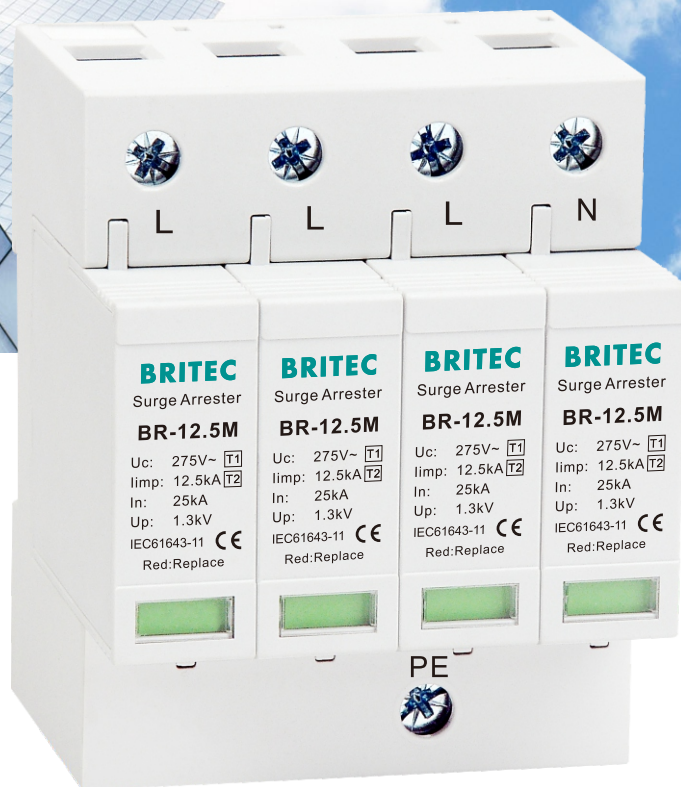


**B+C**  
Surge Arrester

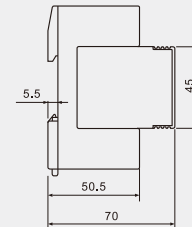
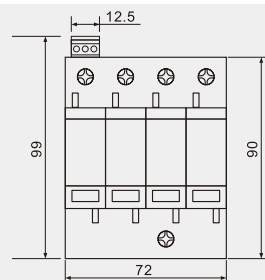
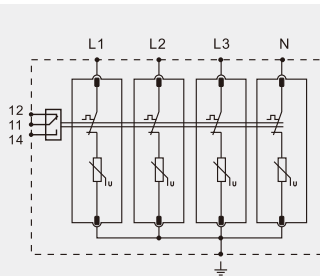
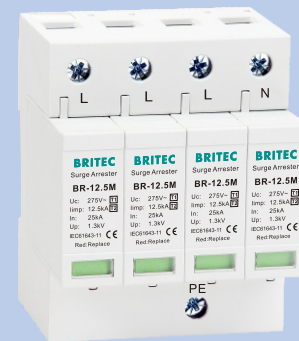


## T1+T2 Surge Arrester

[www.britecelectric.com](http://www.britecelectric.com)

## BR-12.5M 4P

### T1+T2 Surge Arrester

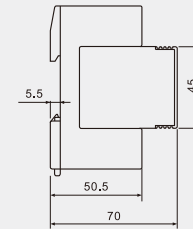
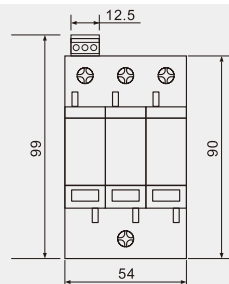
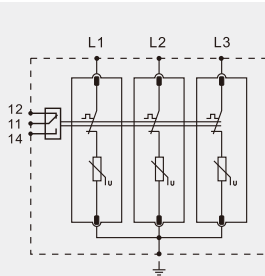


■ BR-12.5M 4P surge arrester is suitable for TN-S system.

	BR-12.5M 150 4P	BR-12.5M 275 4P	BR-12.5M 320 4P
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage $U_c$	150V	275V	320V
Lightning impulse current (10/350 $\mu$ s) $I_{imp}$	12.5kA	12.5kA	12.5kA
Nominal discharge current (8/20 $\mu$ s) $I_n$	25kA	25kA	25kA
Max. discharge current (8/20 $\mu$ s) $I_{max}$	60kA	60kA	60kA
Voltage protection level $U_p$	$\leq 1.0kV$	$\leq 1.3kV$	$\leq 1.5kV$
Specific energy $W/R$	39kJ/ $\Omega$	39kJ/ $\Omega$	39kJ/ $\Omega$
Short circuit withstand capacity $I_{scsr}$	25kA	25kA	25kA
Temporary overvoltage TOV-withstand $U_T$	175V/5sec.	335V/5sec.	350V/5sec.
Temporary overvoltage TOV-safe failure $U_T$	250V/120min.	440V/120min.	550V/120min.
Max. backup fuse	160A gG	160A gG	160A gG
Response time $t_A$	$\leq 25ns$	$\leq 25ns$	$\leq 25ns$
Operating temperature range $T_u$	-40°C-80°C	-40°C-80°C	-40°C-80°C
Operating state/fault indication	green/red	green/red	green/red
Cross-section area (Min.)	4mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)	35mm <sup>2</sup>	35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B8411	B8413	B8415
Order Code (With remote signaling)	B8412	B8414	B8416

## BR-12.5M 3P

### T1+T2 Surge Arrester

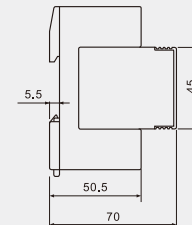
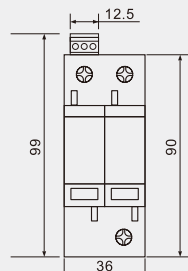
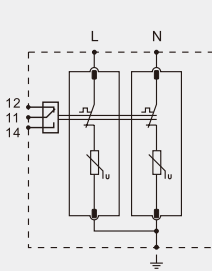
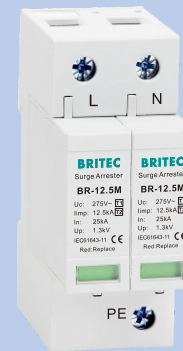


BR-12.5M 3P surge arrester is suitable for TN-C system.

