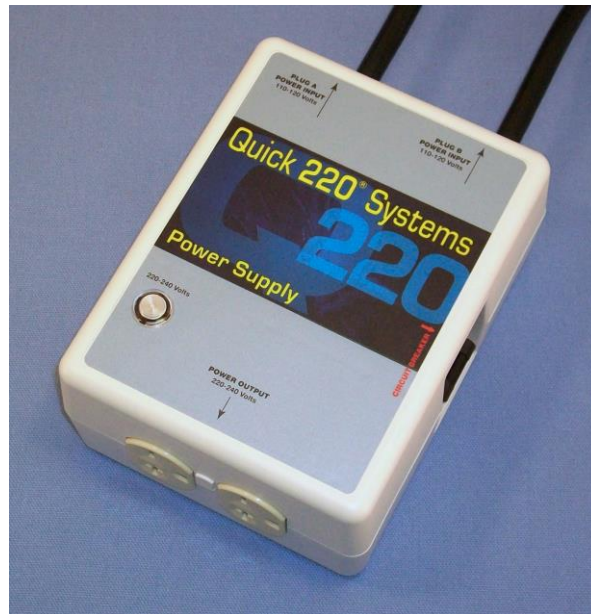


Quick 220[®] Voltage Converting Power Supply

Instructions & Safety Information

Models A220-20D and A220-20L

Version 2



Quick 220 Systems LLC

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sales@quick220sys.com

www.quick220sys.com

Safety Information

Warning! Electrical Device. Do not use in or near water, in damp or wet areas, or when you are wet.

Warning! Do not drop or subject to mechanical shock.

Warning! Do not use in explosive atmospheres or near explosive materials.

Warning! This device is not for use by children or others unaware of hazards of electricity. Misuse can cause electrical shock and lead to death.

Warning! This product has three-pronged (grounding) plugs. Connect only to grounded, properly wired, three-pronged AC outlets. **DO NOT ALTER PLUGS OR USE ADAPTORS DEFEATING GROUND CONNECTIONS.**

Caution! Use 3 wire, grounded, extension cords with ampere ratings adequate for the equipment load.

Caution! Operate uncovered where air freely circulates and heat can dissipate. Do not enclose.

Caution! Read and understand these instructions before using. The short guide on the Quick 220 power supply is to assist operators who have read this Instruction Manual.

Caution! To prevent tripping facility circuit breakers or fuses, connect Quick 220 "PLUG A" and "PLUG B" to AC outlets with ampere capacity for equipment connected to the QUICK 220 power supply plus any other devices on the same 110/120 volt circuits. If circuit breakers or fuses disconnect, remove other equipment from the 110/120 volt circuits or connect the QUICK 220 power supply to different circuits.

Caution!

DISCONNECT SYSTEM AND SEE TROUBLESHOOTING" IF:

1. "220 VOLTS" lamp doesn't stay on during use.
2. QUICK 220 power supply clicks repeatedly. The QUICK 220 is silent during normal operation, quietly clicking twice at start up and once at shut down.

Equipment loses power during operation.

Description

The Quick 220 power supply uses the principle that 220/240 volts AC is supplied to most facilities. The 220/240 volts is divided into 110/120 volt circuits for distribution within the building. Using 110/120 volt outlets and the Quick 220, the user can quickly identify and connect to the separated 110/120 volt halves of the original 220/240, restoring the 220/240 volt AC option without adding new electrical circuits or wiring to the building.

To protect people and equipment, the Quick 220 power supply's safety interlock blocks all output power until electrical connections are complete and correct. The Quick 220's internal circuits assure correct outlet polarity before completing electrical connections. Should power on one of the 110/120 volt supply lines be interrupted by overload or disconnect, all output power is immediately and automatically disconnected.

Operation

Use appropriate extension cords (not supplied), as necessary, to reach 110/120 volt outlets.

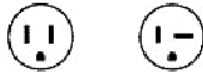
- Loads between 15 and 20 amperes: use 20 ampere extension cord(s).
- Loads under 15 amperes:
 - Use extension cords rated for the load --- AWG#12-3 for loads up to 15 amperes, AWG#16-3 for loads up to 12 amperes.
 - Use adapter cords, if necessary, to connect to 15 ampere outlets. This reduces the capacity of the system to 15 amperes, maximum. See "Definitions", paragraph 1.

