

Compact Single Pole & Multi-pole Surge Protective Devices (SPDs)

Lightning and Overvoltage Protection **ProBloc B(R)**

Special features:

- Single and Multi-pole compact housing designs
- High discharge capacity thanks to unique design impulse discharge current
- High performance paired varistor combination, each with separate disconnect mechanisms
- Backup fuse up to 250 A gG
- Short circuit current rating up to 50 kA
- All modules including N-PE, with fault indication green-red
- Optional remote contact (RC) signaling
- ÖVE-IEC Class I & II / EN Type 1+2 certified



Compliance	IEC 61643-11:2011	EN 61643-11:2012
ProBloc B(R) Series	✓	✓

Raycap ProBloc B products feature compact Type 1/Type 2 single and multi-pole designs for use in a number of industrial applications. Products are available for both AC and DC power protection, and protective elements consist of high energy MOV and Gas Discharge Tube (GDT) surge protective device (SPD) technology. The ProTube versions contain only the GDT protective element. Both ProBloc and ProTube are compliant to IEC/EN safety standards.

Lightning and Overvoltage Protection
ProBloc B(R) 25 (1+0)
 Class I • Class II • Type 1 • Type 2

25 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-S, TN-C
 Mode of Protection: L-PE, L-N, N-PE, L-PEN
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

ProBloc B(R) 25/xxx (1+0)

150

275*

320*

IEC Electrical

		150	275*	320*
Nominal AC Voltage (50/60 Hz)	U_o	120V	230V	230V
Maximum Continuous Operating Voltage (AC)	U_c	150V	275V	320V
Nominal Discharge Current (8/20 μ s)	I_n		25 kA	
Maximum Discharge Current (8/20 μ s)	I_{max}		100 kA	
Impulse Discharge Current (10/350 μ s)	I_{imp}		25 kA	
Specific Energy	W/R		156 kJ/ Ω	
Charge	Q		12.5 As	
Voltage Protection Level	U_p	< 1.0 kV	< 1.5 kV	< 1.5 kV
Response Time	t_A		< 25 ns	
Overcurrent Protection (max)			250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA	
TOV Withstand 5s	U_T	174V	334V	334V
TOV Safe Fail 120min	U_T	229V	438V	438V
Number of Ports			1	

Mechanical & Environmental

Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Humidity	RH	5%...95%		
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree of Protection		IP 20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection		Yes		
Fault Indication		Red Flag		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/0.5A; 125V/3A		
RC Terminal Cross Section (max)		1.5mm ² (Solid) / 16 AWG (Solid)		
RC Terminal Screw Torque	M_{max}	2.2 lbf-in [0.25 Nm]		

Order Information

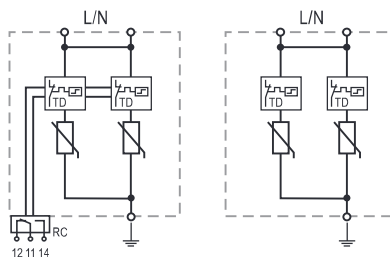
Order Code	150	275*	320*
ProBloc B 25/xxx (1+0)	56.0562	56.0564	56.0566
ProBloc BR 25/xxx (1+0) (with remote contacts)	56.0563	56.0565	56.0567

*OVE Certified

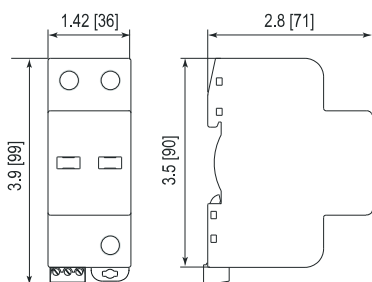
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏏ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnecter



Complete Unit



Single Unit Dimensions & Packaging				
ProBloc B 25/xxx (1+0)		150	275*	320*
Weight	pounds	.540	.650	.650
	grams	245	295	295
DIN 43880 Dimension		2 TE / 1.42" [36]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		7 Units		
ProBloc BR 25/xxx (1+0)		150	275*	320*
Weight	pounds	.551	.661	.661
	grams	250	300	300
DIN 43880 Dimension		2 TE / 1.42" [36]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		7 Units		



ProBloc B

inches
[mm]



Applicable connection configurations can be found beginning on page 98.

Lightning and Overvoltage Protection
ProBloc B(R) 50 (2+0)
 Class I • Class II • Type 1 • Type 2

25 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-S
 Mode of Protection: L-PE, N-PE
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

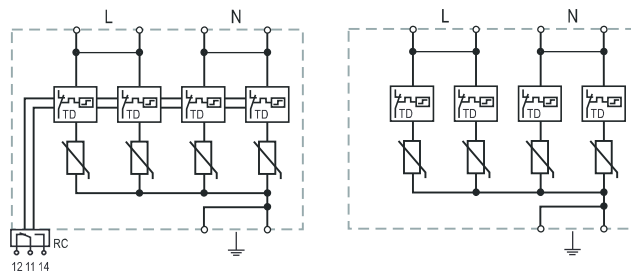
ProBloc B(R) 50/xxx (2+0)		150	275*	320*
IEC Electrical				
Nominal AC Voltage (50/60 Hz)	U_o	120V	230V	230V
Maximum Continuous Operating Voltage (AC)	U_c	150V	275V	320V
Nominal Discharge Current (8/20 μ s)	I_n		25 kA	
Maximum Discharge Current (8/20 μ s)	I_{max}		100 kA	
Impulse Discharge Current (10/350 μ s)	I_{imp}		25 kA	
Total Discharge Current (10/350 μ s)	I_{total}		50 kA	
Specific Energy	W/R		156 kJ/ Ω	
Charge	Q		12.5 As	
Voltage Protection Level	U_p	< 1.0 kV	< 1.5 kV	< 1.5 kV
Response Time	t_A		< 25 ns	
Overcurrent Protection (max)			250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA	
TOV Withstand 5s	U_T	174V	334V	334V
TOV Safe Fail 120min	U_T	229V	438V	438V
Number of Ports			1	
Mechanical & Environmental				
Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Humidity	RH	5%...95%		
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree of Protection		IP 20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection		Yes		
Fault Indication		Red Flag		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/0.5A; 125V/3A		
RC Terminal Cross Section (max)		1.5mm ² (Solid) / 16 AWG (Solid)		
RC Terminal Screw Torque	M_{max}	2.2 lbf-in [0.25 Nm]		
Order Information				
Order Code		150	275*	320*
ProBloc B 50/xxx (2+0)		56.0572	56.0574	56.0576
ProBloc BR 50/xxx (2+0) (with remote contacts)		56.0573	56.0575	56.0577

*OVE Certified

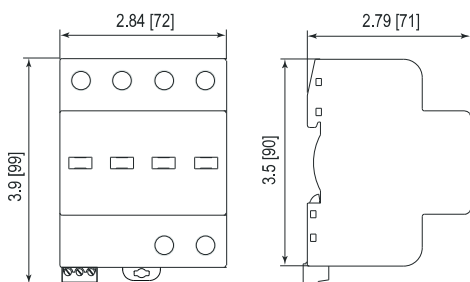
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- PE PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect

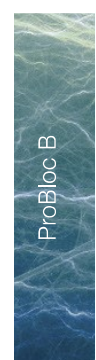


Complete Unit



Single Unit Dimensions & Packaging

		150	275*	320*
ProBloc B 50/xxx (2+0)				
Weight	pounds	1.014	1.234	1.234
	grams	460	560	560
DIN 43880 Dimension		4 TE / 2.84" [72]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		3 Units		
ProBloc BR 50/xxx (2+0)				
Weight	pounds	1.036	1.256	1.256
	grams	470	570	570
DIN 43880 Dimension		4 TE / 2.84" [72]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		3 Units		



Applicable connection configurations can be found beginning on page 98.

inches
[mm]

Lightning and Overvoltage Protection

ProBloc B(R) 75 (3+0)

Class I • Class II • Type 1 • Type 2

25 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-C
 Mode of Protection: L-PEN
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

ProBloc B(R) 75/xxx (3+0)

