Class C/Type 2 Power Supply Surge Protection Box

BSPB Series 20kA/10kA 230V~All mode

Protection/Power

Surge Protection Class C/Type 2

Single-phase
Power Supply Surge Protector

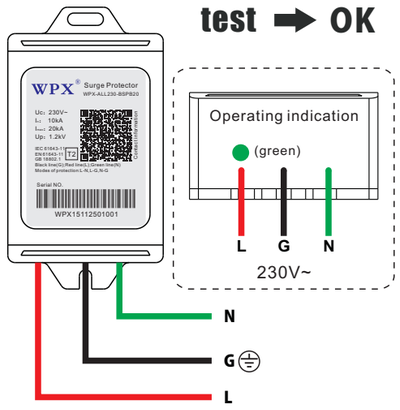
Description of products

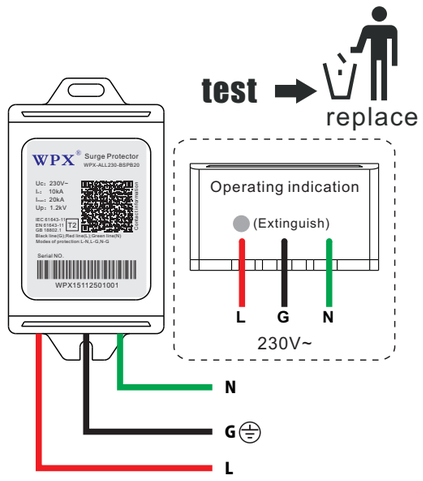
WPX's ALL230-BSPB series Surge Protective Device(SPD) covers critical gate motors, ensuring secure access to guarded properties. It isdesigned to operate in indoor or outdoor environments, at the protected equipment.

Features & Benefits

- **Easy, safe,** and maintenance-free operation.
- **Repeatable surge current** capability for long life.
- **Easily retrofits** on existing panelboards.
- **Compact Module** attaches directly to breaker panel. Dimensions: 78mm(L)×53mm(W)×30mm(H) Weight: 200g
- **Patented** WPX BSP-SPD Detection Circuitry monitors all modes of failure, including neutral to ground.
- Standard visible alarm function to indicate reduced protection.
- ANSI/IEEE C62.41 Category A, B, & C3 Compatible ANSI/IEEE C62.11, C62.45 Tested.
- **High-isolation dry contacts** for remote system integrity monitoring.
- **IEC 61643-11 Class II.**
- **3-Years Warranty.**

