

WARNINGS:

Keep a clearance between high voltage cables and any metal surface of 5 cm (2 inches).
Neon tubes **MUST** be installed on isolated (glass or plastic) supports only.
Metal supports are prohibited.
Do NOT install the neon tubes directly on any surface (metal, plastic, concrete, wood or chalk).
The creepage and clearance between the neon tubes and any other surface or components having different voltage (other neon tubes, conductors, earthed parts) shall be in accordance to EN 50107-1, par. 13÷16.
Do NOT install the power supply directly on metal surfaces; keep at least a clearance of 10 mm.
Keep at least 5 cm (2 inches) clearance from adjacent power supplies.
In case of doubt do NOT take any action: contact your Reseller or Distributor.
The discovery of this document in countries with different languages has to be considered involuntary.

INSTALLATION:

⚠ **CAUTION:** Potentially hazardous high voltage can always be present, even when the sign is off or not lit.
⚡ **High Voltage:** Installation and servicing **MUST** be performed by qualified personnel only.
Switch off the mains switch before starting any operation on the sign or on the power supply.
Make sure the operating input voltage of the power supply correspond to the mains supply voltage before making any connections. Input waveform must be sinusoidal. Leading and/or Trailing Edge wave form are NOT allowed.
Earth all the metal parts and limit the length of the High Voltage cables.
Fix the power supply to the sign frame using screws (in number, at least, of 2) of appropriate diameter.
Do NOT hang the device by the input or output cables. Do NOT make knots or loops with cables.
Do NOT install the power supply close to combustible material or in presence of explosive gases.
Do NOT immerse the power supply in water or any other liquid and prevent the device to get wet.
Install the power supply assuring a proper cooling, with a maximum temperature of 40°C (104°F).
Any other use other than powering neon tubes is considered as improper use and therefore prohibited.
Install the power supply in accordance with any applicable law, standard and “state of the art” rule.
Never assume that power is removed from power supply when the sign is not lit: turn off the main switch.
Find and repair abnormalities of neon tubes before switching on again.
Do NOT operate the power supply in case of damaged cables or device case.
Do NOT overload the power supply. Output current can be checked using a HV digital milliamp-meter.
The device has to be considered properly loaded when the input power does not exceed the value of 24 watt.
Do NOT open or disassemble the device nor try to repair by yourself.
Assure the grounding circuit and/or the case has not been affected by corrosion.
High Voltage cable shall have the same length, do not cut. Midpoint wiring is strongly recommended.
Do NOT extend the length of High voltage cables; never cross HV cables nor twist them.
Do NOT cross or run HV cables with supply cable. Do NOT run HV on the metal frame of the sign.
Do NOT run HV cables parallel and tight together, keep at least 5 cm clearance from cables.
🔥 **Risk of FIRE:** do NOT connect any part of the output circuit to any grounded metal or short circuit the output cables.
⚡ **CAUTION:** As a Type A control gear, the electric choc hazard is always present even when the sign is not lit.

RESIDUAL RISKS:

⚠ **WARNING:** Some residual risks (electrocution, shock, injury, etc.) may arise due to improper use of the device or external agents; these risks cannot be completely eliminated.

WARRANTY

Warranty is void if any of the above instruction has not been fully respected. Warranty is limited to faults due to the components and/or manufacturing or assembling process only. Any faults externally originated (overvoltage, spike, improper use or NOT as per instructions) are not covered by warranty.
The device has one year warranty from the date of purchasing based on invoice.
The liability of the Manufacturer, Distributor or the Reseller shall not exceed the cost of supplying a replacement on a one-to-one basis. Manufacturer, Importer, Distributor and/or Reseller are not liable for freight, journey or any installation expenses.

⚠ ATTENTION: Failure to observe the above may cause irreparable damages or injuries of which the Manufacturer, Importer, Distributor and/or Reseller is not responsible.

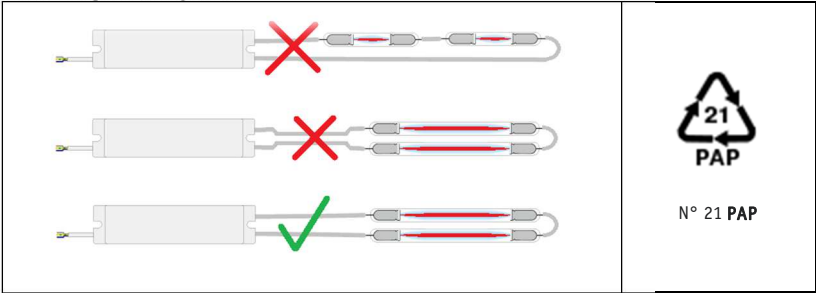
DISPOSAL (for EU Countries only)

According to the Directive 2012/19/EU concerning the reduction of the use of hazardous substances in electrical and electronic equipment, as well as waste disposal it should be noted that all the electrical and electronic equipment marked with the symbol of the crossed bin is to be collected separately.



