

ELECTRA SERIES



GENERAL SPECIFICATIONS	
Type	Streetlights
Applications	Suitable for large and high-speed roadways.
MATERIALS AND FINISHES	
• Body and cover in die-cast aluminum with minimum EN 47100 title with low content copper and high resistance to atmospheric agents. • Upper cover with smooth finish of highly aesthetic aspect. • Coated under the AION process, in silver-colored polyester powders (RAL 9006). This process certifies the luminaire's resistance to UV radiation according to ASTM D4587:2011, to salt spray according to EN ISO 9227:2017 with a minimum exposure time of 3000 hours and to corrosion according to ISO 12944 for class C5HD. • Pressure compensation filter in Teflon. • Gaskets in anti-aging rubber, removable. • INFINITY protection system: extra-clear tempered safety glass protection screen, 4mm thick. • Stainless steel external screws. • Adjust pole mounting system in die cast aluminium.	
MECHANICAL CHARACTERISTICS	
• Separation of the optical compartment from the wiring compartment. • Access to the wiring compartment is allowed by acting on the two stainless steel screws by using tools. • Tool-free solution to access to the wiring compartment using the thumb screws available (cod. 33429). • Access to the optical compartment is allowed, for maintenance purposes only, acting on the four stainless steel screws through the use of tools. • Automatic anti-closing safety system: to prevent accidental closure of the cover during assembly and maintenance, the luminaires are equipped	
PROTECTION AGAINST SURGES	
• CL I: up to 10kV both common and differential mode. • CL II: up to 10 kV common mode, differential mode 6kV.	
POWER SUPPLY CHARACTERISTICS	
• Power supply unit consisting of a programmable driver with a lifespan greater than 100,000h. • Electronic power supply with integrated thermal protection with high efficiency and durability intended for external use. • All versions are protected against overloads and surges to protect components and LEDs. • The luminaires are equipped with a knife switch to interrupt the power supply at the device's opening. • The power supply cable accesses the device through a PG 16 cable gland (IP68). • Power correction factor at full load > 0.9. • Power supply 220 - 240V / 50 - 60 Hz VAC.	
WISE SOLUTIONS (OPTIONAL)	
• Automatic dimming through virtual midnight system with customized profiles according to specific needs. • Astronomical clock: this function the system to be switched on and off according to certain preset time slots. • CLO functionality: the driver can be programmed to gradually increase the level of drive current fed to the LEDs in order to compensate their physiological lifespan reduction. • 1-10V: analog dimming interface via 1-10V protocol. • DALI 2: digital dimming interface via DALI 2 protocol. • Adjustment of the luminous flux through conveyed waves. • Main voltage dimming: this function allows the variation of the luminous flux by acting on the variation of the power supply voltage supplied by • NEMA SOCKET: 7 pins (ANSI C136.41). • ZHAGA: streetlights certified with Zhaga D4i predisposition (ZHAGA Book 18) in the upper part (UP position), lower (DOWN position) or mixed part (UP+DOWN position) for the connection of presence and/or movement sensors or combined solutions.	

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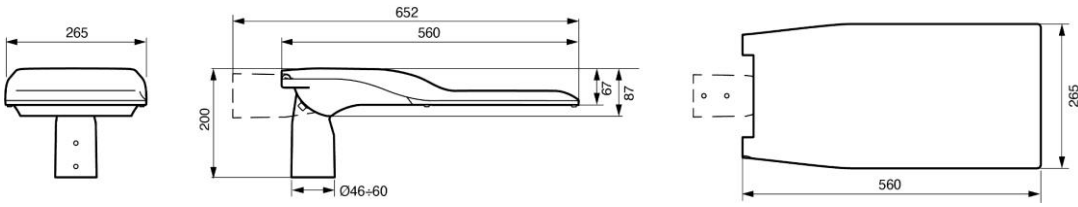
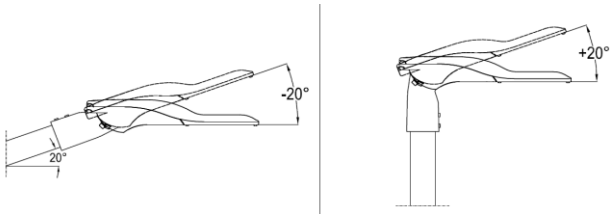