Fault indication

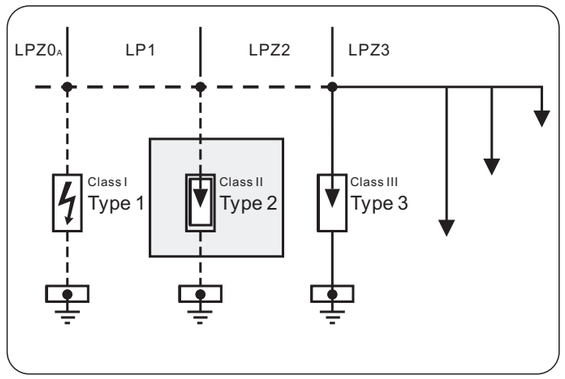




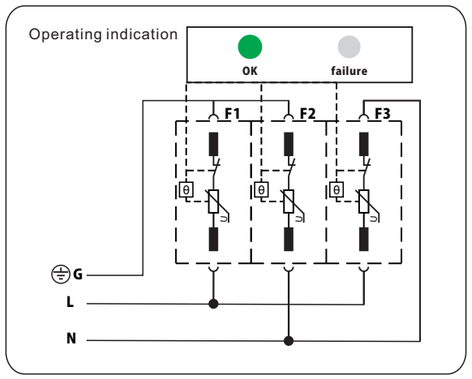
Technical Parameters

Model Number	WPX-ALL230-BSPB20	WPX-ALL230-BSPB10
SPD according IEC61643-11/GB 18802.1/EN 61643-11	Class II/Type 2	Class II/Type 2
Applicable power supply system	230V~/Single-phase	230V~/Single-phase
Modes of protection	L-N;L-G;N-G	L-N;L-G;N-G
Rated Working Voltage Uo	230V~	230V~
Max Continuous Operating Voltage U_c (L-G,N-G,L-N)	275V~	275V~
Total Discharge Current I_{total}(8/20μs) (L-G,N-G,L-N)	30kA	15kA
Max Discharge Current I_{max}(8/20μs) (L-G,N-G,L-N)	75kA	30kA
Nominal Discharge Current I_n(8/20μs) (L-G,N-G,L-N)	10kA	5kA
Max Discharge Current I_n(8/20μs) (L-G,N-G,L-N)	20kA	10kA
1kA, Voltage Protection Level U_p(L-G,N-G,L-N)	≤0.8kV	≤0.8kV
5kA, Voltage Protection Level U_p(L-G,N-G,L-N)	≤0.9kV	≤1.0kV
10kA ,In Voltage Protection Level Up(L-G,N-G,L-N)	≤1.2kV	———
Response Time tA	≤25ns	≤25ns
Max. mains-side Overcurrent Protection(L)	40A(gL/gG)	40A(gL/gG)
Standard Monitoring	LED and visible alarm	LED and visible alarm
Operating Temperature Range(in parallel)	-40℃...+85℃	-40℃...+85℃
Relative Humidity	≤95% (25℃)	≤95% (25℃)
Atmospheric Pressure	76kPa...106kPa	76kPa...106kPa
Altitude	0 to 10,000 feet	0 to 10,000 feet
Working Frequency	0Hz...600Hz	0Hz...600Hz
Enclosure material	Grey ABS	Grey ABS
Degree of protection（IP code）	IP65/IEC 60529	IP65/IEC 60529
Leading wire size	12AWG/0.5m	12AWG/0.5m

Coordination



Circuit Diagram



L-N,L-G,N-G mode

Single-phase
Power Supply Surge Protector

Installation and Maintenance

Installation

1 Before installation, check the surface of power surge protector whether have damage, and then measure the resistance is normal or not between terminal L,N,PE of power surge protector with a multimeter (tramegger is prohibited) : Resistance between L, N to PE should be infinite ; Resistance between L to N should be more than 1MΩ.

2 After fixed the Power surge protector, connected it to power supply system in the front end of the protected device according to the wiring's marking. Red line-L line,Green line-N line, Black line-G line; Among them,yellow line as short as possible, less than 0.5m.

3 After wiring, checked it is correct, then turn on the power supply; at this time the indicator of the power surge protector will be “green”,means this power surge protector working normally.

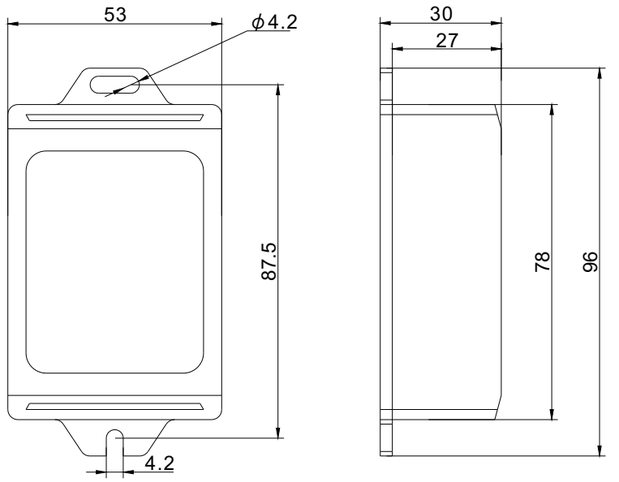
Operation and maintenance

1 The power surge protector setted thermofuse, over-current protection in the circuit; the indicator of the power surge protector is”green” when work normally. When the power surge protector degrade to the end of its life due to lighting strike,internal temperature control switch automatically withdrawn from the protected lines, the indicator went into “Extinguish ” alert status.

2 This power surge protector does not need special maintenance in normal use. As power surge protector is in uninterrupted charged status for long time, in order to prevent the failure of power surge protector, please check its working status regularly, especially check in time after the thunderstorm. If find the indicator of the power surge is “Extinguish ”, must replace the power surge protector immediately.

3 When the surge protector in the process of normal use, especially in thunderstorm season, should check the earthing system of the power surge protector, make it keep good earthing. Otherwise, the protection effect of the power surge protector will be affected differently. If grounding line PE in open circuit status, power surge protector will lose protection function.