		BR-12.5M 150 3P	BR-12.5M 275 3P	BR-12.5M 320 3P
SPD classification according to EN61643-11		Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11		Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage	Uc	150V	275V	320V
Lightning impulse current (10/350µs)	Iimp	12.5kA	12.5kA	12.5kA
Nominal discharge current (8/20µs)	In	25kA	25kA	25kA
Max. discharge current (8/20µs)	I <sub>max</sub>	60kA	60kA	60kA
Voltage protection level	Up	≤1.0kV	≤1.3kV	≤1.5kV
Specific energy	W/R	39kJ/Ω	39kJ/Ω	39kJ/Ω
Short circuit withstand capacity	I <sub>sc</sub>	25kA	25kA	25kA
Temporary overvoltage TOV-withstand	U <sub>T</sub>	175V/5sec.	335V/5sec.	350V/5sec.
Temporary overvoltage TOV-safe failure	U <sub>T</sub>	250V/120min.	440V/120min.	550V/120min.
Max. backup fuse		160A gG	160A gG	160A gG
Response time	t <sub>A</sub>	≤25ns	≤25ns	≤25ns
Operating temperature range	T <sub>u</sub>	-40°C–80°C	-40°C–80°C	-40°C–80°C
Operating state/fault indication		green/red	green/red	green/red
Cross-section area (Min.)		4mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)		35mm <sup>2</sup>	35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on		35mm Din rail		
Enclosure material		Thermoplastic UL94-V0		
Degree of protection		IP20	IP20	IP20
Order Code		B8311	B8313	B8315
Order Code (With remote signaling)		B8312	B8314	B8316

## BR-12.5M 2P

### T1+T2 Surge Arrester



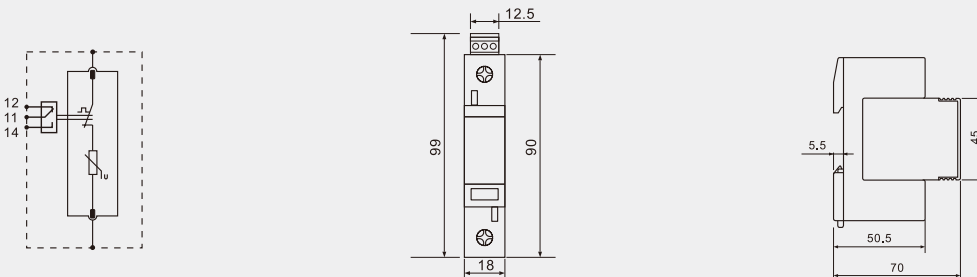
■ BR-12.5M 2P surge arrester is suitable for single phase TN system.

	BR-12.5M 150 2P	BR-12.5M 275 2P	BR-12.5M 320 2P
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage	Uc	150V	275V
Lightning impulse current (10/350µs)	Iimp	12.5kA	12.5kA
Nominal discharge current (8/20µs)	In	25kA	25kA
Max. discharge current (8/20µs)	I <sub>max</sub>	60kA	60kA
Voltage protection level	Up	≤1.0kV	≤1.3kV
Specific energy	W/R	39kJ/Ω	39kJ/Ω
Short circuit withstand capacity	I <sub>sc</sub>	25kA	25kA
Temporary overvoltage TOV-withstand	U <sub>T</sub>	175V/5sec.	335V/5sec.
Temporary overvoltage TOV-safe failure	U <sub>T</sub>	250V/120min.	440V/120min.
Max. backup fuse		160A gG	160A gG
Response time	t <sub>A</sub>	≤25ns	≤25ns
Operating temperature range	T <sub>u</sub>	-40°C-80°C	-40°C-80°C
Operating state/fault indication		green/red	green/red
Cross-section area (Min.)		4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)		35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B8211	B8213	B8215
Order Code (With remote signaling)	B8212	B8214	B8216



## BR-12.5M 1P

T1+T2 Surge Arrester

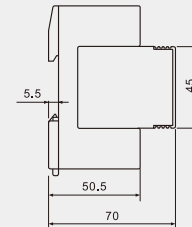
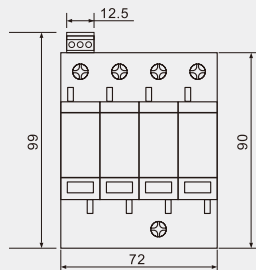
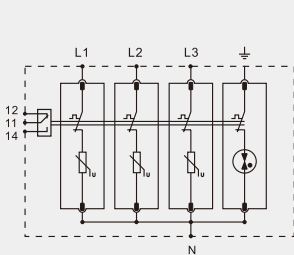


■ BR-12.5M 1P can be used to build 2P, 3P and 4P surge arresters.

