

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:** $I_{imp} = 12.5kA$
- **MOV max. withstand capability 1 x 8/20:** 100kA per pole
- **Housing:** Compact design
- **Complies with:** IEC/EN 61643-11



Technical data

Type	PROBLOC BS(R) 25/xxx (2+0)					
	150	275	320	385	440	
Electrical characteristics						
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	20kA per pole				
Max. discharge current (8/20)	I_{max}	50kA per pole				
Impulse current (10/350)	I_{imp}	12.5kA per pole				
Specific energy	W/R	39kJ/Ω				
Charge	Q	6.25As				
Protection level	U_p	< 0.7kV	< 1.4kV	< 1.4kV	< 1.6kV	< 1.9kV
Residual voltage at I_{imp}	U_{res}	< 0.6kV	< 1.1kV	< 1.1kV	< 1.4kV	< 1.7kV
Residual voltage at 5kA (8/20)	U_{res}	< 0.6kV	< 1.1kV	< 1.1kV	< 1.2kV	< 1.3kV
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				
Mechanical characteristics						
Temperature range		- 40°C+ 80°C				
Terminal screw torque		max. 3.0Nm				
Terminal cross section		35mm ² (solid)/25mm ² (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 ²				
Remote terminal torque		0.25Nm				

Ordering information

U_C	150	275	320	385	440
Ordering code PROBLOC BS 25/xxx (2+0)	504.405	504.406	504.407	504.408	504.409
Ordering code PROBLOC BSR 25/xxx (2+0) (with remote contacts)	504.420	504.421	504.422	504.423	504.424

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:** $I_{imp} = 12.5kA$
- **MOV max. withstand capability 1 x 8/20:** 100kA per pole
- **Housing:** Compact design
- **Complies with:** IEC/EN 61643-11



Technical data

Type	PROBLOC BS(R) 37.5/xxx (3+0)					
	150	275	320	385	440	
Electrical characteristics						
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	20kA per pole				
Max. discharge current (8/20)	I_{max}	50kA per pole				
Impulse current (10/350)	I_{imp}	12.5kA per pole				
Specific energy	W/R	39kJ/Ω				
Charge	Q	6.25As				
Protection level	U_p	< 0.9kV	< 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}	< 0.6kV	< 1.1kV	< 1.1kV	< 1.2kV	< 1.3kV
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				
Mechanical characteristics						
Temperature range		- 40°C+ 80°C				
Terminal screw torque		max. 3.0Nm				
Terminal cross section		35mm ² (solid)/25mm ² (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 ²				
Remote terminal torque		0.25Nm				

Ordering information

U_C	150	275	320	385	440
Ordering code PROBLOC BS 37.5/xxx (3+0)	504.049	504.051	504.053	504.267	504.055
Ordering code PROBLOC BSR 37.5/xxx (3+0) (with remote contacts)	504.057	504.059	504.061	504.269	504.063

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:** $I_{imp} = 12.5kA$
- **MOV max. withstand capability 1 x 8/20:** 100kA per pole
- **Housing:** Compact design
- **Complies with:** IEC/EN 61643-11



Technical data

Type	PROBLOC BS(R) 50/xxx (4+0)					
	150	275	320	385	440	
Electrical characteristics						
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	20kA per pole				
Max. discharge current (8/20)	I_{max}	50kA per pole				
Impulse current (10/350)	I_{imp}	12.5kA per pole				
Specific energy	W/R	39kJ/Ω				
Charge	Q	6.25As				
Protection level	U_p	< 0.9kV	< 1.4kV	< 1.4kV	< 1.8kV	< 2.1kV
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	< 1.1kV	< 1.1kV	< 1.2kV	< 1.3kV
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				
Mechanical characteristics						
Temperature range		- 40°C+ 80°C				
Terminal screw torque		max. 3.0Nm				
Terminal cross section		35mm ² (solid)/25mm ² (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 ²				
Remote terminal torque		0.25Nm				

