



**B+C**  
Surge Arrester

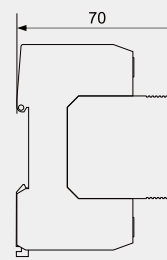
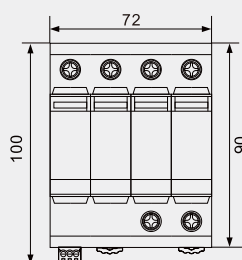
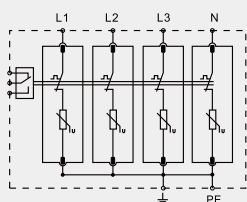


## T1+T2 Surge Arrester

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## BR-12.5M 4P

### T1+T2 Surge Arrester

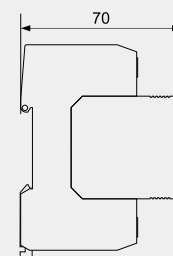
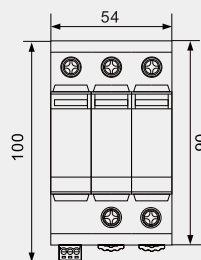
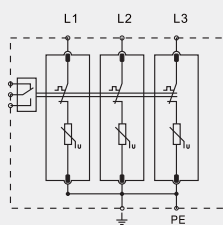


BR-12.5M 4P is suitable for TN-S system.

	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
Total discharge current (10/350 $\mu$ s) $I_{total}$	50kA	50kA	50kA
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 $U_p$	$\leq 0.8$ kV	$\leq 1.3$ kV	$\leq 1.5$ kV
Specific energy $W/R$	39kJ/ $\Omega$	39kJ/ $\Omega$	39kJ/ $\Omega$
Short circuit withstand capacity $I_{SCCR}$	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	125A gG	125A gG	125A gG
Leakage current $I_{PE}$	<1mA	<1mA	<1mA
Response time $t_A$	$\leq 25$ ns	$\leq 25$ ns	$\leq 25$ ns
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.)	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	B18411	B18413	B18415
Order Code (With remote signaling)	B18412	B18414	B18416

## BR-12.5M 3P

### T1+T2 Surge Arrester

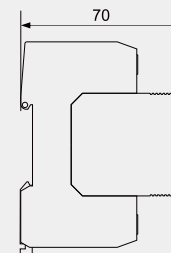
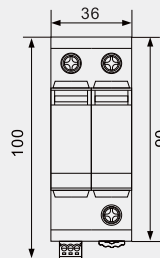
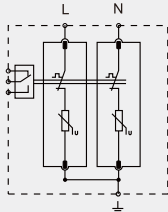


■ BR-12.5M 3P surge arrester is suitable for TN-C system.

		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
Total discharge current (10/350µs)	Itotal	37.5kA	37.5kA	37.5kA
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	≤ 0.8kV	≤ 1.3kV	≤ 1.5kV
Specific energy	W/R	39kJ/Ω	39kJ/Ω	39kJ/Ω
Short circuit withstand capacity	I <sub>SCCR</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		125A gG	125A gG	125A gG
Leakage current	I <sub>PE</sub>	< 1mA	< 1mA	< 1mA
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		B18311	B18313	B18315
Order Code (With remote signaling)		B18312	B18314	B18316

## BR-12.5M 2P

T1+T2 Surge Arrester



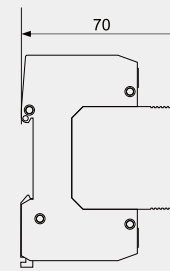
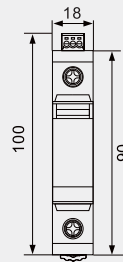
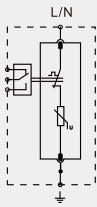
BR-12.5M 2P surge arrester is suitable for single phase TN system.

