USER MANUAL

LED Street Luminaire ELLY HE

Installation, operation and maintenance instructions

IMPORTANT SAFETY NOTICE
Installation, connection and servicing must be performed only by a qualified electrician. Always disconnect the power supply before installation, inspection or maintenance.

Product identification

Manufacturer	STARK Technology JSC
Product	LED street luminaire ELLY HE
Models	ELLY HE 12W, ELLY HE 17W, ELLY HE 21W, ELLY HE 25W, ELLY HE 28W, ELLY HE 32W, ELLY HE 37W, ELLY HE 42W
Country of origin	Bulgaria
Date of manufacture	See product label

1. Product description

The ELLY HE LED street luminaire is designed for stationary outdoor lighting applications. It is suitable for streets, parks, pedestrian areas, car parks, industrial yards, logistics facilities and other open public or private spaces.

The luminaire uses integrated LED modules and is intended for fixed installation on lighting poles, brackets or other suitable supporting structures.

2. Technical data

Parameter	Value
Rated supply voltage	220-240 V AC
Frequency	50 Hz
Power factor	> 0.9
Correlated colour temperature	2 700 K – 6 500 K
LED driver	SELV
Primary/secondary insulation	Reinforced insulation (EN IEC 60598-1)
Light distribution	Directed light
Light source	Integrated LED modules. Light source is not user replaceable.
Electrical protection class	Class I
Ingress protection	IP65
Mechanical impact resistance	IK08
Certification / marking	ENEC, CE
Ambient operating temperature ta	-20 °C to +40 °C
Maximum case temperature tc	60 °C max.
Mounting	Pole or bracket Ø60 mounting
Mounting torque	15 Nm ± 10%
Maximum mounting height	12m
Maximum Wind Speed Resistance (WSR)	45 m/s (162 km/h)

Rated Power (W)	**12**	**17**	**21**	**25**	**28**	**32**	**37**	**42**
Dimensions (mm)	**275x160x75**						**335x160x75**	
Rated current (A)	0.05	0.07	0.1	0.11	0.13	0.15	0.17	0.2
Projected Area (EPA) m^2	0.045	0.045	0.045	0.045	0.045	0.045	0.060	0.060
Wind Load at Maximum WSR (N)	56	56	56	56	56	56	74	74

3. Intended use

This product is intended for fixed outdoor use only. It must be installed on a mechanically stable pole, bracket or equivalent structure designed to carry the luminaire load and withstand the applicable environmental conditions.

Typical applications include:

- Street lighting
- Park and pedestrian lighting
- Pathway lighting
- Car parks
- Industrial zones
- Logistics bases
- Public outdoor spaces

4. Safety instructions

- Disconnect the power supply before installation, inspection, cleaning or servicing.
- Installation and electrical connection must be carried out only by a qualified electrician.
- Ensure reliable protective earthing before energizing the luminaire.
- Do not install or use the luminaire if visible mechanical damage is present.
- Do not disassemble the luminaire and do not modify the electrical circuit.
- Do not stare directly at the operating light source for an extended period.
- Observe all applicable national electrical installation rules and workplace safety requirements.
- The luminaire is protected against dust ingress and water jets according to its IP65 rating.
- Type Y attachment: if the external flexible cable or cord is damaged, the luminaire must be returned to the manufacturer or an authorized service provider.

5. Installation

Installation must be performed with the power supply disconnected. Use suitable fixing elements for the selected pole or bracket and verify that the mechanical connection is secure before energizing the product.

1. Disconnect and lock out the power supply.

2. Mount the luminaire on a suitable supporting structure.

3. Connect the conductors according to the wiring table below.

4. Check that the protective earth connection is secure.

5. Check all mechanical fixings and all electrical connections.

6. Energize the circuit and verify normal operation of the luminaire.

Conductor colour	**Terminal**	**Function**

Brown	**L**	Live / phase
Blue	**N**	Neutral
Yellow-green	**PE**	Protective earth

6. Operation

After the power supply is switched on, the luminaire starts operating automatically. No user adjustment is required during normal operation.

Operate the luminaire only within the technical parameters stated in this manual and on the product label.

7. Maintenance and service

- Periodically inspect the condition of the mounting elements and the supporting structure.
- Clean the housing and protective cover when required. Use a soft cloth and suitable non-aggressive cleaning agents only.
- Do not use abrasive materials, solvents or aggressive chemicals.
- All repair works must be performed by qualified personnel.
- In case of failure of the light source or the power supply unit, contact the manufacturer or an authorised service provider.
- The light source of this luminaire shall be replaced only by the manufacturer, its service agent or a similarly qualified person.

8. Storage and transport

- Store the product in a dry indoor location at a temperature from -20 °C to +50 °C.
- During transport, protect the luminaire from impact, vibration, moisture and damage to the packaging.

