

#### FEATURES

- ENEC approved 2 channel Dali DT8 driver
- Certified LED module for BCL
- Dimmable to 0,1%



#### COLOURS

Available colours:



Matt white RAL 9016 (XX=MW)  
Matt black RAL 9005 (XX=BL)

#### SPRINGS

Standard with CS spring (concrete/gyproc). Also available as above with WS spring (gyproc/metal).

## Linea 75 BCL

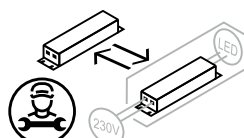
Adjustable

Preliminary

### SPECIFICATIONS

|                        |                                                                                                                             |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Beam angle             | 60° / 80°                                                                                                                   |
| Fixture material       | Housing: Die cast aluminium / Reflector glass: Polycarbonate                                                                |
| LED                    | Bridgelux COB                                                                                                               |
| CRI                    | 93                                                                                                                          |
| Driver type (included) | Eldoled Dualdrive 562/A Dali DT8                                                                                            |
| IK rate                | IK03                                                                                                                        |
| IP rate                | IP20/IP65                                                                                                                   |
| Operating temperature  | -20°C / +45°C                                                                                                               |
| Safety marks           | EN60598 / EN62031 / EN62471                                                                                                 |
| Colour consistency     | MacAdam step 3                                                                                                              |
| LV Plug                | AMP                                                                                                                         |
| Safety class           | I                                                                                                                           |
| Warranty               | 7 years (within the European Union and the countries of the Free Trade Association for products delivered after 1 May 2015) |
| Energy class           | These products contains a light source of energy efficiency class F (2700-6500K)                                            |

This luminaire contains built-in LED lamps. There are no exchangeable parts inside the luminaire. EU 874/2012



Only when the product is installed in a closed ceiling it may be exposed to water splashes, and only on its front side.

IP20

IP65

## LINEA 75 BCL

**2700-6500K**

Downlight incl. PSU



## ITEM SPECIFICATIONS

| Description                                     | Item code CS  | Item code WS | Input    | Vf | W    | Lm   | Lm/W | CRI (typ.) | UGR  | Pf   | Ripple | Inrush current | B-16A Fuse |
|-------------------------------------------------|---------------|--------------|----------|----|------|------|------|------------|------|------|--------|----------------|------------|
| Linea 75 BCL 2700-6500K 1250Lm 60° <sup>1</sup> | 916A03XX4W02  | 916A03XX9W02 | 120-250V | 36 | 11,4 | 1250 | 110  | 93         | 24.0 | 0.90 | <5%    | 200mA's        | 106 pcs    |
| Linea 75 BCL 2700-6500K 1250Lm 80° <sup>1</sup> | 9116A03XX4Y02 | 916A03XX9Y02 | 120-250V | 36 | 11,4 | 1250 | 110  | 93         | 28.4 | 0.90 | <5%    | 200mA's        | 106 pcs    |

| Description                                 | mDER ratings | Energy class | Expected Lifetime |             |            | Reported Lifetime* |              |            |
|---------------------------------------------|--------------|--------------|-------------------|-------------|------------|--------------------|--------------|------------|
|                                             |              |              | L70B10            | L80B10      | L90B10     | L70B10             | L80B10       | L90B10     |
| Linea 75 BCL 2700-6500K 1250Lm <sup>1</sup> | 40-95%       | F            | 195.000 hrs       | 120.000 hrs | 53.000 hrs | >102.000 hrs       | >102.000 hrs | 53.000 hrs |

| Description                                 | Weight | Dimensions single carton | Quantity per carton |
|---------------------------------------------|--------|--------------------------|---------------------|
| Linea 75 BCL 2700-6500K 1250Lm <sup>1</sup> | 440 gr | 160x107x100 mm           | 18 pcs              |

All values are measured at 230V (+/- 7%). \* Based on 17.000hrs of LM80 testing at 120mA and a Tc55°C.

<sup>1</sup> This is the maximum light output, but depending on fluctuations in the lighting plan, the actual output will be lower.

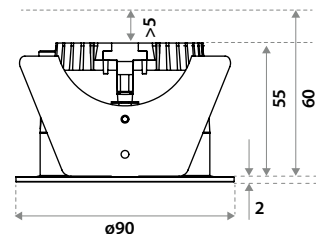
## FIRE RATING TUBE

| Description         | Item code    | Hole size | time    |
|---------------------|--------------|-----------|---------|
| Fire rating tube 90 | 009D03MW0000 | ø94x70mm  | 90 min. |



**!** Only in combination with WS (wire) springs versions.

## DIMENSIONS



## HOLE SIZE



**Using CS springs:** Ø 75 mm.  
Thickness ceiling 5-60 mm  
& recess depth 60 mm.



**Using WS springs.** Ø 77 mm.  
Thickness ceiling 1-55 mm  
& recess depth 60 mm.

## AWARENESS OF HEALTHY LIGHT FOR DIFFERENT ACTIVITIES



The lighting plan consists of two lighting groups. The panels provide a high mDER value for the eyes, while the downlights create comfort for the employee. Both groups operate independently to create a dynamic atmosphere.