		150	275*	320*
IEC Electrical				
Nominal AC Voltage (50/60 Hz)	U_o	120V	230V	230V
Maximum Continuous Operating Voltage (AC)	U_c	150V	275V	320V
Nominal Discharge Current (8/20 μ s)	I_n		25 kA	
Maximum Discharge Current (8/20 μ s)	I_{max}		100 kA	
Impulse Discharge Current (10/350 μ s)	I_{imp}		25 kA	
Total Discharge Current (10/350 μ s)	I_{total}		75 kA	
Specific Energy	W/R		156 kJ/ Ω	
Charge	Q		12.5 As	
Voltage Protection Level	U_p	< 1.0 kV	< 1.5 kV	< 1.5 kV
Response Time	t_A		< 25 ns	
Overcurrent Protection (max)			250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA	
TOV Withstand 5s	U_T	174V	334V	334V
TOV Safe Fail 120min	U_T	229V	438V	438V
Number of Ports			1	

Mechanical & Environmental

Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Humidity	RH	5%...95%		
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree of Protection		IP 20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection		Yes		
Fault Indication		Red Flag		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/0.5A; 125V/3A		
RC Terminal Cross Section (max)		1.5mm ² (Solid) / 16 AWG (Solid)		
RC Terminal Screw Torque	M_{max}	2.2 lbf-in [0.25 Nm]		

Order Information

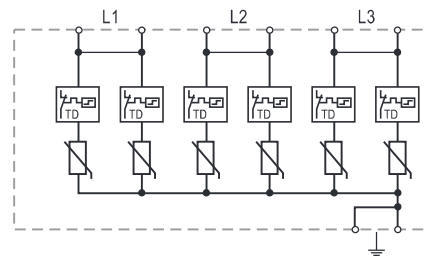
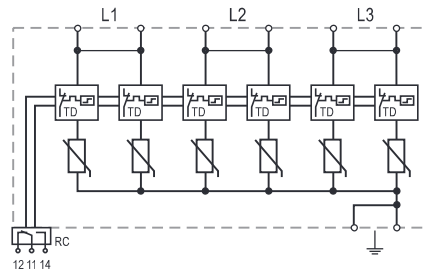
Order Code	150	275*	320*
ProBloc B 75/xxx (3+0)	56.0582	56.0584	56.0586
ProBloc BR 75/xxx (3+0) (with remote contacts)	56.0583	56.0585	56.0587

*OVE Certified

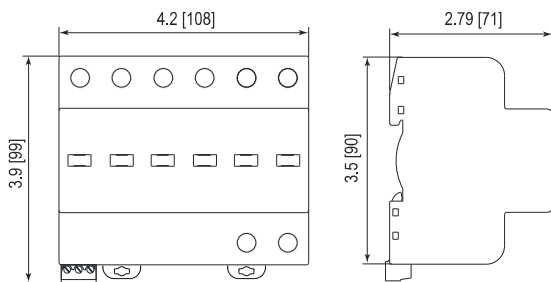
Internal Configuration

Legend

- L Line Conductor Terminal
- ⊥ PEN Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



Complete Unit



Single Unit Dimensions & Packaging

		150	275*	320*
ProBloc B 75/xxx (3+0)				
Weight	pounds	1.521	1.851	1.851
	grams	690	840g	840
DIN 43880 Dimension		6 TE / 4.25" [108]		
Packaging Dimensions (H×W×L)		3.1 × 4.4 × 11.7" [79 × 112 × 298 mm]		
Standard Order Quantity		2 Units		
ProBloc BR 75/xxx (3+0)				
Weight	pounds	1.554	1.884	1.884
	grams	705	855	855
DIN 43880 Dimension		6 TE / 4.25" [108]		
Packaging Dimensions (H×W×L)		3.1 × 4.4 × 11.7" [79 × 112 × 298 mm]		
Standard Order Quantity		2 Units		



inches
[mm]



Applicable connection configurations can be found beginning on page 98.

Lightning and Overvoltage Protection
ProBloc B(R) 100 (4+0)
 Class I • Class II • Type 1 • Type 2

25 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-S
 Mode of Protection: L-PE, N-PE
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

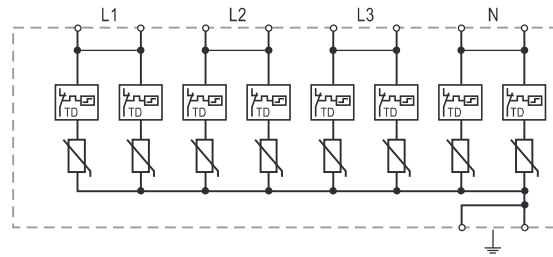
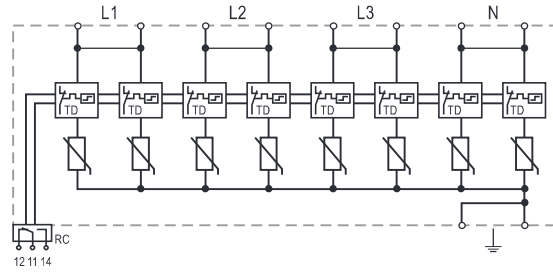
ProBloc B(R) 100/xxx (4+0)		150	275*	320*
IEC Electrical				
Nominal AC Voltage (50/60 Hz)	U_o	120V	230V	230V
Maximum Continuous Operating Voltage (AC)	U_c	150V	275V	320V
Nominal Discharge Current (8/20 μ s)	I_n		25 kA	
Maximum Discharge Current (8/20 μ s)	I_{max}		100 kA	
Impulse Discharge Current (10/350 μ s)	I_{imp}		25 kA	
Total Discharge Current (10/350 μ s)	I_{total}		100 kA	
Specific Energy	W/R		156 kJ/ Ω	
Charge	Q		12.5 As	
Voltage Protection Level	U_p	< 1.0 kV	< 1.5 kV	< 1.5 kV
Response Time	t_A		< 25 ns	
Overcurrent Protection (max)			250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA	
TOV Withstand 5s	U_T	174V	334V	334V
TOV Safe Fail 120min	U_T	229V	438V	438V
Number of Ports			1	
Mechanical & Environmental				
Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Humidity	RH	5%...95%		
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree of Protection		IP 20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection		Yes		
Fault Indication		Red Flag		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/0.5A; 125V/3A		
RC Terminal Cross Section (max)		1.5mm ² (Solid) / 16 AWG (Solid)		
RC Terminal Screw Torque	M_{max}	2.2 lbf-in [0.25 Nm]		
Order Information				
Order Code		150	275*	320*
ProBloc B 100/xxx (4+0)		56.0592	56.0594	56.0596
ProBloc BR 100/xxx (4+0) (with remote contacts)		56.0593	56.0595	56.0597

*OVE Certified

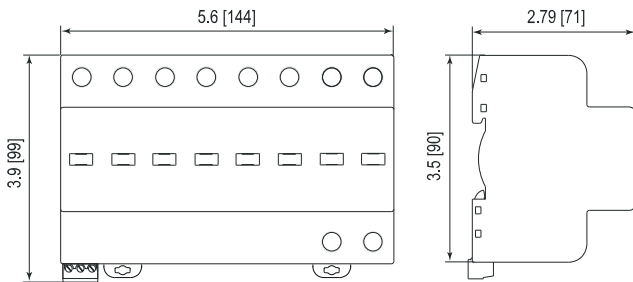
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⊥ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



Complete Unit



Single Unit Dimensions & Packaging

		150	275*	320*
ProBloc B 100/xxx (4+0)				
Weight	pounds	2.028	2.469	2.469
	grams	920	1120	1120
DIN 43880 Dimension		8 TE / 5.66" [144]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298 mm]		
Standard Order Quantity		2 Units		
ProBloc BR 100/xxx (4+0)				
Weight	pounds	2.182	2.623	2.623
	grams	990	1190	1190
DIN 43880 Dimension		8 TE / 5.66" [144]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298 mm]		
Standard Order Quantity		2 Units		



inches
[mm]



Applicable connection configurations can be found beginning on page 98.

