

ProBloc T1SG 3+0 E

Class I • Class II • Class III • Type 1 • Type 2 • Type 3



Location of Use: Main Distribution Boards
 Network Systems: TN-C
 Mode of Protection: L-PEN
 IEC/EN Category: Class I+II+III / Type 1+2+3
 Technology: Spark Gap
 Leakage Current Free: Yes
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018

Technical Data

ProBloc T1SG-xxx-3+0-E(-R)

255

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o / U_n	240 V
Maximum Continuous Operating Voltage (AC)	U_c	255 V
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}	7.5 kA
Specific Energy	W/R	14 kJ/ Ω
Charge	Q	3.75 As
Open Circuit Voltage of Combination Wave Generator (1.2/50 μ s)	U_{oc}	6 kV
Short Circuit Current of Combination Wave Generator (8/20 μ s)	I_{cw}	3 kA
Voltage Protection Level	U_p	1500 V
Response Time	t_A	< 100 ns
Overcurrent Protection (max)		160 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA
Follow Current Interrupt Rating (AC)	I_{fi}	25 kA
TOV Withstand 120min	U_T	442 V
Number of Ports		1

Additional Electrical Parameters - Standard (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	1200 V
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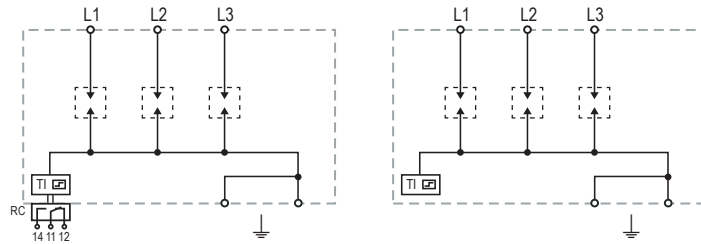
Mechanical & Environmental

Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Altitude (max)		13123 ft [4000 m]
Terminal Screw Torque	M_{max}	40 lbf-in [4.5 Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm ² (Solid, Stranded) / 25 mm ² (Flexible)
Mounting		35 mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Operating State / Fault Indication		Green Flag / Not Green Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/0.5 A, 125V/0.1 A; DC: 48V/0.5 A, 24V/0.5 A, 12V/0.5 A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)

Internal Configuration

Legend

- L Line Conductor Terminal
- ⏏ PEN Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TI Thermal Indicator



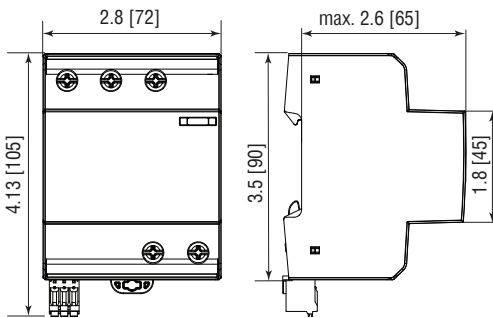
ProBloc T1SG-xxx-3+0-E(-R)

Order Information

Order Code	255
ProBloc T1SG-xxx-3+0-E	53.0011
ProBloc T1SG-xxx-3+0-E-R (with remote contacts)	53.0012

Dimensions & Packaging

inches [mm]



Complete Unit Dimensions & Packaging

ProBloc T1SG-xxx-3+0-E	255	
Weight	pounds [grams]	0.860 [390]
ProBloc T1SG-xxx-3+0-E-R		
Weight	pounds [grams]	0.864 [392]
DIN 43880 Dimension		4 TE / 2.84 [72]
Packaging Dimensions (HxWxL)		4.3 × 4.5 × 13.8" [109 × 115 × 352 mm]
Standard Order Quantity		4 Units

Information contained in this document is subject to change at any time without notice.



