Shihlin Electric

SURGE PROTECTIVE DEVICE

ISO 9001 SGS
CNAS
ISO14001
CE

SHIHLIN ELECTRIC & ENGINEERING

Surge Protective Device

Feature

1. Suitable for AC220V/380V, 50/60Hz power system.
2. Low residual voltage and low leakage current.
3. Thermal trip/fuse function for fast response.
4. Plug-in modular design for easy installation and replacement.
5. Standard 35mm din-rail installation.
6. Status window display
7. Additional alarm switch can be added.
8. Comply with IEC61643 standard

Electrical Characteristics

1. SPD structure: Inner core part is a metal oxide varistor made with zinc oxide.
2. Rated voltage (Un): The rated voltage of SPD device will be the same with rated voltage of the device being protected.
3. Maximum continuous operating voltage (Uc): 275VAC, Uc should be 15% greater than Un.
4. Frequency: 50/60 Hz
5. Time: MOV≦25ns, NPE≦100ns
6. Voltage protection level (Up): Less than rated impulse withstand voltage of the device being protected.
7. Life expectancy: It takes voltage surge 10000 times within rated discharge current
8. Operating temperature: -5˚C ~ +40˚C, relative humidity: 30~99%, operating altitude: 2000 meter below.

Operating Principle

1. Voltage limiting type SPD: Having high impedance when no surges occur and as the surge voltage and current increase, the impedance decrease. By using varistor and transient voltage suppressor (TVS). Leakage current is limited, with fast response time and low residual voltage.
2. Voltage switching type SPD: Having high impedance when no surges occur and become low impedance when surges occur. Use spark gap and gas discharge tube type parts. Voltage discharge capability is high.

Specification

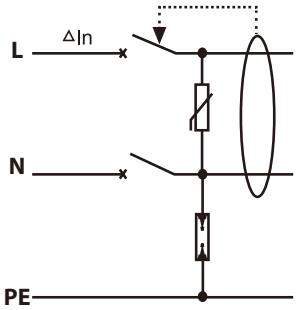
- Class III

Model	Uoc	Uc	Up	Pole	Alarm Switch
BHP06M3	6kV	275Vac	1.0kV	2P 3P 4P	250VAC/0.1A 125VDC/0.2A 75VDC/0.5A

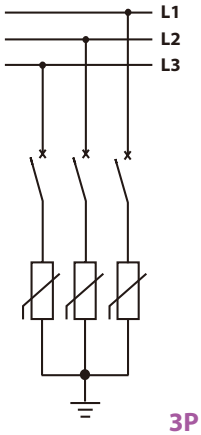
- Class II

Model	Type	Uc	In	Imax	Up	tA	Pole	Alarm Switch
BHP20M2	MOV	275Vac	10kA	20kA	1.2kV	≦25ns	1P 3P 1P+NPE 2P+NPE 3P+NPE 6P+NPE	250V 0.25A
	NPE	255Vac	20kA	40kA		≦100ns		
BHP40M2	MOV	275Vac	20kA	40kA	1.3kV	≦25ns		250V 0.25A
	NPE	255Vac	40kA	80kA	1.5kV	≦100ns		
BHP65M2	MOV	275Vac	30kA	65kA	1.5kV	≦25ns		250V 0.25A
	NPE	255Vac	60kA	120kA		≦100ns		
BHP80M2	MOV	275Vac	40kA	80kA	1.7kV	≦25ns		250V 0.25A
	NPE	255Vac	80kA	160kA	1.5kV	≦100ns		
BHP100M2	MOV	275Vac	60kA	100kA	2kV	≦25ns		250V 0.25A
	NPE	255Vac	100kA	200kA	1.5kV	≦100ns		-