Lightning and Overvoltage Protection
ProBloc B(R) 50 (1+1)
 Class I • Class II • Type 1 • Type 2

25 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-S, TT
 Mode of Protection: L-N, N-PE
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

ProBloc B(R) 50/xxx (1+1)

150

275*

320*

IEC Electrical

			150	275*	320*
Nominal AC Voltage (50/60 Hz)	U_o		120V	230V	230V
Maximum Continuous Operating Voltage (AC)	(L-N) U_c		150V	275V	320V
	(N-PE) U_c			255V	
Nominal Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_n			25 kA / 50 kA	
Maximum Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_{max}			100 kA / 100 kA	
Impulse Discharge Current (10/350 μ s)	(L-N)/(N-PE) I_{imp}			25 kA / 50 kA	
Total Discharge Current (10/350 μ s)	I_{total}			50 kA	
Specific Energy	(L-N)/(N-PE) W/R			156 kJ/ Ω / 625 kJ/ Ω	
Charge	(L-N)/(N-PE) Q			12.5 As / 25 As	
Voltage Protection Level	(L-N)/(N-PE) U_p	< 1.0 kV / < 1.5 kV		< 1.5 kV / < 1.5 kV	< 1.5 kV / < 1.5 kV
Follow Current Interrupt Rating	(N-PE) I_{fi}			100 A _{RMS}	
Response Time	(L-N)/(N-PE) t_A			< 25 ns / < 100 ns	
Overcurrent Protection (max)	(L-N)			250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}			50 kA	
TOV Withstand 5s	(L-N) U_T		174V	334V	334V
TOV Safe Fail 120min	(L-N) U_T		229V	438V	438V
TOV Withstand 200ms	(N-PE) U_T			1200V / 300A	
Number of Ports				1	

Mechanical & Environmental

Temperature Range	T_a		-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Humidity	RH		5%...95%		
Terminal Screw Torque	M_{max}		26.5 lbf-in [3.0 Nm]		
Conductor Cross Section (max)			2 AWG (Solid, Stranded) / 4 AWG (Flexible)		
			35mm ² (Solid, Stranded) / 25mm ² (Flexible)		
Mounting			35 mm DIN Rail, EN 60715		
Degree of Protection			IP 20 (built-in)		
Housing Material			Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection	(L-N)/(N-PE)		Yes/No		
Fault Indication	(L-N)/(N-PE)		Red Flag/No		
Remote Contacts (RC)			Optional		
RC Switching Capacity			AC: 250V/0.5A; 125V/3A		
RC Terminal Cross Section (max)			1.5mm ² (Solid) / 16 AWG (Solid)		
RC Terminal Screw Torque	M_{max}		2.2 lbf-in [0.25 Nm]		

Order Information

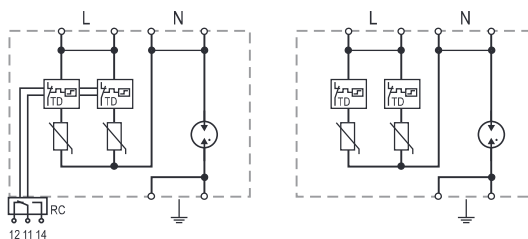
	150	275*	320*
Order Code			
ProBloc B 50/xxx (1+1)	56.0602	56.0604	56.0606
ProBloc BR 50/xxx (1+1) (with remote contacts)	56.0603	56.0605	56.0607

*OVE Certified

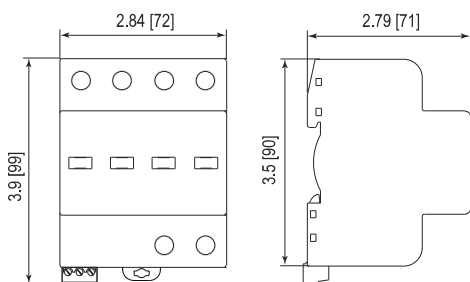
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- PE PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect

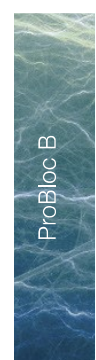


Complete Unit



Single Unit Dimensions & Packaging

		150	275*	320*
ProBloc B 50/xxx (1+1)				
Weight	pounds	.98	1.06	1.06
	grams	445	485	485
DIN 43880 Dimension		4 TE / 2.84" [72]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		3 Units		
ProBloc BR 50/xxx (1+1)				
Weight	pounds	.99	1.06	1.06
	grams	450	490	490
DIN 43880 Dimension		4 TE / 2.84" [72]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		3 Units		



inches
[mm]



Applicable connection configurations can be found beginning on page 98.

Lightning and Overvoltage Protection
ProBloc B(R) 100 (3+1)
 Class I • Class II • Type 1 • Type 2

25 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-S, TT
 Mode of Protection: L-N, N-PE
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

ProBloc B(R) 100/xxx (3+1)

275*

320*

IEC Electrical

			275*	320*
Nominal AC Voltage (50/60 Hz)	U_o		230 V	230 V
Maximum Continuous Operating Voltage (AC)	(L-N) U_c		275 V	320 V
	(N-PE) U_c			255 V
Nominal Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_n		25 kA/100 kA	
Maximum Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_{max}		100 kA/100 kA	
Impulse Discharge Current (10/350 μ s)	(L-N)/(N-PE) I_{imp}		25 kA/100 kA	
Total Discharge Current (10/350 μ s)	I_{total}		100 kA	
Specific Energy	(L-N)/(N-PE) W/R		156 kJ/ Ω /2.5 MJ/ Ω	
Charge	(L-N)/(N-PE) Q		12.5 As/50 As	
Voltage Protection Level	(L-N)/(N-PE) U_p		< 1.5 kV / < 1.5 kV	< 1.5 kV / < 1.5 kV
Follow Current Interrupt Rating	(N-PE) I_{fi}		100 A _{RMS}	
Response Time	(L-N)/(N-PE) t_A		< 25 ns / < 100 ns	
Overcurrent Protection (max)	(L-N)		250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA	
TOV Withstand 5s	(L-N) U_T		334 V	334 V
TOV Safe Fail 120min	(L-N) U_T		438 V	438 V
TOV Withstand 200ms	(N-PE) U_T		1200 V/300 A	
Number of Ports			1	

Mechanical & Environmental

Temperature Range	T_a		-40 °F to +185 °F [-40 °C to +85 °C]	
Permissible Humidity	RH		5%...95%	
Terminal Screw Torque (max)	M_{max}		26.5 lbf-in [3.0 Nm]	
Conductor Cross Section (max)			2 AWG (Solid, Stranded) / 4 AWG (Flexible)	
			35mm ² (Solid, Stranded) / 25mm ² (Flexible)	
Mounting			35 mm DIN Rail, EN 60715	
Degree of Protection			IP 20 (built-in)	
Housing Material			Thermoplastic: Extinguishing Degree UL 94 V-0	
Thermal Protection	(L-N)/(N-PE)		Yes/No	
Fault Indication	(L-N)/(N-PE)		Red Flag/No	
Remote Contacts (RC)			Optional	
RC Switching Capacity			AC: 250V/0.5A; 125V/3A	
RC Terminal Cross Section (max)			1.5mm ² (Solid) / 16 AWG (Solid)	
RC Terminal Screw Torque	M_{max}		2.2 lbf-in [0.25 Nm]	

Order Information

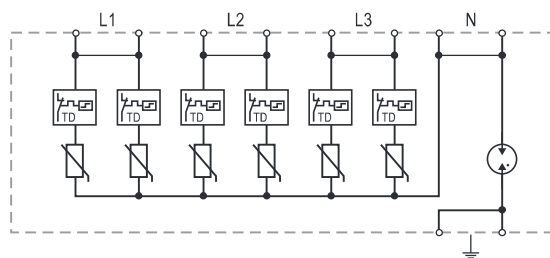
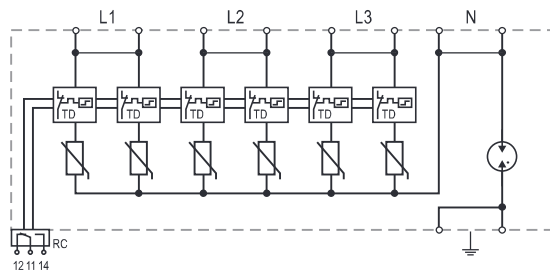
		275*	320*
Order Code			
ProBloc B 100/xxx (3+1)		56.0614	56.0616
ProBloc BR 100/xxx (3+1) (with remote contacts)		56.0615	56.0617

*OVE Certified

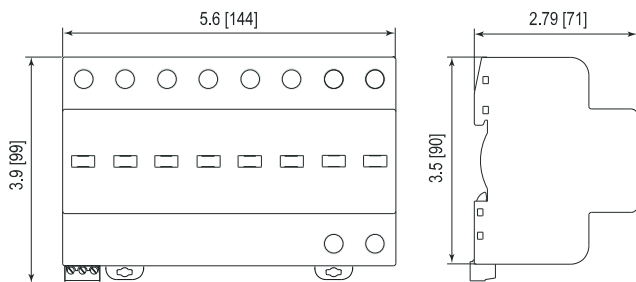
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏚ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



Complete Unit



Single Unit Dimensions & Packaging

		275*	320*
ProBloc B 100/xxx (3+1)			
Weight	pounds	2.50	2.50
	grams	1135	1135
DIN 43880 Dimension		8 TE / 5.66" [144]	
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298 mm]	
Standard Order Quantity		2 Units	
ProBloc BR 100/xxx (3+1)			
Weight	pounds	2.53	2.53
	grams	1150	1150
DIN 43880 Dimension		8 TE / 5.66" [144]	
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298 mm]	
Standard Order Quantity		2 Units	



inches
[mm]



Applicable connection configurations can be found beginning on page 98.