	BR-12.5M 150 1P	BR-12.5M 275 1P	BR-12.5M 320 1P
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage	Uc	150V	275V
Lightning impulse current (10/350µs)	Iimp	12.5kA	12.5kA
Nominal discharge current (8/20µs)	In	25kA	25kA
Max. discharge current (8/20µs)	I <sub>max</sub>	60kA	60kA
Voltage protection level	Up	≤1.0kV	≤1.3kV
Specific energy	W/R	39kJ/Ω	39kJ/Ω
Short circuit withstand capacity	I <sub>sc</sub>	25kA	25kA
Temporary overvoltage TOV-withstand	U <sub>T</sub>	175V/5sec.	335V/5sec.
Temporary overvoltage TOV-safe failure	U <sub>T</sub>	250V/120min.	440V/120min.
Max. backup fuse		160A gG	160A gG
Response time	t <sub>A</sub>	≤25ns	≤25ns
Operating temperature range	T <sub>u</sub>	-40°C-80°C	-40°C-80°C
Operating state/fault indication		green/red	green/red
Cross-section area (Min.)		4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)		35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B8171	B8173	B8175
Order Code (With remote signaling)	B8172	B8174	B8176

## BR-12.5M 3+1

### T1+T2 Surge Arrester

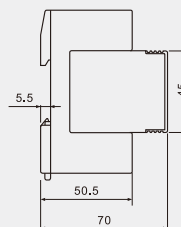
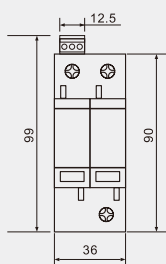
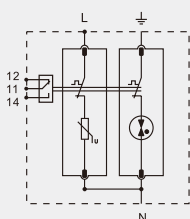


BR-12.5M 3+1 surge arrester is suitable for TT and TN-S system.

	BR-12.5M 150 3+1	BR-12.5M 275 3+1	BR-12.5M 320 3+1
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage $U_c$	150V	275V	320V
Lightning impulse current (10/350 $\mu$ s) (L-N/N-PE) $I_{imp}$	12.5kA/50kA	12.5kA/50kA	12.5kA/50kA
Nominal discharge current (8/20 $\mu$ s) (L-N/N-PE) $I_n$	25kA/50kA	25kA/50kA	25kA/50kA
Max. discharge current (8/20 $\mu$ s) (L-N/N-PE) $I_{max}$	60kA/100kA	60kA/100kA	60kA/100kA
Voltage protection level (L-N/N-PE) $U_p$	$\leq 1.0kV/\leq 1.5kV$	$\leq 1.3kV/\leq 1.5kV$	$\leq 1.5kV/\leq 1.5kV$
Voltage protection level 5kA (L-N/N-PE) $U_p$	$\leq 0.6kV/\leq 1.5kV$	$\leq 1kV/\leq 1.5kV$	$\leq 1.2kV/\leq 1.5kV$
Max. backup fuse	160A gG	160A gG	160A gG
Specific energy (L-N/N-PE) W/R	39kJ/ $\Omega$ / 625kJ/ $\Omega$	39kJ/ $\Omega$ / 625kJ/ $\Omega$	39kJ/ $\Omega$ / 625kJ/ $\Omega$
Short circuit withstand capacity $I_{scrr}$	25kA	25kA	25kA
Temporary overvoltage TOV-withstand (L-N) $U_T$	175V/5sec.	335V/5sec.	350V/5sec.
Temporary overvoltage TOV-safe failure (L-N) $U_T$	250V/120min.	440V/120min.	550V/120min.
Temporary overvoltage TOV-withstand (N-PE) $U_T$	1200V/200ms	1200V/200ms	1200V/200ms
Response time (L-N/N-PE) $t_A$	$\leq 25ns/\leq 100ns$	$\leq 25ns/\leq 100ns$	$\leq 25ns/\leq 100ns$
Operating temperature range $T_u$	-40 $^{\circ}C$ -80 $^{\circ}C$	-40 $^{\circ}C$ -80 $^{\circ}C$	-40 $^{\circ}C$ -80 $^{\circ}C$
Operating state/fault indication	green/red	green/red	green/red
Cross-section area (Min.)	4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Cross-section area (Max.)	35mm <sup>2</sup>	35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B8611	B8613	B8615
Order Code (With remote signaling)	B8612	B8614	B8616

## BR-12.5M 1+1

### T1+T2 Surge Arrester

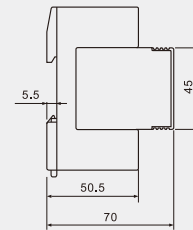
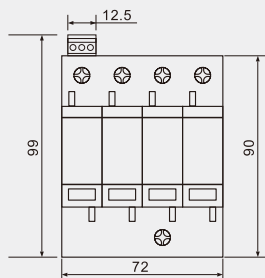
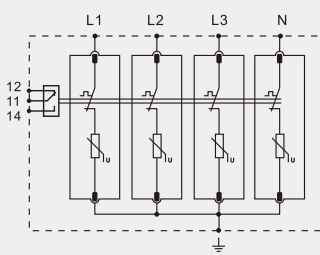
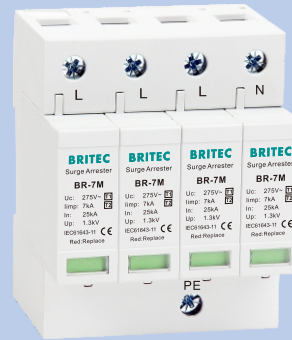


BR-12.5M 1+1 surge arrester is suitable for TT and TN-S system.