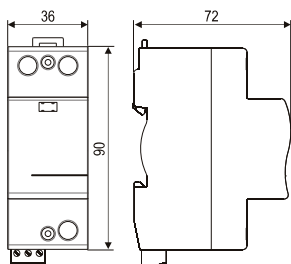
Ordering information

U_C	150	275	320	385	440
Ordering code PROBLOC BS 50/xxx (4+0)	504.065	504.067	504.069	504.271	504.071
Ordering code PROBLOC BSR 50/xxx (4+0) (with remote contacts)	504.073	504.075	504.077	504.273	504.079

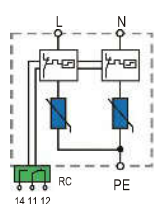
Dimensions, Internal configuration, Weight and Packaging

PROBLOC BS(R) 25/xxx (2+0)

Dimensions



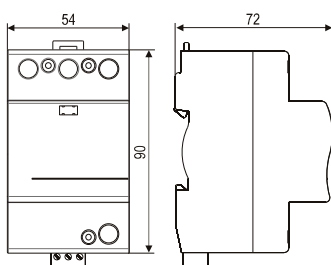
Internal configuration



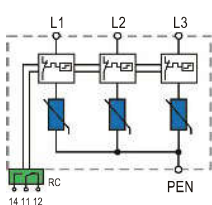
PROBLOC BS 25/xxx (2+0)	150	275	320	385	440
Dimensions DIN 43880	2TE				
Weight per unit	198g	251g	251g	267g	283g
PROBLOC BSR 25/xxx (2+0)	150	275	320	385	440
Dimensions DIN 43880	2TE				
Weight per unit	203g	256g	256g	272g	288g
Packaging dimensions (single unit)	109 x 76,5 x 41,5mm				
Min. packaging quantity	7 pcs.				

PROBLOC BS(R) 37.5/xxx (3+0)

Dimensions



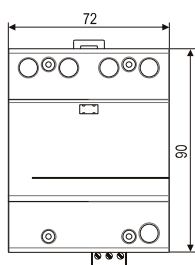
Internal configuration



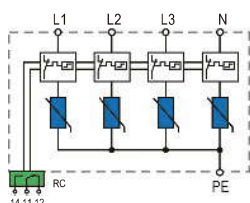
PROBLOC BS 37.5/xxx (3+0)	150	275	320	385	440
Dimensions DIN 43880	3TE				
Weight per unit	300g	382g	382g	394g	432g
PROBLOC BSR 37.5/xxx (3+0)	150	275	320	385	440
Dimensions DIN 43880	3TE				
Weight per unit	305g	387g	387g	399g	437g
Packaging dimensions (single unit)	109 x 76.5 x 60mm				
Min. packaging quantity	5 pcs.				

PROBLOC BS(R) 50/xxx (4+0)

Dimensions



Internal configuration



PROBLOC BS 50/xxx (4+0)	150	275	320	385	440
Dimensions DIN 43880	4TE				
Weight per unit	366g	462g	462g	494g	526g
PROBLOC BSR 50/xxx (4+0)	150	275	320	385	440
Dimensions DIN 43880	4TE				
Weight per unit	371g	467g	467g	499g	531g
Packaging dimensions (single unit)	109 x 76.5 x 78mm				
Min. packaging quantity	3 pcs.				

PROBLOC BS (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:** $I_{imp} = 12.5kA/50kA (L-N/N-PE)$
- **MOV max. withstand capability 1 x 8/20:** 100kA per pole
- **Housing:** Compact design
- **Complies with:** IEC/EN 61643-11



Technical data

Type	PROBLOC BS 25/xxx (1+1)					
	150	275	320	385	440	
Electrical characteristics						
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)	20kA/50kA				
Max. discharge current (8/20)	I_{max} (L-N/N-PE)	50kA/100kA				
Impulse current (10/350)	I_{imp} (L-N/N-PE)	12.5kA/50kA				
Specific energy	W/R (L-N/N-PE)	39kJ/Ω/625kJ/Ω				
Charge	Q (L-N/N-PE)	6.25As/25As				
Protection level	U_p (L-N)	< 0.7kV	< 1.4kV	< 1.4kV	< 1.6kV	< 1.9kV
	U_p (N-PE)	< 1.5kV				
Residual voltage at I_{imp}	U_{res} (L-N)	< 0.6kV	< 1.1kV	< 1.1kV	< 1.4kV	< 1.7kV
Residual voltage at 5kA (8/20)	U_{res} (L-N)	< 0.6kV	< 1.1kV	< 1.1kV	< 1.2kV	< 1.3kV
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				
Mechanical characteristics						
Temperature range	- 40°C+ 80°C					
Terminal screw torque	max. 3.0Nm					
Terminal cross section	35mm ² (solid)/25mm ² (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					