Lightning and Overvoltage Protection

ProTube B 50

Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards
 Network Systems: TN-S, TT
 Mode of Protection: N-PE
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

ProTube B 50/xxx

255

IEC Electrical

Maximum Continuous Operating Voltage (AC)	U_c	255V
Nominal Discharge Current (8/20 μ s)	I_n	50 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	100 kA
Impulse Discharge Current (10/350 μ s)	I_{imp}	50 kA
Specific Energy	W/R	625 kJ/ Ω
Charge	Q	25 As
Voltage Protection Level	U_p	< 1.5 kV
Follow Current Interrupt Rating	I_{fi}	100 A _{RMS}
Response Time	t_A	< 100 ns
TOV Withstand 200ms	U_T	1200V/300A
Number of Ports		1

Mechanical & Environmental

Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Humidity	RH	5%...95%
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)
Mounting		35 mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0

Order Information

Order Code		255
ProTube B 50/xxx		56.0510

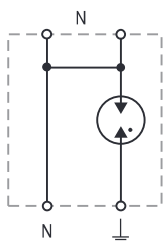
ProTube B 50

Internal Configuration

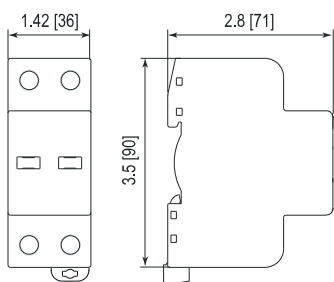
Legend

N Neutral Conductor Terminal

⏚ PE/G Conductor Terminal



Complete Unit



Single Unit Dimensions & Packaging

ProTube B 50/xxx	255
Weight	pounds .396
	grams 180
DIN 43880 Dimension	2 TE / 1.42" [36]
Packaging Dimensions (H×W×L)	3.1 × 4.4 × 11.7" [79 × 112 × 298mm]
Standard Order Quantity	7 Units



inches
[mm]

Lightning and Overvoltage Protection

ProTube B 100

Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards
 Network Systems: TN-S, TT
 Mode of Protection: N-PE
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

ProTube B 100/xxx

255

IEC Electrical

Maximum Continuous Operating Voltage (AC)	U_c	255V
Nominal Discharge Current (8/20 μ s)	I_n	100 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	100 kA
Impulse Discharge Current (10/350 μ s)	I_{imp}	100 kA
Specific Energy	W/R	2.5 MJ/ Ω
Charge	Q	50 As
Voltage Protection Level	U_p	< 1.5 kV
Follow Current Interrupt Rating	I_{fi}	100 A _{RMS}
Response Time	t_A	< 100 ns
TOV Withstand 200ms	U_T	1200V/300A
Number of Ports		1

Mechanical & Environmental

Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Humidity	RH	5%...95%
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)
Mounting		35 mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0

Order Information

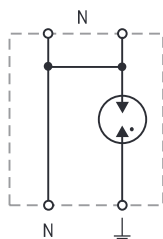
Order Code		255
ProTube B 100/xxx		56.0511

ProTube B 100

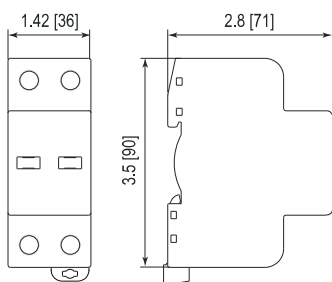
Internal Configuration

Legend

N Neutral Conductor Terminal
 ⊥ PE/G Conductor Terminal

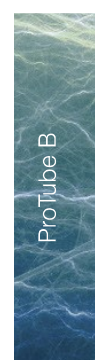


Complete Unit



Single Unit Dimensions & Packaging

ProTube B 100/xxx	255
Weight	pounds .529
	grams 240
DIN 43880 Dimension	2 TE / 1.42" [36]
Packaging Dimensions (H×W×L)	3.1 × 4.4 × 11.7" [79 × 112 × 298mm]
Standard Order Quantity	7 Units



inches
[mm]



Applicable connection configurations can be found on page 98.

Lightning and Overvoltage Protection
ProBloc B(R) 12.5 (1+0)
 Class I • Class II • Type 1 • Type 2

12.5 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-S, TN-C
 Mode of Protection: L-PE, N-PE, L-PEN, L-N
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

ProBloc B(R) 12.5/xxx (1+0)		150	275*	320*
IEC Electrical				
Nominal AC Voltage (50/60 Hz)	U_o	120V	230V	230V
Maximum Continuous Operating Voltage (AC)	U_c	150V	275V	320V
Nominal Discharge Current (8/20 μ s)	I_n		20 kA	
Maximum Discharge Current (8/20 μ s)	I_{max}		50 kA	
Impulse Discharge Current (10/350 μ s)	I_{imp}		12.5 kA	
Specific Energy	W/R		39 kJ/ Ω	
Charge	Q		6.25 As	
Voltage Protection Level	U_p	< 1.0 kV	< 1.5 kV	< 1.5 kV
Response Time	t_A		< 25 ns	
Overcurrent Protection (max)			250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA	
TOV Withstand 5s	U_T	174V	334V	334V
TOV Safe Fail 120min	U_T	229V	438V	438V
Number of Ports			1	

Mechanical & Environmental

Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Humidity	RH	5%...95%		
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree of Protection		IP 20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection		Yes		
Fault Indication		Red Flag		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/0.5A; 125V/3A		
RC Terminal Cross Section (max)		1.5mm ² (Solid) / 16 AWG (Solid)		
RC Terminal Screw Torque	M_{max}	2.2 lbf-in [0.25 Nm]		

Order Information

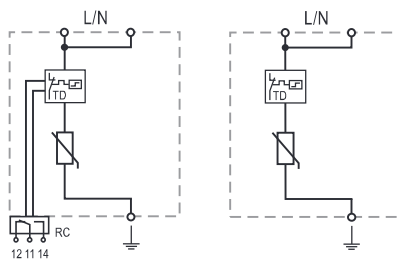
Order Code	150	275*	320*
ProBloc B 12.5/xxx (1+0)	56.0500	56.0502	56.0504
ProBloc BR 12.5/xxx (1+0) (with remote contacts)	56.0501	56.0503	56.0505

*OVE Certified

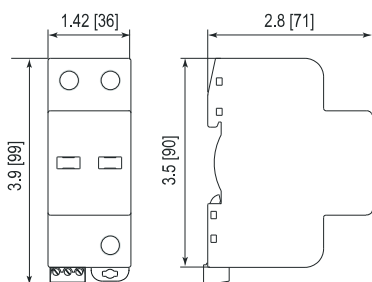
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏚ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect

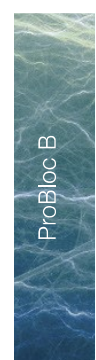


Complete Unit



Single Unit Dimensions & Packaging

		150	275*	320*
ProBloc B 12.5/xxx (1+0)				
Weight	pounds	.330	.440	.440
	grams	150	200	200
DIN 43880 Dimension		2 TE / 1.42" [36]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		7 Units		
ProBloc BR 12.5/xxx (1+0)				
Weight	pounds	.341	.451	.451
	grams	155	205	205
DIN 43880 Dimension		2 TE / 1.42" [36]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		7 Units		



inches
[mm]



Applicable connection configurations can be found beginning on page 98.

