

# Class I, II Compact Single and Multi-pole SPD 25kA per pole



**Category IEC / EN / VDE:**

**Location of use:**

**Protection modes:**

**Protective elements:**

**Surge discharge ratings:**

**Internal protection and safety:**

**Complies with:**

**Class I, II / Type 1, 2 / B, C**

**Main distribution boards**

**L/N-PE, L-PEN, L-N, N-PE**

**High energy MOV and GDT**

**Iimp up to 50kA**

**Separate thermal disconnecter for each MOV**

**IEC/EN 61643-11**

**PROTEC BS(R) Series:**

**PROTEC BS(R) 25/xxx**

**PROTUBE BS 50, 100**

**PROBLOC BS(R) Series:**

**PROBLOC BS(R) 50/xxx (2+0)**

**PROBLOC BS(R) 75/xxx (3+0)**

**PROBLOC BS(R) 100/xxx (4+0)**

**PROBLOC BS(R) 50/xxx (1+1)**

**PROBLOC BS(R) 100/xxx (3+1)**

The PROTEC BS(R) 25 kA and PROBLOC BS(R) 25 kA per pole series of overvoltage surge protective devices have been developed to protect against partial direct and indirect lightning discharges. They are suited for power supply installations and intended to provide protection in zones 0<sub>A</sub> - 2 per IEC 62305.

PROTEC BS(R) is a compact, single pole housing design and consists of a high performance paired varistors, each equipped with separate disconnection mechanism.

PROBLOC BS(R) is a compact, multi-pole housing design and consists of a high performance paired varistors combination, each equipped with separate disconnection mechanism.

PROTUBE BS is a compact, single pole housing design and consists of a high energy encapsulated gas discharge tube. It is utilized for galvanic separation between the N and PE conductors in a 1+1 or 3+1 power distribution networks.

PROTEC BS(R) 25 kA and PROBLOC BS(R) 25 kA per pole series comply with the IEC/EN 61643-11 standard and are applicable to the following connections: TN-S, TN-C, IT and TT.

**PROTEC BS(R)**



- **Category IEC / EN / VDE:** Class I, II / Type 1, 2 / B, C
- **Location of use:** Main distribution boards
- **Network systems:** TN-S, TN-C, IT
- **Protection modes:** L/N - PE, L- PEN
- **Protective element:** High energy MOV
- **Surge discharge rating:**  $I_{imp} = 25kA$
- **MOV max. withstand capability 1 x 8/20:** 120kA
- **Housing:** Compact design
- **Complies with:** IEC/EN 61643-11



**Technical data**

Type	PROTEC BS(R) 25/xxx					
	150	275	320	385	440	
<b>Electrical characteristics</b>						
Max. continuous operating voltage (AC/DC)	$U_C$	150/200V	275/350V	320/420V	385/500V	440/580V
Nominal discharge current (8/20)	$I_n$	25kA				
Max. discharge current (8/20)	$I_{max}$	100kA				
Impulse current (10/350)	$I_{imp}$	25kA				
Specific energy	W/R	156kJ/Ω				
Charge	Q	12.5As				
Protection level	$U_p$	< 0.7kV	< 1.3kV	< 1.3kV	< 1.7kV	< 2.0kV
Residual voltage at $I_{imp}$	$U_{res}$	< 0.7kV	< 1.2kV	< 1.2kV	< 1.5kV	< 1.8kV
Residual voltage at 5kA (8/20)	$U_{res}$	< 0.5kV	< 1.0kV	< 1.0kV	< 1.1kV	< 1.2kV
Follow current	$I_{fi}$	NO				
Response time	$t_A$	< 25ns				
Thermal protection		YES				
Back-up fuse (if mains > 250A)		250A gL				
Short-circuit withstand current	$I_{SCCR}$	25kA/50Hz				
<b>Mechanical characteristics</b>						
Temperature range		- 40°C ... + 80°C				
Terminal screw torque		max. 3.0Nm				
Terminal cross section		35mm <sup>2</sup> (solid)/25mm <sup>2</sup> (stranded)				
Mounting		35mm DIN rail, EN 60715				
Degree of protection		IP 20				
Housing material		Thermoplastic; extinguishing degree UL 94 V-0				
Indication of disconnector operation		red flag				
Remote contacts (RC)		YES				
Contact ratings		AC: 250V/0.5A; 125V/3A				
Terminal cross section		max. 1.5mm <sup>2</sup>				
Remote terminal torque		0.25Nm				

**Ordering information**

$U_C$	150	275	320	385	440
Ordering code PROTEC BS 25/xxx	502.326	502.327	502.328	502.329	502.330
Ordering code PROTEC BSR 25/xxx (with remote contacts)	502.331	502.332	502.333	502.334	502.335

PROTUBE BS



- Category IEC / EN / VDE: Class I, II / Type 1, 2 / B, C
- Location of use: Main distribution boards
- Network system: TT
- Protection modes: N - PE
- Protective element: High energy GDT
- Surge discharge rating:  $I_{imp}$  up to 100kA
- GDT max. withstand capability 1 x 8/20: 150kA
- Housing: Compact design
- Complies with: IEC/EN 61643-11



