

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	
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)	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				
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 (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	PROBLOC BS(R) 100/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)	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				
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 100/xxx (3+1)	504.530	504.531	504.532	504.472	504.473
Ordering code PROBLOC BSR 100/xxx (3+1) (with remote contacts)	504.533	504.534	504.535	504.474	504.475