

APC® Line-R®

Estabilizador Automático de Tensão
Modelos LE300-BR, LE300BI-BR

Thank you for purchasing APC's Line-R Automatic Voltage Regulator! Please fill out and mail the product warranty registration form, or fill out an online form at www.apc.com.

Chronically abnormal line voltage is often the result of adjustments made to the power station to conserve energy, or to compensate for low voltages in other areas. Locally, the operation of heavy loads such as air conditioners, office copiers, and laser printers may cause temporary voltage fluctuations.

The Line-R is a high-performance, microprocessor-controlled tap changing device which automatically corrects brownouts (by boosting low voltage) and overvoltages (by stepping down high voltage) from the power utility service to levels that are safe for computers, as well as other sensitive equipment. APC's Line-R provides the highest degree of protection from line voltage sags and swells, and has been designed for many years of reliable, maintenance-free service.

Please Read This Manual

This manual provides safety, installation and operation instructions that, when followed, will ensure the fullest performance and service life that the Line-R can provide. Please save this manual. It includes important instructions for the safe use of this product, as well as information necessary to obtain factory service, if necessary.

Applications

CAUTION: The total power consumption of all equipment plugged into the Line-R must not exceed 300VA. A total load in excess of 300 VA will cause the fuse to fault (blow). To find out your equipment power consumption, check it's manual for input load. Obs: If this power consumption is expressed in W (WATTS), multiply this value for 1.45 to obtain the equivalent in VA. This is the most used power factor used for computer systems.

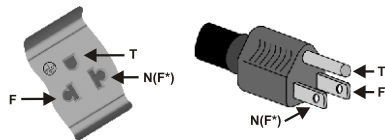
The Line-R is designed for use with voltage sensitive equipment such as: a home computer, monitor, inkjet printer, scanner or fax. It is also designed for use with home electronics equipment such as televisions, stereos, CD players, VCRs, and DVD players, data processing equipment, modems, typewriters, calculators, and telephone equipment.

Appliances not suitable for use with the Line-R are items such as refrigerators, freezers, power tools, air conditioners, dehumidifiers, blenders, or any device that employs an AC motor for operation. Not for use with small fuel generators. Also excluded are line sustaining equipment and any device with a power requirement higher than 300 VA.

When using the Line-R with an Uninterruptible Power Supply (UPS), connect the UPS to the Line-R's output, then connect the Line-R to the wall outlet.

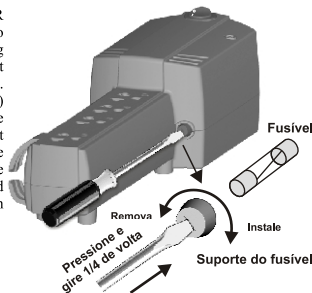
Polarization Standard

In order to comply with all installation practices and standards, as well as to avoid the risk of electrical shock, the Line-R must be connected in places having proper grounding. The network phase conductors where your equipment will be connected must be protected by fuses or circuit breakers, and it must be bipolar if used in a biphasic network.



Fuse Replacement

For safety purposes, the Line-R provides user-replaceable fuses to protect the unit from being overloaded. The monovolt unit (LR300-BR) contains a single fuse. The bivolt unit (LR300BI-BR) contains two fuses. See *Specifications* table for replacement fuse ratings. Replace a faulted fuse with a fuse of the same exact type and rating verify if the load connected to the unit is not higher than specified. The fuse is not part of the warranty.



Note: Use a screwdriver to help you to remove the fuse holder.

CAUTION: Unplug the Line-R from the wall outlet before replacing the fuse.

Features

LED

RED Flashes when the Line-R is regulating an input voltage above the limite range and the output voltage is out of regulation range, turn off the Line-R and check your electrical installation.
Lights (normal) when the Line-R is regulating an input voltage above the normal range and the output voltage is within the normal regulation range (115V +/-6%).

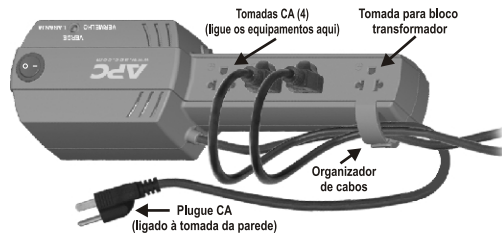
GREEN
Lights (normal) when the input voltage is normal.

ORANGE

Flashes (normal) when the Line-R is regulating an input voltage below the normal range and the output voltage is out the regulation range, turn off the Line-R and check your electrical installation.

Lights when the Line-R is regulating an input voltage below the normal range and the output voltage is within the normal regulation range. (115V +/-6%).

Obs: On the bivolt version used under 220V net the LED will light red but this is a normal condition, it indicates that you have more than 115V in the inlet and it is correcting the output for 115V.