The Quick 220 power supply will trip Ground Fault Interrupter (GFI) circuits or outlets. Select non-GFI outlets and circuits. If a GFI is desired, use a 220/240 volt GFI, connecting it to the 220/240 volt output of the Quick 220 power supply.

1. 110/120 Volt Connections:
 - a. Test 110/120 volt outlets using supplied Receptacle Tester.
 - Two amber "CORRECT" lights should be on. If lights give different reading, outlet is not wired correctly and Quick 220 will not operate. Have wiring corrected by a qualified person.
 - Press GFI test button on Receptacle Tester for 6 seconds. When released, the two amber "Correct" lights should remain on. If amber lights go off, reset GFI in circuit and move to outlet that is not GFI protected.
 - b. Connect "PLUG A" power cord to 110/120 volts AC outlet. The Quick 220 power supply will give an audible "click" as "PLUG A" is inserted into the outlet. If there is no "click," disconnect and see Trouble Shooting, paragraph 4.
 - c. Connect "PLUG B" power cord to other 110/120 volt AC outlets until "220 Volts" lamp on front panel illuminates. (An extension cord will probably be necessary.) As "PLUG B" is inserted into the outlet, the Quick 220 power supply will give an audible "click." If there is no "click," disconnect and see Trouble Shooting, paragraph 4.
 - When "220 Volts" illuminates, 220/240 volts is ready for use on 220/240 volt outlet.
 - If "220 Volts" does not illuminate, move "Plug B" to other outlets until "220 Volts" lights.
 - Only about half the outlets in any facility will complete the 220/240 volt connection.
2. Connect equipment. SET EQUIPMENT POWER SWITCH "OFF" BEFORE CONNECTING.
 - a. Connect equipment to be powered to 220/240 volt outlet.
 - b. Switch circuit breaker "ON". A "buzz" may be heard for a few moments when power is switched on.
 - c. Use equipment according to manufactures instructions.

Definitions

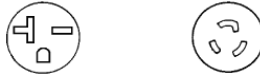
1. "110/120 VAC" means an alternating current electrical source from 108 to 125 volts AC supplied by a three pronged grounded outlet of the type commonly found in residential and commercial applications in the United States, shown below. The source can be either single phase or three phase, which is commonly found in commercial or industrial facilities. The blade patterns for 15 ampere and for 20 ampere plugs are shown below with the prongs toward and the cord away from the viewer.



NEMA 5-15P NEMA 5-20P
15 Amp 20 Amp

Plug Blade Configurations -110 to 120 Volts Nominal

2. "220/240 VAC" means 208 to 250 volts AC. If the power source is single phase, the voltage output of the Quick 220 power supply will be twice the voltage of the voltage supplied, typically 220 to 240 volts. If the power source is 3 phase, the voltage output will be 1.73 times the voltage of the voltage supplied, typically 208 volts. This is supplied though a NEMA 6-20R straight blade duplex outlet or a NEMA L6-20R locking single outlet.



NEMA 6-20R (Straight) NEMA L6-20R (Locking)
Outlet Configurations - 20 Ampere, 220 to 240 Volts Nominal

Specifications

INPUT:

Voltage: Two 115 Volts AC, 60 HZ, out of phase, non-GFI circuits
Two power cords, 72 inches each, NEMA 5-20 plugs
20 amperes, each line

OUTPUT VOLTAGE:

Single Phase Input: 230 Volts AC nominal (2 times input voltage)
Three Phase Input: 208 Volts AC nominal (1.732 times input voltage)

OUTPUT POWER: 4600 watts at 115 Volts AC, single phase input

OUTPUT CURRENT: 20A max. at 80% on/20% off (time), 3 hour maximum cycle
16A max., continuous

OUTPUT RECEPTACLE: A220-20D - NEMA 6-20R Duplex
A220-20L - NEMA L6-20R locking

POWER CONSUMPTION: 8 watts at no load

ENVIRONMENT:

35 to 95 degrees F, 85% relative humidity, max., non-condensing
No explosive gases, dust or other materials
Dry. Away from water, oils or other liquids.
Avoid excessive dust.

SIZE: 5 in. wide x 6 ½ in. deep x 3 in. high, 3 pounds

United States Patent Number 5,977,658

Specifications may change due to product and material improvements.

