Pluggable Single-Pole SPD

SafeTec T2 1+0

Class II • Type 2 • Type 1CA



Location of Use: Sub-distribution Boards
Network Systems: TN-S, TN-C, TT (only L-N)
Mode of Protection: L-PE, N-PE (only TN-S), L-PEN, L-N
Surge Ratings: I_n = up to 20 kA (8/20 µs)
I_{max} = up to 50 kA (8/20 µs)
IEC/EN/UL Category: Class II / Type 2 / Type 1CA
Protective Elements: High Energy MOV and GDT
Safety: Patented Current Limiting
Housing: Pluggable Design
Compliance: IEC 61643-11:2011
EN 61643-11:2012
UL 1449 4th Edition

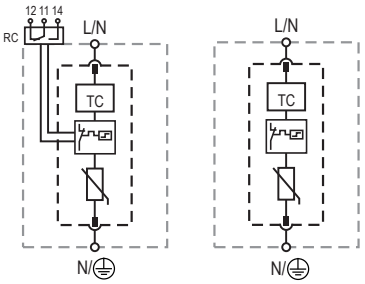
Technical Data

SafeTec T2-xxx-1+0(-R)		75	150	300	350	480	550	750	880
IEC Electrical									
Nominal AC Voltage (50/60Hz)	U_o/U_n	60 V	120 V	240 V	277 V	400 V	400 V	600 V	600 V
Maximum Continuous Operating Voltage (AC)	U_c	75 V	150 V	300 V	350 V	480 V	550 V	750 V	880 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 µs)	I_{max}	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA	35 kA	35 kA
Voltage Protection Level	U_p	800 V	1250 V	1650 V	1750 V	2300 V	2500 V	3500 V	3600 V
Response Time	t_A	< 25 ns							
Back-Up Fuse (max)		315 A / 250 A gG							
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA / 50 kA							
TOV Withstand 120min	U_T	150 V	255 V	442 V	529 V	762 V	918 V	1200 V	1250 V
Number of Ports		1							
UL Electrical									
Maximum Continuous Operating Voltage (AC)	MCOV	75 V	150 V	300 V	350 V	480 V	550 V	750 V	880 V
Voltage Protection Rating	VPR	600 V	700 V	1200 V	1200 V	1500 V	1800 V	2500 V	2500 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Short-Circuit Current Rating (AC)	SCCR	85kA	200 kA	150 kA	200 kA	200 kA	200 kA	200 kA	200 kA
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}	39.9 lbf·in [4.5 Nm]							
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)							
		35 mm² (Solid, Stranded) / 25 mm² (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							
Operating State / Fault Indication		Green Flag / Not Green Flag							
Remote Contacts (RC)		Optional							
RC Switching Capacity		AC: 250 V / 1 A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A							
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm² (Solid)							

Order Information								
Order Code	75	150	300	350	480	550	750	880
SafeTec T2-xxx-1+0	59.0132	59.0134	59.0136	59.0138	59.0140	59.0142	59.0144	59.0146
SafeTec T2-xxx-1+0-R (with remote contacts)	59.0133	59.0135	59.0137	59.0139	59.0141	59.0143	59.0145	59.0147
SafeTec T2-xxx-P	59.0125	59.0126	59.0127	59.0128	59.0129	59.0299	59.0130	59.0131

SafeTec T2 1+0

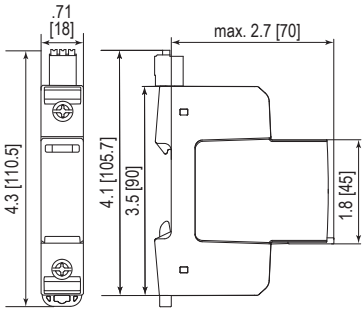
Internal Configuration



Legend

L Line
N Neutral
⏚ Protective Earth
RC Remote Contacts Optional
TC Thermal Control Function

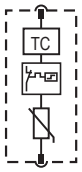
Dimensions & Packaging



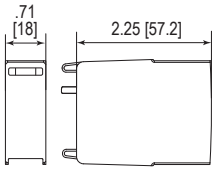
Dimensions & Packaging									
SafeTec T2-xxx-1+0		**75**	**150**	**300**	**350**	**480**	**550**	**750**	**880**
Single Unit Weight	pounds	.272	.280	.292	.309	.316	.327	.349	.349
	grams	123	127	132	140	143	148	158	158
SafeTecT2-xxx-1+0-R		**75**	**150**	**300**	**350**	**480**	**550**	**750**	**880**
Single Unit Weight	pounds	.287	.296	.307	.325	.331	.342	.364	.364
	grams	130	134	139	147	150	155	165	165
Single Unit DIN 43880 Dimension		1 TE							
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]							
Minimum Order Quantity		12 Units							