Lightning and Overvoltage Protection
ProBloc B(R) 25 (2+0)
 Class I • Class II • Type 1 • Type 2

12.5 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-S
 Mode of Protection: L-PE, N-PE
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

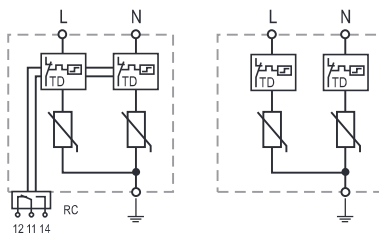
ProBloc B(R) 25/xxx (2+0)		150	275*	320*
IEC Electrical				
Nominal AC Voltage (50/60 Hz)	U_o	120V	230V	230V
Maximum Continuous Operating Voltage (AC)	U_c	150V	275V	320V
Nominal Discharge Current (8/20 μ s)	I_n		20 kA	
Maximum Discharge Current (8/20 μ s)	I_{max}		50 kA	
Impulse Discharge Current (10/350 μ s)	I_{imp}		12.5 kA	
Total Discharge Current (10/350 μ s)	I_{total}		25 kA	
Specific Energy	W/R		39 kJ/ Ω	
Charge	Q		6.25 As	
Voltage Protection Level	U_p	< 1.0 kV	< 1.5 kV	< 1.5 kV
Response Time	t_A		< 25 ns	
Overcurrent Protection (max)			250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA	
TOV Withstand 5s	U_T	174V	334V	334V
TOV Safe Fail 120min	U_T	229V	438V	438V
Number of Ports			1	
Mechanical & Environmental				
Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Humidity	RH	5%...95%		
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree of Protection		IP 20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection		Yes		
Fault Indication		Red Flag		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/0.5A; 125V/3A		
RC Terminal Cross Section (max)		1.5mm ² (Solid) / 16 AWG (Solid)		
RC Terminal Screw Torque	M_{max}	2.2 lbf-in [0.25 Nm]		
Order Information				
Order Code		150	275*	320*
ProBloc B 25/xxx (2+0)		56.0512	56.0514	56.0516
ProBloc BR 25/xxx (2+0) (with remote contacts)		56.0513	56.0515	56.0517

*OVE Certified

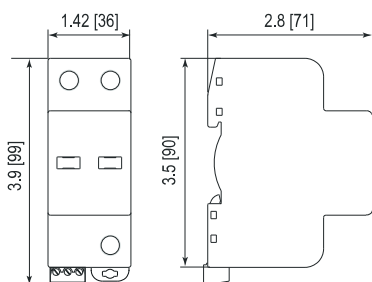
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏏ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnecter



Complete Unit



Single Unit Dimensions & Packaging

		150	275*	320*
ProBloc B 25/xxx (2+0)				
Weight	pounds	.407	.496	.496
	grams	185	225	225
DIN 43880 Dimension		2 TE / 1.42" [36]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		7 Units		
ProBloc BR 25/xxx (2+0)				
Weight	pounds	.418	.507	.507
	grams	190	230	230
Packaging Dimensions (H x W x L)		2 TE / 1.42" [36]		
DIN 43880 Dimension		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		7 Units		



Lightning and Overvoltage Protection
ProBloc B(R) 37.5 (3+0)
 Class I • Class II • Type 1 • Type 2

12.5 kA Series



Location of Use Main Distribution Boards
 Network Systems TN-C
 Mode of Protection: L-PEN
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

ProBloc B(R) 37.5/xxx (3+0)		150	275*	320*
IEC Electrical				
Nominal AC Voltage (50/60 Hz)	U_o	120V	230V	230V
Maximum Continuous Operating Voltage (AC)	U_c	150V	275V	320V
Nominal Discharge Current (8/20 μ s)	I_n		20 kA	
Maximum Discharge Current (8/20 μ s)	I_{max}		50 kA	
Impulse Discharge Current (10/350 μ s)	I_{imp}		12.5 kA	
Total Discharge Current (10/350 μ s)	I_{total}		37.5 kA	
Specific Energy	W/R		39 kJ/ Ω	
Charge	Q		6.25 As	
Voltage Protection Level	U_p	< 1.0 kV	< 1.5 kV	< 1.5 kV
Response Time	t_A		< 25 ns	
Overcurrent Protection (max)			250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA	
TOV Withstand 5s	U_T	174V	334V	334V
TOV Safe Fail 120min	U_T	229V	438V	438V
Number of Ports			1	

Mechanical & Environmental				
Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Humidity	RH	5%...95%		
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree of Protection		IP 20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection		Yes		
Fault Indication		Red Flag		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/0.5A; 125V/3A		
RC Terminal Cross Section (max)		1.5mm ² (Solid) / 16 AWG (Solid)		
RC Terminal Screw Torque	M_{max}	2.2 lbf-in [0.25 Nm]		

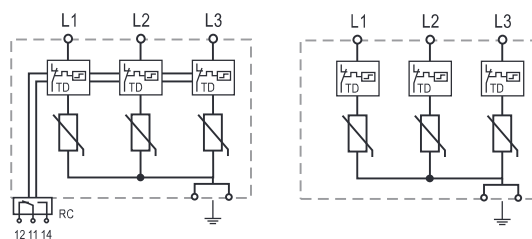
Order Information				
Order Code		150	275*	320*
ProBloc B 37.5/xxx (3+0)		56.0522	56.0524	56.0526
ProBloc BR 37.5/xxx (3+0) (with remote contacts)		56.0523	56.0525	56.0527

*OVE Certified

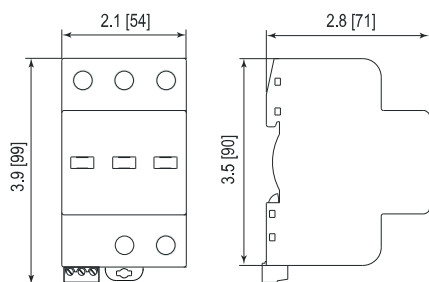
Internal Configuration

Legend

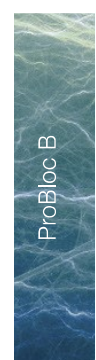
- L Line Conductor Terminal
- ⏏ PEN Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



Complete Unit



Dimensions & Packaging			
ProBloc B 37.5/xxx (3+0)	150	275*	320*
Weight	pounds	.639	.727
	grams	290	330
DIN 43880 Dimension	3 TE / 2.13" [54]		
Packaging Dimensions (H x W x L)	3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity	5 Units		
ProBloc BR 37.5/xxx (3+0)	150	275*	320*
Weight	pounds	.661	.727
	grams	300	330
DIN 43880 Dimension	3 TE / 2.13" [54]		
Packaging Dimensions (H x W x L)	3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity	5 Units		



inches
[mm]

Lightning and Overvoltage Protection
ProBloc B(R) 50 (4+0)
 Class I • Class II • Type 1 • Type 2

12.5 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-S
 Mode of Protection: L-PE, N-PE
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

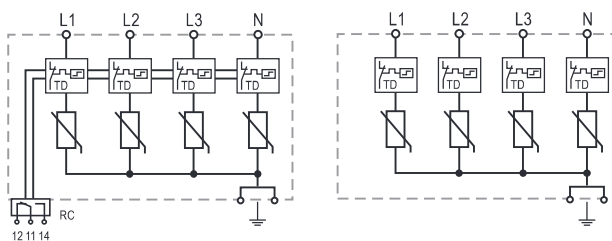
ProBloc B(R) 50/xxx (4+0)		150	275*	320*
IEC Electrical				
Nominal AC Voltage (50/60 Hz)	U_o	120V	230V	230V
Maximum Continuous Operating Voltage (AC)	U_c	150V	275V	320V
Nominal Discharge Current (8/20 μ s)	I_n		20 kA	
Maximum Discharge Current (8/20 μ s)	I_{max}		50 kA	
Impulse Discharge Current (10/350 μ s)	I_{imp}		12.5 kA	
Total Discharge Current (10/350 μ s)	I_{total}		50 kA	
Specific Energy	W/R		39 kJ/ Ω	
Charge	Q		6.25 As	
Voltage Protection Level	U_p	< 1.0 kV	< 1.5 kV	< 1.5 kV
Response Time	t_A		< 25 ns	
Overcurrent Protection (max)			250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA	
TOV Withstand 5s	U_T	174V	334V	334V
TOV Safe Fail 120min	U_T	229V	438V	438V
Number of Ports			1	
Mechanical & Environmental				
Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Humidity	RH	5%...95%		
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree of Protection		IP 20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection		Yes		
Fault Indication		Red Flag		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/0.5A; 125V/3A		
RC Terminal Cross Section (max)		1.5mm ² (Solid) / 16 AWG (Solid)		
RC Terminal Screw Torque	M_{max}	2.2 lbf-in [0.25 Nm]		
Order Information				
Order Code		150	275*	320*
ProBloc B 50/xxx (4+0)		56.0532	56.0534	56.0536
ProBloc BR 50/xxx (4+0) (with remote contacts)		56.0533	56.0535	56.0537