	BR-12.5M 150 1+1	BR-12.5M 275 1+1	BR-12.5M 320 1+1
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage U <sub>c</sub>	150V	275V	320V
Lightning impulse current (10/350μs) (L-N/N-PE) I <sub>imp</sub>	12.5kA/25kA	12.5kA/25kA	12.5kA/25kA
Nominal discharge current (8/20μs) (L-N/N-PE) I <sub>n</sub>	25kA/40kA	25kA/40kA	25kA/40kA
Max. discharge current (8/20μs) (L-N/N-PE) I <sub>max</sub>	60kA/80kA	60kA/80kA	60kA/80kA
Voltage protection level (L-N/N-PE) U <sub>p</sub>	≤1.0kV/≤1.5kV	≤1.3kV/≤1.5kV	≤1.5kV/≤1.5kV
Voltage protection level 5kA (L-N/N-PE) U <sub>p</sub>	≤0.6kV/≤1.5kV	≤1kV/≤1.5kV	≤1.2kV/≤1.5kV
Max. backup fuse	160A gG	160A gG	160A gG
Specific energy (L-N/N-PE) W/R	39kJ/Ω / 156kJ/Ω	39kJ/Ω / 156kJ/Ω	39kJ/Ω / 156kJ/Ω
Short circuit withstand capacity I <sub>scrr</sub>	25kA	25kA	25kA
Temporary overvoltage TOV-withstand (L-N) U <sub>T</sub>	175V/5sec.	335V/5sec.	350V/5sec.
Temporary overvoltage TOV-safe failure (L-N) U <sub>T</sub>	250V/120min.	440V/120min.	550V/120min.
Temporary overvoltage TOV-withstand (N-PE) U <sub>T</sub>	1200V/200ms	1200V/200ms	1200V/200ms
Response time (L-N/N-PE) t <sub>A</sub>	≤25ns/≤100ns	≤25ns/≤100ns	≤25ns/≤100ns
Operating temperature range T <sub>u</sub>	-40°C-80°C	-40°C-80°C	-40°C-80°C
Operating state/fault indication	green/red	green/red	green/red
Cross-section area (Min.)	4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Cross-section area (Max.)	35mm <sup>2</sup>	35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B8617	B8619	B8621
Order Code (With remote signaling)	B8618	B8620	B8622

## BR-7M 4P

### T1+T2 Surge Arrester



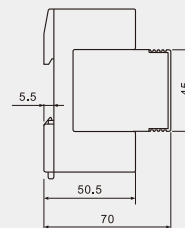
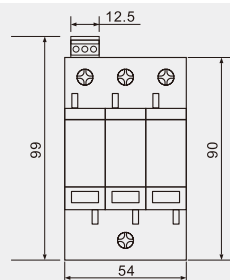
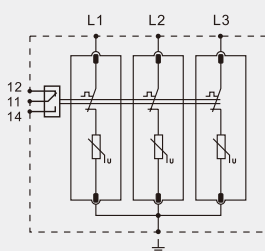
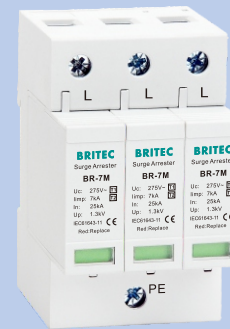
BR-7M 4P surge arrester is suitable for TN-S system.

	BR-7M 150 4P	BR-7M 275 4P	BR-7M 320 4P
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage	Uc	150V	275V
Lightning impulse current (10/350µs)	Iimp	7kA	7kA
Nominal discharge current (8/20µs)	In	25kA	25kA
Max. discharge current (8/20µs)	Imax	60kA	60kA
Voltage protection level	Up	≤0.8kV	≤1.3kV
Specific energy	W/R	12.25kJ/Ω	12.25kJ/Ω
Short circuit withstand capacity	Iscrr	25kA	25kA
Temporary overvoltage TOV-withstand	UT	175V/5sec.	335V/5sec.
Temporary overvoltage TOV-safe failure	UT	250V/120min.	440V/120min.
Max. backup fuse		125A gG	125A gG
Response time	tA	≤25ns	≤25ns
Operating temperature range	Tu	-40°C-80°C	-40°C-80°C
Operating state/fault indication		green/red	green/red
Cross-section area (Min.)		4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)		35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7300	B7302	B7304
Order Code (With remote signaling)	B7301	B7303	B7305



## BR-7M 3P

### T1+T2 Surge Arrester

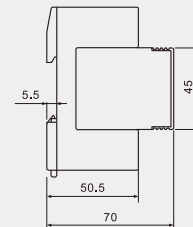
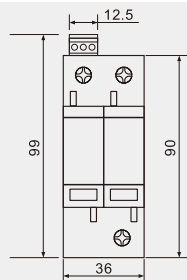
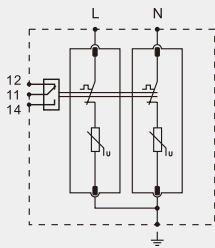
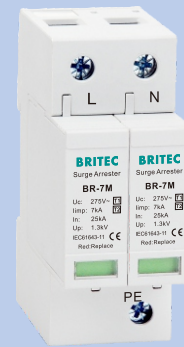


■ BR-7M 3P surge arrester is suitable for TN-C system.

	BR-7M 150 3P	BR-7M 275 3P	BR-7M 320 3P
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage	Uc	150V	275V
Lightning impulse current (10/350µs)	Iimp	7kA	7kA
Nominal discharge current (8/20µs)	In	25kA	25kA
Max. discharge current (8/20µs)	I <sub>max</sub>	60kA	60kA
Voltage protection level	Up	≤0.8kV	≤1.3kV
Specific energy	W/R	12.25kJ/Ω	12.25kJ/Ω
Short circuit withstand capacity	I <sub>scrr</sub>	25kA	25kA
Temporary overvoltage TOV-withstand	U <sub>T</sub>	175V/5sec.	335V/5sec.
Temporary overvoltage TOV-safe failure	U <sub>T</sub>	250V/120min.	440V/120min.
Max. backup fuse		125A gG	125A gG
Response time	t <sub>A</sub>	≤25ns	≤25ns
Operating temperature range	T <sub>u</sub>	-40°C-80°C	-40°C-80°C
Operating state/fault indication		green/red	green/red
Cross-section area (Min.)		4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)		35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7306	B7308	B7310
Order Code (With remote signaling)	B7307	B7309	B7311

## BR-7M 2P

### T1+T2 Surge Arrester

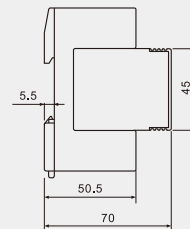
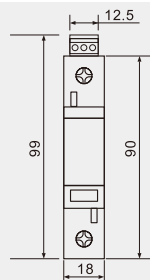
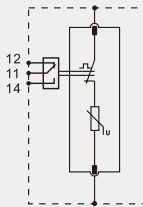


■ BR-7M 2P surge arrester is suitable for single phase TN system.

