

# Operating Instructions LED Streetlights

(Please, read carefully before starting operation)

Version: 17.01.2017

## Model 411 Old Town Luminaire Square with LED Insert Uranus

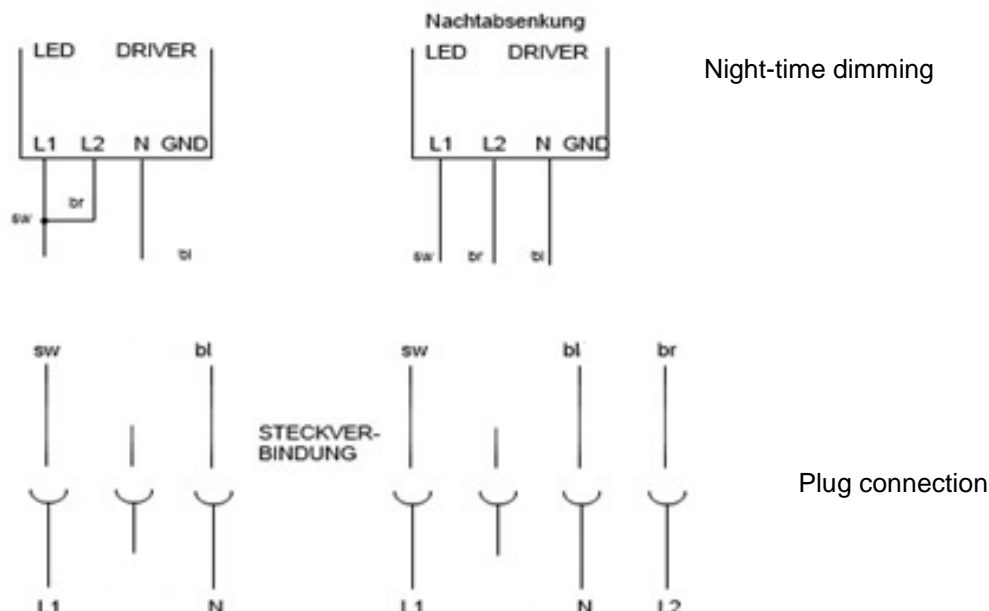
### Technical Specifications:

Rated voltage	230 Volt AC / 50/60 Hz
Rated amperage	0.8 A
Power supply	Interference suppressed acc. to DIN EN 61000-6-3/-4, EN 55011, EN 55022 Cl. B, power factor corrected
Power factor BöSha LED driver	Cos $\phi$ = 0.96 at nominal load
Type of protection	Class II acc. to VDE 0140 (DIN EN 61140)
Safety extra-low voltage (SELV)	Acc. to EN 61347-2-13
Degree of enclosure protection	IP 54
System performance	22 / 30 / 42 Watt
Manufactured according to	VDE 0710/0711
Wired ready for operation acc. to	EN 60598
Ambient temperature	From - 40 °C to + 40 °C for > 100,000 hrs
Recommended mounting height	3.0 – 5.0 m
Maximum mounting height	5.0 m
Torque for maintenance/installation	8 mm: 20 Nm / 10 mm: 20 Nm
Dimensions	530 x 530 x 650 mm
Weight	6.3 kg
Wind-exposed area	0.18 m <sup>2</sup>
Standard connector	Wieland plug series ST 18

### Installation and connection:

Normally, the luminaires are mounted on a pole; for this purpose, depending on the type of luminaire, 1 - 3 hexagon socket head cap screws have to be fastened.

Due to the pre-assembled cable opening of the luminaire is **not** necessary.



The connecting cable has to be connected according to the circuit diagram.

In the presence of night-time dimming the brown cable has to be connected to L2.

### Starting operation:

Installation has to be carried out by suitably qualified staff only. For damages resulting from improper handling we do not assume any liability.

- Open pole terminal compartment
- Determine voltage free status and secure against re-energizing
- Mount the LED luminaire on the pole; for this purpose insert the connecting cable of the luminaire completely into the pole.
- If necessary, align the luminaire on the pole and fasten the luminaire by means of the fixing screws.
- Connect the supply cable and perform function test.

### Technical notice:

For supply connection a mains terminal has to be used.

The terminal compartment has to have at least the same degree of enclosure protection as the luminaire.

The cable gland between luminaire compartment and terminal compartment is tightened firmly and, in addition, sealed with a sealing compound.

Number of clamping points: 3 (4 in models with night-time dimming)

Rated voltage: 230 V AC

Rated amperage: 0.8

### Transport and storage:

Store the luminaires in a dry, dust-free environment. In the event of improper storage any warranty claims will not be accepted.

The LED light sources must not be exchanged by the user – only by the manufacturer. If exchange of the LED modules should become necessary the luminaire has to be returned to the manufacturer (BöSha).

## LED Old Town Luminaire Square Model 411 with LED Insert Uranus

Due to their nostalgic design, BöSha old town luminaires are perfect for the efficient illumination of historical old town areas. By combining the latest LED and reflector technology as well as additional control functions they offer an economic efficiency previously not attained.

This luminaire primarily provides its lighting accents in historical old towns and alleys, fashions squares and parks and impresses by pleasant, glare-free light. By means of segmental assembly partial areas, where less light is wanted (e. g. near house walls), can be shaded. Diverse roof variants allow for creative scope.

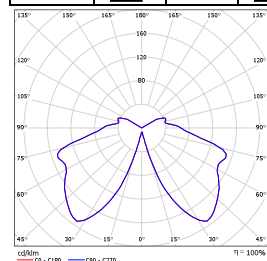
The LED insert Uranus is characterized by minimized glare, concentrated downward light and moderate luminance.

Pay attention to the quality and efficacy of the product. Having an optimized luminous intensity distribution, the quantity of luminaires can be reduced due to larger luminaire spacing. The luminaires are equipped with highly efficient LED modules – supplying **nominally 120 lm/W** at 5,000 K.

### Typical Application Areas:

(Lighting Classes)

ME2	<input type="checkbox"/>	S2	<input type="checkbox"/>
ME3	<input type="checkbox"/>	S3	<input type="checkbox"/>
ME4	<input type="checkbox"/>	S4	<input checked="" type="checkbox"/>
ME5	<input type="checkbox"/>	S5	<input checked="" type="checkbox"/>
ME6	<input type="checkbox"/>	S6	<input checked="" type="checkbox"/>



- Enclosure: aluminium, powder coated DB 703 (graphite grey), other RAL colours on request
- Acrylic panes (PMMA)
- Recommended pole height: 3.0 – 5.0 m
- Multichip-On-Board-LED
- Light distribution: rotationally symmetric / asymmetrical
- Optionally, to be equipped segmentally (asymmetrical)
- Colour temperatures: warm white (3,000 K), neutral white (4,000 K), daylight white (5,000 K)
- Degree of protection IP 54
- LED module and electronic ballast separately removable and plug-connected
- Night-time dimming (power reduction down to 50 % via 2<sup>nd</sup> phase)
- Optionally, the luminaires can be equipped with a telemanagement system
- Various roof shapes (on request)

Model description and performance variants					
Model	Description	Performance	Weight Luminaire head	Wind load	Effective lumen output (at 5000 K)
411	Old Town Luminaire square with LED insert Uranus	22W, 30W, 42W	6.3 kg	0.18 m <sup>2</sup>	1,901 / 2,592 / 3,629

Subject to technical modifications