

PROBLOC B(R) 12.5kA per pole



- **Category IEC / EN:** Class I, II / Type 1, 2
- **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:** $I_{imp} = 12.5kA/50kA (L-N/N-PE)$
- **Housing:** Compact design
- **Complies with:** IEC 61643-11:2011, EN 61643-11:2012;



Technical data

Type	150	PROBLOC B(R) yy/xxx (1+1) (3+1)			440
		275	320	385	

● **Electrical characteristics**

Max. continuous operating voltage (AC)	U_c (L-N)	150	275	320	385	440
	U_c (N-PE)	255V				
Nominal discharge current (8/20)	I_n (L-N/N-PE)	12.5kA/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/625kJΩ				
Charge	Q (L-N/N-PE)	6.25As/25As				
Protection level	U_p (L-N)	< 0.7kV	< 1.3kV	< 1.3kV	< 1.7kV	< 2.0kV
	U_p (N-PE)	< 1.3kV				
Residual voltage at 5kA (8/20)	U_{res} (L-N)	< 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 > 160A)	(L-N)	160A gL/gG				
Short-circuit current rating	I_{sccr}	25kA/50Hz				
TOV withstand 5s	U_T (L-N)	174V		335V	580V	
TOV disconnection 120min	U_T (L-N)	228V		438V	765V	
TOV disconnection 200ms	U_T (N-PE)			1200V/300A		
Number of ports		1				

● **Mechanical characteristics**

Temperature range	T_a	- 40°C ... + 70°C				
Permissible humidity	RH	5%...95%				
Terminal screw torque	M_{max}	max. 3.0Nm				
Conductor cross section		35mm ² (solid)/25mm ² (stranded)				
AWG conductor cross section		2 AWG (solid) / 3 AWG (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 ²				
Remote terminal torque		0.25Nm				

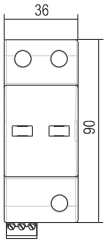
Ordering information

U_c	150	275	320	385	440
Ordering code PROBLOC B 25/xxx (1+1)	56.0019	56.0029	56.0039	56.0049	56.0059
Ordering code PROBLOC BR 25/xxx (1+1) (with remote contacts)	56.0020	56.0030	56.0040	56.0050	56.0060
Ordering code PROBLOC B 50/xxx (3+1)	56.0021	56.0031	56.0041	56.0051	56.0061
Ordering code PROBLOC BR 50/xxx (3+1) (with remote contacts)	56.0022	56.0032	56.0042	56.0052	56.0062

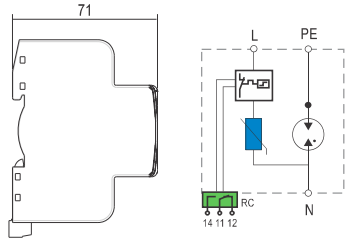
Dimensions, Internal configuration, Weight and Packaging

PROBLOC B(R) 25/xxx (1+1)

Dimensions



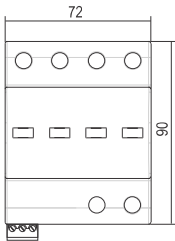
Internal configuration



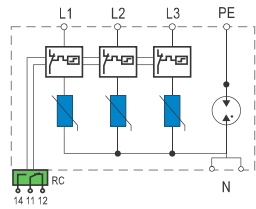
PROBLOC B 25/xxx (1+1)	150	275	320	385	440
Dimensions DIN 43880	2TE				
Weight per unit	110g	150g	150g	210g	300g
PROBLOC BR 25/xxx (1+1)	150	275	320	385	440
Dimensions DIN 43880	2TE				
Weight per unit	115g	155g	155g	215g	305g
Packaging dimensions (single unit)	109 x 76.5 x 41.5mm				
Min. packaging quantity	7 pcs.				