Technical data

Type	PROTUBE BS yyy		
	50		100
<b>Electrical characteristics</b>			
Max. continuous operating voltage (AC/DC)	$U_C$	255V	
Nominal discharge current (8/20)	$I_n$	50kA	100kA
Max. discharge current (8/20)	$I_{max}$	100kA	
Impulse current (10/350)	$I_{imp}$	50kA	100kA
Specific energy	W/R	625kJ/Ω	2.5MJ/Ω
Charge	Q	25As	50As
Protection level	$U_p$	< 1.5kV	< 1.75kV
Residual voltage at 5kA (8/20)	$U_{res}$	< 0,2kV	< 0,2kV
Follow current	$I_{fi}$	100A <sub>RMS</sub>	
Response time	$t_A$	100ns	
<b>Mechanical characteristics</b>			
Temperature range		- 40°C ....+ 80°C	
Terminal screw torque		max. 3.0Nm	
Terminal cross section		35mm <sup>2</sup> (solid)/25mm <sup>2</sup> (stranded)	
Mounting		35mm DIN rail, EN 60715	
Degree of protection		IP 20	
Housing material		Thermoplastic; extinguishing degree UL 94 V-0	

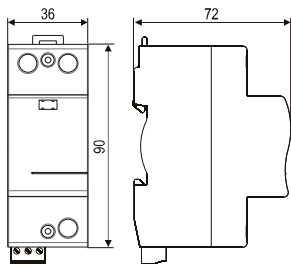
Ordering information

$I_{imp}$	50	100
Ordering code PROTUBE BS yyy	5030.42	5030.44

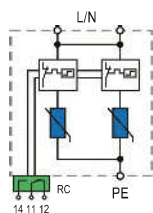
Dimensions, Internal configuration, Weight and Packaging

**PROTEC BS(R) 25**

Dimensions



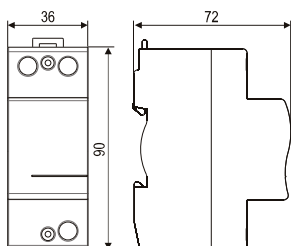
Internal configuration



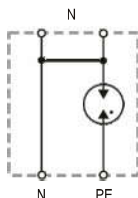
PROTEC BS 25/xxx	150	275	320	385	440
Dimensions DIN 43880	2TE				
Weight per unit	200g	252g	252g	268g	285g
PROTEC BSR 25/xxx	150	275	320	385	440
Dimensions DIN 43880	2TE				
Weight per unit	205g	257g	257g	273g	289g
Packaging dimensions (single unit)	109 x 76.5 x 41.5mm				
Min. packaging quantity	7 pcs.				

**PROTUBE BS yyy**

Dimensions



Internal configuration



PROTUBE BS yyy	50	100
Dimensions DIN 43880	2TE	
Weight per unit	178g	238g
Packaging dimensions (single unit)	109 x 76.5 x 41.5mm	
Min. Packaging quantity	7 pcs.	

**PROBLOC BS(R) (2+0)**



- **Category IEC / EN / VDE:** Class I, II / Type 1, 2 / B, C
- **Location of use:** Main distribution boards
- **Network system:** TN-S
- **Protection modes:** L/N - PE
- **Protective element:** High energy MOV
- **Surge discharge rating:**  $I_{imp} = 25kA$
- **MOV max. withstand capability 1 x 8/20:** 150kA per pole
- **Housing:** Compact design
- **Complies with:** IEC/EN 61643-11



**Technical data**

Type	PROBLOC BS(R) 50/xxx (2+0)					
	150	275	320	385	440	
<b>Electrical characteristics</b>						
Max. continuous operating voltage (AC/DC)	$U_C$	150/200V	275/350V	320/420V	385/500V	440/580V
Nominal discharge current (8/20)	$I_n$	25kA per pole				
Max. discharge current (8/20)	$I_{max}$	100kA per pole				
Impulse current (10/350)	$I_{imp}$	25kA per pole				
Specific energy	W/R	156kJ/Ω				
Charge	Q	12.5As				
Protection level	$U_p$	< 0.7kV	< 1.4kV	< 1.4kV	< 1.8kV	< 2.1kV
Residual voltage at $I_{imp}$	$U_{res}$	< 0.7kV	< 1.2kV	< 1.2kV	< 1.5kV	< 1.8kV
Residual voltage at 5kA (8/20)	$U_{res}$	< 0.5kV	< 1.0kV	< 1.0kV	< 1.1kV	< 1.2kV
Follow current	$I_{fi}$	NO				
Response time	$t_A$	< 25ns				
Thermal protection		YES				
Back-up fuse (if mains > 250A)		250A gL				
Short-circuit withstand current	$I_{SCCR}$	25kA/50Hz				
<b>Mechanical characteristics</b>						
Temperature range		- 40°C ... + 80°C				
Terminal screw torque		max. 3.0Nm				
Terminal cross section		35mm <sup>2</sup> (solid)/25mm <sup>2</sup> (stranded)				
Mounting		35mm DIN rail, EN 60715				
Degree of protection		IP 20				
Housing material		Thermoplastic; extinguishing degree UL 94 V-0				
Indication of disconnector operation		red flag				
Remote contacts (RC)		YES				
Contact ratings		AC: 250V/0.5A; 125V/3A				
Terminal cross section		max. 1.5mm <sup>2</sup>				
Remote terminal torque		0.25Nm				