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ProBloc T1SG 4+0 E

Class I • Class II • Class III • Type 1 • Type 2 • Type 3



Location of Use: Main Distribution Boards
 Network Systems: TN-S
 Mode of Protection: L-PE, N-PE
 IEC/EN Category: Class I+II+III / Type 1+2+3
 Technology: Spark Gap
 Leakage Current Free: Yes
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018

Technical Data

ProBloc T1SG-xxx-4+0-E(-R)

255

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o / U_n	240 V
Maximum Continuous Operating Voltage (AC)	U_c	255 V
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}	7.5 kA
Specific Energy	W/R	14 kJ/ Ω
Charge	Q	3.75 As
Open Circuit Voltage of Combination Wave Generator (1.2/50 μ s)	U_{oc}	6 kV
Short Circuit Current of Combination Wave Generator (8/20 μ s)	I_{cw}	3 kA
Voltage Protection Level	U_p	1500 V
Response Time	t_A	< 100 ns
Overcurrent Protection (max)		160 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA
Follow Current Interrupt Rating (AC)	(L-PE) / (N-PE) I_{fi}	25 kA / 100 A
TOV Withstand 120min	(L-PE) U_T	442 V
Number of Ports		1

Additional Electrical Parameters - Standard (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 μ s)	(L-PE) / (N-PE) U_{res}	1200 V / 255 V
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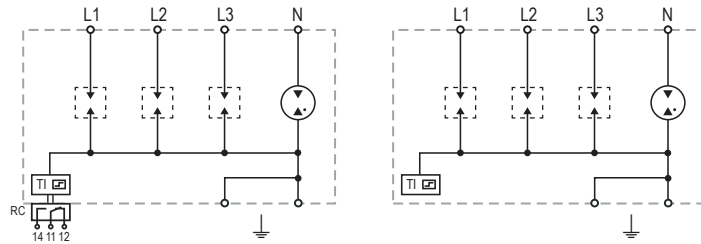
Mechanical & Environmental

Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Altitude (max)		13123 ft [4000 m]
Terminal Screw Torque	M_{max}	40 lbf-in [4.5 Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm ² (Solid, Stranded) / 25 mm ² (Flexible)
Mounting		35 mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Operating State / Fault Indication		Green Flag / Not Green Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/0.5 A, 125V/0.1 A; DC: 48V/0.5 A, 24V/0.5 A, 12V/0.5 A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)

Internal Configuration

Legend

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



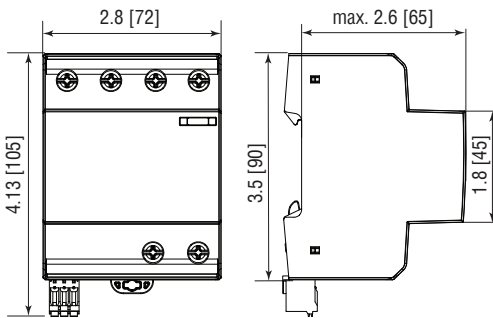
ProBloc T1SG-xxx-3+0-E(-R)

Order Information

Order Code	255
ProBloc T1SG-xxx-4+0-E	53.0013
ProBloc T1SG-xxx-4+0-E-R (with remote contacts)	53.0014

Dimensions & Packaging

inches [mm]



Complete Unit Dimensions & Packaging

ProBloc T1SG-xxx-4+0-E	255
Weight	pounds [grams] 0.917 [416]
ProBloc T1SG-xxx-4+0-E-R	
Weight	pounds [grams] 0.924 [419]
DIN 43880 Dimension	4 TE / 2.84 [72]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	4 Units

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ProBloc T1SG 1+1 E

Class I • Class II • Class III • Type 1 • Type 2 • Type 3



Location of Use: Main Distribution Boards
 Network Systems: TT, TN-S
 Mode of Protection: L-N, N-PE
 IEC/EN Category: Class I+II+III / Type 1+2+3
 Technology: Spark Gap
 Leakage Current Free: Yes
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018