Dimension:mm



Leading wire size
L=0.5m
Specification:12AWG

Caution

DO NOT DISASSEMBLE THE PRODUCT IN CASE THE ELECTRICITY INSIDE!!

Warranty

Kindly Note: The warranty will be void if the products have been disassembled, repaired or modified without WPX's authorization.

Contact Us

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Website

Class C/Type 2 Power Supply Surge Protection Box

BSPB Series 20kA/10kA 230V~All mode

Protection/Power

Surge Protection Class C/Type 2

Single-phase
Power Supply Surge Protector

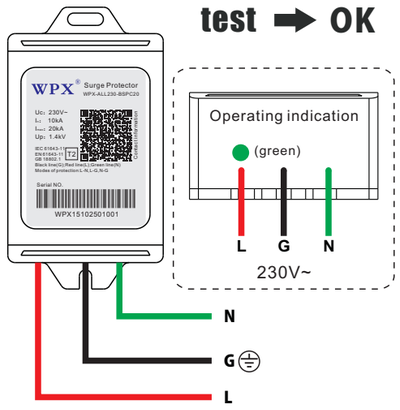
Description of products

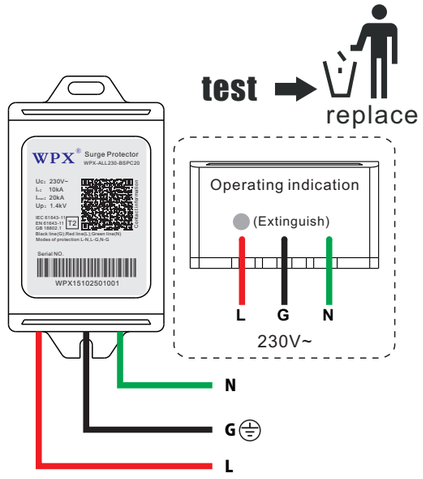
WPX's ALL230-BSPC series Surge Protective Device(SPD) covers critical gate motors, ensuring secure access to guarded properties. It isdesigned to operate in indoor or outdoor environments, at the protected equipment.

Features & Benefits

- **Easy, safe,** and maintenance-free operation.
- **Repeatable surge current** capability for long life.
- **Easily retrofits** on existing panelboards.
- **Compact Module** attaches directly to breaker panel. Dimensions: 78mm(L)×53mm(W)×30mm(H) Weight: 200g
- **Patented** WPX BSP-SPD Detection Circuitry monitors all modes of failure, including neutral to ground.
- Standard visible alarm function to indicate reduced protection.
- ANSI/IEEE C62.41 Category A, B, & C3 Compatible ANSI/IEEE C62.11, C62.45 Tested.
- **High-isolation dry contacts** for remote system integrity monitoring.
- **IEC 61643-11 Class II.**
- **3-Years Warranty.**