Ordering information

U_c	150	275	320	385	440
Ordering code PROBLOC BS 25/xxx (1+1)	504.410	504.411	504.412	504.413	504.414

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:** $I_{imp} = 12.5kA/50kA (L-N/N-PE)$
- **MOV max. withstand capability 1 x 8/20:** 100kA per pole
- **Housing:** Compact design
- **Complies with:** IEC/EN 61643-11



Technical data

Type	PROBLOC BS(R) 50/xxx (3+1)					
	150	275	320	385	440	
Electrical characteristics						
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)	20kA/50kA				
Max. discharge current (8/20)	I_{max} (L-N/N-PE)	50kA/100kA				
Impulse current (10/350)	I_{imp} (L-N/N-PE)	12.5kA/50kA				
Specific energy	W/R (L-N/N-PE)	39kJ/Ω/625kJ/Ω				
Charge	Q (L-N/N-PE)	6.25As/25As				
Protection level	U_p (L-N)	< 0.9kV	< 1.4kV	< 1.4kV	< 1.8kV	< 2.1kV
	U_p (N-PE)	< 1.5kV				
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} (L-N)	< 0.6kV	< 1.1kV	< 1.1kV	< 1.2kV	< 1.3kV
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				
Mechanical characteristics						
Temperature range	- 40°C ... + 80°C					
Terminal screw torque	max. 3.0Nm					
Terminal cross section	35mm ² (solid)/25mm ² (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 ²					
Remote terminal torque	0.25Nm					

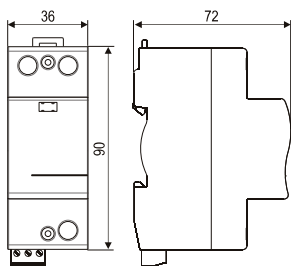
Ordering information

U_c	150	275	320	385	440
Ordering code PROBLOC BS 50/xxx (3+1)	504.480	504.481	504.482	504.483	504.484
Ordering code PROBLOC BSR 50/xxx (3+1) (with remote contacts)	504.485	504.486	504.487	504.488	504.489

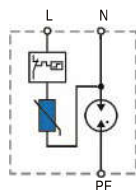
Dimensions, Internal configuration, Weight and Packaging

PROBLOC BS 25/xxx (1+1)

Dimensions



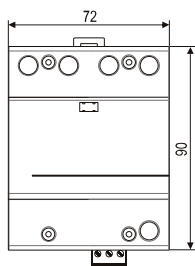
Internal configuration



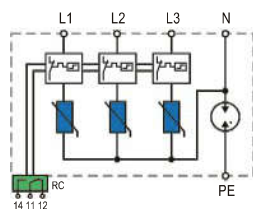
PROBLOC BS 25/xxx (1+1)	150	275	320	385	440
Dimensions DIN 43880	2TE				
Weight per unit	192g	245g	245g	261g	277g
Packaging dimensions (single unit)	109 x 76.5 x 41.5mm				
Min. packaging quantity	7 pcs.				

PROBLOC BS(R) 50/xxx (3+1)

Dimensions



Internal configuration



PROBLOC BS 50/xxx (3+1)	150	275	320	385	440
Dimensions DIN 43880	4TE				
Weight per unit	442g	538g	538g	548g	577g
PROBLOC BSR 50/xxx (3+1)	150	275	320	385	440
Dimensions DIN 43880	4TE				
Weight per unit	447g	543g	543g	553g	582g
Packaging dimensions (single unit)	109 x 76.5 x 78mm				
Min. packaging quantity	3 pcs.				