Plug Internal Configuration

SafeTec T2-xxx-P



Dimensions & Packaging



Dimensions & Packaging									
SafeTec T2-xxx-P		**75**	**150**	**300**	**350**	**480**	**550**	**750**	**880**
Single Unit Weight	pounds	.124	.133	.144	.161	.168	.179	.201	.201
	grams	56	60	65	73	76	81	91	91
Single Unit DIN 43880 Dimension		1 TE							
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]							
Minimum Order Quantity		28 Units							

RoHS COMPLIANT

Applicable connection configurations can be found beginning on page 220.

inches
[mm]

Pluggable Multi-Pole SPD

SafeTec T2 2+0

Class II • Type 2 • Type 1CA



Location of Use: Sub-distribution Boards
Network Systems: TN-S
Mode of Protection: L-N, N-PE
Surge Ratings: I_n = up to 20 kA (8/20 µs)
I_{max} = up to 50 kA (8/20 µs)
IEC/EN/UL Category: Class II / Type 2 / Type 1CA
Protective Elements: High Energy MOV and GDT
Safety: Patented Current Limiting
Housing: Pluggable Design
Compliance: IEC 61643-11:2011
EN 61643-11:2012
UL 1449 4th Edition

Technical Data

SafeTec T2-xxx-2+0(-R)		75	150	300	350	480	550	750	880
IEC Electrical									
Nominal AC Voltage (50/60Hz)	U_o/U_n	60 V	120 V	240 V	277 V	400 V	400 V	600 V	600 V
Maximum Continuous Operating Voltage (AC)	U_c	75 V	150 V	300 V	350 V	480 V	550 V	750 V	880 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 µs)	I_{max}	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA	35 kA	35 kA
Voltage Protection Level	U_p	800 V	1250 V	1650 V	1750 V	2300 V	2500 V	3500 V	3600 V
Response Time	t_A	< 25 ns							
Back-Up Fuse (max)		315 A / 250 A gG							
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA / 50 kA							
TOV Withstand 120min	U_T	150 V	255 V	442 V	529 V	762 V	918 V	1200 V	1250 V
Number of Ports		1							
UL Electrical									
Maximum Continuous Operating Voltage (AC)	MCOV	75 V	150 V	300 V	350 V	480 V	550 V	750 V	880 V
Voltage Protection Rating	VPR	600 V	700 V	1200 V	1200 V	1500 V	1800 V	2500 V	2500 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Short-Circuit Current Rating (AC)	SCCR	85kA	200 kA	150 kA	200 kA	200 kA	200 kA	200 kA	200 kA
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}	39.9 lbf·in [4.5 Nm]							
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)							
		35 mm² (Solid, Stranded) / 25 mm² (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							
Operating State / Fault Indication		Green Flag / Not Green Flag							
Remote Contacts (RC)		Optional							
RC Switching Capacity		AC: 250 V / 1 A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A							
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm² (Solid)							

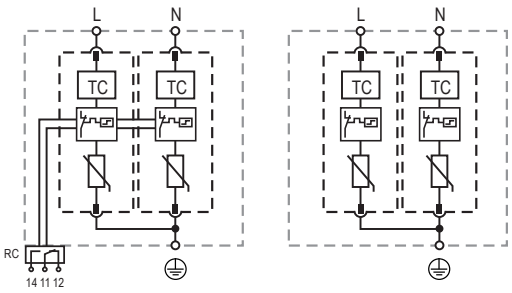
Order Information								
Order Code	75	150	300	350	480	550	750	880
SafeTec T2-xxx-2+0	59.0345	59.0148	59.0150	59.0152	59.0154	59.0156	59.0158	59.0160
SafeTec T2-xxx-2+0-R (with remote contacts)	59.0346	59.0149	59.0151	59.0153	59.0155	59.0157	59.0159	59.0161
SafeTec T2-xxx-P	59.0125	59.0126	59.0127	59.0128	59.0129	59.0299	59.0130	59.0131