	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 $U_c$	150V	275V	320V
Lightning impulse current (10/350 $\mu$ s) $I_{imp}$	12.5kA	12.5kA	12.5kA
Total discharge current (10/350 $\mu$ s) $I_{total}$	25kA	25kA	25kA
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 $U_p$	$\leq 0.8kV$	$\leq 1.3kV$	$\leq 1.5kV$
Specific energy $W/R$	39kJ/ $\Omega$	39kJ/ $\Omega$	39kJ/ $\Omega$
Short circuit withstand capacity $I_{SCCR}$	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	125A gG	125A gG	125A gG
Leakage current $I_{PE}$	<1mA	<1mA	<1mA
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	B18211	B18213	B18215
Order Code (With remote signaling)	B18212	B18214	B18216



## BR-12.5M 1P

T1+T2 Surge Arrester

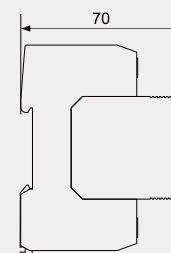
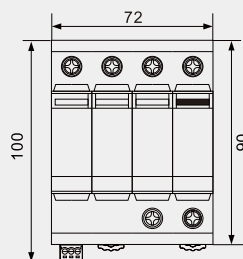
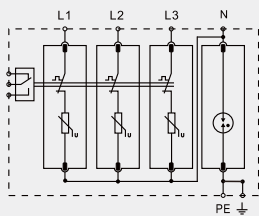
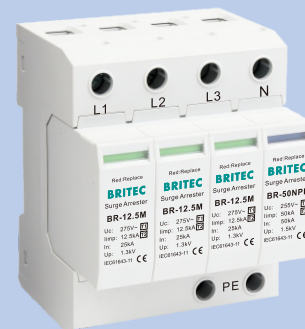


BR-12.5M 1P can be used to build 2P, 3P and 4P surge arresters.

	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)	Imax	60kA	60kA
Voltage protection level	Up	≤0.8kV	≤1.3kV
Specific energy	W/R	39kJ/Ω	39kJ/Ω
Short circuit withstand capacity	I <sub>SCCR</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
Leakage current	I <sub>PE</sub>	<1mA	<1mA
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	B18171	B18173	B18175
Order Code (With remote signaling)	B18172	B18174	B18176

## BR-12.5M 3+1

### T1+T2 Surge Arrester

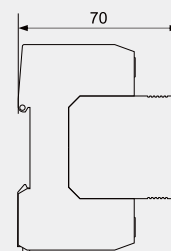
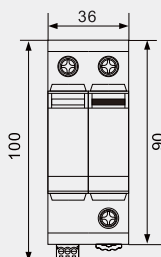
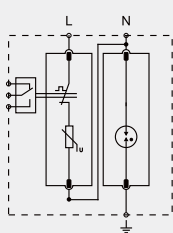


■ BR-12.5M 3+1 surge arrester is suitable for TT and TN-S system.

	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
Total discharge current (10/350 $\mu$ s) $I_{total}$	50kA	50kA	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) $U_p$	$\leq 0.8kV/\leq 1.5kV$	$\leq 1.3kV/\leq 1.5kV$	$\leq 1.5kV/\leq 1.5kV$
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	39kJ/ $\Omega$ /625kJ/ $\Omega$	39kJ/ $\Omega$ /625kJ/ $\Omega$	39kJ/ $\Omega$ /625kJ/ $\Omega$
Short circuit withstand capacity $I_{SCCR}$	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
Leakage current $I_{PE}$	<1mA	<1mA	<1mA
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	B18611	B18613	B18615
Order Code (With remote signaling)	B18612	B18614	B18616

## BR-12.5M 1+1

T1+T2 Surge Arrester

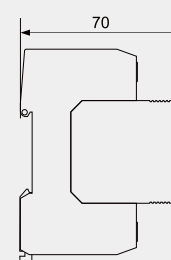
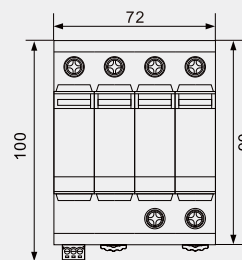
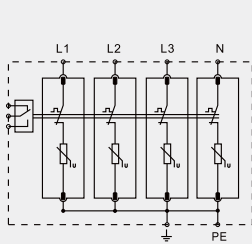
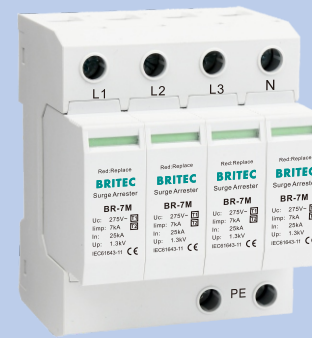


BR-12.5M 1+1 surge arrester is suitable for single phase TT and TN system.