Fault indication

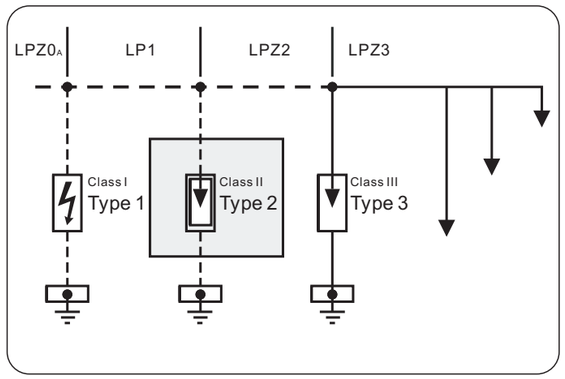




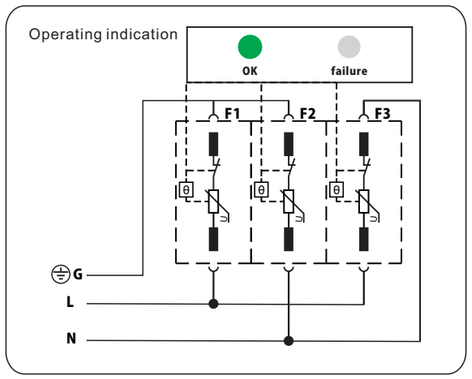
Technical Parameters

Model Number	WPX-ALL230-BSPC20	WPX-ALL230-BSPC10
SPD according IEC61643-11/GB 18802.1/EN 61643-11	Class II/Type 2	Class II/Type 2
Applicable power supply system	230V~/Single-phase	230V~/Single-phase
Modes of protection	L-N;L-G;N-G	L-N;L-G;N-G
Rated Working Voltage Uo	230V~	230V~
Max Continuous Operating Voltage U_c (L-G,N-G,L-N)	320V~	320V~
Total Discharge Current I_{total}(8/20μs) (L-G,N-G,L-N)	30kA	15kA
Max Discharge Current I_{max}(8/20μs) (L-G,N-G,L-N)	75kA	30kA
Nominal Discharge Current I_n(8/20μs) (L-G,N-G,L-N)	10kA	5kA
Max Discharge Current I_n(8/20μs) (L-G,N-G,L-N)	20kA	10kA
1kA, Voltage Protection Level U_p(L-G,N-G,L-N)	≤0.8kV	≤0.8kV
5kA, Voltage Protection Level U_p(L-G,N-G,L-N)	≤0.9kV	≤1.2kV
10kA ,In Voltage Protection Level Up(L-G,N-G,L-N)	≤1.4kV	———
Response Time tA	≤25ns	≤25ns
Max. mains-side Overcurrent Protection(L)	40A(gL/gG)	40A(gL/gG)
Standard Monitoring	LED and visible alarm	LED and visible alarm
Operating Temperature Range(in parallel)	-40℃...+85℃	-40℃...+85℃
Relative Humidity	≤95% (25℃)	≤95% (25℃)
Atmospheric Pressure	76kPa...106kPa	76kPa...106kPa
Altitude	0 to 10,000 feet	0 to 10,000 feet
Working Frequency	0Hz...600Hz	0Hz...600Hz
Enclosure material	Grey ABS	Grey ABS
Degree of protection（IP code）	IP65/IEC 60529	IP65/IEC 60529
Leading wire size	12AWG/0.5m	12AWG/0.5m

Coordination



Circuit Diagram



L-N,L-G,N-G mode

Single-phase
Power Supply Surge Protector

Installation and Maintenance

Installation

1 Before installation, check the surface of power surge protector whether have damage, and then measure the resistance is normal or not between terminal L,N,PE of power surge protector with a multimeter (tramegger is prohibited) : Resistance between L, N to PE should be infinite ; Resistance between L to N should be more than 1MΩ.

2 After fixed the Power surge protector, connected it to power supply system in the front end of the protected device according to the wiring's marking. Red line-L line,Green line-N line, Black line-G line; Among them,yellow line as short as possible, less than 0.5m.

3 After wiring, checked it is correct, then turn on the power supply; at this time the indicator of the power surge protector will be “green”,means this power surge protector working normally.

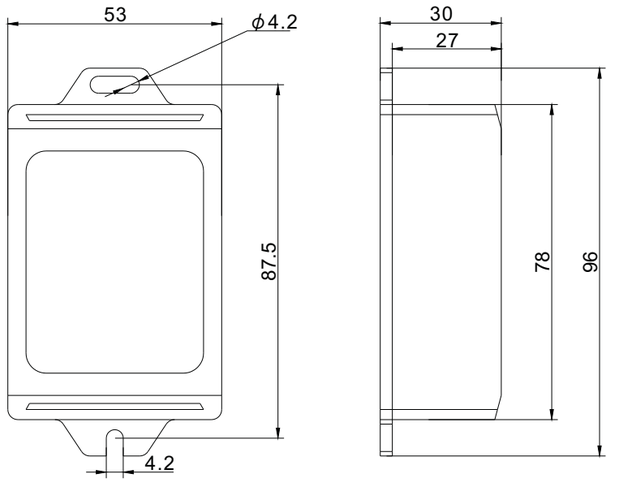
Operation and maintenance

1 The power surge protector setted thermofuse, over-current protection in the circuit; the indicator of the power surge protector is”green” when work normally. When the power surge protector degrade to the end of its life due to lighting strike,internal temperature control switch automatically withdrawn from the protected lines, the indicator went into “Extinguish ” alert status.

