

Waterproof power supply for spa and hot tub AV apps

Techbook

Designed to be used in humid environments.









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In.power.210 is a Power Converter for spa and hot tub AV applications that stands out from the crowd.

The in.power.210 allows power distribution to operate at its maximum efficiency. Its aluminum splash proof enclosure makes it an excellent choice for hot and humid environments. Also its design provides a reliable and safe DC power source for typical AV products such as Radio and CD Players.

The in.power.210 provides an isolated DC output that meets the maximum available Voltage, Current and Power requirements for "Wet Low Voltage Power Limited Source" as specified for Class 2 power source. Furthermore, the In.power.210 complies with the requirements of UL 1563 ed.5.

in.power.210
DC power supply designed for extreme conditions of hot tub environments, built to meet north American & European standars

Main features

Dust and water splash proof

Power input can be 50/60Hz, 120/240 Vac (factory configured) DC output is protected by a 5A, 3AG Slo-Blo fuse type All in.power.210 are UL 1563 ed.5 & CSA No. C22.2 # 218.1 - M89 compliant

Specific 230/240 Vac input models are also certified IEC/EN: 60335 - 2 - 60 - 2002/2003





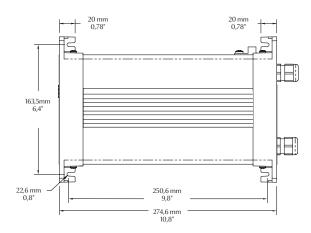
WARNING

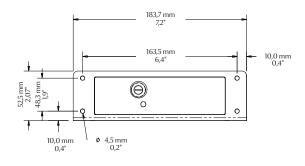
Before installing or connecting the unit, please read the following.

- This product must always be connected to a circuit protected by a ground fault interrupter.
- This product must be bonded to Earth Ground by its external bonding lug.
- This product should be serviced by qualify personnel only. There
 is no serviceable parts inside the enclosure of this product where
 Hazardous voltage are present.
- The output of the product is fused protected. Replacement of the 5A, 3AG Slo-Blo fuse by any other type will void the warranty and may provide risk of injury.
- Ambient air temperature in the vicinity of this product location should not exceed the maximum temperature rating specified in this manual. A minimum clearance of 2 inches must be kept over the enclosure cover. Failure to do so may result in internal temperature exceeding the operating temperature.
- This product is not protected against water immersion or splashing of pressurized water. It should not be installed in a location or in a manner which could lead to contact with water flood or high pressure water spills.

- The electrical load of connections to this product must not exceed the ratings specified in this manual. Failure to ensure compliance with proper electrical load specifications may cause hazardous operating conditions and/or decreased the life span of this product.
- This product must not be altered or modified in any way.
- Do not connect any equipment to this product other than equipment and/or accessories that are specified or approved by this product manufacturer.
- This product is certified as a component only. The finished system which will incorporate this product should be certified by the proper agency as a finished system. In no circumstances should the fact that this product is certified as component be considered sufficient for the finished system to comply with certification requirements. The finished system manufacturer is solely responsible for ensuring that the finished system complies with all applicable laws and regulations.





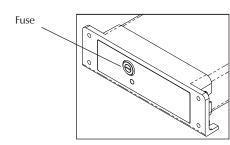


Mounting on a horizontal or vertical surface

The in.power.210 is assembled to be installed on a horizontal or vertical surface. Fix the in.power.210 on an even surface. Whether horizontally or vertically installed, this unit should be installed at a location above the flooding line of the spa or bath.

installation





AC power input

The AC supply cord terminals or plug are to be connected to their specified receptacle as decribed in the document "addendum in.power.210"

DC power output

The DC power output cable of in.power.210 is terminated with 2 Isolated Quick-Connect Female Terminals (3/16"). They have to be connected to the corresponding isolated QC Male 3/16" terminals of your AV equipment.

Wire Color	Description	Rating
Black	Isolated GND	0 Vdc
Red	Isolated 12V	+12 Vdc, 5A
Yellow (with 3-wire cord)	Isolated 12V	+12Vdc, 5A

Note: With 3-wire cord, total current for both outputs together is 5A

Fuse protection

The DC output is protected by a 5A, 3AG Slo-Blo fuse that is accessible on the front panel of the In.power.210. A screwdriver must be used to remove the fuse holder cap and access it. This fuse must be replaced only with the same current rating, time delay and fuse type.



General specifications:

Environmental:

Operating temperature: -20°C (-4°F) to 60°C (140°F)

Storage temperature: -20° C (-4° F) to 85° C (185° F)

Humidity: up to 80% RH, non condensing

Mechanical:

2.02 kg (4.45 lbs) Weight:

Dimensions (W x H x D):

Chassis: 185mm x 52mm x 275mm (7-1/4" x 2" x 10-3/4")

For more information refer to page 5, panel mounting section

of this manual.

Electrical:

Input voltage: 120 Vac or 230/240 Vac - Factory selected

Refer to document "addendum In.Power.210"

Input frequency: 50Hz/60Hz

2A (120 Vac) or 1A (230/240 Vac) Input current:

Output voltage: +12 Vdc

+5 Adc (fused) **Output Current:**

Protection:

Output short-circuit: 5A, 3AG Slo-Blo fuse

Output Overvoltage: 20V

Temperature: Thermally protected

Applicable standards:

UL 1563 Fifth Ed.

CSA No. C22.2 # 218.1 - M89

IEC/EN: 60335 - 2 - 60 - 2002/2003*







* Applicable to certain models only.

Specifications and design are subject to change without prior notice.