

“PLC” PROTECTOR

FOR ALL “PLC” APPLICATIONS



A/C POWER AND DATA LINE PROTECTION IN ONE CONVENIENT BOX

Today's competitive markets require all industrial equipment to function at maximum performance. Lower profits require higher yields or production. This is achieved by maintaining production equipment to run at its optimum level. Increased production means increased profits.

The Always “On”™ “PLC” 2+2 and 2+0 Transient Voltage Surge Suppressor (TVSS) and data line filter will provide today's users and OEM's with the ultimate protection required by today's automated industries. Always “On”™ has 25 years in the noise suppression and power quality industry, providing us the knowledge base required to remain on the cutting edge of the power protection industry.



*User resettable breaker
on all models*

APPLICATIONS:

Among other applications, the PLC Protector can be applied to PLC's, robotics, CAD/CAM, alarm systems, scanners, controllers, medical equipment and virtually all microprocessor-based "critical" equipment.

USERS:

Typical PLC Protector users include the oil industry, refineries, the pulp and paper industry, the textile industry, water and sewer treatment plants, the petrochemical industry, the food processing industry and virtually all types of manufacturers.

FEATURES / BENEFITS:

Series Hybrid Design

Sine wave tracking TVSS technology ensures fast and immediate attenuation of the harmful spikes, transients and both common and normal mode noise. The added data line filter ensures that the 2+2 Filter will protect the attached network/communication link from all potential problems. The Always “On”™ 2+2 filter is the only filter that offers all modes of protection on both the power line and the data line. The Always “On”™ 2+2 one-two punch will guarantee maximum runtimes for your equipment, resulting in higher production and profits, while decreasing downtime and equipment repair costs.

Suppression / Attenuation

The “cutting edge” technology contained in the Always “On”™ 2+2 and 2+0 filters allows normal mode noise attenuation up to 85dB and for common mode noise attenuation up to 50dB. It filters bandwidths of 10kHz to 100MHz, with a total peak surge current of 32,500 amps, while providing a response time of less than 1 nanosecond.

Functioning Indicator

The easily seen three colour LED informs the user of the working status of the Always “On”™ 2+2 and 2+0 filter.

Optional Communications

Form A, B or C contacts allow the user to monitor the status of the 2+2 or 2+0 filter from a remote location.

Mounting Options

The 2+2 and 2+0 come standard with J-Rail or an optional flange mounting is available.

Product Warranty

Always “On”™ 2+2 and 2+0 filters are warrantied against failure for two years (exchange or repair warranty).

5-Year User Guarantee

Always “On”™ guarantees against electrical damage to the protected power supplies by power aberrations for 5 years.

Conclusion

The “PLC” 2+2 and 2+0 filters increase up-times to the maximum, which increases production and results in higher profits. It also offers substantial savings through decreased down-time and decreased repair costs.

FOR ALWAYS “ON”™ UPC ORDER CODES, VISIT WWW.ALWAYSON.COM.

Always “On”™ UPS Systems Inc., #100 - 150 Campion Road, Kelowna, BC Canada V1X 7S8

"PLC" TWO PLUS AND TWO PLUS TWO PROTECTOR



TVSS AND DATA LINE FILTER

TVSS FILTERS THREE WIRE GROUNDED / TWO WIRE UNGROUNDED
DATA LINE FILTERS- THREE AND FOUR WIRE DATA BUS PROTECTION

NOW 4 TYPES OF HIGH END PROTECTION IN ONE BOX

A/C POWER CONDITIONING (IN BOTH THE TWO PLUS AND TWO PLUS TWO)
SURGE PROTECTION UTILIZING TVSS / HYBRID DESIGN

Specifications:

	3 WIRE GROUNDED	2 WIRE UNGROUNDED
Operating Voltage	120VAC Single Phase	120VAC Single Phase
Power Rating	360VA/600VA/1200VA/1800VA	360VA/600VA/1200VA/1800VA
Amperage	3/5/10/15	3/5/10/15
Frequency	50/60Hz	50/60Hz
Protection Modes	L-N, L-G, N-G	L-N
Maximum Clamping Voltage	150V	150V
Noise Attenuation	normal mode common mode	75dB @ 100kHz
Filter Band Width	10kHz to 100 MHz	10kHz to 100 MHz
Total Peak Surge Current	up to 32,500A	up to 13,000A
Joules	up to 750 joules	up to 750 joules
Response Time	< 1 nanosecond	< 1 nanosecond
Indicators	Status and fault LED	Status and fault LED
Options-	Dry contacts (for remote monitoring)	

DATA LINE PROTECTION (TWO PLUS TWO ONLY)

This solid state semi-conductor series offers surge protection for line to line and lines A, B, common and shield to ground. It is designed for 3 wire and 4 wire data bus communications that require approximately 5VDC difference between line and line. It is compatible with DeviceNet, Data Highway Plus, Modbus Plus, Genius Bus, Simatic Net, Profibus, CompoBus/S, RS485, RS422, Twisted Pair, 3 Wire and Industrial Networks up to 100Mb/sec.

Strike Breakdown Voltage	13V @ 100V/uSec, 10.5V @ 100V/Sec
Maximum DC Operating Voltage	9.6VDC
Clamping Voltage	81V
Maximum Surge Current	1kA
Maximum Capacitance	A-B Lines L-L 2.9pF, L-G 73pF
Tested to UL497B	

DeviceNet

Includes 24VDC Bus protection

ORDERING INFORMATION:

VOLTS	AMPS	UPC Order Codes	
		PLC 2 Plus	PLC 2 Plus 2
120	3	825433 70000	825433 71000
120	5	825433 70010	825433 71010
120	10	825433 70020	825433 71020
120	15	825433 70030	825433 71030
220	3	825433 70110	825433 71101
220	5	825433 70120	825433 71111
220	10	825433 70130	825433 71121
220	15	825433 70140	825433 71131

PHYSICAL DATA (BOTH)

DIN RAIL/ FLANGE MOUNT CONTAINER

Operating Temperature: -40 to +60 C

Dimensions 110 x 75 x 110mm (4.375 x 2.75 x 4.375) inches

Weight 2kg / 4.5lbs

Specifications are subject to change without notice to reflect upgrades and improvement in technology.

Description of Model Number

Model Style	Model Type	Voltage	Current Rating	AC Filter	Data and VDC Filter	Dry Contacts
PLC	2+2 2+0	120 240	3 5 10 15	AC	DP (2+2 only)	DCA DCB DCC (2+0 only)

FOR MORE INFORMATION CALL CUSTOMER SERVICE TOLL-FREE AT 1-877-259-2976 Ext. 451.

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