2 This power surge protector does not need special maintenance in normal use. As power surge protector is in uninterrupted charged status for long time, in order to prevent the failure of power surge protector, please check its working status regularly, especially check in time after the thunderstorm. If find the indicator of the power surge is “Extinguish ”, must replace the power surge protector immediately.

3 When the surge protector in the process of normal use, especially in thunderstorm season, should check the earthing system of the power surge protector, make it keep good earthing. Otherwise, the protection effect of the power surge protector will be affected differently. If grounding line PE in open circuit status, power surge protector will lose protection function.

Dimension:mm



Leading wire size
L=0.5m
Specification:12AWG

Caution

DO NOT DISASSEMBLE THE PRODUCT IN CASE THE ELECTRICITY INSIDE!!

Warranty

Kindly Note: The warranty will be void if the products have been disassembled, repaired or modified without WPX's authorization.

Contact Us

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Website

Class C/Type 2 Power Supply Surge Protection Box

BSPB Series 20kA/10kA 120V~All mode

Protection/Power

Surge Protection Class C/Type 2

Single-phase
Power Supply Surge Protector

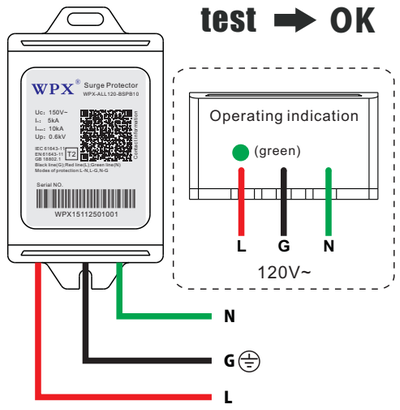
Description of products

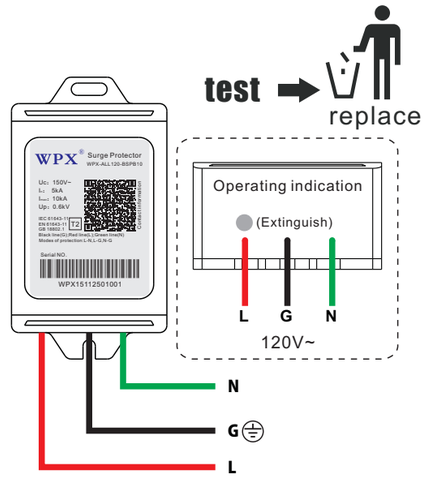
WPX's ALL120-BSPB series Surge Protective Device(SPD) covers critical gate motors, ensuring secure access to guarded properties. It isdesigned to operate in indoor or outdoor environments, at the protected equipment.

Features & Benefits

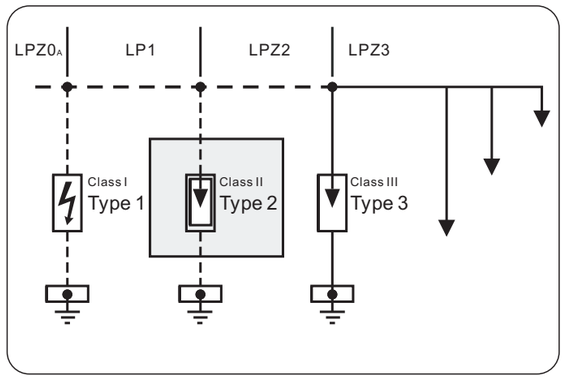
- **Easy, safe,** and maintenance-free operation.
- **Repeatable surge current** capability for long life.
- **Easily retrofits** on existing panelboards.
- **Compact Module** attaches directly to breaker panel. Dimensions: 78mm(L)×53mm(W)×30mm(H) Weight: 200g
- **Patented** WPX BSP-SPD Detection Circuitry monitors all modes of failure, including neutral to ground.
- Standard visible alarm function to indicate reduced protection.
- ANSI/IEEE C62.41 Category A, B, & C3 Compatible ANSI/IEEE C62.11, C62.45 Tested.
- **High-isolation dry contacts** for remote system integrity monitoring.
- **IEC 61643-11 Class II.**
- **3-Years Warranty.**