	BR-7M 150 2P	BR-7M 275 2P	BR-7M 320 2P
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage	Uc	150V	275V
Lightning impulse current (10/350µs)	Iimp	7kA	7kA
Nominal discharge current (8/20µs)	In	25kA	25kA
Max. discharge current (8/20µs)	I <sub>max</sub>	60kA	60kA
Voltage protection level	Up	≤0.8kV	≤1.3kV
Specific energy	W/R	12.25kJ/Ω	12.25kJ/Ω
Short circuit withstand capacity	I <sub>sc</sub>	25kA	25kA
Temporary overvoltage TOV-withstand	U <sub>T</sub>	175V/5sec.	335V/5sec.
Temporary overvoltage TOV-safe failure	U <sub>T</sub>	250V/120min.	440V/120min.
Max. backup fuse		125A gG	125A gG
Response time	t <sub>A</sub>	≤25ns	≤25ns
Operating temperature range	T <sub>u</sub>	-40°C-80°C	-40°C-80°C
Operating state/fault indication		green/red	green/red
Cross-section area (Min.)		4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)		35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7312	B7314	B7316
Order Code (With remote signaling)	B7313	B7315	B7317

## BR-7M 1P

### T1+T2 Surge Arrester

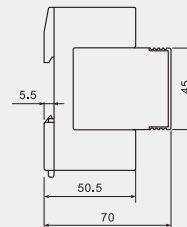
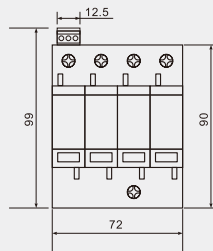
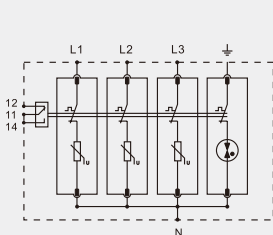
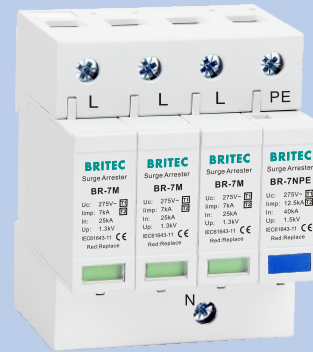


BR-7M 1P can be used to build 2P, 3P and 4P surge arresters.

	BR-7M 150 1P	BR-7M 275 1P	BR-7M 320 1P
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage	Uc	150V	275V
Lightning impulse current (10/350µs)	Iimp	7kA	7kA
Nominal discharge current (8/20µs)	In	25kA	25kA
Max. discharge current (8/20µs)	I <sub>max</sub>	60kA	60kA
Voltage protection level	Up	≤0.8kV	≤1.3kV
Specific energy	W/R	12.25kJ/Ω	12.25kJ/Ω
Short circuit withstand capacity	I <sub>scrr</sub>	25kA	25kA
Temporary overvoltage TOV-withstand	U <sub>T</sub>	175V/5sec.	335V/5sec.
Temporary overvoltage TOV-safe failure	U <sub>T</sub>	250V/120min.	440V/120min.
Max. backup fuse		125A gG	125A gG
Response time	t <sub>A</sub>	≤25ns	≤25ns
Operating temperature range	T <sub>u</sub>	-40°C-80°C	-40°C-80°C
Operating state/fault indication		green/red	green/red
Cross-section area (Min.)		4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)		35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7318	B7320	B7322
Order Code (With remote signaling)	B7319	B7321	B7323

## BR-7M 3+1

### T1+T2 Surge Arrester



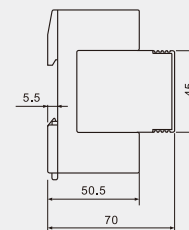
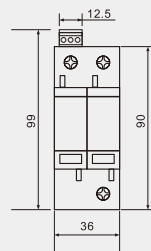
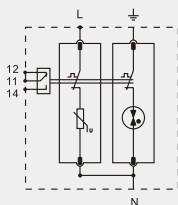
■ BR-7M 3+1 surge arrester is suitable for TT and TN-S system.