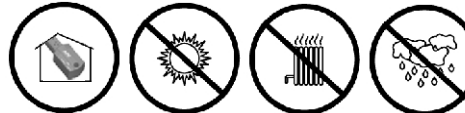
Installation

-Inspection

Remove the Line-R from the shipping container and inspect it for damage that may have occurred in transit. Notify the carrier and place of purchase if any damage is found. The packing materials are made of recyclable materials and should be saved for reuse or be disposed of properly.

-Placement

Please install the Line-R in a protected environment. Do not block the top or side air vents on the unit. Allow 2.5 cm (1 inch) minimum vent clearance. Do not operate the Line-R in an environment where the ambient temperature or humidity is outside the limits listed in the *Specifications* section of this manual. Operate the Line-R in an environment free of excessive dust, mechanical vibration, inflammable gases and explosive or corrosive atmospheres.



Plug the Line-R into Wall Outlet

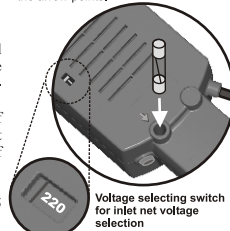
Plug the Line-R (LR300-BR) into a 115 volt AC wall outlet. Or plug the Line-R (LR300BI-BR) into a 115 or 220 volt AC wall outlet. The wall outlet should be within easy access to the unit. On the bivolt unit user has to select the inlet voltage according to net voltage where the product will be connected.

The status LED shall flashes and remains lit. In case the status LED keeps flashing, check if the voltage switch is in the correct position. If the switch is in the correct position and the LED keeps flashing, do not connect any equipment to the Line-R, turn it off and contact APC support.

CAUTION: The LE300BI-BR comes with the 220V net fuse (1,6A) assembled, in case of 115V net usage, it's necessary to replace the fuse for the 3,15A one that accompany the product. For LE300-BR this procedure is not necessary. Adjust the switch to on position and verify the LED status. It should flashes and stay lighty. If the it keeps flashing verify the if the Net selection voltage is in the correct position. If the selection switch is correct and the LED keeps flashing don't connect any device to the line-R, Unplug it from the outlet and call the APC technical assistance.

Fuse 3.15 A

To be used with 115V on LE300BI-BR model. Localized in the bottom panel where the arrow points.



Connect Your Equipment

Plug equipment into the Line-R rear-panel outlets and switch the equipment ON. The equipment will not be powered until the Line-R is switched ON.

CAUTION: The total power consumption of all equipment plugged into the Line-R must not exceed 300 W. A total load in excess of 300 W will cause the fuse to fault (blow).

CAUTION: Do not plug an LR300-BR (115 volt input model) into a 220 volt outlet as this may damage the unit or the connected equipment.

CAUTION: make sure the voltage switch is in the correct position, if it's not it can occur failures in the equipment connected to the Line-R.

•Switch ON the Line-R

Switch the Line-R ON by pressing the front panel ON/OFF switch to the ON (I) position. This switch may be used as the master ON/OFF switch for all equipment connected to the unit.

Specifications

Characteristics	LE300-BR	LE300BI-BR
Maximum Output Power Capacity	300VA	300VA/220VA*
Voltage Type	Monovolt	Bivolt
Nominal Output Voltage	115V	+6%
Nominal Input Current	2.6A	2.6A (115V) 1.0A (220V)
Input Voltage Range	103 - 132V	103 - 132V (115V) 186 - 242V (220V)
Surge Energy	300 Joules	
Output Regulation	±6%	
Response Time	< 3 ciclos de CA	
Efficiency	> 91%	
Nominal Frequency	60 Hz	
Total Harmonic Distortion	< 1,5%	
Number of Outlets	4	
Fuse for 115 volt operation	250V, T 3,15 Amp, Slo-Blo type (Slo-Blo) (5x20 mm)	250V, T3,15 Amp, Slo-Blo type (Slo-Blo) (5x20 mm)
Fuse for 220 volt operation	None	250V, T1,6 Amp, Slo-Blo type (Slo-Blo) (5x20 mm)
Operating Temperature	0 - 40°C (32 - 104°F)	
Relative Humidity	0 - 95% Non-condensing	
Dimensions	83 x 325 x 92 mm (3,3 x 12,8 x 3,6 pol.)	
Weight	1,35 kg	2,0 kg

* For computer equipment and non resistive loads 300VA.

For resistive loads: 300VA in 115V and 220VA in 220V.

Limited Warranty

American Power Conversion (APC) warrants its products to be free from defects in materials and workmanship for a period of one year from the date of purchase. Its obligation under this warranty is limited to repairing or replacing, at its sole option, any such defective products. To obtain service under warranty you must obtain a Return Material Authorization (RMA) number from APC or an APC service center. Products must be returned to APC or an APC service center with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment which has been damaged by accident, negligence, or misapplication or has been altered or modified in any way. This warranty applies to the original purchaser who must have proper registered the product within 10 days of purchase.

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