**Ordering information**

$U_C$	150	275	320	385	440
Ordering code PROBLOC BS 50/xxx (2+0)	504.435	504.436	504.437	504.438	504.439
Ordering code PROBLOC BSR 50/xxx (2+0) (with remote contacts)	504.445	504.446	504.447	504.448	504.449

## PROBLOC BS(R) (3+0)



- Category IEC / EN / VDE: Class I, II / Type 1, 2 / B, C
- Location of use: Main distribution boards
- Network systems: TN-C, IT
- Protection modes: L - PEN
- Protective element: High energy MOV
- Surge discharge rating:  $I_{imp} = 25kA$
- MOV max. withstand capability 1 x 8/20: 150kA per pole
- Housing: Compact design
- Complies with: IEC/EN 61643-11



### Technical data

Type	PROBLOC BS(R) 75/xxx (3+0)					
	150	275	320	385	440	
<b>Electrical characteristics</b>						
Max. continuous operating voltage (AC/DC)	$U_C$	150/200V	275/350V	320/420V	385/500V	440/580V
Nominal discharge current (8/20)	$I_n$	25kA per pole				
Max. discharge current (8/20)	$I_{max}$	100kA per pole				
Impulse current (10/350)	$I_{imp}$	25kA per pole				
Specific energy	W/R	156kJ/Ω				
Charge	Q	12.5As				
Protection level	$U_p$	< 0.8kV	< 1.4kV	< 1.4kV	< 1.9kV	< 2.2kV
Residual voltage at $I_{imp}$	$U_{res}$	< 0.8kV	< 1.3kV	< 1.3kV	< 1.6kV	< 1.9kV
Residual voltage at 5kA (8/20)	$U_{res}$	< 0.6kV	< 1.0kV	< 1.0kV	< 1.1kV	< 1.2kV
Follow current	$I_{fi}$	NO				
Response time	$t_A$	< 25ns				
Thermal protection		YES				
Back-up fuse (if mains > 250A)		250A gL				
Short-circuit withstand current	$I_{SCCR}$	25kA/50Hz				
<b>Mechanical characteristics</b>						
Temperature range		- 40°C ... + 80°C				
Terminal screw torque		max. 3.0Nm				
Terminal cross section		35mm <sup>2</sup> (solid)/25mm <sup>2</sup> (stranded)				
Mounting		35mm DIN rail, EN 60715				
Degree of protection		IP 20				
Housing material		Thermoplastic; extinguishing degree UL 94 V-0				
Indication of disconnector operation		red flag				
Remote contacts (RC)		YES				
Contact ratings		AC: 250V/0.5A; 125V/3A				
Terminal cross section		max. 1.5mm <sup>2</sup>				
Remote terminal torque		0.25Nm				

### Ordering information

$U_C$	150	275	320	385	440
Ordering code PROBLOC BS 75/xxx (3+0)	504.518	504.519	504.520	504.464	504.465
Ordering code PROBLOC BSR 75/xxx (3+0) (with remote contacts)	504.521	504.522	504.523	504.466	504.467

## PROBLOC BS(R) (4+0)



- Category IEC / EN / VDE: Class I, II / Type 1, 2 / B, C
- Location of use: Main distribution boards
- Network systems: TN-S, IT
- Protection modes: L/N-PE
- Protective element: High energy MOV
- Surge discharge rating:  $I_{imp} = 25kA$
- MOV max. withstand capability 1 x 8/20: 150kA per pole
- Housing: Compact design
- Complies with: IEC/EN 61643-11



### Technical data

Type	PROBLOC BS(R) 100/xxx (4+0)					
	150	275	320	385	440	
<b>Electrical characteristics</b>						
Max. continuous operating voltage (AC/DC)	$U_C$	150/200V	275/350V	320/420V	385/500V	440/580V
Nominal discharge current (8/20)	$I_n$	25kA per pole				
Max. discharge current (8/20)	$I_{max}$	100kA per pole				
Impulse current (10/350)	$I_{imp}$	25kA per pole				
Specific energy	W/R	156kJ/Ω				
Charge	Q	12.5As				
Protection level	$U_p$	< 0.8kV	< 1.4kV	< 1.4kV	< 1.9kV	< 2.2kV
Residual voltage at $I_{imp}$	$U_{res}$	< 0.8kV	< 1.3kV	< 1.3kV	< 1.6kV	< 1.9kV
Residual voltage at 5kA (8/20)	$U_{res}$	< 0.6kV	< 1.0kV	< 1.0kV	< 1.1kV	< 1.2kV
Follow current	$I_{fi}$	NO				
Response time	$t_A$	< 25ns				
Thermal protection		YES				
Back-up fuse (if mains > 250A)		250A gL				
Short-circuit withstand current	$I_{SCCR}$	25kA/50Hz				
<b>Mechanical characteristics</b>						
Temperature range		- 40°C ... + 80°C				
Terminal screw torque		max. 3.0Nm				
Terminal cross section		35mm <sup>2</sup> (solid)/25mm <sup>2</sup> (stranded)				
Mounting		35mm DIN rail, EN 60715				
Degree of protection		IP 20				
Housing material		Thermoplastic; extinguishing degree UL 94 V-0				
Indication of disconnector operation		red flag				
Remote contacts (RC)		YES				
Contact ratings		AC: 250V/0.5A; 125V/3A				
Terminal cross section		max. 1.5mm <sup>2</sup>				
Remote terminal torque		0.25Nm				

