

# SurgeFree™

**MODEL**
**500 Series, 530P**
**Single Phase AC Protectors**
**Parallel Models**

The 530P is a versatile protector that is optimized for single phase applications up to 240VAC. Low impedance construction results in superior protection due to low let-through levels, without sacrificing reliability. At the heart of the protector is our new, all mode, single phase protection module. Protection components are thermally protected to ensure safety and are continuously monitored by dedicated status indicators. The 530P comes in an indoor/outdoor rated, corrosion resistant compact enclosure. It can be wired to a service panel or can reside near or within the protected equipment as a dedicated protector.

The 530P is offered with or without enclosure for retrofit and OEM applications. Optional relay contacts provide remote protector status monitoring. Its plug-in status board allows for field monitoring upgrades without having to send the whole unit back to the factory. The 530P is covered by our 20-year, no nonsense warranty and our lifetime warranty on the module and fuses.


**I<sub>peak</sub> = 60kA to 100kA total (model dependent)**
**20-Year Warranty  
Lifetime Module Replacement**

## FEATURES

- Modular
- Low Impedance Construction
- All protection elements & fuses monitored
- Thermally protected varistors & all modes protected
- NEMA 4X indoor/outdoor enclosure with padlock eyes
- Dedicated LED indicators
- EMI/RFI filtering; optional enclosure-free
- Optional relay (surge protected) and beeper with mute
- Small form factor
- All modes protected

## SPECIFICATIONS

SPD Type:	Type 2 (with enclosure), Type 4 Component Assembly (without enclosure)
I <sub>n</sub> :	5kA
Maximum Continuous Operating VAC (MCOV):	115% Rated Line Voltage
Varistor MCOV:	125% Rated Line Voltage Minimum
SCCR:	50kA AIC
Surge Current/Mode (8/20μs):	-120/240V (split phase models) 20kA per mode (L1-N, L2-N, L1-G, L2-G, N-G) -120V/-220V/-240V models, 40kA L1-N, 40kA L1-G, 20kA N-G -240V-LLG models, 20kA L1-G, 20kA L2-G, 20kA L1-L2
Response Time:	<1 ns
Status Indicators:	4/5 Blue status LEDs depending on model. 1 Green LED on motherboard
Optional Status Indicators:	Standard LED indicators plus beeper with mute and SPST relay contacts
Modes of Protection:	L-N, L-G, L-L, N-G
Operating Altitude:	13,000ft. (4000m)
Temp. (Operating/Storage):	-40° to +70°C/-40° to +85°C
Enclosure:	NEMA 4X nonmetallic. Indoor/Outdoor, UL94-5VA+UV(f1)
Weight:	2.4 lbs./1.1kg (with enclosure) 1.0 lbs./0.5kg (without enclosure)
Power Connections:	20 to 6 AWG (0.52 - 13.3mm <sup>2</sup> ) Cage Clamp Terminal Blocks
Ground Connection:	Screw Terminal (Ring Terminal Lug included) 12-10AWG (3.31-5.26mm <sup>2</sup> )
Relay (where equipped):	28 to 16 AWG (0.081-1.31mm <sup>2</sup> ) Cage Clamp Pluggable Terminal Block
Conduit Connector Size:	3/4" Trade (2 holes - 1.093" (27.76mm)) Note: Hole Plugs included
Dimensions (overall), with enclosure:	8.33"L x 7.01"W x 4.22"D (212mm L x 178mm W x 107mm D)
Mounting, with enclosure:	8.875"L x 5.00"W (4 slots-0.200"W) (225mm L x 127mm W (4 slots-5.1mm W))
Dimensions (overall) without enclosure including 1" standoffs:	7.4"L x 5.4"W x 4.5"D (188mm L x 137mm W x 114mm D)
Mounting, without enclosure:	See 500 series installation instructions document 299-700-33

**MCG Surge Protection** • Toll Free: 1-800-851-1508 • [www.mcgsurge.com](http://www.mcgsurge.com) • E-Mail: [info1@mcgsurge.com](mailto:info1@mcgsurge.com)  
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# Specifications

- ANSI/IEEE C62.41-2002
- IEC 61643-1-1998
- UL 1449, 4th Ed.

## Model 500 Series

Model 500 Series	Service	VPR L-N	VPR L-G	VPR N-G	VPR L-L
530P-120/240V	120/240VAC, 1 $\phi$ , 3W+Gnd	800	800	700	1200
530P-120V	120VAC, 1 $\phi$ , 2W+Gnd	800	800	700	n/a
530P-220V	220VAC, 1 $\phi$ , 2W+Gnd	1500	1500	1500	n/a
530P-240V	240VAC, 1 $\phi$ , 2W+Gnd	1200	1200	1200	n/a
530P-240V-LLG	240VAC, 1 $\phi$ , 2W+Gnd*	n/a	1200	n/a	1100

\*Line 1, Line 2, and Ground (No Neutral)

### Basic Models Names and Options:

530P-120/240V

530P-120V

530P-220V

530P-240V

530P-240V-LLG

Adding “-N” to basic model name deletes enclosure – protection assembly only (OEM style).

Adding “-UFP” to basic model name adds protection status relay contacts and beeper with mute.

UFP= Upgraded Front Panel

### Ordering example: 530P-120/240V-UFP

This model is a parallel-connected 500 series protector (with enclosure) for use on a 120/240VAC, 1 $\phi$ , 3W + G service with the optional remote relay contacts and beeper option.

UL File Number: E322161

UL: 530P MODELS WITH ENCLOSURE: SPD Type 2, USL/CNL, UL1449, 4th Edition/CSA C22.2 No. 269.2

530P MODELS WITHOUT ENCLOSURE: SPD Type 4CA, USR, UL1449, 4th Edition / SPD Type 5, CNR, CSA C22.2 No 269.5

ARRA Certification: Complies with ARRA 1605 Requirements