

SISTEMI PER LA GESTIONE DEL TRAFFICO - TRAFFIC CONTROL SYSTEM

CVE-LED Series

TRAFFIC SIGNAL HEADS IN POLYCARBONATE WITH LED OPTICS THIRD GENERATION

Ministry Homologation no. 30014 del 24/03/2009

GENERAL CHARACTERISTICS

The new technology for energy saving:

- Better visibility compared to traffic lights with incandescent lamps, and a consequent increase of traffic safety
- Energy conservation up to 90% compared to incandescent lamps
- Longer lifetime, about 20 times more than traditional system (10 years)
- No need of maintenance
- Easily interchangeable with traditional system with incandescent lamps

MATERIAL

Polycarbonate with high mechanical resistance, originally pulp-coloured UV stabilized, self-extinguishing.
Available with standard colours: green, yellow, black and yellow-black combination.

Available, also on request, grey colour and grey-black.



CVE/3/200L

TECHNICAL CHARACTERISTICS

Modular sectional aspects Æ 210 mm and 300 mm.

Standard dimensions, completely interchangeable with other widespread traffic lights.

Clutch front doors with 180° rotation opening and snap locking with spring screw rotating of 90° on two closing points.

Polycarbonate lense fixed in it.

Rapid clutch sun **visors with** differentiate rotating insert against accidental fall, they can also be fixed for using the traffic lights in horizontal position, for specific applications like on highways tollgates and portals with road signs linked to traffic lights.

Brackets for fastening traffic lights on poles Ø 102 mm, equal modular up and down brackets that can be used with other widespread supports: the fixing arms (mod. B/U) can also be fixed band-it.

On request, brackets for fastening the traffic lights on the arm of an octagonal section pole with bent arm or air rope.

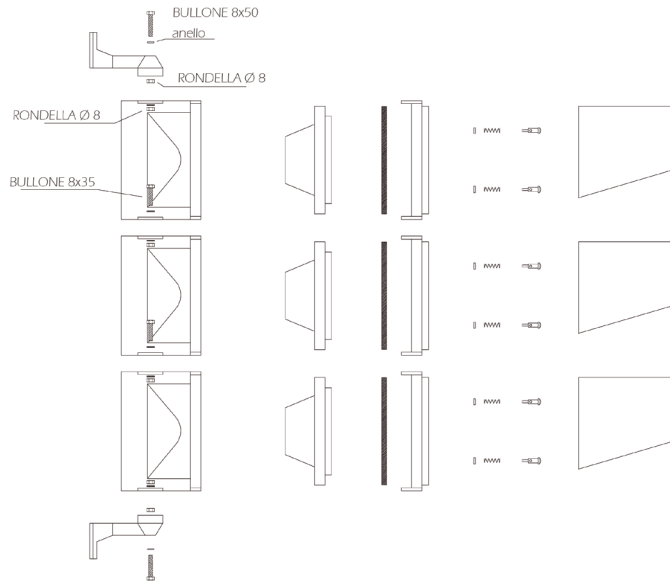


CVE/30L



*CVE/3/200TL
lanterna tranviaria*

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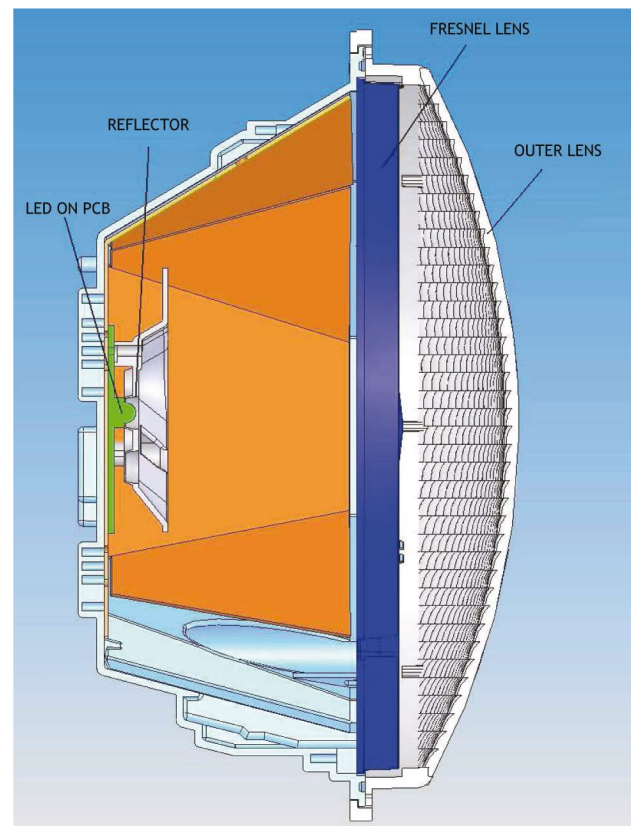


LED MODULES

Led module with 3/4 LED high intensity IP65 made by electronic power supply driver (12Vdc ÷ 24Vdc or 230Vac to be specified) and diffusion system with double lens: main Fresnel lens to widen luminous beam and coloured external lens to stabilize the optics.

The external lens of the Led module is moulded together with the front door and the module screws in the front door for a rapid clutch, making easy any operation of maintenance or addition of directional masks.

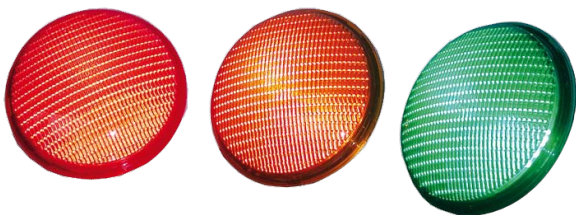
Front masks with all symbols are available, plastic material with fastening system to avoid rotation between the two lenses.