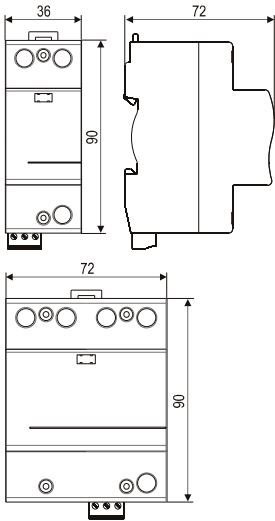
### Ordering information

$U_C$	150	275	320	385	440
Ordering code PROBLOC BS 100/xxx (4+0)	504.524	504.525	504.526	504.468	504.469
Ordering code PROBLOC BSR 100/xxx (4+0) (with remote contacts)	504.527	504.528	504.529	504.470	504.471

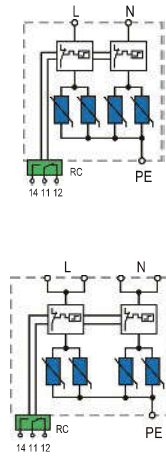
**Dimensions, Internal configuration, Weight and Packaging**

**PROBLOC BS(R) 50/xxx (2+0)**

**Dimensions**



**Internal configuration**

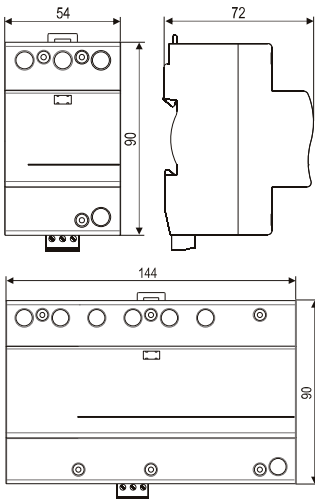


<b>PROBLOC BS 50/xxx (2+0)</b>	<b>150</b>	<b>275</b>	<b>320</b>
Dimensions DIN 43880	2TE		
Weight per unit	266g	374g	374g
<b>PROBLOC BSR 50/xxx (2+0)</b>	<b>150</b>	<b>275</b>	<b>320</b>
Dimensions DIN 43880	2TE		
Weight per unit	271g	379g	379g
Packaging dimensions (single unit)	109 x 76.5 x 41.5mm		
Min. packaging quantity	7 pcs.		

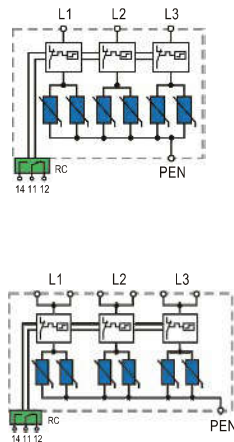
<b>PROBLOC BS 50/xxx (2+0)</b>	<b>385</b>	<b>440</b>	
Dimensions DIN 43880	4TE		
Weight per unit	438g	458g	
<b>PROBLOC BSR 50/xxx (2+0)</b>	<b>385</b>	<b>440</b>	
Dimensions DIN 43880	4TE		
Weight per unit	443g	463g	
Packaging dimensions (single unit)	109 x 76.5 x 78mm		
Min. packaging quantity	3 pcs.		

**PROBLOC BS(R) 75/xxx (3+0)**

**Dimensions**



**Internal configuration**

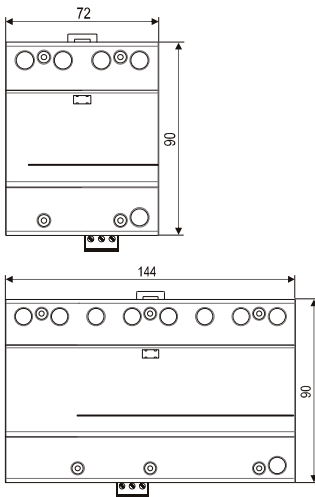


<b>PROBLOC BS 75/xxx (3+0)</b>	<b>150</b>	<b>275</b>	<b>320</b>
Dimensions DIN 43880	3TE		
Weight per unit	400g	570g	570g
<b>PROBLOC BSR 75/xxx (3+0)</b>	<b>150</b>	<b>275</b>	<b>320</b>
Dimensions DIN 43880	3TE		
Weight per unit	405g	575g	575g
Packaging dimensions (single unit)	109 x 76.5 x 60mm		
Min. packaging quantity	5 pcs.		

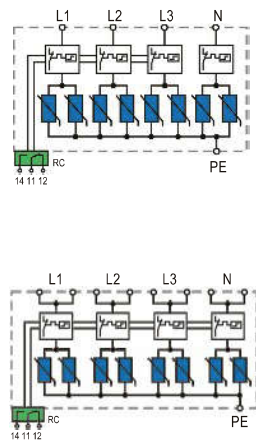
<b>PROBLOC BS 75/xxx (3+0)</b>	<b>385</b>	<b>440</b>	
Dimensions DIN 43880	8TE		
Weight per unit	726g	792g	
<b>PROBLOC BSR 75/xxx (3+0)</b>	<b>385</b>	<b>440</b>	
Dimensions DIN 43880	8TE		
Weight per unit	731g	797g	
Packaging dimensions (single unit)	109 x 76.5 x 148mm		
Min. packaging quantity	2 pcs.		