Technical Data

ProBloc T1SG-xxx-1+1-E(-R)

255

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o / U_n	240V
Maximum Continuous Operating Voltage (AC)	(L-N) / (N-PE) U_c	255V / 305V
Nominal Discharge Current (8/20µs)	(L-N) / (N-PE) I_n	20kA / 50kA
Maximum Discharge Current (8/20µs)	(L-N) / (N-PE) I_{max}	50kA / 100kA
Impulse Discharge Current (10/350µs)	(L-N) / (N-PE) I_{imp}	7.5kA / 30kA
Specific Energy	(L-N) / (N-PE) W/R	39kJ/Ω / 625kJ/Ω
Charge	(L-N) / (N-PE) Q	3.75As / 15As
Open Circuit Voltage of Combination Wave Generator (1.2/50µs)	(L-N) / (N-PE) U_{oc}	6kV / 6kV
Short Circuit Current of Combination Wave Generator (8/20µs)	(L-N) / (N-PE) I_{cw}	3kA / 3kA
Voltage Protection Level	(L-N) / (N-PE) U_p	1500V / 1500V
Response Time	(L-N) / (N-PE) t_A	< 100ns / < 100ns
Overcurrent Protection (max)		160A gG
Short-Circuit Current Rating (AC)	(L-N) I_{SCCR}	25kA
Follow Current Interrupt Rating (AC)	(L-N) / (N-PE) I_{fi}	25kA / 100A
TOV Withstand 120min	(L-N) U_T	442V
TOV Withstand 200ms	(N-PE) U_T	1200V
Number of Ports		1

Additional Electrical Parameters - Standard (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 µs)	(L-N) / (N-PE) U_{res}	1200V / 305V
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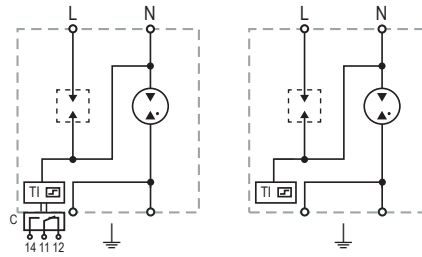
Mechanical & Environmental

Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Altitude (max)		13123 ft [4000m]
Terminal Screw Torque	M_{max}	40 lbf-in [4.5Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)
Mounting		35mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Operating State / Fault Indication		Green Flag / Not Green Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/0.5A, 125V/0.1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5mm ² (Solid)

Internal Configuration

Legend

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



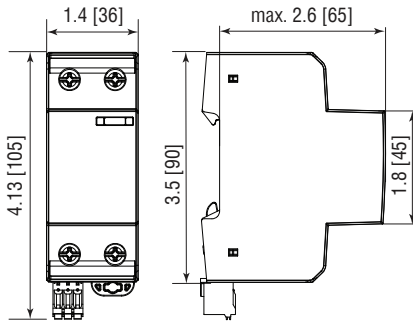
ProBloc T1SG-xxx-1+1-E(-R)

Order Information

Order Code	255
ProBloc T1SG-xxx-1+1-E	53.0015
ProBloc T1SG-xxx-1+1-E-R (with remote contacts)	53.0016

Dimensions & Packaging

inches [mm]



Complete Unit Dimensions & Packaging

ProBloc T1SG-xxx-1+1-E	255
Weight	pounds [grams] 0.503 [228]
ProBloc T1SG-xxx-1+1-E-R	
Weight	pounds [grams] 0.507 [230]
DIN 43880 Dimension	2 TE / 1.42 [36]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	7 Units

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ProBloc T1SG 3+1 E

Class I • Class II • Class III • Type 1 • Type 2 • Type 3



Location of Use: Main Distribution Boards
 Network Systems: TT, TN-S
 Mode of Protection: L-N, N-PE
 IEC/EN Category: Class I+II+III / Type 1+2+3
 Technology: Spark Gap
 Leakage Current Free: Yes
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018