Specific details of a LED module



Lens details



LED modules

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TECHNICAL FEATURES

Power supply	230 Vac \pm 50 Hz \pm 15% (on demand 24 Vdc)
Absorbed power	LED HIGH FLUX Luxeon Lumileds type with average consumption less than 9 W.
Luminous intensity	Typical > 300 cd
Operative temperature	Class A, B, C - 40°C to + 60°C
Connection	4 wires of 1,5 mmq blue = neutral brown = red light grey = amber light black = green light
EMC	In compliance with EN50293 class B
Insulation class	Class II
Warranty	3 years

ADVANTAGES

The innovative traffic lights with LED optical system offers several benefits compared to traditional solution with incandescent lamp. The main advantages are:

- Reduction of maintenance costs thanks to:
 - Consumption reduced of 90%
 - No need of maintenance or lamp change
 - Higher lifetime (about 10 years)
- higher safety thanks to the reduction of phantom effect, which is the cause of false signals due to sun rays reflection
- If there is an open circuit in one or more of the LEDs, the driver will detect this scenario and the unit will turn off. If a short circuit occurs in one or more LEDs and the light intensity drops below 25% of the nominal light output, the driver will detect this scenario and the unit will turn off. The power consumption is reduced with the current through each LED being close to 0mA.

CLASSES AND PERFORMANCE LEVELS OF TRAFFIC SIGNAL HEADS REF. TO UNI EN 12368/2002

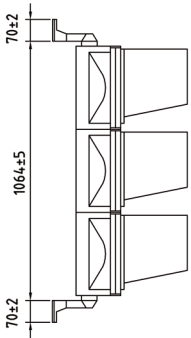
	Signal Head diam. 200 mm	Signal Head diam. 300 mm
Impact resistance:	Class IR3	Class IR3
IP rating:	Class IV, IP55	Class IV: IP55
Operational temperature range:	A, B, C: -40°C +60°C	A, B, C: -40°C +60°C
Luminous intensity:	Red level 3/2; Amber, Green and White level 2/2	Red, Amber and Green level 3/2
Distribution of luminous intensity:	Type W	Type W
Wide beam signal performance:	Red B3/2; Amber, Green and White A2/1-B2/2	Red, Amber and Green B3/2
Luminance uniformity:	Lmin:Lmax \geq 1:10	Lmin:Lmax \geq 1:10
Maximum phantom signal:	Red and Green Class 5, Amber class 4, White cl. 3	Red and Green Class 5, Amber Class 4
Signal light with symbol:	Class S1	Class S1
Background screen of signal light:	Class C1	Class C1

ENERGY SAVING

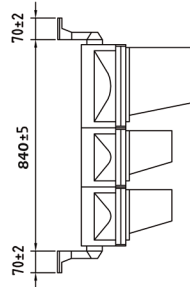
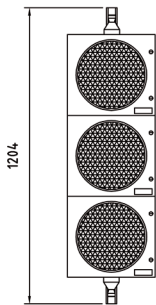
TRAFFIC SIGNAL HEAD	Ø 200 mm	yearly consumption	Ø 300 mm	yearly consumption
Consumption with incandescent lamps	70 W	613 kW/h	100 W	876 kW/h
Consumption with Leds	9 W	87,6 kW/h	9 W	87,6 kW/h
Energysaving		85,7 %		90 %

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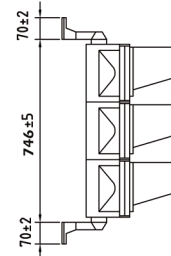
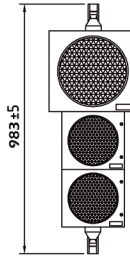
DIMENSIONAL DRAWINGS



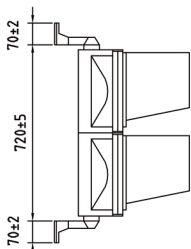
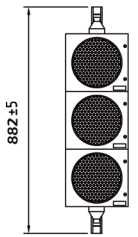
Traffic light 3 lights \varnothing 300 mm
mod. CVE 3300



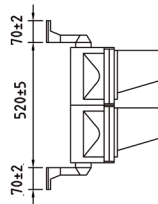
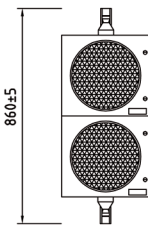
Traffic light 3 lights , red \varnothing 300 mm, amber/green \varnothing 200 mm,
mod. CVE 30



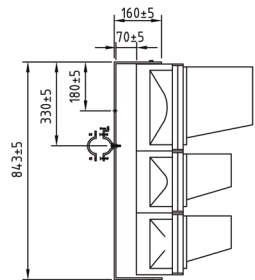
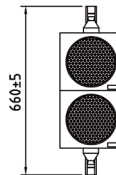
Traffic light 3 lights , \varnothing 200 mm
mod. CVE 3200



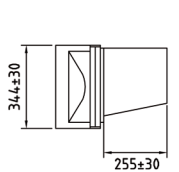
Traffic light 2 lights \varnothing 300 mm
mod. CVE 2300



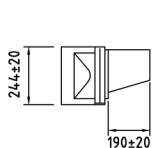
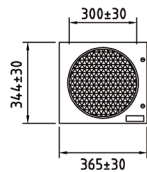
Traffic light 2 lights \varnothing 200 mm
mod. CVE 2200



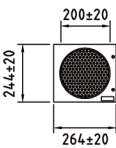
Traffic light 3 lights , red \varnothing 300 mm, amber/green \varnothing 200 mm,
mod. CVE 30, with arm and collar



Traffic light 1 lights \varnothing 300 mm
mod. CVE 1300



Traffic light 1 lights \varnothing 200 mm
mod. CVE 1200



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