*OVE Certified

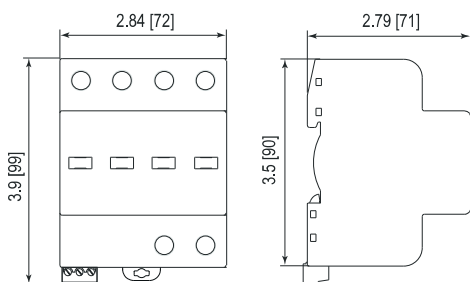
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏏ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect

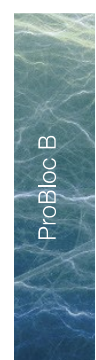


Complete Unit



Dimensions & Packaging

		150	275*	320*
ProBloc B 50/xxx (4+0)				
Weight	pounds	1.212	1.521	1.521
	grams	550	590	590
DIN 43880 Dimension		4 TE / 2.84" [72]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		3 Units		
ProBloc BR 50/xxx (4+0)				
Weight	pounds	1.234	1.234	1.322
	grams	560	560	600
DIN 43880 Dimension		4 TE / 2.84" [72]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]		
Standard Order Quantity		2 Units		



inches
[mm]



Applicable connection configurations can be found beginning on page 98.

Lightning and Overvoltage Protection
ProBloc B(R) 25 (1+1)
 Class I • Class II • Type 1 • Type 2

12.5 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-S, TT
 Mode of Protection: L-N, N-PE
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

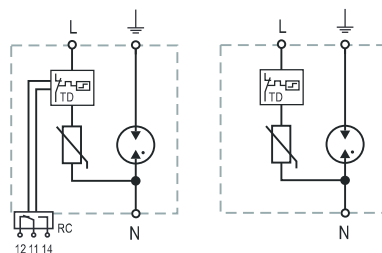
ProBloc B(R) 25/xxx (1+1)		150	275*	320*
IEC Electrical				
Nominal AC Voltage (50/60Hz)	U_o	120V	230V	230V
Maximum Continuous Operating Voltage (AC)	(L-N) U_c	150V	275V	320V
	(N-PE) U_c		255V	
Nominal Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_n		20 kA / 50 kA	
Maximum Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_{max}		50 kA / 100 kA	
Impulse Discharge Current (10/350 μ s)	(L-N)/(N-PE) I_{imp}		12.5 kA / 50 kA	
Total Discharge Current (10/350 μ s)	I_{total}		25 kA	
Specific Energy	(L-N)/(N-PE) W/R		39 kJ/ Ω / 625 kJ/ Ω	
Charge	(L-N)/(N-PE) Q		6.25 As / 25 As	
Voltage Protection Level	(L-N)/(N-PE) U_p	< 1.0 kV / < 1.5 kV	< 1.5 kV / < 1.5 kV	< 1.5 kV / < 1.5 kV
Follow Current Interrupt Rating	((N-PE) I_{fi}		100 A _{RMS}	
Response Time	(L-N)/(N-PE) t_A		< 25 ns / < 100 ns	
Overcurrent Protection (max)	(L-N)		250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA	
TOV Withstand 5s	(L-N) U_T	174V	334V	334V
TOV Safe Fail 120min	(L-N) U_T	229V	438V	438V
TOV Withstand 200ms	(N-PE) U_T		1200V / 300A	
Number of Ports			1	
Mechanical & Environmental				
Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]		
Permissible Humidity	RH	5%...95%		
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]		
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)		
		35mm ² (Solid, Stranded) / 25mm ² (Flexible)		
Mounting		35 mm DIN Rail, EN 60715		
Degree of Protection		IP 20 (built-in)		
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection	(L-N)/(N-PE)	Yes/No		
Fault Indication	(L-N)/(N-PE)	Red Flag/No		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/0.5A; 125V/3A		
RC Terminal Cross Section (max)		1.5mm ² (Solid) / 16 AWG (Solid)		
RC Terminal Screw Torque	M_{max}	2.2 lbf-in [0.25 Nm]		
Order Information				
Order Code		150	275*	320*
ProBloc B 25/xxx (1+1)		56.0542	56.0544	56.0546
ProBloc BR 25/xxx (1+1) (with remote contacts)		56.0543	56.0545	56.0547

*OVE Certified

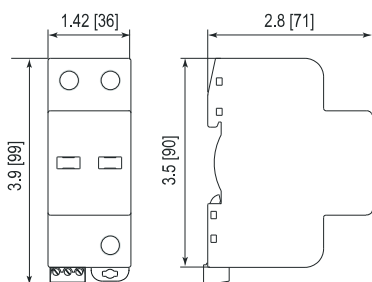
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- PE PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



Complete Unit



Single Unit Dimensions & Packaging			
ProBloc B 25/xxx (1+1)			
		150	275*
Weight	pounds	.242	.330
	grams	110	150
DIN 43880 Dimension		2 TE / 1.42" [36]	
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]	
Standard Order Quantity		7 Units	
ProBloc BR 25/xxx (1+1)			
		150	275*
Weight	pounds	.253	.341
	grams	115	155
DIN 43880 Dimension		2 TE / 1.42" [36]	
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]	
Standard Order Quantity		7 Units	



Lightning and Overvoltage Protection

ProBloc B(R) 50 (3+1)

Class I • Class II • Type 1 • Type 2

12.5 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-S, TT
 Mode of Protection: L-N, N-PE
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

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

275*

320*

IEC Electrical

Parameter	Symbol	275*	320*
Nominal AC Voltage (50/60 Hz)	U_o	230V	230V
Maximum Continuous Operating Voltage (AC)	(L-N) U_c	275V	320V
	(N-PE) U_c		255V
Nominal Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_n	20 kA / 50 kA	
Maximum Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_{max}	50 kA / 100 kA	
Impulse Discharge Current (10/350 μ s)	(L-N)/(N-PE) I_{imp}	12.5 kA / 50 kA	
Total Discharge Current (10/350 μ s)	I_{total}	50 kA	
Specific Energy	(L-N)/(N-PE) W/R	39 kJ/ Ω / 625 kJ/ Ω	
Charge	(L-N)/(N-PE) Q	6.25 As / 25 As	
Voltage Protection Level	(L-N)/(N-PE) U_p	< 1.5 kV / < 1.5 kV	< 1.5 kV / < 1.5 kV
Follow Current Interrupt Rating	(N-PE) I_{fi}	100 A _{RMS}	
Response Time	(L-N)/(N-PE) t_A	< 25 ns / < 100 ns	
Overcurrent Protection (max)	(L-N)	250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}	50 kA	
TOV Withstand 5s	(L-N) U_T	334V	334V
TOV Safe Fail 120min	(L-N) U_T	438V	438V
TOV Withstand 200ms	(N-PE) U_T	1200V / 300 A	
Number of Ports		1	

Mechanical & Environmental

Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]	
Permissible Humidity	RH	5%...95%	
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]	
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)	
		35mm ² (Solid, Stranded) / 25mm ² (Flexible)	
Mounting		35 mm DIN Rail, EN 60715	
Degree of Protection		IP 20 (built-in)	
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0	
Thermal Protection	(L-N)/(N-PE)	Yes/No	
Fault Indication	(L-N)/(N-PE)	Red Flag/No	
Remote Contacts (RC)		Optional	
RC Switching Capacity		AC: 250V/0.5A; 125V/3A	
RC Terminal Cross Section (max)		1.5mm ² (Solid) / 16 AWG (Solid)	
RC Terminal Screw Torque	M_{max}	2.2 lbf-in [0.25 Nm]	