**PROBLOC BS(R) 100/xxx (4+0)**

**Dimensions**



**Internal configuration**



<b>PROBLOC BS 100/xxx (4+0)</b>	<b>150</b>	<b>275</b>	<b>320</b>
Dimensions DIN 43880	4TE		
Weight per unit	532g	756g	756g
<b>PROBLOC BSR 100/xxx (4+0)</b>	<b>150</b>	<b>275</b>	<b>320</b>
Dimensions DIN 43880	4TE		
Weight per unit	537g	761g	761g
Packaging dimensions (single unit)	109 x 76.5 x 78mm		
Min. packaging quantity	3 pcs.		

<b>PROBLOC BS 100/xxx (4+0)</b>	<b>385</b>	<b>440</b>	
Dimensions DIN 43880	8TE		
Weight per unit	912g	1000g	
<b>PROBLOC BSR 100/xxx (4+0)</b>	<b>385</b>	<b>440</b>	
Dimensions DIN 43880	8TE		
Weight per unit	917g	1005g	
Packaging dimensions (single unit)	109 x 76.5 x 148mm		
Min. packaging quantity	2 pcs.		



**PROBLOC BS(R) (1+1)**



- **Category IEC / EN / VDE:** Class I, II / Type 1, 2 / B, C
- **Location of use:** Main distribution boards
- **Network system:** TT, TN-S
- **Protection modes:** L-N, N-PE
- **Protective element:** High energy MOV and GDT
- **Surge discharge rating:**  $I_{imp} = 25kA/50kA (L-N/N-PE)$
- **MOV max. withstand capability 1 x 8/20:** 150kA per pole
- **Housing:** Compact design
- **Complies with:** IEC/EN 61643-11



**Technical data**

Type		PROBLOC BS(R) 50/xxx (1+1)				
		150	275	320	385	440
<b>Electrical characteristics</b>						
Max. continuous operating voltage (AC/DC)	$U_c$ (L-N)	150/200V	275/350V	320/420V	385/500V	440/580V
	$U_c$ (N-PE)	255V				
Nominal discharge current (8/20)	$I_n$ (L-N/N-PE)	25kA/50kA				
Max. discharge current (8/20)	$I_{max}$ (L-N/N-PE)	100kA/100kA				
Impulse current (10/350)	$I_{imp}$ (L-N/N-PE)	25kA/50kA				
Specific energy	W/R (L-N/N-PE)	156kJ/Ω/625kJ/Ω				
Charge	Q (L-N/N-PE)	12.5As/25As				
Protection level	$U_p$ (L-N)	< 0,8kV	< 1,4kV	< 1,4kV	< 1,8kV	< 2,1kV
	$U_p$ (N-PE)	< 1,5kV				
Residual voltage at $I_{imp}$	$U_{res}$ (L-N)	< 0,8kV	< 1,3kV	< 1,3kV	< 1,6kV	< 1,9kV
Residual voltage at 5kA (8/20)	$U_{res}$	< 0,6kV	< 1,0kV	< 1,0kV	< 1,1kV	< 1,2kV
Follow current	$I_{fi}$ (N-PE)	100ARMS				
Response time	$t_A$ (L-N/N-PE)	< 25ns/100ns				
Thermal protection	(L-N)	YES				
Back-up fuse (if mains > 250A)	(L-N)	250A gL				
Short-circuit withstand current	$I_{SCCR}$ (L-N)	25kA/50Hz				
<b>Mechanical characteristics</b>						
Temperature range		-40°C ....+ 80°C				
Terminal screw torque		max. 3,0Nm				
Terminal cross section		35mm <sup>2</sup> (solid)/25mm <sup>2</sup> (stranded)				
Mounting		35mm DIN rail, EN 60715				
Degree of protection		IP 20				
Housing material		Thermoplastic; extinguishing degree UL 94 V-0				
Indication of disconnector operation		red flag				
Remote contacts (RC)		YES				
Contact ratings		AC: 250V/0.5A; 125V/3A				
Terminal cross section		max. 1,5mm <sup>2</sup>				
Remote terminal torque		0,25Nm				

**Ordering information**

$U_c$	150	275	320	385	440
Ordering code PROBLOC BS 50/xxx (1+1)	504.454	504.455	504.456	504.457	504.458
Ordering code PROBLOC BSR 50/xxx (1+1) (with remote contacts)	504.459	504.460	504.461	504.462	504.463

**PROBLOC BS(R) (3+1)**



- **Category IEC / EN / VDE:** Class I, II / Type 1, 2 / B, C
- **Location of use:** Main distribution boards
- **Network system:** TT, TN-S
- **Protection modes:** L-N, N-PE
- **Protective element:** High energy MOV and GDT
- **Surge discharge rating:**  $I_{imp} = 25kA/50kA (L-N/N-PE)$
- **MOV max. withstand capability 1 x 8/20:** 150kA per pole
- **Housing:** Compact design
- **Complies with:** IEC/EN 61643-11



