

# FRISO KRAMER DIRECT CLASS I/II

Lightsource: LED  
 Voltage: 230 V AC 50 Hz  
 Power factor: > 0,90  
 Pole diameter: 60 mm  
 Driver: Philips Xitanium

## IMPORTANT

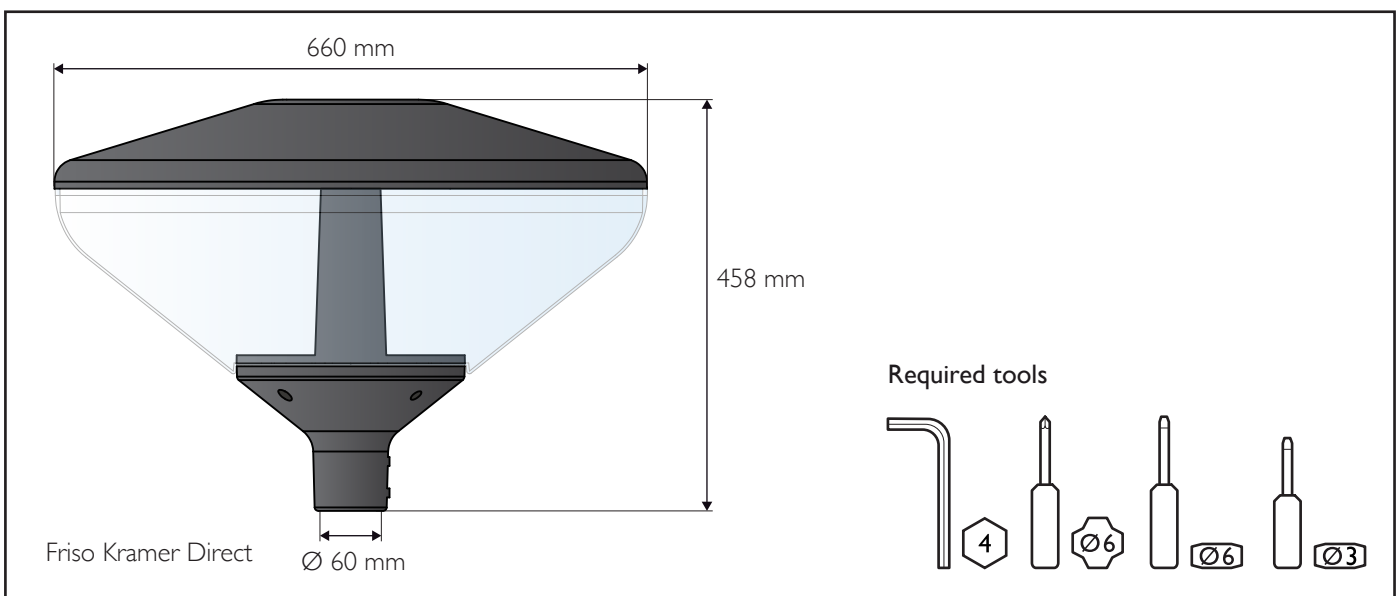
1. Follow the instructions of this manual
2. Use IEC tools
3. Replace defective parts
- 4. Point the hexbolt towards the street**
5. The hexbolts have to be tightened with a torque of 4-5 Nm
6. Cable: 1,5 mm<sup>2</sup> or 1,0 mm<sup>2</sup>  
with rated voltage and current: 250V / > 1A
7. Terminal block in the pole is not included
8. Installation requires advice from a qualified technician
9. Lightwell B.V. retains final explanation rights
- 10. The external cable of this luminaire can not be replaced. If the cable is damaged, the luminaire should be removed**
- 11. The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person**