Trouble Shooting

1. "220 Volts" lamp doesn't light.
 - Make sure that power cord connectors are firmly seated.
 - Using Receptacle Tester supplied with Quick 220 power supply, check outlets for correct wiring and electrical power. If outlet is not correctly wired, have qualified person correct outlet wiring.
 - Continue moving "PLUG B" power cord to different outlets until "220 Volts" lamp lights. About half the outlets in any facility will complete the 220/240 volt connection.
2. "220 Volt" lamp lights, but there is no power at 220/240 outlet.
 - Assure that circuit breaker is switched "ON".
3. Quick 220 power supply clicks repeatedly during operation and/or equipment runs as if it is not getting enough power.
 - Power cords supplying Quick 220 power supply are too long and/or the wire too small for the amps demanded by the equipment. Use power cords with larger wire
 - For loads exceeding 12 amperes and/or power cords over 50 feet, use #12-3 AWG three prong, grounded power cords.
4. Quick 220 trips Ground Fault Interrupters (GFI) in system and fails to operate.
 - The Quick 220 power supply does not operate on GFI protected outlets or circuits. Move power cords to non-GFI outlets or circuits. If a GFI is needed, connect a 220/240 volt GFI to the 220/240 volt outlet of the Quick 220 power supply.
5. Quick 220 fails to "click" as power cords are inserted into 110/120 volt outlets.
 - Check power at outlet with Outlet Tester. Correct if necessary.
 - If there is power at the 110/120 volt outlet, but no "click" from the Quick 220 power supply when the plug is inserted, the safety circuits are not operating. Call Quick 220 Systems for assistance.

If the above steps do not answer the question,
call Quick 220 Systems for assistance.
800-347-0394 or 602-938-6057
sales@quick220sys.com

Shipping Kit Contents

| <u>ITEM</u> | | <u>Part No.</u> | <u>Quantity</u> |
|---|------------|-----------------|-----------------|
| Quick 220 Power Supply – 20 Ampere Outlet tester | A220-20 v2 | 1 TEST001 | 1 |

Care and Cleaning

Before cleaning, disconnect Quick 220 power supply from all electrical connections. Clean case with a cloth lightly moistened with water. Do not immerse. Do not use organic solvents such as acetone, alcohol, or mineral spirits.

Limited Warranty

The Quick 220 power supply is warranted for a period of one year from the date of shipment against defects in material and workmanship. If during the warranty period, the Quick 220 Power Supply is found defective in material or workmanship and returned to Quick 220 Systems LLC (Quick 220 Systems), we will, at our option, repair or replace it at no charge to the buyer. If we replace the unit, we may at our option replace it with a new unit, a rebuilt unit or a unit of newer design with the same or better specifications. The warranty period on replacement units is one year from the shipping date for the original unit or 90 days, whichever is longer.

This warranty does not cover product failure due to accidental damage, abuse or misuse of the product. This includes, but is not limited to physical damage, modification of the product, electrical overloading, or operation at voltages lower or higher than specified for the product.

THIS LIMITED WARRANTY IS IN PLACE OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND NONE SHALL BE CREATED, WHETHER UNDER THE UNIFORM COMMERCIAL CODE, CUSTOM, PRACTICE, THE COURSE OF DEALINGS BETWEEN THE PARTIES OR OTHERWISE, OF THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE GOODS AND/OR SERVICES PROVIDED HEREUNDER. THIS WARRANTY SHALL NOT BE ALTERED BY THE WARRANTY OF ANY OTHER PRODUCTS OR SYSTEMS TO WHICH THE PRODUCT MAY BE CONNECTED OR WHICH MAY BE SUPPLIED BY QUICK 220 SYSTEMS.

Quick 220 Systems shall not be liable for any special, indirect, incidental or consequential damages. Quick 220 Systems's sole liability under this warranty is limited to the repair or replacement of the defective unit as described above. Should further interpretation of this warranty be required, it is to be interpreted under the laws of the State of Arizona.

Repair Service (Warranty and Non-warranty)

CALL 800-347-0394 or 602-938-6057

FOR REPAIR AND ASSISTANCE.

You may also write us:

Quick 220 Systems LLC

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Phoenix, Arizona 85068-7489

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