Order Information

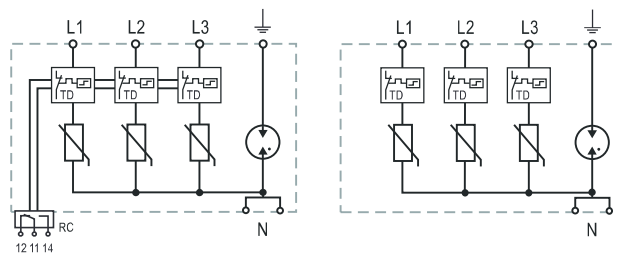
Order Code	275*	320*
ProBloc B 50/xxx (3+1)	56.0554	56.0556
ProBloc BR 50/xxx (3+1) (with remote contacts)	56.0555	56.0557

*OVE Certified

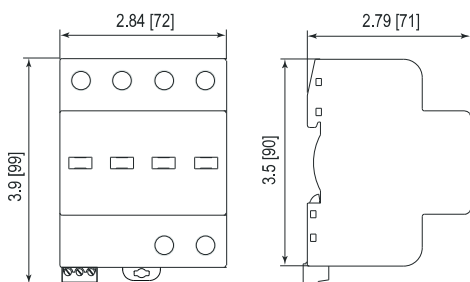
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⊥ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnecter

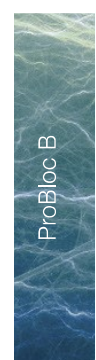


Complete Unit



Single Unit Dimensions & Packaging

		275*	320*
ProBloc B 50/xxx (3+1)			
Weight	pounds	1.311	1.311
	grams	595	595
DIN 43880 Dimension		4 TE / 2.84" [72]	
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]	
Standard Order Quantity		3 Units	
ProBloc BR 50/xxx (3+1)			
Weight	pounds	1.322	1.322
	grams	600	600
DIN 43880 Dimension		4 TE / 2.84" [72]	
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298mm]	
Standard Order Quantity		3 Units	



inches
[mm]

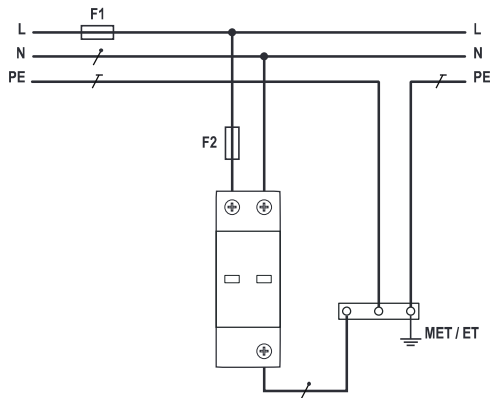


Applicable connection configurations can be found beginning on page 98.

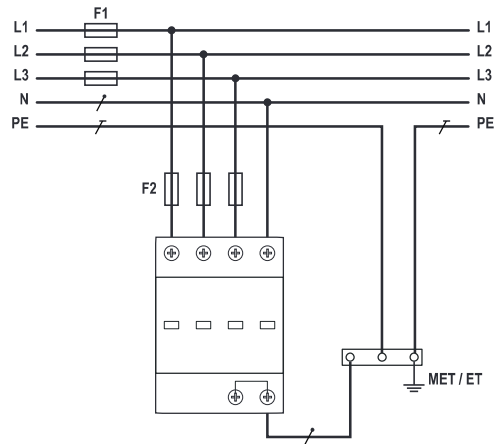
Compact Multi-pole SPD Connection Configurations

ProBloc B(R) 12.5kA Series & ProTube B

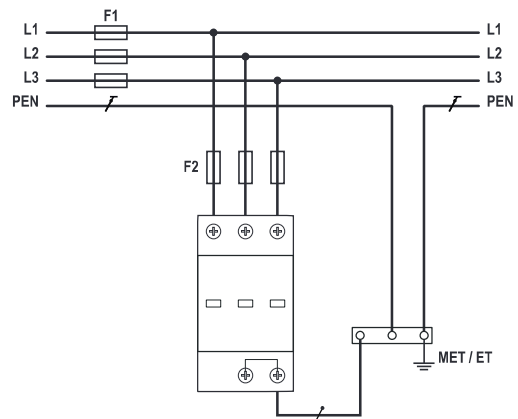
TN-S (Single-phase, 2+0, 1+1)



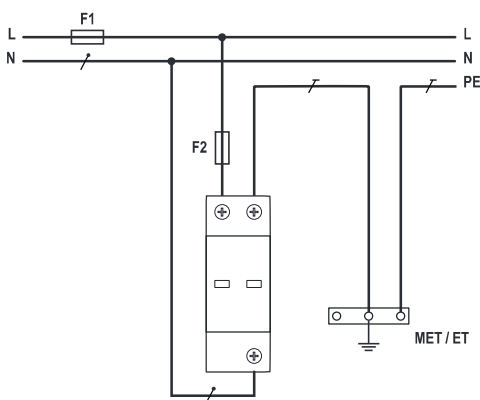
TN-S (Three-phase, 4+0, 3+1)



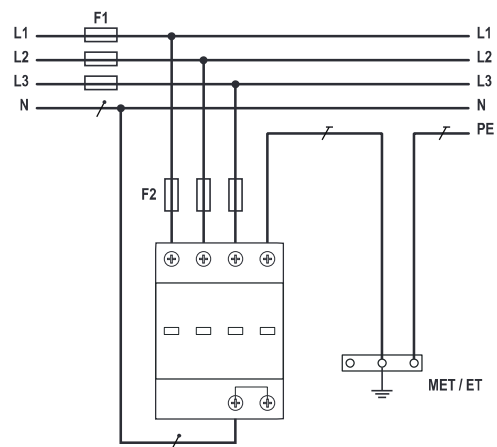
TN-C (Three-phase, 3+0)



TT (Single-phase, 1+1)



TT (Three-phase, 3+1)



Overcurrent Protection Rating for I_{SCCR}

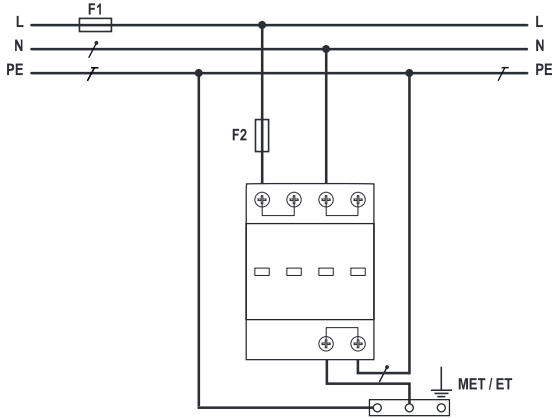
/ N Neutral
 / PE Protective Earth
 / PEN Protective Earth & Neutral

— F1 > 250 A gG → — F2 = 250 A gG
 — F1 ≤ 250 A gG → ~~— F2~~
 — F ≤ 100 A gG

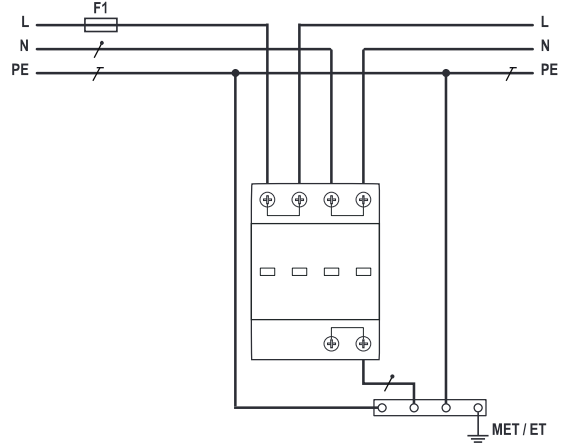
Compact Multi-pole SPD Connection Configurations