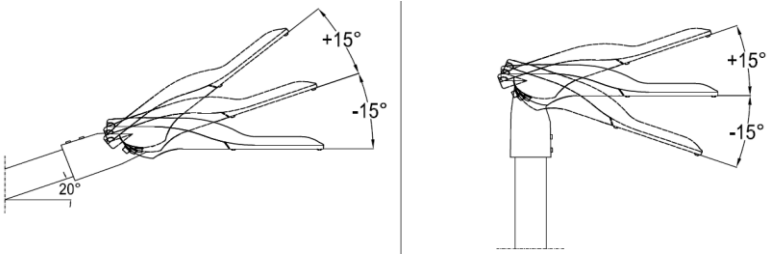
DIMENSIONS AND INSTALLATION DETAILS

ELECTRA 0			
			Installation
Max weight*	2,65 kg		Pole diameter: Ø 46 mm ÷ 60 mm; adjustment step: 5°;
Wind exposed surface with tilt 0°	lateral: 0.014 m ²	front: 0.013 m ²	Pole diameter: Ø 60 mm ÷ 76 mm available on request;
ELECTRA 1			
			Installation
Max weight*	4,45 kg		Pole diameter: Ø 46 mm ÷ 60 mm; adjustment step: 2,5°;
Wind exposed surface with tilt 0°	lateral: 0.020 m ²	front: 0.020 m ²	Pole diameter: Ø 60 mm ÷ 76 mm available on request;
ELECTRA 2			
			Installation
Max weight*	5,20 kg		Pole diameter: Ø 46 mm ÷ 60 mm; adjustment step: 2,5°;
Wind exposed surface with tilt 0°	lateral: 0.022 m ²	front: 0.020 m ²	Pole diameter: Ø 60 mm ÷ 76 mm available on request;

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DIMENSIONS AND INSTALLATION DETAILS

ELECTRA 3			
			Installation 
Max weight*	6,00 kg		Pole diameter: Ø 46 mm ÷ 60 mm; adjustment step: 2,5°;
Wind exposed surface with tilt 0°	lateral: 0.025 m ²	front: 0.021 m ²	Pole diameter: Ø 60 mm ÷ 76 mm available on request;

ON REQUEST FOR ELECTRA 1,2,3	
	
Pole diameter: Ø 46 mm ÷ 60 mm; adjustment step: 2,5°;	