**Technical data**

Type		150	275	320	385	440
		<b>PROBLOC BS(R) 100/xxx (3+1)</b>				
<b>Electrical characteristics</b>						
Max. continuous operating voltage (AC/DC)	$U_c$ (L-N)	150/200V	275/350V	320/420V	385/500V	440/580V
	$U_c$ (N-PE)	255V				
Nominal discharge current (8/20)	$I_n$ (L-N/N-PE)	25kA/100kA				
Max. discharge current (8/20)	$I_{max}$ (L-N/N-PE)	100kA/100kA				
Impulse current (10/350)	$I_{imp}$ (L-N/N-PE)	25kA/100kA				
Specific energy	W/R (L-N/N-PE)	156kJ/Ω/625kJ/Ω				
Charge	Q (L-N/N-PE)	12.5As/25As				
Protection level	$U_p$ (L-N)	< 0.9kV	< 1.4kV	< 1.4kV	< 1.9kV	< 2.2kV
	$U_p$ (N-PE)	< 1.75kV				
Residual voltage at $I_{imp}$	$U_{res}$ (L-N)	< 0.7kV	< 1.2kV	< 1.2kV	< 1.5kV	< 1.8kV
Residual voltage at 5kA (8/20)	$U_{res}$	< 0.5kV	< 1.0kV	< 1.0kV	< 1.1kV	< 1.2kV
Follow current	$I_{fi}$ (N-PE)	100ARMS				
Response time	$t_A$ (L-N/N-PE)	< 25ns/100ns				
Thermal protection	(L-N)	YES				
Back-up fuse (if mains > 250A)	(L-N)	250A gL				
Short-circuit withstand current	$I_{SCCR}$ (L-N)	25kA/50Hz				
<b>Mechanical characteristics</b>						
Temperature range		-40°C ....+ 80°C				
Terminal screw torque		max. 3.0Nm				
Terminal cross section		35mm <sup>2</sup> (solid)/25mm <sup>2</sup> (stranded)				
Mounting		35mm DIN rail, EN 60715				
Degree of protection		IP 20				
Housing material		Thermoplastic; extinguishing degree UL 94 V-0				
Indication of disconnecter operation		red flag				
Remote contacts (RC)		YES				
Contact ratings		AC: 250V/0.5A; 125V/3A				
Terminal cross section		max. 1.5mm <sup>2</sup>				
Remote terminal torque		0.25Nm				

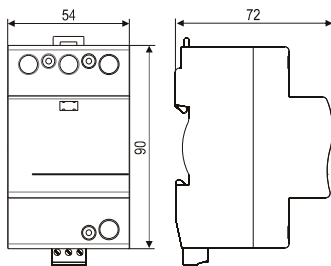
**Ordering information**

$U_c$	150	275	320	385	440
Ordering code <b>PROBLOC BS 100/xxx (3+1)</b>	504.530	504.531	504.532	504.472	504.473
Ordering code <b>PROBLOC BSR 100/xxx (3+1) (with remote contacts)</b>	504.533	504.534	504.535	504.474	504.475

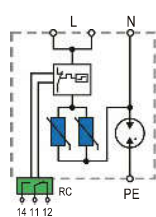
**Dimensions, Internal configuration, Weight and Packaging**

**PROBLOC BS(R) 50/xxx (1+1)**

**Dimensions**



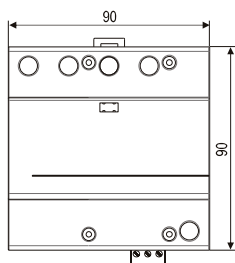
**Internal configuration**



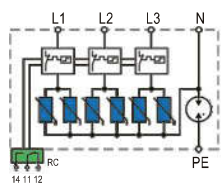
PROBLOC BS 50/xxx (1+1)	150	275	320	385	440
Dimensions DIN 43880	3TE				
Weight per unit	308g	364g	364g	386g	408g
PROBLOC BSR 50/xxx (1+1)	150	275	320	385	440
Dimensions DIN 43880	3TE				
Weight per unit	313g	369g	369g	391g	414g
Packaging dimensions (single unit)	109 x 76.5 x 60mm				
Min. packaging quantity	5 pcs.				

**PROBLOC BS(R) 100/xxx (3+1)**

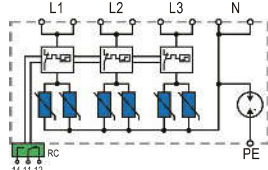
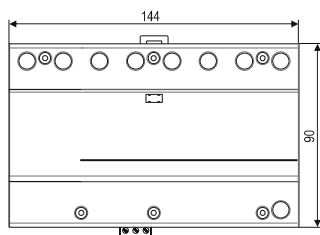
**Dimensions**



**Internal configuration**



PROBLOC BS 100/xxx (3+1)	150	275	320
Dimensions DIN 43880	5TE		
Weight per unit	568g	728g	728g
PROBLOC BSR 100/xxx (3+1)	150	275	320
Dimensions DIN 43880	5TE		
Weight per unit	573g	733g	733g
Packaging dimensions (single unit)	109 x 76.5 x 96mm		
Min. packaging quantity	3 pcs.		