9. Disposal

Do not dispose of this product together with household waste. At the end of its service life, deliver it to a specialised collection point for electrical and electronic equipment in accordance with Directive 2012/19/EU (WEEE) and applicable local regulations.

10. Compliance and standards

The product is designed and manufactured in accordance with the applicable European directives and standards.

Applicable directives

- Low Voltage Directive (LVD) 2014/35/EU
- Electromagnetic Compatibility Directive (EMC) 2014/30/EU
- RoHS Directive 2011/65/EU and Directive (EU) 2015/863
- WEEE Directive 2012/19/EU

Applicable standards

- EN 60598-1 - Luminaires - General requirements and tests
- EN 60598-2-3 - Luminaires for road and street lighting
- EN 55015 - Limits and methods of measurement of radio disturbance characteristics
- EN 61547 - Equipment for general lighting purposes - EMC immunity requirements

- EN 61000-3-2 - Harmonic current emissions
- EN 61000-3-3 - Voltage fluctuations and flicker
- EN 62471 - Photobiological safety of lamps and lamp systems

Certificates / markings

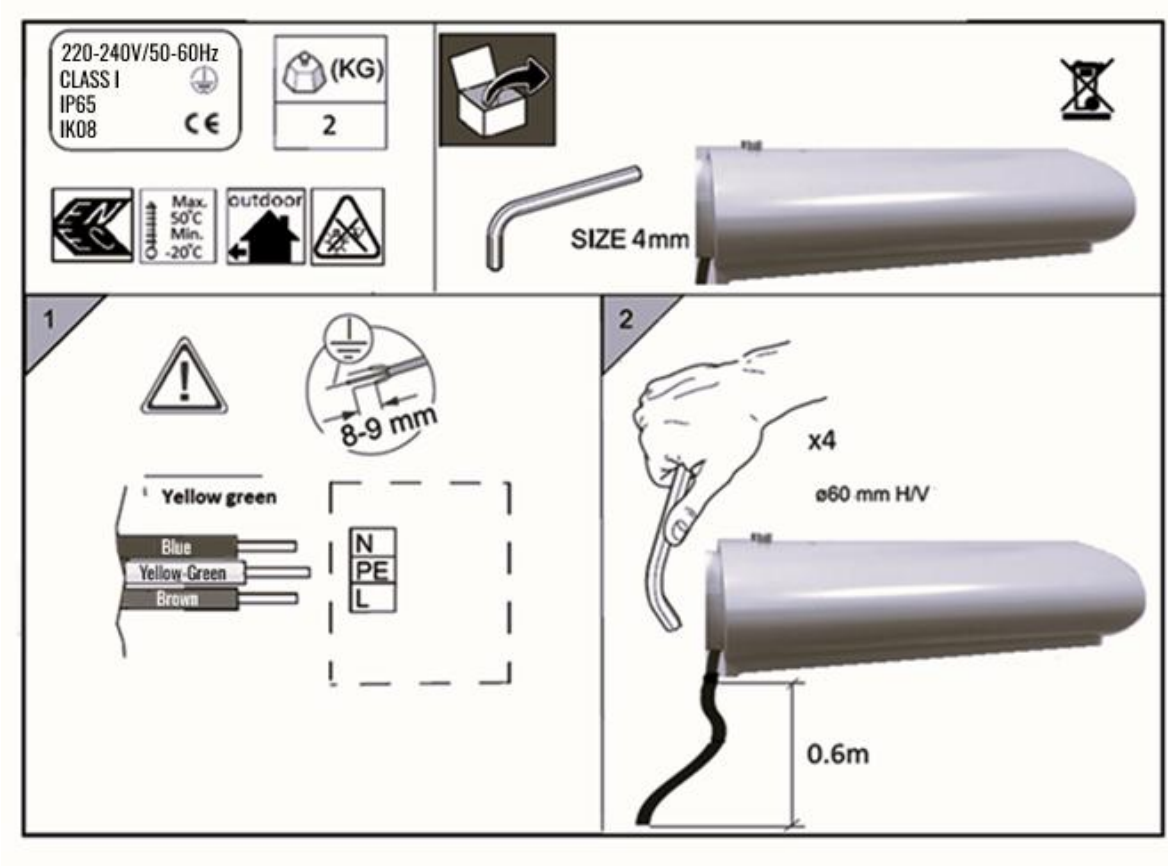
- CE
- ENEC

11. Warranty conditions

The warranty is valid only when the product has been correctly installed and operated in accordance with this manual and the technical parameters stated on the product label.

The warranty does not cover damage caused by:

- incorrect installation;
- incorrect supply voltage;
- mechanical damage;
- intervention by unauthorised persons;
- natural disasters or force majeure events;
- operation outside the specified technical parameters.

Warranty period	24 months
Service contact	Contact the manufacturer or an authorised service provider.

Keep this manual for future reference and provide it to the installer, operator and maintenance personnel.