

Compact Multi-Pole SPD with leads for use in EV (AC) Chargers

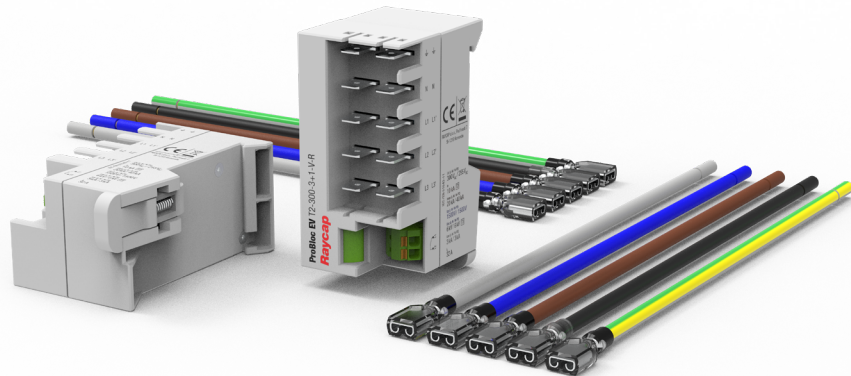
Lightning and Overvoltage Protection for AC Chargers

ProBloc EV T2 V



Special features:

- Enables V connectivity for in-line installation
- Compact design with 35 mm width – suitable for even the smallest AC EV chargers
- Type 2 + 3 SPD
- Discharge capacity up to 20kA (L-N) and 40kA (N-PE)
- Short circuit current rating 10kA
- Mounts via DIN rail installation (only 2TE width needed) or mounts flush on the backplate
- Features FastOn connection terminals. Insulated connection leads can (optional) be supplied with the SPD



IEC 61643-11:2011

EN 61643-11:2012+A11:2018



With the increasing number of electrical vehicles on the road, charging stations are becoming more prevalent. While technologies have been focused on new vehicle designs and battery capacities, protection of people and the charging infrastructure also must be considered. The safety of those using the infrastructure is covered under IEC 60364-7-722:2018 (DIN VDE 0100-722:2019) which requires the use of overvoltage protection in all publicly accessible charging stations. As well, safety-conscious businesses and homeowners will also want to protect themselves and their investments with purpose-built surge protection. The ProBloc EV T2 V surge protectors are uniquely designed for use in AC charging systems. Raycap also offers DC surge protectors for use in DC Fast Charging infrastructure.



More Product Information

RoHS
COMPLIANT CE

DATASHEET

Compact Multi-Pole SPD for EV Systems

ProBloc EV T2 1+1 (01) V

Class II • Class III • Type 2 • Type 3



Location of Use: EV Chargers
 Mode of Protection: L-N, N-PE
 IEC/EN Category: Class II+III / Type 2+3
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018



Technical Data

ProBloc EV T2-xxx-1+1-V(-01-R)

300

IEC Electrical

Nominal AC Voltage (50/60 Hz)		U_0	240V
Maximum Continuous Operating Voltage (AC)	(L-N/N-PE)	U_c	300V/255V
Nominal Discharge Current (8/20 μ s)	(L-N/N-PE)	I_n	10 kA/10 kA
Maximum Discharge Current (8/20 μ s)	(L-N/N-PE)	I_{max}	20 kA/40 kA
Voltage Protection Level	(L-N/N-PE)	U_p	1500V/1500V
Rated Load Current		I_L	32 A
Open Circuit Voltage of Combination Wave Generator (1.2/50 μ s)(L-N/N-PE)		U_{oc}	6 kV/6 kV
Short Circuit Current of Combination Wave Generator	(L-N/N-PE)	I_{cw}	3 kA/3 kA
Follow Current Interrupt Rating	(N-PE)		100 A
Response time	(L-N/N-PE)	t_A	<25 ns / <100 ns
Overvoltage Category			III
Maximum Backup fuse, if required			63 A gG
Short-Circuit Current Rating		I_{SCCR}	10 kA
TOV Withstand 5s	(L-N)	U_T	337V
TOV Safe Fail 120min	(L-N)	U_T	442V
TOV 200ms	(N-PE)	U_T	1200V/300 A
Number of ports			1

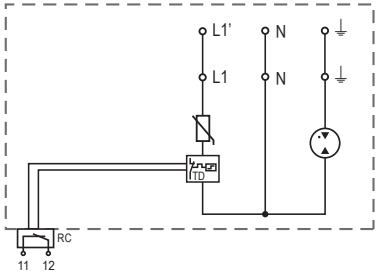
Mechanical & Environmental

Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Humidity	RH	5%...95%
Altitude (max)		13123 ft [4000 m]
Conductor Cross Section		10 AWG / 6 mm ² (Flexible)
Mounting		35 mm DIN Rail, EN 60715 / Baseplate Screw-in Mounting
Degree of Protection		IP 20 (built-in)
Thermal Protection		Yes
Fault Indication		Red Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/1A, 125V/1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5mm ² (Solid)
Overvoltage Category		III

Internal Configuration

Legend

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



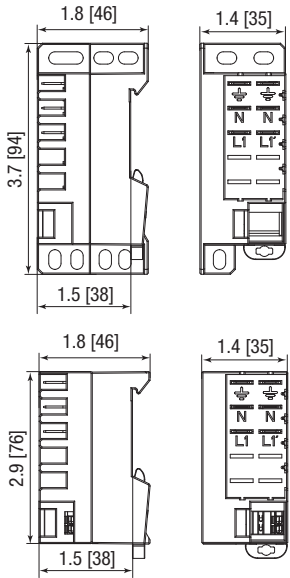
ProBloc EV T2-xxx-1+1-V(-01-R)