## SPECIFICATIONS

1. LED power is set in the factory
2. Light color standard 3000K/4000K
3. CLO, Dimprofile is set in the factory

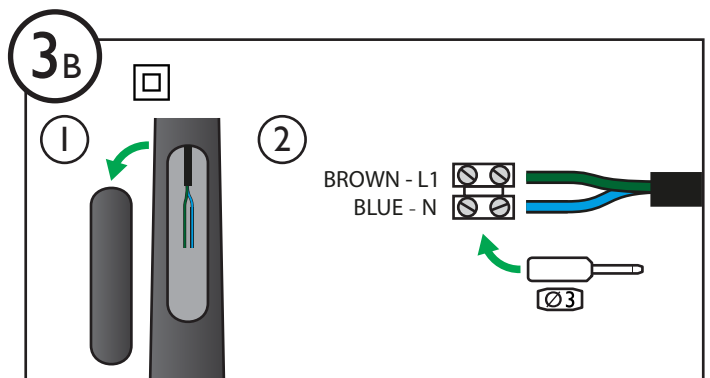
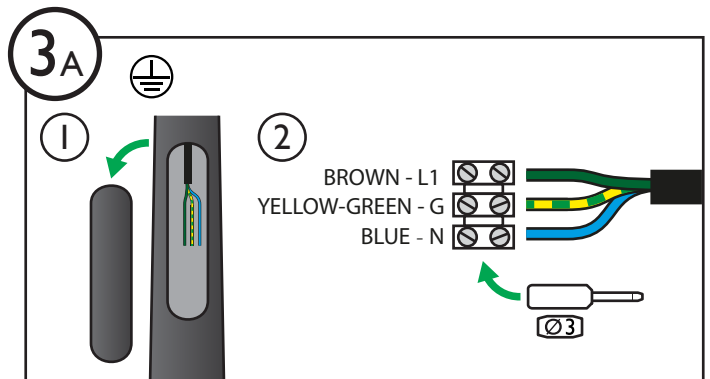
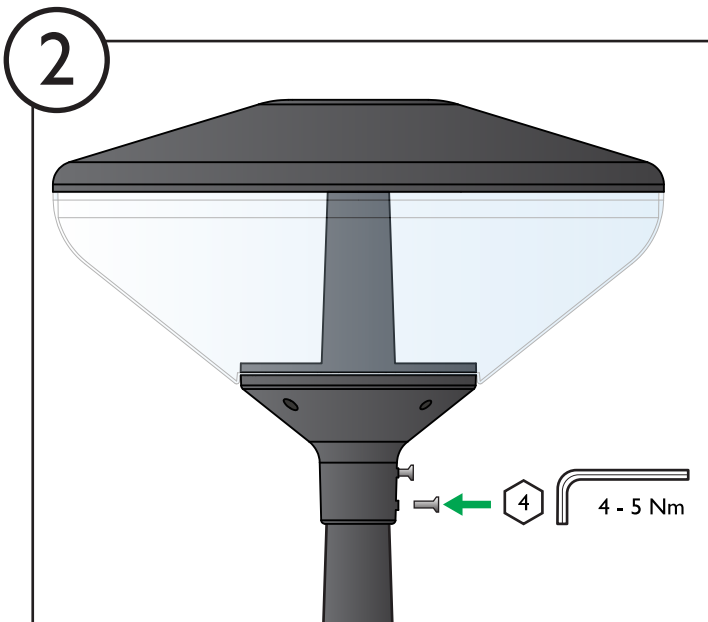
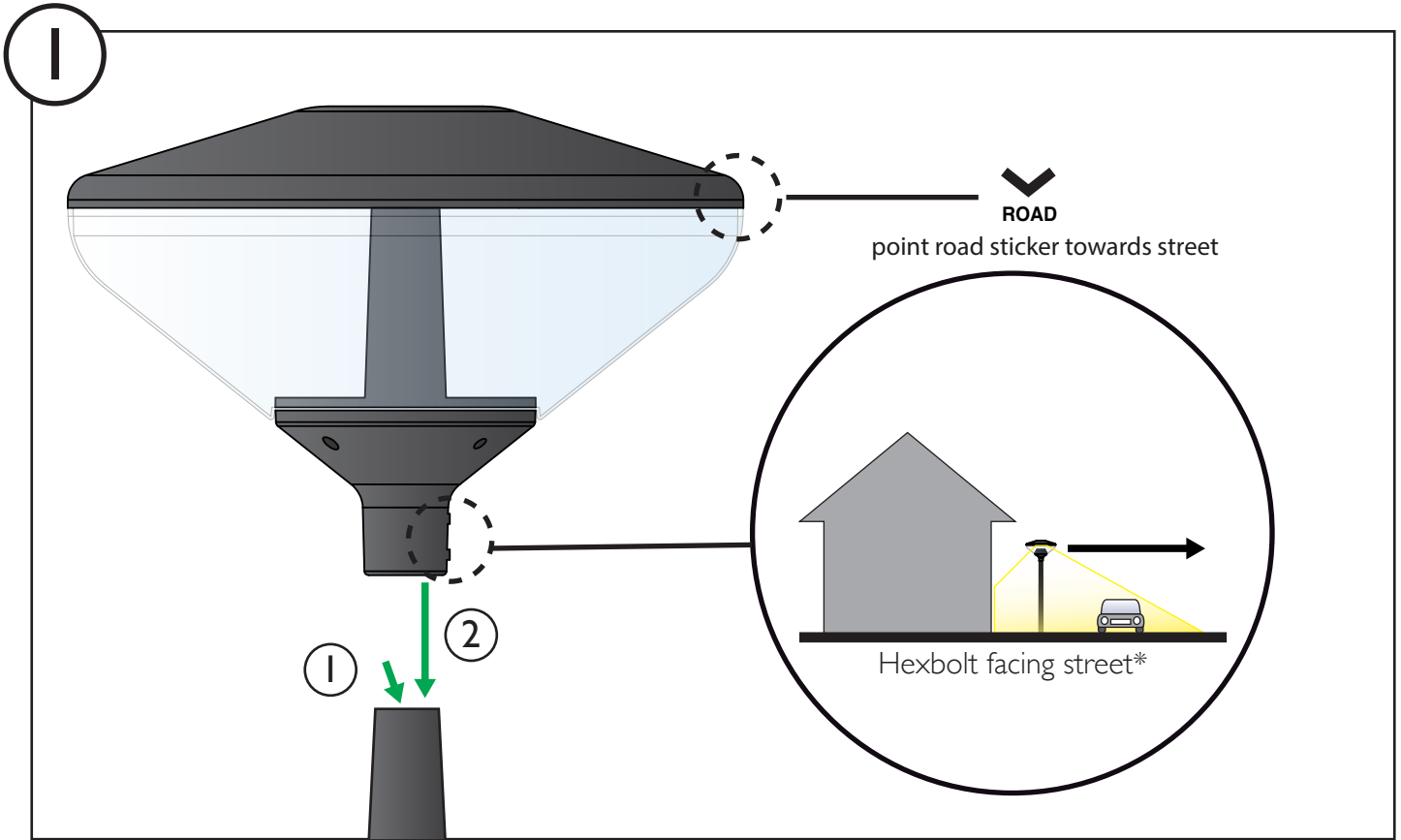
## PARTS