	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 $U_c$	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
Total discharge current (10/350 $\mu$ s) $I_{total}$	25kA	25kA	25kA
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) $U_p$	$\leq 0.8kV/\leq 1.5kV$	$\leq 1.3kV/\leq 1.5kV$	$\leq 1.5kV/\leq 1.5kV$
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) $W/R$	39kJ/ $\Omega$ /156kJ/ $\Omega$	39kJ/ $\Omega$ /156kJ/ $\Omega$	39kJ/ $\Omega$ /156kJ/ $\Omega$
Short circuit withstand capacity $I_{SCCR}$	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
Leakage current $I_{PE}$	< 1mA	< 1mA	< 1mA
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	B18617	B18619	B18621
Order Code (With remote signaling)	B18618	B18620	B18622

## BR-7M 4P

### T1+T2 Surge Arrester



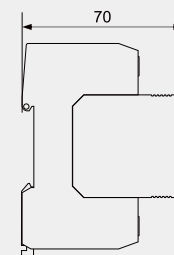
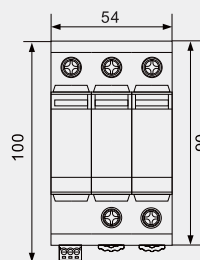
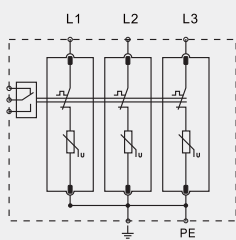
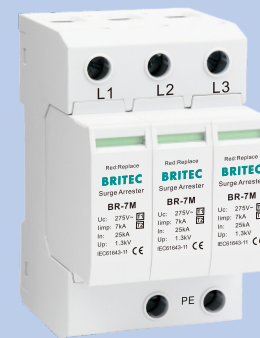
■ BR-7M 4P surge arrester is suitable for TN-S system.

	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
Total discharge current (10/350µs)	Itotal	28kA	28kA
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>SCCR</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
Leakage current	I <sub>PE</sub>	<1mA	<1mA
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
Order Code		B17300	B17304
Order Code (With remote signaling)		B17301	B17305



## BR-7M 3P

### T1+T2 Surge Arrester

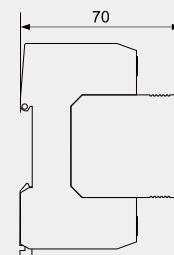
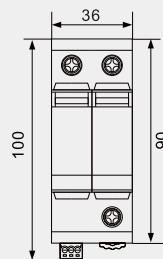
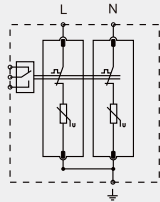


■ BR-7M 3P surge arrester is suitable for TN-C system.

		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	320V
Lightning impulse current (10/350µs)	Iimp	7kA	7kA	7kA
Total discharge current (10/350µs)	Itotal	21kA	21kA	21kA
Nominal discharge current (8/20µs)	In	25kA	25kA	25kA
Max. discharge current (8/20µs)	Imax	60kA	60kA	60kA
Voltage protection level	Up	≤0.8kV	≤1.3kV	≤1.5kV
Specific energy	W/R	12.25kJ/Ω	12.25kJ/Ω	12.25kJ/Ω
Short circuit withstand capacity	I <sub>SCCR</sub>	25kA	25kA	25kA
Temporary overvoltage TOV-withstand	UT	175V/5sec.	335V/5sec.	350V/5sec.
Temporary overvoltage TOV-safe failure	UT	250V/120min.	440V/120min.	550V/120min.
Max. backup fuse		125A gG	125A gG	125A gG
Leakage current	I <sub>PE</sub>	<1mA	<1mA	<1mA
Response time	t <sub>A</sub>	≤25ns	≤25ns	≤25ns
Operating temperature range	Tu	-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		B17306	B17308	B17310
Order Code (With remote signaling)		B17307	B17309	B17311

## BR-7M 2P

### T1+T2 Surge Arrester

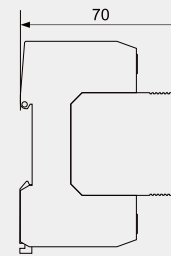
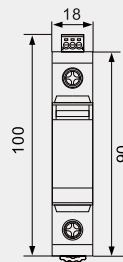
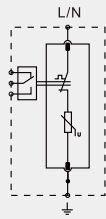


- BR-7M 2P surge arrester is suitable for single phase TN system.