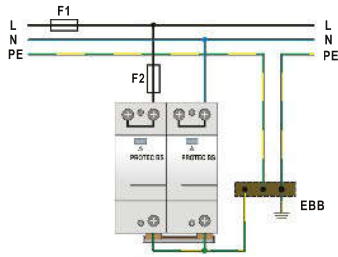


PROBLOC BS 100/xxx (3+1)	385	440
Dimensions DIN 43880	8TE	
Weight per unit	834g	900g
PROBLOC BSR 100/xxx (3+1)	385	440
Dimensions DIN 43880	8TE	
Weight per unit	839g	905g
Packaging dimensions (single unit)	109 x 76.5 x 148mm	
Min. packaging quantity	2 pcs.	

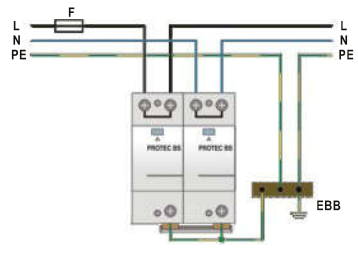
PROTEC BS(R) and PROTUBE BS

Network connections

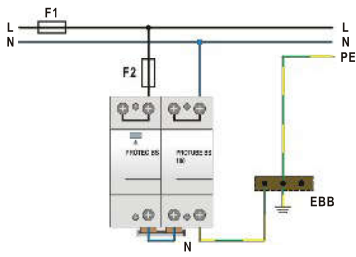
TN-S Network - Single-phase (T-connection)



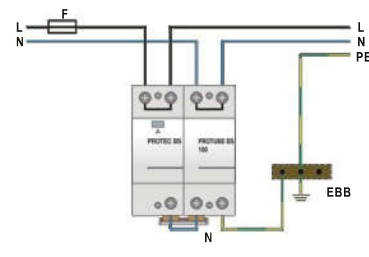
TN-S Network - Single-phase (V-connection)



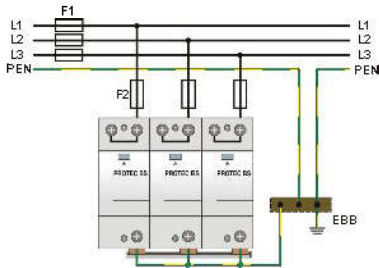
TT Network - Single-phase (T-connection)



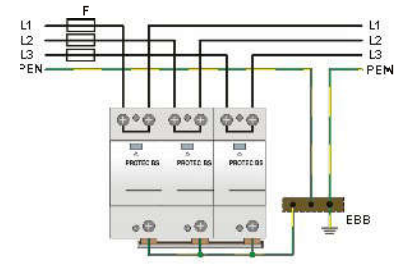
TT Network - Single-phase (V-connection)



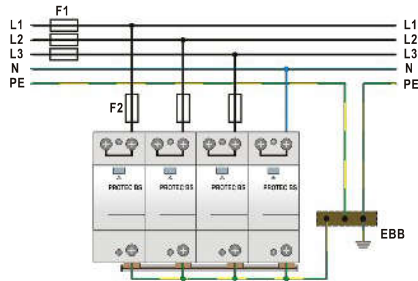
TN-C Network - Three-phase (T-connection)



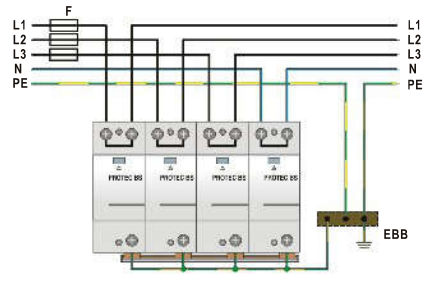
TN-C Network - Three-phase (V-connection)



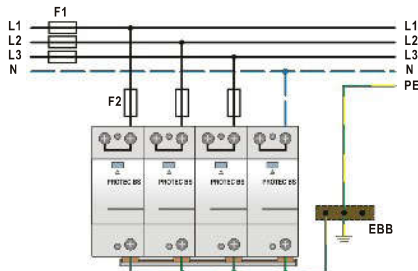
TN-S Network - Three-phase (T-connection)



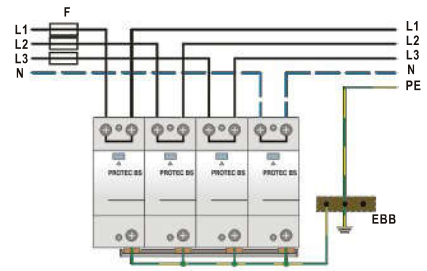
TN-S Network - Three-phase (V-connection)



IT Network - Three-phase (T-connection)

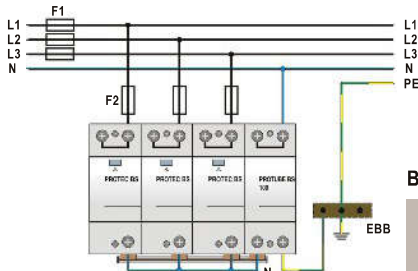


IT Network - Three-phase (V-connection)