Technical Data

ProBloc T1SG-xxx-3+1-E(-R)

255

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o / U_n	240V
Maximum Continuous Operating Voltage (AC)	(L-N) / (N-PE) U_c	255V / 305V
Nominal Discharge Current (8/20 μ s)	(L-N) / (N-PE) I_n	20kA / 50kA
Maximum Discharge Current (8/20 μ s)	(L-N) / (N-PE) I_{max}	50kA / 100kA
Impulse Discharge Current (10/350 μ s)	(L-N) / (N-PE) I_{imp}	7.5kA / 30kA
Specific Energy	(L-N) / (N-PE) W/R	39kJ/ Ω / 625kJ/ Ω
Charge	(L-N) / (N-PE) Q	3.75As / 15As
Open Circuit Voltage of Combination Wave Generator (1.2/50 μ s)	(L-N) / (N-PE) U_{oc}	6kV / 6kV
Short Circuit Current of Combination Wave Generator (8/20 μ s)	(L-N) / (N-PE) I_{cw}	3kA / 3kA
Voltage Protection Level	(L-N) / (N-PE) U_p	1500V / 1500V
Response Time	(L-N) / (N-PE) t_A	< 100ns / < 100ns
Overcurrent Protection (max)		160A gG
Short-Circuit Current Rating (AC)	(L-N) I_{SCCR}	25kA
Follow Current Interrupt Rating (AC)	(L-N) / (N-PE) I_{fi}	25kA / 100A
TOV Withstand 120min	(L-N) U_T	442V
TOV Withstand 200ms	(N-PE) U_T	1200V
Number of Ports		1

Additional Electrical Parameters - Standard (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 μ s)	(L-N) / (N-PE) U_{res}	1200V / 305V
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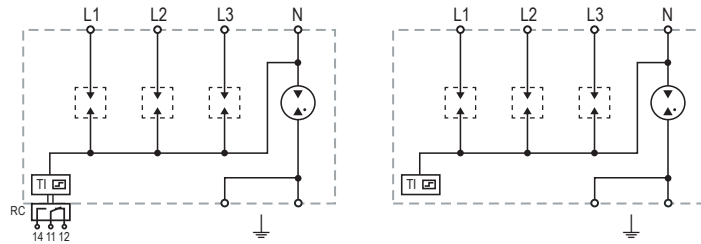
Mechanical & Environmental

Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Altitude (max)		13123 ft [4000m]
Terminal Screw Torque	M_{max}	40 lbf-in [4.5Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)
Mounting		35mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Operating State / Fault Indication		Green Flag / Not Green Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/0.5A, 125V/0.1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5mm ² (Solid)

Internal Configuration

Legend

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



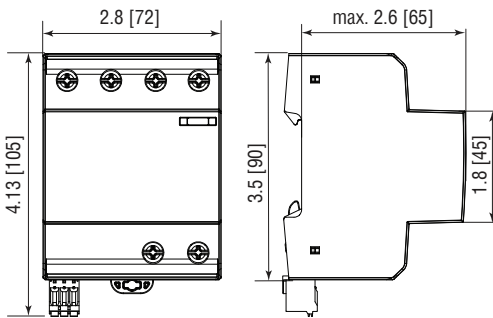
ProBloc T1SG-xxx-3+1-E(-R)

Order Information

Order Code	255
ProBloc T1SG-xxx-3+1-E	53.0017
ProBloc T1SG-xxx-3+1-E-R (with remote contacts)	53.0018

Dimensions & Packaging

inches [mm]



Complete Unit Dimensions & Packaging

ProBloc T1SG-xxx-3+1-E	255
Weight	pounds [grams] 0.948 [430]
ProBloc T1SG-xxx-3+1-E-R	
Weight	pounds [grams] 0.952 [432]
DIN 43880 Dimension	4 TE / 2.84 [72]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	4 Units

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