	BR-7M 150 3+1	BR-7M 275 3+1	BR-7M 320 3+1
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage $U_c$	150V	275V	320V
Lightning impulse current (10/350 $\mu$ s) (L-N/N-PE) $I_{imp}$	7kA/12.5kA	7kA/12.5kA	7kA/12.5kA
Nominal discharge current (8/20 $\mu$ s) (L-N/N-PE) $I_n$	25kA/40kA	25kA/40kA	25kA/40kA
Max. discharge current (8/20 $\mu$ s) (L-N/N-PE) $I_{max}$	60kA/70kA	60kA/70kA	60kA/70kA
Voltage protection level (L-N/N-PE) $U_p$	$\leq 0.8kV/\leq 1.5kV$	$\leq 1.3kV/\leq 1.5kV$	$\leq 1.5kV/\leq 1.5kV$
Voltage protection level 5kA (L-N/N-PE) $U_p$	$\leq 0.6kV/\leq 1.5kV$	$\leq 1kV/\leq 1.5kV$	$\leq 1.2kV/\leq 1.5kV$
Max. backup fuse	125A gG	125A gG	125A gG
Specific energy (L-N/N-PE) $W/R$	12.25kJ/ $\Omega$ /39kJ/ $\Omega$	12.25kJ/ $\Omega$ /39kJ/ $\Omega$	12.25kJ/ $\Omega$ /39kJ/ $\Omega$
Short circuit withstand capacity $I_{scrr}$	25kA	25kA	25kA
Temporary overvoltage TOV-withstand (L-N) $U_T$	175V/5sec.	335V/5sec.	350V/5sec.
Temporary overvoltage TOV-safe failure (L-N) $U_T$	250V/120min.	440V/120min.	550V/120min.
Temporary overvoltage TOV-withstand (N-PE) $U_T$	1200V/200ms	1200V/200ms	1200V/200ms
Response time (L-N/N-PE) $t_A$	$\leq 25ns/\leq 100ns$	$\leq 25ns/\leq 100ns$	$\leq 25ns/\leq 100ns$
Operating temperature range $T_u$	-40°C-80°C	-40°C-80°C	-40°C-80°C
Operating state/fault indication	green/red	green/red	green/red
Cross-section area (Min.)	4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Cross-section area (Max.)	35mm <sup>2</sup>	35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7324	B7326	B7328
Order Code (With remote signaling)	B7325	B7327	B7329



## BR-7M 1+1

### T1+T2 Surge Arrester

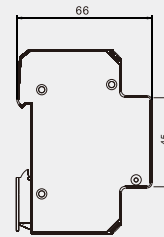
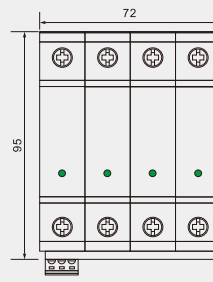
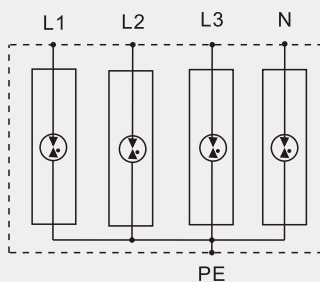


■ BR-7M 1+1 surge arrester is suitable for TT and TN-S system.

	BR-7M 150 1+1	BR-7M 275 1+1	BR-7M 320 1+1
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage $U_c$	150V	275V	320V
Lightning impulse current (10/350 $\mu$ s) (L-N/N-PE) $I_{imp}$	7kA/12.5kA	7kA/12.5kA	7kA/12.5kA
Nominal discharge current (8/20 $\mu$ s) (L-N/N-PE) $I_n$	25kA/40kA	25kA/40kA	25kA/40kA
Max. discharge current (8/20 $\mu$ s) (L-N/N-PE) $I_{max}$	60kA/70kA	60kA/70kA	60kA/70kA
Voltage protection level (L-N/N-PE) $U_p$	$\leq 0.8kV/\leq 1.5kV$	$\leq 1.3kV/\leq 1.5kV$	$\leq 1.5kV/\leq 1.5kV$
Voltage protection level 5kA (L-N/N-PE) $U_p$	$\leq 0.6kV/\leq 1.5kV$	$\leq 1kV/\leq 1.5kV$	$\leq 1.2kV/\leq 1.5kV$
Max. backup fuse	125A gG	125A gG	125A gG
Specific energy (L-N/N-PE) W/R	12.25kJ/ $\Omega$ / 39kJ/ $\Omega$	12.25kJ/ $\Omega$ / 39kJ/ $\Omega$	12.25kJ/ $\Omega$ / 39kJ/ $\Omega$
Short circuit withstand capacity $I_{scrr}$	25kA	25kA	25kA
Temporary overvoltage TOV-withstand (L-N) $U_T$	175V/5sec.	335V/5sec.	350V/5sec.
Temporary overvoltage TOV-safe failure (L-N) $U_T$	250V/120min.	440V/120min.	550V/120min.
Temporary overvoltage TOV-withstand (N-PE) $U_T$	1200V/200ms	1200V/200ms	1200V/200ms
Response time (L-N/N-PE) $t_A$	$\leq 25ns/\leq 100ns$	$\leq 25ns/\leq 100ns$	$\leq 25ns/\leq 100ns$
Operating temperature range $T_u$	-40°C-80°C	-40°C-80°C	-40°C-80°C
Operating state/fault indication	green/red	green/red	green/red
Cross-section area (Min.)	4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Cross-section area (Max.)	35mm <sup>2</sup>	35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7330	B7332	B7334
Order Code (With remote signaling)	B7331	B7333	B7335

## BR-12.5GRS 4P

T1+T2 Surge Arrester Sparkgap

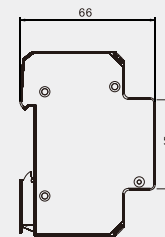
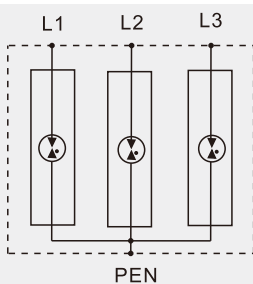


BR-12.5GRS 4P surge arrester is suitable for TN-S system.