SafeTec T2 2+0

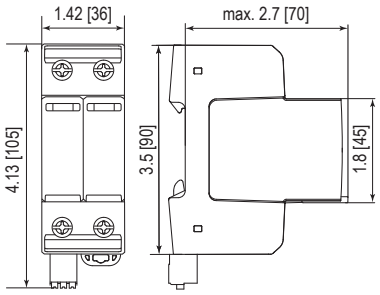
Internal Configuration

Legend

L Line
N Neutral
⏚ Protective Earth
RC Remote Contacts Optional
TC Thermal Control Function



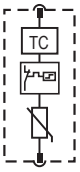
Dimensions & Packaging



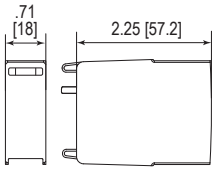
Dimensions & Packaging									
SafeTec T2-xxx-2+0		**75**	**150**	**300**	**350**	**480**	**550**	**750**	**880**
Single Unit Weight	pounds	.534	.552	.574	.609	.622	.644	.688	.688
	grams	242	250	260	276	282	292	312	312
SafeTecT2-xxx-2+0-R		**75**	**150**	**300**	**350**	**480**	**550**	**750**	**880**
Single Unit Weight	pounds	.565	.583	.605	.640	.653	.675	.719	.719
	grams	256	264	274	290	296	306	326	326
Single Unit DIN 43880 Dimension		2 TE							
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]							
Minimum Order Quantity		7 Units							

Plug Internal Configuration

SafeTec T2-xxx-P



Dimensions & Packaging



Dimensions & Packaging									
SafeTec T2-xxx-P		**75**	**150**	**300**	**350**	**480**	**550**	**750**	**880**
Single Unit Weight	pounds	.124	.133	.144	.161	.168	.179	.201	.201
	grams	56	60	65	73	76	81	91	91
Single Unit DIN 43880 Dimension		1 TE							
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]							
Minimum Order Quantity		28 Units							

RoHS COMPLIANT

Applicable connection configurations can be found beginning on page 220.

inches
[mm]

Pluggable Multi-Pole SPD

SafeTec T2 3+0

Class II • Type 2 • Type 1CA



Location of Use: Sub-distribution Boards
Network Systems: TN-C
Mode of Protection: L-PEN
Surge Ratings: I_n = 20 kA (8/20 µs)
I_{max} = up to 50 kA (8/20 µs)
IEC/EN/UL Category: Class II / Type 2 / Type 1CA
Protective Elements: High Energy MOV and GDT
Safety: Patented Current Limiting
Housing: Pluggable Design
Compliance: IEC 61643-11:2011
EN 61643-11:2012
UL 1449 4th Edition

Technical Data

SafeTec T2-xxx-3+0(-R)		150	300	350	480	550	750	880
IEC Electrical								
Nominal AC Voltage (50/60Hz)	U_o/U_n	120 V	240 V	277 V	400 V	400 V	600 V	600 V
Maximum Continuous Operating Voltage (AC)	U_c	150 V	300 V	350 V	480 V	550 V	750 V	880 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 µs)	I_{max}	50 kA	50 kA	50 kA	50 kA	50 kA	35 kA	35 kA
Voltage Protection Level	U_p	1250 V	1650 V	1750 V	2300 V	2500 V	3500 V	3600 V
Response Time	t_A	< 25 ns						
Back-Up Fuse (max)		315 A / 250 A gG						
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA / 50 kA						
TOV Withstand 120min	U_T	255 V	442 V	529 V	762 V	918 V	1200 V	1250 V
Number of Ports		1						
UL Electrical								
Maximum Continuous Operating Voltage (AC)	MCOV	150 V	300 V	350 V	480 V	550 V	750 V	880 V
Voltage Protection Rating	VPR	700 V	1200 V	1200 V	1500 V	1800 V	2500 V	2500 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Short-Circuit Current Rating (AC)	SCCR	200 kA	150 kA	200 kA	200 kA	200 kA	200 kA	200 kA
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}	39.9 lbf·in [4.5 Nm]						
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)						
		35 mm² (Solid, Stranded) / 25 mm² (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						
Operating State / Fault Indication		Green Flag / Not Green Flag						
Remote Contacts (RC)		Optional						
RC Switching Capacity		AC: 250 V / 1 A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A						
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm² (Solid)						