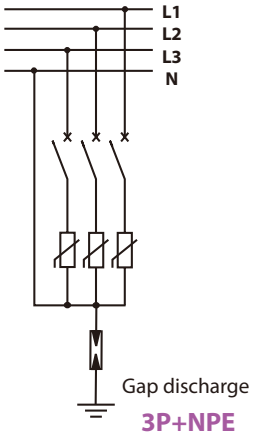
Wiring Diagrams



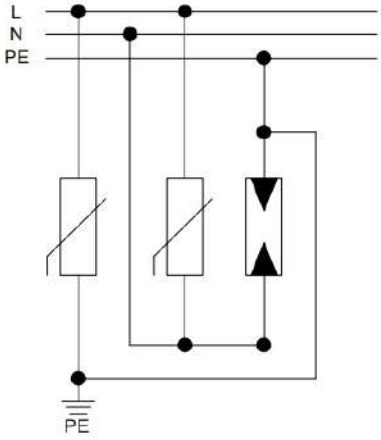
1P+NPE



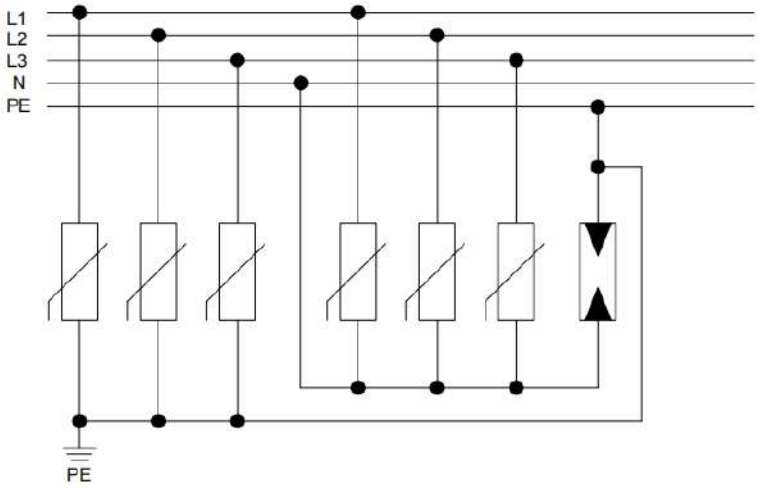
3P



3P+NPE



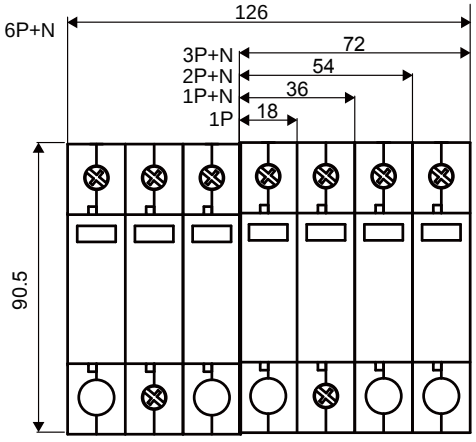
1P COMBINE 1P+N

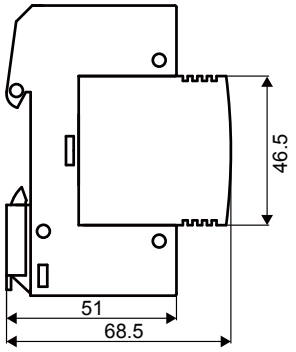


3P COMBINE 3P+N

BHP20M2 / BHP40M2 / BHP65M2 / BHP80M2

Dimensions (mm)





BHP20M2 / BHP40M2 / BHP65M2 / BHP80M2

SHIHLIN ELECTRIC & ENGINEERING

MOTOR CONTROL (CONTACTOR/ MS/ MMS), CIRCUIT BREAKER (MCCB/ ELCB/ EMCCB/ MCB), AIR CIRCUIT BREAKER, AUTOMATIC TRANSFER SWITCHES (Panel Board Type/ Residential Unit Use), SURGE PROTECTIVE DEVICE, LOW VOLTAGE POWER CAPACITORS, SMART METER, INVERTER