		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	320V
Lightning impulse current (10/350µs)	Iimp	7kA	7kA	7kA
Total discharge current (10/350µs)	Itotal	14kA	14kA	14kA
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	≤0.8kV	≤1.3kV	≤1.5kV
Specific energy	W/R	12.25kJ/Ω	12.25kJ/Ω	12.25kJ/Ω
Short circuit withstand capacity	I <sub>SCCR</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		125A gG	125A gG	125A gG
Leakage current	I <sub>PE</sub>	<1mA	<1mA	<1mA
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		B17312	B17314	B17316
Order Code (With remote signaling)		B17313	B17315	B17317

## BR-7M 1P

T1+T2 Surge Arrester

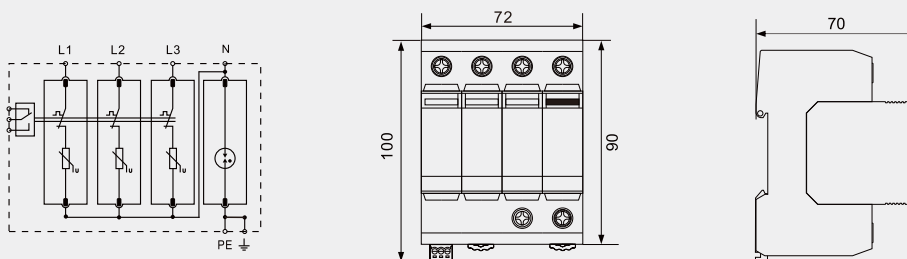
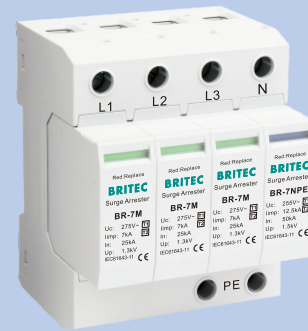


BR-7M 1P can be used to build 2P, 3P and 4P surge arresters.

	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)	I <sub>imp</sub>	7kA	7kA
Nominal discharge current (8/20µs)	I <sub>n</sub>	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>SCCR</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
Leakage current	I <sub>PE</sub>	<1mA	<1mA
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	B17318	B17320	B17322
Order Code (With remote signaling)	B17319	B17321	B17323

## BR-7M 3+1

### T1+T2 Surge Arrester



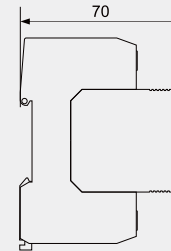
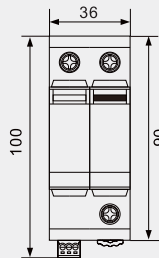
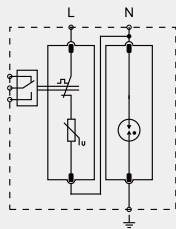
BR-7M 3+1 surge arrester is suitable for TT and TN-S system.

	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
Total discharge current (10/350 $\mu$ s) $I_{total}$	25kA	25kA	25kA
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) $U_p$	$\leq 0.8kV/\leq 1.5kV$	$\leq 1.3kV/\leq 1.5kV$	$\leq 1.5kV/\leq 1.5kV$
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 $I_{SCCR}$	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
Leakage current $I_{PE}$	<1mA	<1mA	<1mA
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	B17324	B17326	B17328
Order Code (With remote signaling)	B17325	B17327	B17329



## BR-7M 1+1

### T1+T2 Surge Arrester



■ BR-7M 1+1 surge arrester is suitable for single phase TT and TN 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 <sub>c</sub>	150V	275V	320V
Lightning impulse current (10/350μs) (L-N/N-PE)	I <sub>imp</sub>	7kA/12.5kA	7kA/12.5kA	7kA/12.5kA
Total discharge current (10/350μs)	I <sub>total</sub>	14kA	14kA	14kA
Nominal discharge current (8/20μs) (L-N/N-PE)	I <sub>n</sub>	25kA/50kA	25kA/50kA	25kA/50kA
Max. discharge current (8/20μs) (L-N/N-PE)	I <sub>max</sub>	60kA/100kA	60kA/100kA	60kA/100kA
Voltage protection level (L-N/N-PE)	U <sub>p</sub>	≤0.8kV/≤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		125A gG	125A gG	125A gG
Specific energy (L-N/N-PE)	W/R	12.25kJ/Ω/39kJ/Ω	12.25kJ/Ω/39kJ/Ω	12.25kJ/Ω/39kJ/Ω
Short circuit withstand capacity	I <sub>SCCR</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
Leakage current	I <sub>PE</sub>	<1mA	<1mA	<1mA
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.)		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		B17330	B17332	B17334
Order Code (With remote signaling)		B17331	B17333	B17335