Order Information

Order Code	300
ProBloc EV T2-xxx-1+1-V	515 756
ProBloc EV T2-xxx-1+1-V-R (with remote contacts)	515 757
ProBloc EV T2-xxx-1+1-V-01 (with flush mount)	515 758
ProBloc EV T2-xxx-1+1-V-01-R (with flush mount and remote contacts)	515 759

Dimensions & Packaging

inches [mm]



Single Unit

ProBloc EV T2-xxx-1+1-V	300
Weight	pounds [grams] .175 [79.2]
ProBloc EV T2-xxx-1+1-V-R	300
Weight	pounds [grams] .180 [81.7]
ProBloc EV T2-xxx-1+1-V-01	300
Weight	pounds [grams] .184 [83.6]
ProBloc EV T2-xxx-1+1-V-01-R	300
Weight	pounds [grams] .188 [85.1]
Packaging Dimensions (HxWxL)	1.8 x 2.1 x 3.9" [46 x 54 x 100 mm]
Standard Order Quantity	12 Units

Compact Multi-Pole SPD for EV Systems

ProBloc EV T2 3+1 (01) V

Class II • Class III • Type 2 • Type 3



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 Mode of Protection: L-N, N-PE
 IEC/EN Category: Class II+II / Type 2+3
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018



Technical Data

ProBloc EV T2-xxx-3+1-V(-01-R)

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IEC Electrical

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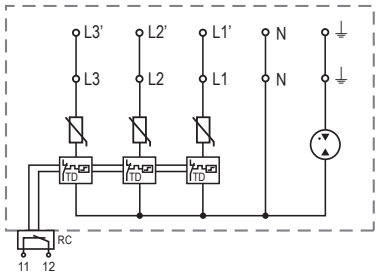
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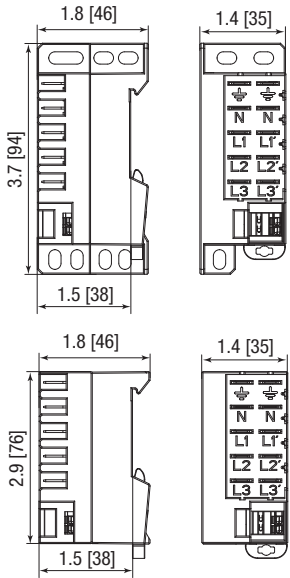
ProBloc EV T2-xxx-3+1-V(-01-R)

Order Information

Order Code	300
ProBloc EV T2-xxx-3+1-V	515 760
ProBloc EV T2-xxx-3+1-V-R (with remote contacts)	515 761
ProBloc EV T2-xxx-3+1-V-01 (with flush mount)	515 762
ProBloc EV T2-xxx-3+1-V-01-R (with flush mount and remote contacts)	515 763

Dimensions & Packaging

inches [mm]



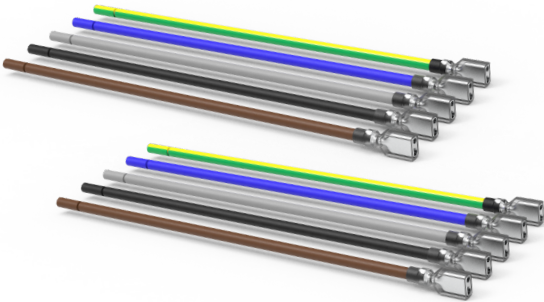
Single Unit

ProBloc EV T2-xxx-3+1-V		300
Weight	pounds [grams]	.234 [106.1]
ProBloc EV T2-xxx-3+1-V-R		300
Weight	pounds [grams]	.239 [108.6]
ProBloc EV T2-xxx-3+1-V-01		300
Weight	pounds [grams]	.244 [110.5]
ProBloc EV T2-xxx-3+1-V-01-R		300
Weight	pounds [grams]	.247 [112]
Packaging Dimensions (HxWxL)		1.8 × 2.1 × 3.9" [46 × 54 × 100 mm]
Standard Order Quantity		12 Units

DATASHEET

Accessories

ProBloc EV T2 V Cable Set



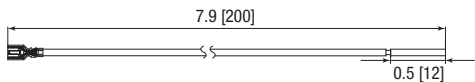
ProBloc EV T2 V Cable Set

Technical Data		
Length		7.8" [200 mm]
Conductor Material		Copper
Conductor Cross Section (max)		10 AWG / 6mm ²
Type of Faston		6.3x0.8
Type of Insulation Sleeve		TE 1-170823-6
Wire Testing Voltage (min)		1500V
Type of Wire		Flexible

Order Information		
Order Code		
Cable set 5 (with insulated fast-on connector)		515 792
Cable set 10 (with insulated fast-on connector)		515 764

Dimensions & Packaging

inches [mm]



Complete Unit		
Cable Set 5		
Weight	pounds [grams]	.154 [70]
Cable Set 10		
Weight	pounds [grams]	.309 [140]
Packaging Dimensions (HxWxL)		4.3 × 4.5 × 13.8" [109 × 115 × 352 mm]
Standard Order Quantity		12 Units