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

Dimensions



Internal configuration

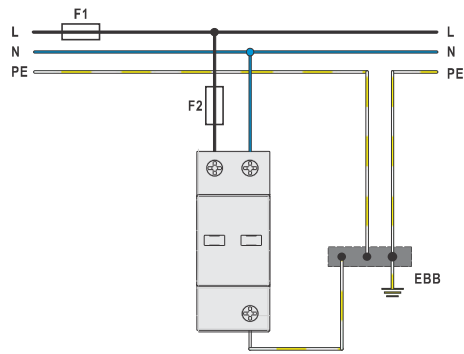


PROBLOC B 50/xxx (3+1)	150	275	320	385	440
Dimensions DIN 43880	4TE				
Weight per unit	555g	595g	595g	655g	745g
PROBLOC BR 50/xxx (3+1)	150	275	320	385	440
Dimensions DIN 43880	4TE				
Weight per unit	560g	600g	600g	660g	750g
Packaging dimensions (single unit)	109 x 76.5 x 78mm				
Min. packaging quantity	3 pcs.				

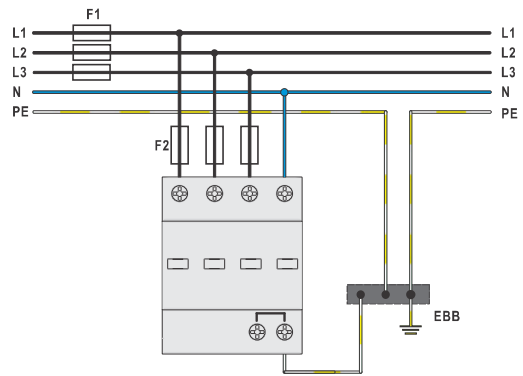
PROBLOC B(R) Series

Network connections

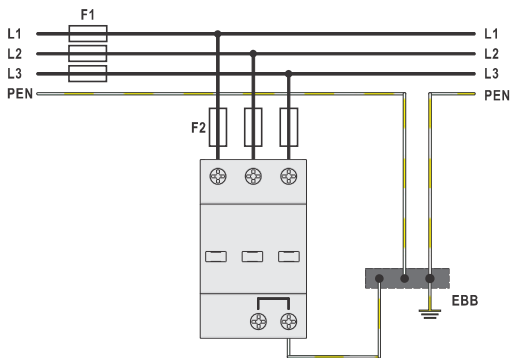
TN-S Network - Single-phase



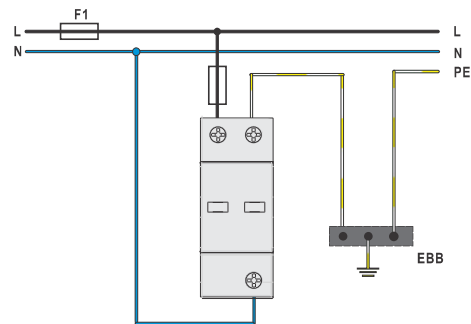
TN-S Network - Three-phase



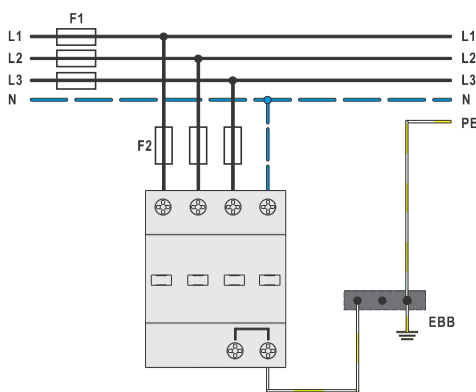
TN-C Network - Three-phase



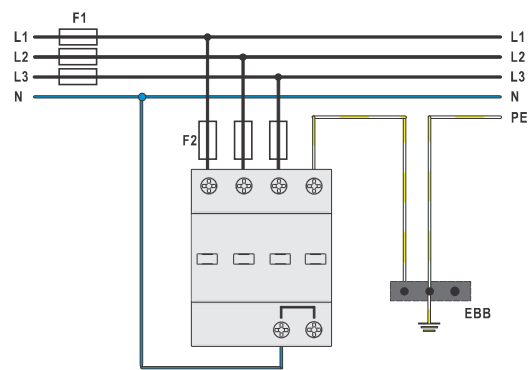
TT Network - Single-phase



IT Network - Three-phase



TT Network - Three-phase



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