Fault indication

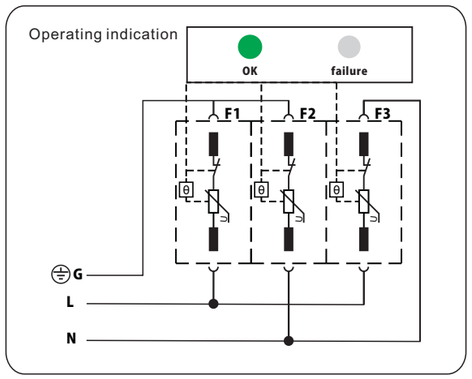




Coordination



Circuit Diagram



L-N,L-G,N-G mode

Technical Parameters

Model Number	WPX-ALL120-BSPB20	WPX-ALL120-BSPB10
SPD according IEC61643-11/GB 18802.1/EN 61643-11	Class II/Type 2	Class II/Type 2
Applicable power supply system	120V~/Single-phase	120V~/Single-phase
Modes of protection	L-N;L-G;N-G	L-N;L-G;N-G
Rated Working Voltage Uo	120V~	120V~
Max Continuous Operating Voltage U_c (L-G,N-G,L-N)	150V~	150V~
Total Discharge Current I_{total}(8/20μs) (L-G,N-G,L-N)	30kA	15kA
Max Discharge Current I_{max}(8/20μs) (L-G,N-G,L-N)	75kA	30kA
Nominal Discharge Current I_n(8/20μs) (L-G,N-G,L-N)	10kA	5kA
Max Discharge Current I_n(8/20μs) (L-G,N-G,L-N)	20kA	10kA
1kA, Voltage Protection Level U_p(L-G,N-G,L-N)	≤0.6kV	≤0.6kV
5kA, Voltage Protection Level U_p(L-G,N-G,L-N)	≤0.7kV	≤0.7kV
10kA ,In Voltage Protection Level Up(L-G,N-G,L-N)	≤0.8kV	———
Response Time tA	≤25ns	≤25ns
Max. mains-side Overcurrent Protection(L)	40A(gL/gG)	40A(gL/gG)
Standard Monitoring	LED and visible alarm	LED and visible alarm
Operating Temperature Range(in parallel)	-40℃...+85℃	-40℃...+85℃
Relative Humidity	≤95% (25℃)	≤95% (25℃)
Atmospheric Pressure	76kPa...106kPa	76kPa...106kPa
Altitude	0 to 10,000 feet	0 to 10,000 feet
Working Frequency	0Hz...600Hz	0Hz...600Hz
Enclosure material	Grey ABS	Grey ABS
Degree of protection（IP code）	IP65/IEC 60529	IP65/IEC 60529
Leading wire size	12AWG/0.5m	12AWG/0.5m

Single-phase
Power Supply Surge Protector

Installation and Maintenance

Installation

1 Before installation, check the surface of power surge protector whether have damage, and then measure the resistance is normal or not between terminal L,N,PE of power surge protector with a multimeter (tramegger is prohibited) : Resistance between L, N to PE should be infinite ; Resistance between L to N should be more than 1MΩ.

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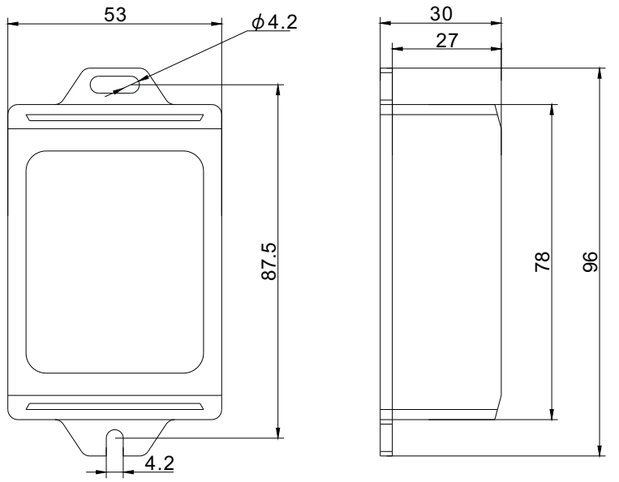
Dimension:mm



Leading wire size
L=0.5m
Specification:12AWG

Caution

DO NOT DISASSEMBLE THE PRODUCT IN CASE THE ELECTRICITY INSIDE!!

Warranty

Kindly Note: The warranty will be void if the products have been disassembled, repaired or modified without WPX's authorization.

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