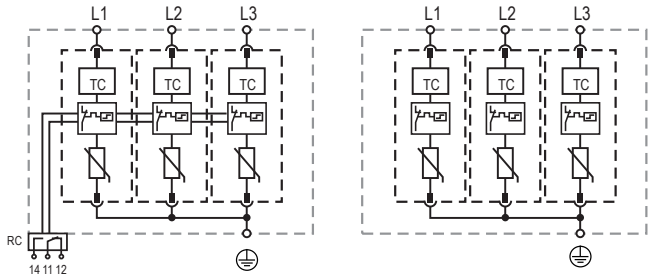
Order Information								
Order Code		150	300	350	480	550	750	880
SafeTec T2-xxx-3+0		59.0162	59.0164	59.0166	59.0168	59.0170	59.0172	59.0174
SafeTec T2-xxx-3+0-R (with remote contacts)		59.0163	59.0165	59.0167	59.0169	59.0171	59.0173	59.0175
SafeTec T2-xxx-P		59.0126	59.0127	59.0128	59.0129	59.0299	59.0130	59.0131

SafeTec T2 3+0

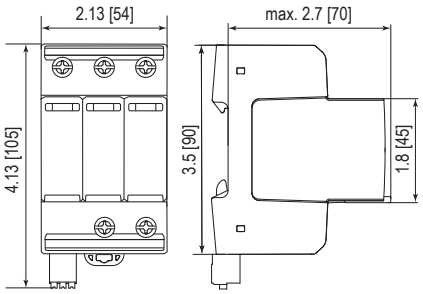
Internal Configuration

Legend

L Line
⏚ Protective Earth
RC Remote Contacts Optional
TC Thermal Control Function



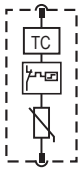
Dimensions & Packaging



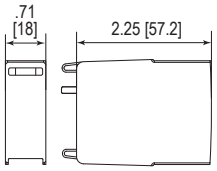
Dimensions & Packaging								
SafeTec T2-xxx-3+0		**150**	**300**	**350**	**480**	**550**	**750**	**880**
Single Unit Weight	pounds	.801	.834	.887	.907	.940	1.006	1.006
	grams	363	378	402	411	426	456	456
SafeTecT2-xxx-3+0-R		**150**	**300**	**350**	**480**	**550**	**750**	**880**
Single Unit Weight	pounds	.823	.856	.909	.929	.962	1.028	1.028
	grams	373	388	412	421	436	466	466
Single Unit DIN 43880 Dimension		3 TE						
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]						
Minimum Order Quantity		5 Units						

Plug Internal Configuration

SafeTec T2-xxx-P



Dimensions & Packaging



Dimensions & Packaging								
SafeTec T2-xxx-P		**150**	**300**	**350**	**480**	**550**	**750**	**880**
Single Unit Weight	pounds	.133	.144	.161	.168	.179	.201	.201
	grams	60	65	73	76	81	91	91
Single Unit DIN 43880 Dimension		1 TE						
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]						
Minimum Order Quantity		28 Units						

RoHS COMPLIANT

Applicable connection configurations can be found beginning on page 220.

inches
[mm]

Pluggable Multi-Pole SPD

SafeTec T2 4+0

Class II • Type 2 • Type 1CA



Location of Use: Sub-distribution Boards
Network Systems: TN-S
Mode of Protection: L-PE, N-PE
Surge Ratings: I_n = 20 kA (8/20 µs)
I_{max} = 50 kA (8/20 µs)
IEC/EN/UL Category: Class II / Type 2 / Type 1CA
Protective Elements: High Energy MOV and GDT
Safety: Patented Current Limiting
Housing: Pluggable Design
Compliance: IEC 61643-11:2011
EN 61643-11:2012
UL 1449 4th Edition

