-22, UN 38 3 and IES 62133
- Overcharge and over-discharge protection, over-temperature protection, short circuit protection
- Integral status indicator



### Products

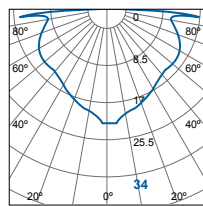
Item number	EAN code	Description	Rated power (W)	Lumen (lm)	CCT (K)	Beam angle (°)	Switching cycles	LxWxH (mm)	Battery	Net weight (kg)
710482	4892657104820	Emergency-TEMPUS-Open-Area-EM3h-3W-860	3	130	6000	120	100000	130x130x35	3.3V 1500mAh LiFePO <sub>4</sub>	0,243
710483	4892657104837	Emergency-TEMPUS-Corridor-EM3h-3W-860	3	140	6000	120	100000	130x130x35	3.3V 1500mAh LiFePO <sub>4</sub>	0,243

### Dimensional drawings

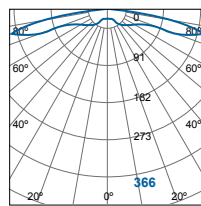


710482 | 710483

### Diagrams



710482 3W



710483 3W



# Electrical data

## ROCCA

Item number	THD (%)	Inrush current Ipeak (A)	Inrush current time (μs)	Max. number of luminaires per miniature circuit breaker B10	Max. number of luminaires per miniature circuit breaker B16	Max. number of luminaires per miniature circuit breaker C10	Max. number of luminaires per miniature circuit breaker C16	Surge protection (V)
711345	16	30	58	19	30	31	50	500
711346	15	30	60	19	30	31	50	1000
711438	15	30	60	19	30	31	50	1000
711439	15	30	60	19	30	31	50	1000
711440	14	45	81	12	20	21	34	1000
712018	14	45	81	12	20	21	34	1000
711441	14	45	81	12	20	21	34	1000
711442	15	45	78	12	20	21	34	1000
712019	15	45	78	12	20	21	34	1000
711443	15	50	78	11	18	18	30	1000
711344	10	50	75	11	18	18	30	1000

## HAGON

Item number	Inrush current Ipeak (A)	Inrush current time (μs)	Max. number of luminaires per miniature circuit breaker B10	Max. number of luminaires per miniature circuit breaker B16	Max. number of luminaires per miniature circuit breaker C10	Max. number of luminaires per miniature circuit breaker C16	Surge protection (V)
711425	21,9	64	26	41	42	69	500
711426	22,3	61	25	40	41	68	1000
710945	22,3	61	25	40	41	68	1000
711427	22,9	59	24	39	40	66	1000
710946	22,9	59	24	39	40	66	1000
711164	29,8	54	19	30	31	51	1000



## Electrical data

### MILENA

Item number	THD (%)	Inrush current I <sub>peak</sub> (A)	Inrush current time (μs)	Max. number of luminaires per miniature circuit breaker B10	Max. number of luminaires per miniature circuit breaker B16	Max. number of luminaires per miniature circuit breaker C10	Max. number of luminaires per miniature circuit breaker C16	Surge protection (V)
710708	<70	5	40	63	101	105	171	500
710692	<20	27.6	2.56	20	32	33	55	1000
710694	<20	30	2.56	19	30	31	50	1000
710709	<70	5	40	63	101	105	171	500
710625	<25	25.8	2.2	22	34	36	59	500
710689	<20	27.6	2.56	20	32	33	55	1000
710691	<20	30	2.56	19	30	31	50	1000

### KANA

Item number	THD (%)	Inrush current I <sub>peak</sub> (A)	Inrush current time (μs)	Max. number of luminaires per miniature circuit breaker B10	Max. number of luminaires per miniature circuit breaker B16	Max. number of luminaires per miniature circuit breaker C10	Max. number of luminaires per miniature circuit breaker C16	Surge protection (V)
711695	14	3	13	187	296	308	504	500
711417	14	3	13	187	296	308	504	500
711696	14	2	10	190	302	314	513	500
711418	14	2	10	190	302	314	513	500
711697	14	3	11	146	232	242	396	500
711419	14	3	11	146	232	242	396	500
711698	14	4	13	100	159	165	270	500
711420	14	4	13	100	159	165	270	500
711699	15	4	15	76	121	126	205	1000
711421	15	4	15	76	121	126	205	1000

## Electrical data

### TOTT 2

Item number	Inrush current I <sub>peak</sub> (A)	Inrush current time (μs)	Max. number of luminaires per miniature circuit breaker B10	Max. number of luminaires per miniature circuit breaker B16	Max. number of luminaires per miniature circuit breaker C10	Max. number of luminaires per miniature circuit breaker C16
710655	17.8	130	12	19	19	32
710656	21.8	130	10	15	16	26
710657	35.6	150	6	9	10	16
710658	38.4	240	3	5	5	8
710677	38.4	240	3	5	5	8

### VOSS

Item number	Inrush current I <sub>peak</sub> (A)	Inrush current time (μs)	Max. number of luminaires per miniature circuit breaker B10	Max. number of luminaires per miniature circuit breaker B16	Max. number of luminaires per miniature circuit breaker C10	Max. number of luminaires per miniature circuit breaker C16	Surge protection (V)
711286	0.2	1	95	151	157	256	500
711287	0.3	1	63	101	105	171	1000
711288	0.7	1	38	60	63	103	1000
711289	0.9	1	19	30	31	51	1000



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