	BR-12.5GRS 150 4P	BR-12.5GRS 275 4P	BR-12.5GRS 320 4P
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage	Uc	150V	275V
Lightning impulse current (10/350µs)	Iimp	12.5kA	12.5kA
Nominal discharge current (8/20µs)	In	30kA	30kA
Max. discharge current (8/20µs)	Imax	60kA	60kA
Voltage protection level	Up	≤1.8kV	≤1.8kV
Specific energy	W/R	39kJ/Ω	39kJ/Ω
Short circuit withstand capacity	Iscrr	25kA	25kA
Temporary overvoltage TOV-withstand	UT	250V/120min.	440V/120min.
Max. backup fuse		160A gG	160A gG
Response time	tA	≤25ns	≤25ns
Operating temperature range	Tu	-40°C-80°C	-40°C-80°C
Operating state/fault indication		green/off	green/off
Cross-section area (Min.)		4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)		35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7010	B7023	B7036
Order Code (With remote signaling)	B7011	B7024	B7037

## BR-12.5GRS 3P

T1+T2 Surge Arrester Sparkgap

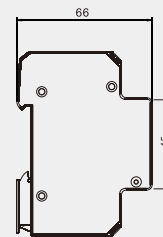
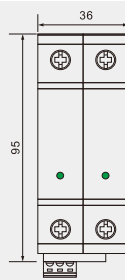
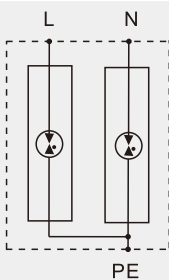


BR-12.5GRS 3P surge arrester is suitable for TN-C system.

	BR-12.5GRS 150 3P	BR-12.5GRS 275 3P	BR-12.5GRS 320 3P
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage	Uc	150V	275V
Lightning impulse current (10/350µs)	Iimp	12.5kA	12.5kA
Nominal discharge current (8/20µs)	In	30kA	30kA
Max. discharge current (8/20µs)	I <sub>max</sub>	60kA	60kA
Voltage protection level	Up	≤1.8kV	≤1.8kV
Specific energy	W/R	39kJ/Ω	39kJ/Ω
Short circuit withstand capacity	I <sub>scrr</sub>	25kA	25kA
Temporary overvoltage TOV-withstand	U <sub>T</sub>	250V/120min.	440V/120min.
Max. backup fuse		160A gG	160A gG
Response time	t <sub>A</sub>	≤25ns	≤25ns
Operating temperature range	T <sub>u</sub>	-40°C-80°C	-40°C-80°C
Operating state/fault indication		green/off	green/off
Cross-section area (Min.)		4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)		35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7012	B7025	B7038
Order Code (With remote signaling)	B7013	B7026	B7039

## BR-12.5GRS 2P

T1+T2 Surge Arrester Sparkgap



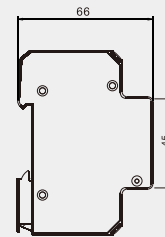
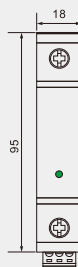
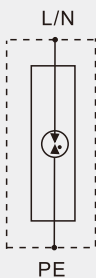
■ BR-12.5GRS 2P surge arrester is suitable for TN system.

	BR-12.5GRS 150 2P	BR-12.5GRS 275 2P	BR-12.5GRS 320 2P
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage	Uc	150V	275V
Lightning impulse current (10/350µs)	Iimp	12.5kA	12.5kA
Nominal discharge current (8/20µs)	In	30kA	30kA
Max. discharge current (8/20µs)	I <sub>max</sub>	60kA	60kA
Voltage protection level	Up	≤1.8kV	≤1.8kV
Specific energy	W/R	39kJ/Ω	39kJ/Ω
Short circuit withstand capacity	I <sub>scrr</sub>	25kA	25kA
Temporary overvoltage TOV-withstand	U <sub>T</sub>	250V/120min.	440V/120min.
Max. backup fuse		160A gG	160A gG
Response time	t <sub>A</sub>	≤25ns	≤25ns
Operating temperature range	T <sub>u</sub>	-40°C-80°C	-40°C-80°C
Operating state/fault indication		green/off	green/off
Cross-section area (Min.)		4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)		35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7014	B7027	B7040
Order Code (With remote signaling)	B7015	B7028	B7041



## BR-12.5GRS 1P

T1+T2 Surge Arrester Sparkgap

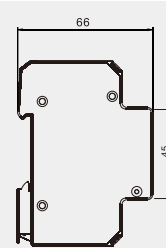
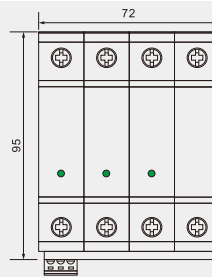
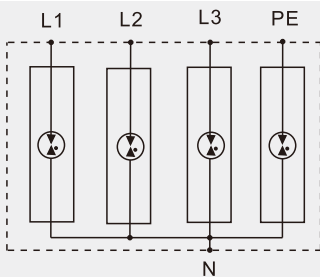


BR-12.5GRS 1P can be used to build 2P, 3P and 4P surge arresters.

	BR-12.5GRS 150 1P	BR-12.5GRS 275 1P	BR-12.5GRS 320 1P
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage	Uc	150V	275V
Lightning impulse current (10/350µs)	Iimp	12.5kA	12.5kA
Nominal discharge current (8/20µs)	In	30kA	30kA
Max. discharge current (8/20µs)	I <sub>max</sub>	60kA	60kA
Voltage protection level	Up	≤1.8kV	≤1.8kV
Specific energy	W/R	39kJ/Ω	39kJ/Ω
Short circuit withstand capacity	I <sub>scrr</sub>	25kA	25kA
Temporary overvoltage TOV-withstand	U <sub>T</sub>	250V/120min.	440V/120min.
Max. backup fuse		160A gG	160A gG
Response time	t <sub>A</sub>	≤25ns	≤25ns
Operating temperature range	T <sub>u</sub>	-40°C-80°C	-40°C-80°C
Operating state/fault indication		green/off	green/off
Cross-section area (Min.)		4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)		35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7016	B7029	B7042
Order Code (With remote signaling)	B7017	B7030	B7043

## BR-12.5GRS 3+1

### T1+T2 Surge Arrester

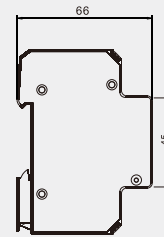
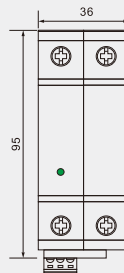
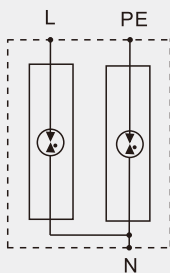
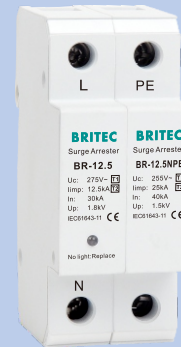


BR-12.5GRS 3+1 surge arrester is suitable for TT and TN-S system.