1. Luminaire with asymmetric optics
2. TOP LID: **8718843016868 (RAL7040)**
3. TOP SCREW: **8718843016936 (RAL7040)**
4. LED module: article number on cord and on LED module
5. DRIVER



													<b>IP66</b>
40°C	66	3-5m	60-76 mm	IEC 598	0,22	80●20	11 kg						<b>IK09</b>

# INSTALLATION



**INFORMATION TERMINAL BLOCK:**

1. 3 or 4 pins screw terminal
2. Rated voltage and current: 250V / > 1A
3. Complying with standard EN 60998-2-1 or EN 60998-2-2

## CLEANING THE LUMINAIRE

The detergents in the table below are discouraged. Use of these detergents may cause damage to the LEDs over time.

### Chemicals that can outgas hydrocarbons (e.g., toluene, benzene, xylene)

Methyl acetate or ethyl acetate (e.g., nail polish remover)
Cyanoacrylates (e.g., "Superglue")
Glycol ethers and dipropylene glycol monomethyl ether (e.g., electronics cleaners)
Formaldehyde or butadiene (e.g., PLIOBOND® adhesive)
Chlorine, including bleach-containing cleaners and sprays

**Table 1: Common chemicals with known LED compatibility issues**

Base Material	Type	OK In XLamp Designs*	Outgas Tested	Issues Found	Issues Suspected
Acetic acid	Acid				Yes
Acrylic rubber	Rubber/plastic seal				Yes
Acetone	Manufacturing material			Yes	
Ammonia	Alkaline				Yes
Benzene	Solvent				Yes
Butadiene rubber	Rubber/plastic seal				Yes
Butyl rubber	Rubber/plastic seal				Yes
Chlorinated polyethylene	Rubber/plastic seal				Yes
Chlorobutyl	Rubber/plastic seal				Yes
Chlorosulphonated rubber	Rubber/plastic seal				Yes
Cyanoacrylate	Sealant & adhesive		Yes	Yes	
Dichloromethane	Solvent				Yes
Epichlorhydrin	Rubber/plastic seal				Yes
Gasoline	Solvent				Yes
Petroleum	Oil/lubricant				Yes
Halogenated hydrocarbons (containing F, Cl, Br elements)/miscellaneous			Yes		Yes
Hydrochloric acid	Acid				Yes
MEK (methyl ethyl ketone)	Solvent				Yes
MIBK (methyl isobutyl ketone)	Solvent				Yes
Mineral spirits	Solvent				Yes
Nitric acid	Acid				Yes
Potassium hydroxide	Alkaline				Yes
Silicone oil	Oil/lubricant				Yes
Sodium hydroxide	Alkaline				Yes
Sulfuric acid	Acid				Yes
Tetrachloromethane	Solvent				Yes
Tetradecylamine					Yes
Toluene	Solvent				Yes
Trimethylhexamethylene diamine					Yes
Xylene	Solvent				Yes

**Table 5: Base material compatibility**