The user must provide the replaceable components of the equipment in the appropriate collection deposits for electronic or electric waste. The end of life treatment of the device and the consequent recycling of its components (according to the WEEE Directive) is essential for the possible presence of potentially polluting components.

Electric Diagram and Symbols



CARDBOARD BOX RECYCLING - Dispose the carton box in container for cardboard recycling only. Please follow local instructions of recycling as this may differ from Municipality to Municipality. Do NOT Burn.

Declaration of Conformity

The Importer:

Forma Mentis S.a.s.

Via Brandolini 16

31046 Oderzo (TV)

Italy

declares, under its sole responsibility, that:

The control gear “*Stirling*”, type EVG 515 – A

To which this declaration refers to COMPLY to the essential requirements of the following, directives and standards:

Directives and Regulations	Standards
Directive 2014/35/EU (LVD)	EN 61347-2-10:2024
Directive 2014/30/EU (EMC)	EN 61547:2023 EN 61000-3-2:2019 +A1:2021+A2:2024 EN 61000-3-3:2013+A1:2019+A2:2021 EN 55015:2019+A11:2020
Directive 2012/19/EU (WEEE)	--
Directive 2011/65/EU (RoHS)	--
Regulation 988/2023/EU	--

Date: 2026-06-13

Signature

The Test Report, according to the Directives 2014/35/EU (LVD) and 2014/30/EU (EMC), plus EN 61347-2-10:2025 and related EMC Standards, are kept by the Importer.

Assembly, Servicing and Disposal Instructions

For Neon Power Supply “*Stirling*” - Type EVG 515 A

△ Read completely, understand and follow strictly these instructions prior to start any operation with this power supply (also named as “device” or “control gear” for sake of brevity). Retain these instructions for future references. In case of doubt do NOT take any action. △ CAUTION: Professional Use Only.

SPECIFICATION

INPUT		OUTPUT	
Voltage	220 ÷ 240 V AC	Rated Voltage	2,5 – E – 2,5 kV
Current	115 mA	Rated Output Current	10 ÷ 15 mA
Power	24 watt	Short circuit	21 mA
Frequency	50 ÷ 60 Hz	Frequency	20 ÷ 24 kHz
Class	I	Earth leakage switch	No
Size	246 × 39 × 25 mm	Open circuit monitor	No
Weight	425 gr.	EN 61347-2-10	Type A
Dimmable	NO	Output HV cable	0,30 m
Supply cable	0,60 m	Cable Type	EN 61347-2-10
Type	H05RN-F - 3G0.75	Cable cross Section	0,50 mm ²
Surge Protection	4 kV	IP grade	IP 44

This device is a “Type A” control gear for gas discharge tubes (generally called cold cathode or neon tubes) and complies with Low Voltage and EMC directive based on EU standard EN 61347-2-10. This device is intended to be built into non user-replaceable luminous sign. It must be installed according to its IP rating. An additional Surge Protection is recommended in case of rough service. This device has been designed for a 18/24 duty cycle.

The device is properly loaded when the input power does not exceed 24 watt (see picture).

This Load chart is in “electric meters”, where each couple of electrodes is equivalent to 30 cm of tube length.

Diameter (mm)	8	10	12	15
Pure Neon	4,5	5,0	5,1	5,5
Ar – Hg*	6,0	6,7	7,2	8,0
Hg free	6,5	7,3	8,0	9,0

△ CAUTION: This footage chart is intended to serve as an estimative guideline only.
Note: all listed values are based on average tube grading and might vary due to several reasons (temperature, filling pressure, gas mixture, etc.). Deduct approx. 30 cm (1 foot) per pair of electrodes from above figures.
△ Mercury (Hg*) filled tubes are banned in many countries due to EU Regulation 2017/852 and/or “Minamata Convention”; thus the figures above are given for replacement only.



A simple wall socket **power meter** is mandatory in order to check the input power and, by consequence, the proper loading of the power supply. No other means are allowed.