ProBloc B(R) 25kA Series

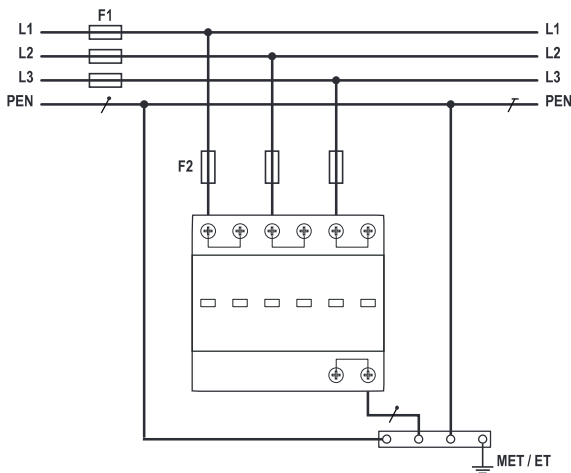
TN-S (Single-phase, 2+0, 1+1)
T Connection



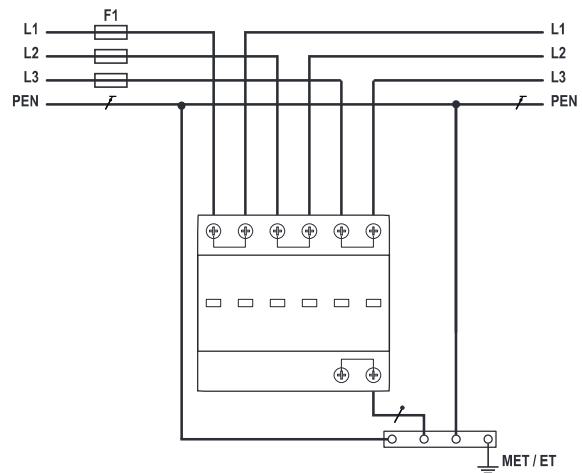
TN-S (Single-phase, 2+0, 1+1)
V Connection



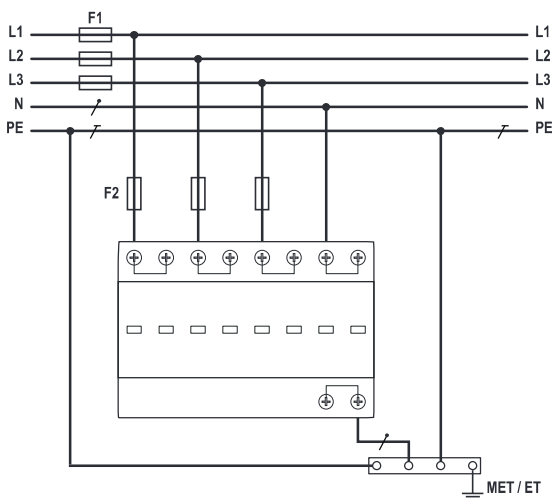
TN-C (Three-phase, 3+0)
T Connection



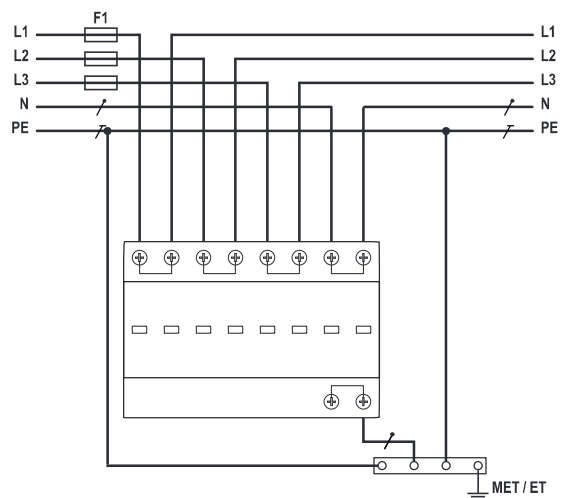
TN-C (Three-phase, 3+0)
V Connection



TN-S (Three-phase, 4+0, 3+1)
T Connection



TN-S (Three-phase, 4+0, 3+1)
V Connection



Overcurrent Protection Rating for I_{SCCR}

∕ N Neutral
∕ PE Protective Earth
∕ PEN Protective Earth & Neutral

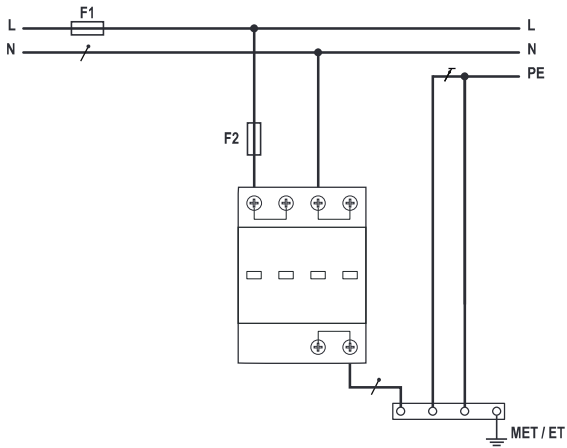
— F1 > 250 A gG → — F2 = 250 A gG
— F1 ≤ 250 A gG → ~~— F2~~
— F ≤ 100 A gG



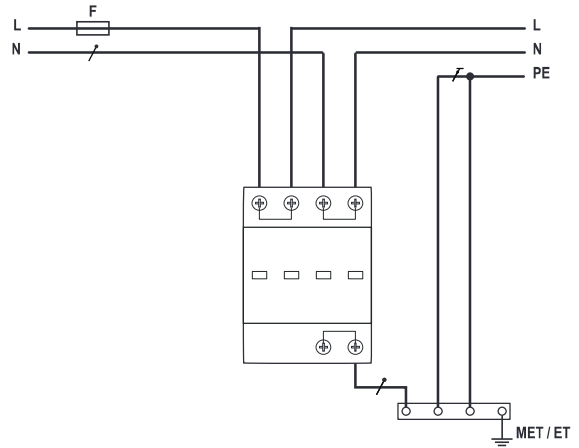
Compact Multi-pole SPD Connection Configurations

ProBloc B(R) 25kA Series

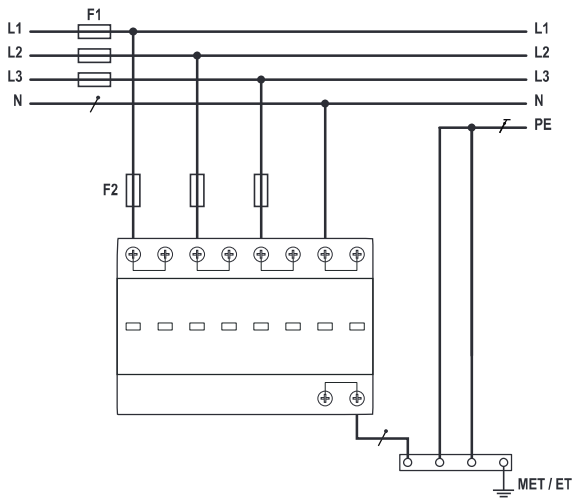
TT (Single-phase, 1+1)
T Connection



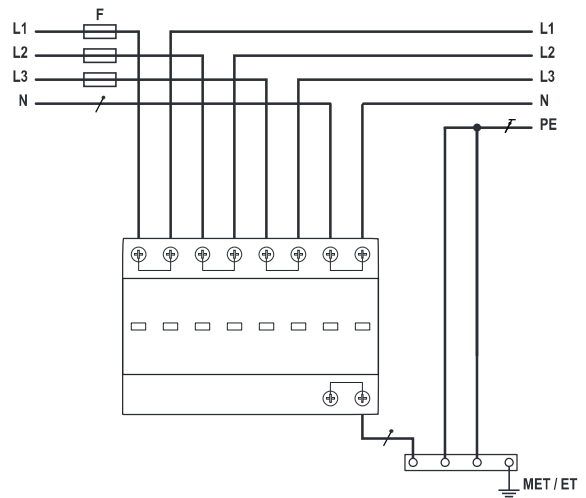
TT (Single-phase, 1+1)
V Connection



TT (Three-phase, 3+1)
T Connection



TT (Three-phase, 3+1)
V Connection



Overcurrent Protection Rating for I_{SCCR}

/ N Neutral

/ PE Protective Earth

/ PEN Protective Earth & Neutral

— F1 > 250 A gG → — F2 = 250 A gG

— F1 ≤ 250 A gG → ~~— F2~~

— F ≤ 100 A gG