### MEASURABLE GENERAL HEALTH EFFECTS BASED ON 20+ YEARS STUDIES

A survey from 248 scientists who have delivered more than 2,600 peer-reviewed publications on light and circadian clocks since 2008 leads to common agreement on the importance of light for health:

- Better sleep
  - Better performance
  - Greater focus
  - Improved immune system
  - Reduced risk of burnout
  - Minimize health risk: Obesity, Cancer, Dementia, etc.
- Brainlit can provide proof of the health advantages of their long implemented BCL lighting plans.

### ADVANTAGES IN SPORTS

- Better overall health which leads to better performances.
- Dedicated team support for games and tournaments (avoid jet lag and shift best performance time).
- Feedback loop for continuously improvements.

### ADVANTAGES IN ELDERLY CARE ENVIRONMENTS

- Increased sleep length up to 87 minutes.
- Increased sleep efficiency.
- 56% less naps during the day.
- 55% less night-time bed wandering.
- Reduced risk of major depressive disorder.
- 43% less fall accidents in long term care environments.
- Better cognitive function

### EXTRA ADVANTAGES IN HOSPITALS AND HEALTH CARE ENVIRONMENTS

- Reduction of "Length of stay" (LOS) within health care.
- Improved health and wellbeing for shift workers.
- A special recipe is used for ICU (patient/ doctor/ nurse)

### ADVANTAGES IN OFFICES

- Productivity increase by 18%.
- Improved cognitive functions and alertness.
- Better concentration and work accuracy improvement by 12%.
- Better sleep.
- More than 70% feel happier and with a feeling of more energy.
- Reduced sick leave of 2%.

## DIFFERENCES BETWEEN A BCL AND HCL LIGHTING PLAN

HCL is mainly used as a visual system where the colour of a group of lights is changing over the day. BCL takes the circadian rhythm in consideration and tries to focus on maximum health effects. It uses a seamless integration of Spectrum, Intensity, Volume and Modulation.

## INSTALLATION OF A BCL SYSTEM

All system components have a Wago plug and once connected, the components find each other automatically (even in case of a replacement of one of the components). An HCL system typically requires an electrician and a DT8 integrator to verify proper operation. The same procedure should be followed if any of the components need to be replaced.

## SYSTEM HARDWARE

- A plug and play system built around standard protocols – DALI, IP/Ethernet, WiFi and Bluetooth.
- Available interfaces to BMS, alarm systems and other controllers.
- Wago plugs and battery-free switches & sensors ensure easy installation.

## RELEVANT NORMS

- ISO 8995-1 (Global norm released 31st 2025)
- LEED (North American norm for sustainable buildings)
- Well Building Standard (North American Standard to improve human health and well-being)
- Breeam circadian demands (European norm with different levels for future proof buildings)
- DIN/TS 67600 (Germany)



The most important norm for HCL is the Well Building Standard which requires a value of 250 mEDI. BCL exceed all of the norms to deliver the greatest healthy impact by using a 2nd warmer group of lighting. This makes it possible to reach higher circadian values (up to 1300 mEDI) and still have a comfortable lighting environment. The norms for HCL are behind the technological possibilities; it is the expectation that the norms will be stricter in the future.

## GENERAL BCL BENEFITS

- BrainLit stands behind the circadian impact and health benefits of Biocentric Lighting
- Cost savings and exceeding all norms of HCL systems
- The Light Control Box contains the dedicated recipe and does not need special commissioning
- All components have Wago plugs for easy installation



BCL Wireless Light and Recipe Switch



BCL Light Control Box



BCL Wireless Motion Sensor

BCL ACCESSOIRES



BCL Wireless Light and Recipe Switch

|               |                        |
|---------------|------------------------|
| Colour        | Glossy white           |
| Type          | Kinetic (battery less) |
| Supplier code | 300032 Office          |
|               | 300036 Elderly Care    |
|               | 300072 Education       |
|               | 300046 Sport           |



BCL Light Control Box

|               |                                    |
|---------------|------------------------------------|
| Colour        | Black                              |
| Type          | Dali DT8 (automatic commissioning) |
| Supplier code | 200100 Office                      |
|               | 200101 Elderly Care                |
|               | 200103 Education                   |
|               | 200104 Sport                       |



BCL Wireless Motion Sensor

|               |                       |
|---------------|-----------------------|
| Colour        | White                 |
| Type          | Powered by solar cell |
| Supplier code | 300024                |



Wago T-splitter 5P

|             |              |
|-------------|--------------|
| Colour      | Black        |
| Description | WAGO 770-621 |
| Item code   | Not supplied |



WAGO 5P extension cable 3,0 m

|             |                          |
|-------------|--------------------------|
| Colour      | Black                    |
| Description | WAGO 771-9985/006-301    |
| Type        | 16A 1,5 mm² H05VV-F 70°C |
| Item code   | Not supplied             |