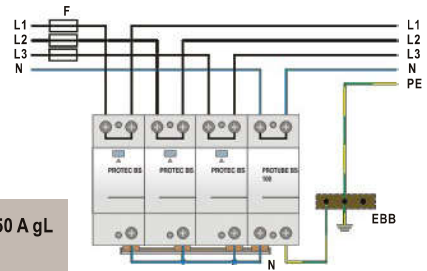


$$U_c \geq 1.1 \cdot U_n \cdot \sqrt{3}$$

TT Network - Three-phase (T-connection)



TT Network - Three-phase (V-connection)



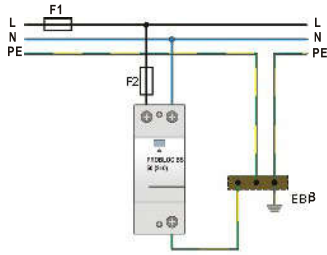
Back-up fuse

- $F1 > 250 \text{ A gL} \rightarrow$   $F2 = 250 \text{ A gL}$
- $F1 \leq 250 \text{ A gL} \rightarrow$   $F2$

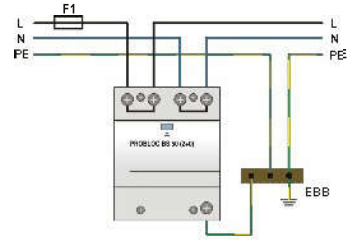
PROBLOC BS(R) Series

Network connections

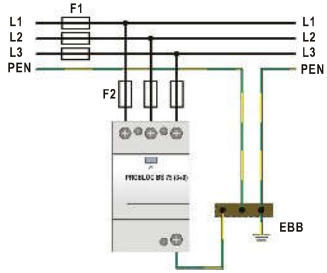
TN-S Network - Single-phase (T-connection)



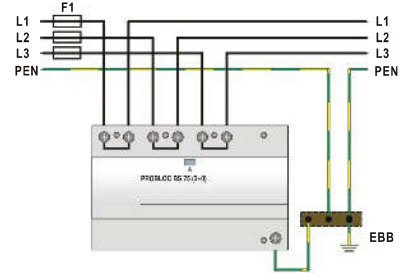
TN-S Network - Single-phase (V-connection)



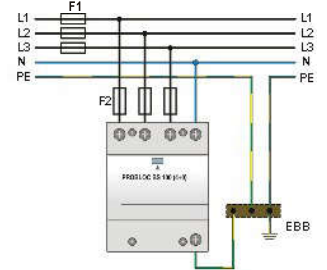
TN-C Network - Three-phase (T-connection)



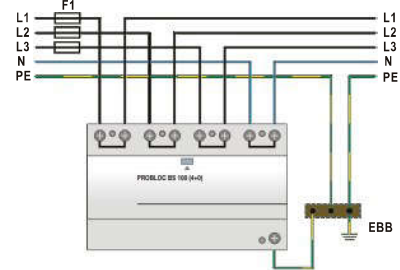
TN-C Network - Three-phase (V-connection)



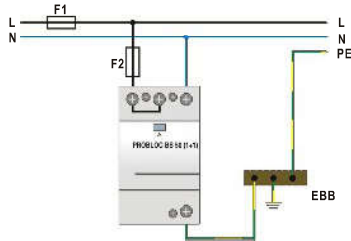
TN-S Network - Three-phase (T-connection)



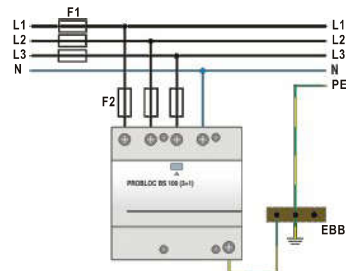
TN-S Network - Three-phase (V-connection)



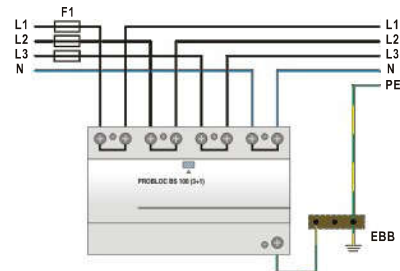
TT Network - Single-phase (T-connection)



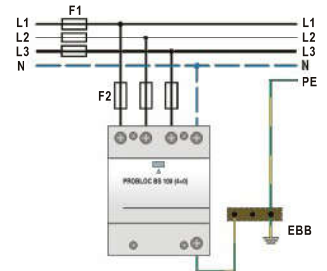
TT Network - Three-phase (T-connection)



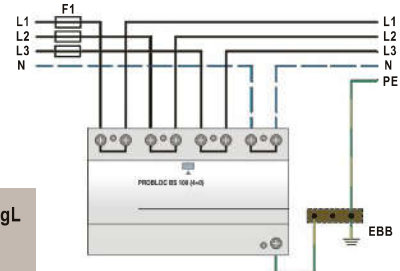
TT Network - Three-phase (V-connection)



IT Network - Three-phase (T-connection)



IT Network - Three-phase (V-connection)



$$U_c \geq 1.1 \cdot U_n \cdot \sqrt{3}$$

Back-up fuse

- $F1 > 250 \text{ A gL}$  →  $F2 = 250 \text{ A gL}$
- $F1 \leq 250 \text{ A gL}$  →  $F2$