Breaker & switchgears overseas sales dept.
3F, No.9, Sec. 1, Chang-an E. Rd., Zhongshan Dist., Taipei City 10441, Taiwan
T. +886-2-2541-9822 F. +886-2-2581-2665
e-mail. b.export@seec.com.tw
http://circuit-breaker.seec.com.tw

Headquarters
16F, No.88, Sec. 6, Zhongshan N. Rd., Shilin Dist., Taipei City 11155, Taiwan
T. +886-2-2834-2662 F. +886-2-2836-6187
http://www.seec.com.tw

Distributor

B211007E.JKR-SPD-OB

ECOWELL AUTOMATION SDN. BHD.
GST NO. : 001383714816 1142575-K
2A, JALAN EIP 1,
EHSAN INDUSTRIAL PARK,
52100 KUALA LUMPUR.
Tel : 603-6262 3133
Fax : 603-6261 3303
info@ecowell.com.my

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Shihlin Electric

BHP40M2

Standard Compliance	IEC 61643-11			
Class	Class II			
Modes of Protection	L-N, N-PE		L-N, L-PE, N-PE: Full Mode	
Connection Type	Parallel			
Poles	1+NPE	3+NPE	2+NPE	6+NPE
Maximum Continuos Operating Voltage, Uc	275VAC 50/60Hz			
Nominal Voltage, Un	275Vac (L-N); 255Vac (N-PE)			
Maximum Discharge Current, Imax (8/20μs) Per Phase	40kA		80kA	
Maximum Discharge Current, Imax (8/20μs) Per Mode	40kA			
Nominal Discharge Current, In (8/20μs)	20kA			
Voltage Protection Level, Up @ In	≤ 1.3kV (L-N); 1.5kV (N-PE)			
Response Time, tA	MOV≦ 25ns, NPE≦ 100ns			
Status Indication	Green: SPD OK Red: SPD Failed			
Auxiliary Terminal (Alarm Monitoring)	Normally Close, NC Normally Open, NO			
Terminal Blocks Capacity Working Environments	temperature: -5˚C ~ +40˚C, relative humidity: 30~99%, operating altitude: 2000 meter below.			
Life expectancy:	It takes voltage surge 10000 times within rated discharge current			
Method of Mounting	Fixed 35mm DIN rail or screw terminal			
Enclosure Material and Protection Level	IP20; Reinforced PA66: UL94 V-0			
Compliances:	TUV		TUV & JKR EMAL	

ECOWELL AUTOMATION SDN. BHD.
GST NO. : 001383714816 1142575-K
2A, JALAN EIP 1,
EHSAN INDUSTRIAL PARK,
52100 KUALA LUMPUR.
Tel : 603-6262 3133
Fax : 603-6261 3303
info@ecowell.com.my

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BHP65M2

Standard Compliance	IEC 61643-11			
Class	Class II			
Modes of Protection	L-N, N-PE		L-N, L-PE, N-PE: Full Mode	
Connection Type	Parallel			
Poles	1+NPE	3+NPE	2+NPE	6+NPE
Maximum Continuos Operating Voltage, Uc	275VAC 50/60Hz			
Nominal Voltage, Un	275Vac (L-N); 255Vac (N-PE)			
Maximum Discharge Current, Imax (8/20μs) Per Phase	65kA		130kA	
Maximum Discharge Current, Imax (8/20μs) Per Mode	65kA			
Nominal Discharge Current, In (8/20μs)	30kA			
Voltage Protection Level, Up @ In	≤ 1.5kV (L-N); 1.5kV (N-PE)			
Response Time, tA	MOV≦ 25ns, NPE≦ 100ns			
Status Indication	Green: SPD OK Red: SPD Failed			
Auxiliary Terminal (Alarm Monitoring)	Normally Close, NC Normally Open, NO			
Terminal Blocks Capacity Working Environments	temperature: -5˚C ~ +40˚C, relative humidity: 30~99%, operating altitude: 2000 meter below.			
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