	BR-12.5GRS 150 3+1	BR-12.5GRS 275 3+1	BR-12.5GRS 320 3+1
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage $U_c$	150V	275V	320V
Lightning impulse current (10/350 $\mu$ s) (L-N/N-PE) $I_{imp}$	12.5kA/50kA	12.5kA/50kA	12.5kA/50kA
Nominal discharge current (8/20 $\mu$ s) (L-N/N-PE) $I_n$	30kA/50kA	30kA/50kA	30kA/50kA
Max. discharge current (8/20 $\mu$ s) (L-N/N-PE) $I_{max}$	60kA/100kA	60kA/100kA	60kA/100kA
Voltage protection level (L-N/N-PE) $U_p$	$\leq 1.8kV / \leq 1.5kV$	$\leq 1.8kV / \leq 1.5kV$	$\leq 1.8kV / \leq 1.5kV$
Specific energy (L-N/N-PE) $W/R$	39kJ/ $\Omega$ / 625kJ/ $\Omega$	39kJ/ $\Omega$ / 625kJ/ $\Omega$	39kJ/ $\Omega$ / 625kJ/ $\Omega$
Short circuit withstand capacity $I_{sc}$	25kA	25kA	25kA
Temporary overvoltage TOV-withstand (L-N) $U_T$	250V/120min.	440V/120min.	550V/120min.
Temporary overvoltage TOV-withstand (N-PE) $U_T$	1200V/200ms	1200V/200ms	1200V/200ms
Max. backup fuse	160A gG	160A gG	160A gG
Response time (L-N/N-PE) $t_A$	$\leq 25ns / \leq 100ns$	$\leq 25ns / \leq 100ns$	$\leq 25ns / \leq 100ns$
Operating temperature range $T_u$	-40°C-80°C	-40°C-80°C	-40°C-80°C
Operating state/fault indication	green/off	green/off	green/off
Cross-section area (Min.)	4mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>
Cross-section area (Max.)	35mm <sup>2</sup>	35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7018	B7031	B7044
Order Code (With remote signaling)	B7019	B7032	B7045

## BR-12.5GRS 1+1

### T1+T2 Surge Arrester



BR-12.5GRS 1+1 surge arrester is suitable for TT and TN-S system.

	BR-12.5GRS 150 1+1	BR-12.5GRS 275 1+1	BR-12.5GRS 320 1+1
SPD classification according to EN61643-11	Type 1 + Type 2	Type 1 + Type 2	Type 1 + Type 2
SPD classification according to IEC61643-11	Class I + Class II	Class I + Class II	Class I + Class II
Max. continuous operating a.c. voltage $U_c$	150V	275V	320V
Lightning impulse current (10/350 $\mu$ s) (L-N/N-PE) $I_{imp}$	12.5kA/25kA	12.5kA/25kA	12.5kA/25kA
Nominal discharge current (8/20 $\mu$ s) (L-N/N-PE) $I_n$	30kA/40kA	30kA/40kA	30kA/40kA
Max. discharge current (8/20 $\mu$ s) (L-N/N-PE) $I_{max}$	60kA/80kA	60kA/80kA	60kA/80kA
Voltage protection level (L-N/N-PE) $U_p$	$\leq 1.8kV / \leq 1.5kV$	$\leq 1.8kV / \leq 1.5kV$	$\leq 1.8kV / \leq 1.5kV$
Specific energy (L-N/N-PE) $W/R$	39kJ/ $\Omega$ / 156kJ/ $\Omega$	39kJ/ $\Omega$ / 156kJ/ $\Omega$	39kJ/ $\Omega$ / 156kJ/ $\Omega$
Short circuit withstand capacity $I_{scrr}$	25kA	25kA	25kA
Temporary overvoltage TOV-withstand (L-N) $U_T$	250V/120min.	440V/120min.	550V/120min.
Temporary overvoltage TOV-withstand (N-PE) $U_T$	1200V/200ms	1200V/200ms	1200V/200ms
Max. backup fuse	160A gG	160A gG	160A gG
Response time (L-N/N-PE) $t_A$	$\leq 25ns / \leq 100ns$	$\leq 25ns / \leq 100ns$	$\leq 25ns / \leq 100ns$
Operating temperature range $T_u$	-40 $^{\circ}C$ -80 $^{\circ}C$	-40 $^{\circ}C$ -80 $^{\circ}C$	-40 $^{\circ}C$ -80 $^{\circ}C$
Operating state/fault indication	green/off	green/off	green/off
Cross-section area (Min.)	4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Cross-section area (Max.)	35mm <sup>2</sup>	35mm <sup>2</sup>	35mm <sup>2</sup>
For mounting on	35mm Din rail		
Enclosure material	Thermoplastic UL94-V0		
Degree of protection	IP20	IP20	IP20
Order Code	B7020	B7033	B7046
Order Code (With remote signaling)	B7021	B7034	B7047