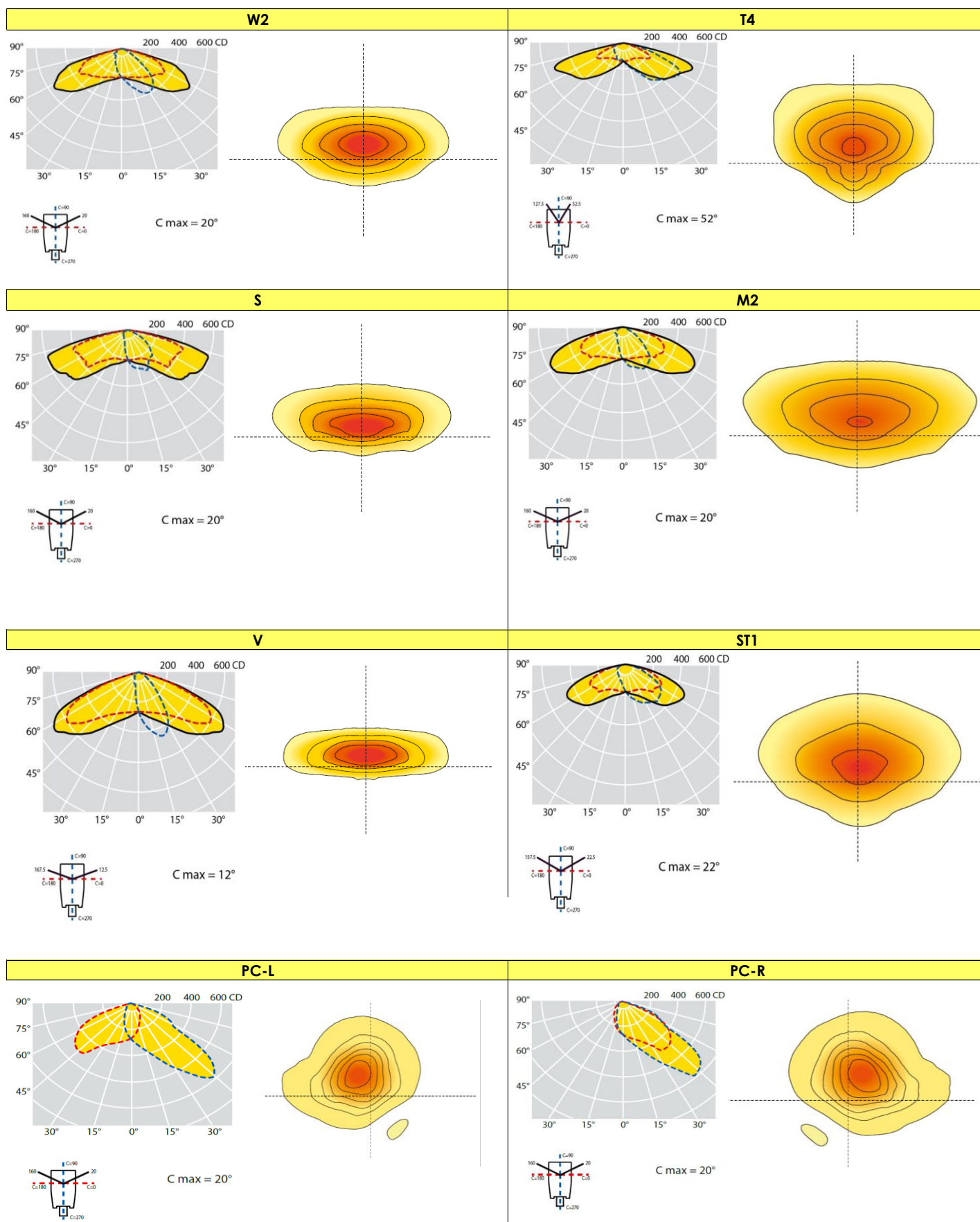
* Weight tolerance ± 5%

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OPTICAL SYSTEM CHARACTERISTICS			
• SAFEWAY and SAFEPEP optic system, refraction system.			
• Optic group easily replaceable.			
• FHS = 0% with glass parallel to the ground.			
• LED Technology on a pressed aluminum circuit, highly dissipating MCPCB (Metal Core Printed Circuit Board).			
• Mac Adam Ellipse (SDCM): 3.			
• Color temperature: 4000 / 3000K - CRI > 70.			
• The streetlights are available on request also with color temperatures between 2200 and 5700K and different CRI.			
MAINTAINED AVERAGE LUMINOUS FLUX ACCORDING TO LM80 - TM21 STANDARDS			
Streetlights operating temperature range*			
ta 35°C	-40°C ÷ +40°C	L90B10	>100.000 hrs
ta 55°C	-40°C ÷ +55°C	L90B10	> 90.000 hrs
*Maximum operating temperature of the floodlights in normal conditions. This indication does not exclude temporary operation of the floodlights at the indicated operating temperatures.			
Colour temperature (K) and CRI Multiplier			
2200K - CRI > 70	0,79	4000K - CRI > 70	1,00
2700K - CRI > 70	0,90	5000K - CRI > 70	1,00
3000K - CRI > 80	0,88	5700K - CRI > 70	1,00
REFRACTION OPTIC SYSTEMS			
W2 OPTIC (SAFE•WAY):	Street optic normally used for all categories lighting, especially when the installation height and the carriage width ratio is considerably greater than 0.85. The W2 optic features a notable back-flow that allows to solve installations with outreaches.		
S OPTIC (SAFE•WAY):	Street optic normally used for lighting categories up to M3. This optic is particularly suitable for situations where the installation height and the width of the carriageway ratio is less than 1. It is also appropriate for roads with very high interdistances and an interdistance / installation height ratio greater than 5.		
V OPTIC (SAFE•WAY):	Street optic particularly suitable for situations where the installation height and the width of the carriageway ratio is less than 1.		
T4 OPTIC (SAFE•WAY):	Optic normally used to illuminate yards, car parks and urban areas, it is also used in the street area when a considerable front light is required and the ratio between the depth of the area to be illuminated and the installation height of the luminaire is considerably higher than 1, but very high lighting levels are not requires.		
M2 OPTIC (SAFE•WAY):	Street optic that allows to illuminate situations with wide interdistances combined with a width of the carriageway equal to or less than the installation height.		
ST1 OPTIC (SAFE•WAY):	Street optic that allows to illuminate situations with high interdistances and a ratio between the installation height and width of the carriageway equal to or greater than 1.		
PC OPTIC(SAFE•PED):	Street optic for cross road, ailable in two configurations: • PC-R(light output to the right): to illuminate crossings when driving on the right side of the road. • PC-L (light output to the left): to illuminate crossings when driving on the left side of the road.		



PHOTOMETRIC DATA



Isolux lines are representative of the photometric distribution.