Technical Data

SafeTec T2-xxx-4+0(-R)		150	300	350	480	550
IEC Electrical						
Nominal AC Voltage (50/60Hz)	U_o/U_n	120 V	240 V	277 V	400 V	400 V
Maximum Continuous Operating Voltage (AC)	U_c	150 V	300 V	350 V	480 V	550 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 µs)	I_{max}	50 kA	50 kA	50 kA	50 kA	50 kA
Voltage Protection Level	U_p	1250 V	1650 V	1750 V	2300 V	2500 V
Response Time	t_A	< 25 ns				
Back-Up Fuse (max)		315 A / 250 A gG				
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA / 50 kA				
TOV Withstand 120min	U_T	255 V	442 V	529 V	762 V	918 V
Number of Ports		1				
UL Electrical						
Maximum Continuous Operating Voltage (AC)	MCOV	150 V	300 V	350 V	480 V	550 V
Voltage Protection Rating	VPR	700 V	1200 V	1200 V	1500 V	1800 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA
Short-Circuit Current Rating (AC)	SCCR	200 kA	150 kA	200 kA	200 kA	200 kA
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}	39.9 lbf·in [4.5 Nm]				
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)				
		35 mm² (Solid, Stranded) / 25 mm² (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				
Operating State / Fault Indication		Green Flag / Not Green Flag				
Remote Contacts (RC)		Optional				
RC Switching Capacity		AC: 250 V / 1 A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A				
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm² (Solid)				

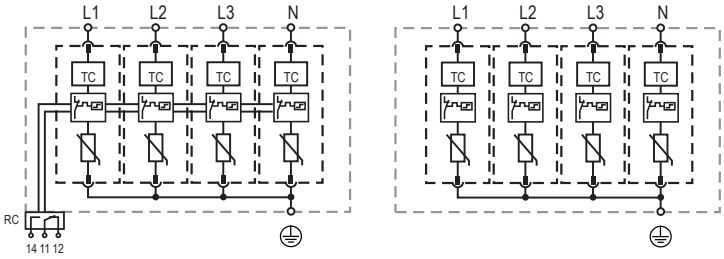
Order Information						
Order Code	150	300	350	480	550
SafeTec T2-xxx-4+0	59.0176	59.0178	59.0180	59.0182	59.0184
SafeTec T2-xxx-4+0-R (with remote contacts)	59.0177	59.0179	59.0181	59.0183	59.0185
SafeTec T2-xxx-P	59.0126	59.0127	59.0128	59.0129	59.0299

SafeTec T2 4+0

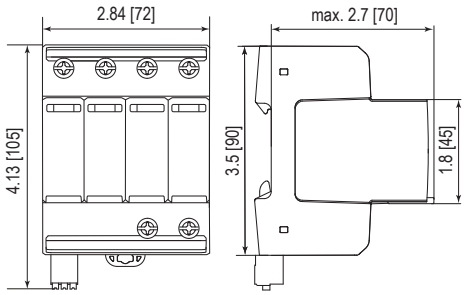
Internal Configuration

Legend

L Line
N Neutral
⏚ Protective Earth
RC Remote Contacts Optional
TC Thermal Control Function



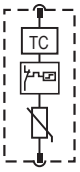
Dimensions & Packaging



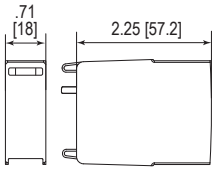
Dimensions & Packaging						
SafeTec T2-xxx-4+0		**150**	**300**	**350**	**480**	**550**
Single Unit Weight	pounds	1.085	1.129	1.200	1.226	1.270
	grams	492	512	544	556	576
SafeTec T2-xxx-4+0-R		**150**	**300**	**350**	**480**	**550**
Single Unit Weight	pounds	1.105	1.149	1.220	1.246	1.290
	grams	501	521	553	565	585
Single Unit DIN 43880 Dimension		4 TE				
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]				
Minimum Order Quantity		4 Units				

Plug Internal Configuration

SafeTec T2-xxx-P



Dimensions & Packaging



Dimensions & Packaging						
SafeTec T2-xxx-P		**150**	**300**	**350**	**480**	**550**
Single Unit Weight	pounds	.133	.144	.161	.168	.179
	grams	60	65	73	76	81
Single Unit DIN 43880 Dimension		1 TE				
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]				
Minimum Order Quantity		28 Units				

RoHS COMPLIANT

Applicable connection configurations can be found beginning on page 220.

inches
[mm]

Pluggable Multi-Pole SPD

SafeTec T2 1+1

Class II • Type 2 • Type 1CA



Location of Use: Sub-distribution Boards
Network Systems: TT, TN-S
Mode of Protection: L-N, N-PE
Surge Ratings: I_n = 20 kA / 40 kA (8/20 µs)
I_{max} = 50 kA / 65 kA (8/20 µs)
IEC/EN/UL Category: Class II / Type 2 / Type 1CA
Protective Elements: High Energy MOV and GDT
Safety: Patented Current Limiting
Housing: Pluggable Design
Compliance: IEC 61643-11:2011
EN 61643-11:2012
UL 1449 4th Edition

Technical Data

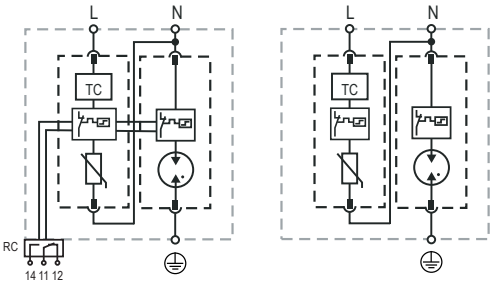
SafeTec T2-xxx-1+1(-R)			75	150	300	350
IEC Electrical						
Nominal AC Voltage (50/60Hz)		U_o/U_n	60 V	120 V	240 V	277 V
Maximum Continuous Operating Voltage (AC)	(L-N)	U_c	75 V	150 V	300 V	350 V
	(N-PE)	U_c	305 V	305 V	305 V	305 V
Nominal Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_n	20 kA / 40 kA	20 kA / 40 kA	20 kA / 40 kA	20 kA / 40 kA
Maximum Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_{max}	50 kA / 65kA	50 kA / 65kA	50 kA / 65kA	50 kA / 65kA
Voltage Protection Level	(L-N)/(N-PE)	U_p	800 V / 1500 V	1250 V / 1500 V	1650 V / 1500 V	1750 V / 1500 V
Follow Current Interrupt Rating	(N-PE)	I_{fi}	100 A_{RMS}			
Response Time	(L-N)/(N-PE)	t_A	< 25 ns / < 100 ns			
Back-Up Fuse (max)			315 A / 250 A gG			
Short-Circuit Current Rating (AC)	(L-N)	I_{SCCR}	25 kA / 50 kA			
TOV Withstand 120min	(L-N)	U_T	150 V	255 V	442 V	529 V
TOV Withstand 200ms	(N-PE)	U_T	1200 V			
Number of Ports			1			
UL Electrical						
Maximum Continuous Operating Voltage (AC)	(L-N)/(N-PE)	MCOV	75 V / 305 V	150 V / 305 V	300 V / 305 V	350 V / 305 V
Voltage Protection Rating	(L-N)/(N-PE)	VPR	600 V / 1000 V	700 V / 1000 V	1200 V / 1000 V	1200 V / 1000 V
Nominal Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_n	20 kA / 20 kA			
Short-Circuit Current Rating (AC)	(L-N)	SCCR	85kA	200 kA	150 kA	200 kA
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}	39.9 lbf·in [4.5 Nm]			
Conductor Cross Section (max)			2 AWG (Solid, Stranded) / 4 AWG (Flexible)			
			35 mm² (Solid, Stranded) / 25 mm² (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			
Operating State / Fault Indication			Green Flag / Not Green Flag			
Remote Contacts (RC)			Optional			
RC Switching Capacity			AC: 250 V / 1A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A			
RC Conductor Cross Section (max)			16 AWG (Solid) / 1.5 mm² (Solid)			
Order Information						
Order Code			**75**	**150**	**300**	**350**
SafeTec T2-xxx-1+1			59.0186	59.0188	59.0190	59.0192
SafeTec T2-xxx-1+1-R (with remote contacts)			59.0187	59.0189	59.0191	59.0193
SafeTec T2-xxx-P			59.0125	59.0126	59.0127	59.0128
SafeTube T2-40-P			59.0274	59.0274	59.0274	59.0274

SafeTec T2 1+1

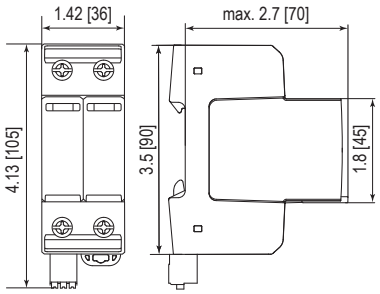
Internal Configuration

Legend

L Line
N Neutral
⏚ Protective Earth
RC Remote Contacts Optional
TC Thermal Control Function



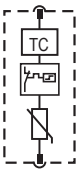
Dimensions & Packaging



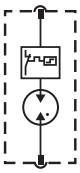
Dimensions & Packaging					
SafeTec T2-xxx-1+1		**75**	**150**	**300**	**350**
Single Unit Weight	pounds	.505	.514	.525	.543
	grams	229	233	238	246
SafeTec T2-xxx-1+1-R		**75**	**150**	**300**	**350**
Single Unit Weight	pounds	.519	.527	.538	.556
	grams	235	239	244	252
Single Unit DIN 43880 Dimension		2 TE			
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]			
Minimum Order Quantity		7 Units			

Plug Internal Configuration

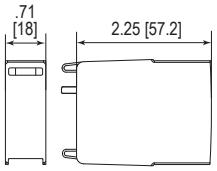
SafeTec T2-xxx-P



SafeTube T2-40-P



Dimensions & Packaging



Dimensions & Packaging					
SafeTec T2-xxx-P		**75**	**150**	**300**	**350**
Single Unit Weight	pounds	.124	.133	.144	.161
	grams	56	60	65	73
SafeTube T2-40-P			**40**		
Single Unit Weight	pounds		.093		
	grams		42		
Single Unit DIN 43880 Dimension			1 TE		
Packaging Dimensions (H x W x L)			4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]		
Minimum Order Quantity			28 Units		

RoHS COMPLIANT

Applicable connection configurations can be found beginning on page 220.

inches
[mm]

Pluggable Multi-Pole SPD

SafeTec T2 3+1

Class II • Type 2 • Type 1CA



Location of Use: Sub-distribution Boards
Network Systems: TT, TN-S
Mode of Protection: L-N, N-PE
Surge Ratings: I_n = 20 kA / 40 kA (8/20 µs)
I_{max} = 50 kA / 65 kA (8/20 µs)
IEC/EN/UL Category: Class II / Type 2 / Type 1CA
Protective Elements: High Energy MOV and GDT
Safety: Patented Current Limiting
Housing: Pluggable Design
Compliance: IEC 61643-11:2011
EN 61643-11:2012
UL 1449 4th Edition

Technical Data

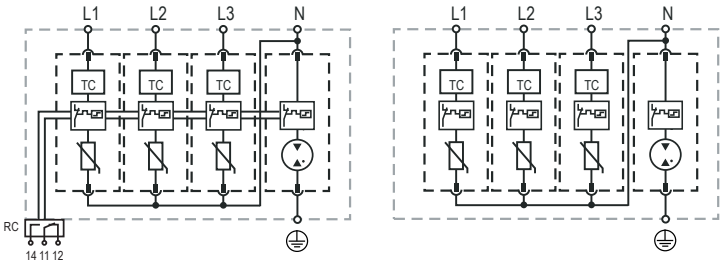
SafeTec T2-xxx-3+1(-R)			300	350
IEC Electrical				
Nominal AC Voltage (50/60Hz)		U_o/U_n	240 V	277 V
Maximum Continuous Operating Voltage (AC)	(L-N)	U_c	300 V	350 V
	(N-PE)	U_c	305 V	305 V
Nominal Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_n	20 kA / 40 kA	20 kA / 40 kA
Maximum Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_{max}	50 kA / 65kA	50 kA / 65kA
Voltage Protection Level	(L-N)/(N-PE)	$U_{p.}$	1650 V / 1500 V	1750 V / 1500 V
Follow Current Interrupt Rating	(N-PE)	I_{fi}	100 A_{RMS}	
Response Time	(L-N)/(N-PE)	t_A	< 25 ns / < 100 ns	
Back-Up Fuse (max)			315 A / 250 A gG	
Short-Circuit Current Rating (AC)	(L-N)	I_{SCCR}	25 kA / 50 kA	
TOV Withstand 120min	(L-N)	U_T	442 V	529 V
TOV Withstand 200ms	(N-PE)	U_T	1200 V	
Number of Ports			1	
UL Electrical				
Maximum Continuous Operating Voltage (AC)	(L-N)/(N-PE)	MCOV	300 V / 305 V	350 V / 305 V
Voltage Protection Rating	(L-N)/(N-PE)	VPR	1200 V / 1000 V	1200 V / 1000 V
Nominal Discharge Current (8/20 µs)	(L-N)/(N-PE)	I_n	20 kA / 20 kA	
Short-Circuit Current Rating (AC)	(L-N)	SCCR	150 kA	200 kA
Mechanical				
Operating Temperature Range		T_a	-40 °F to +185 °F [-40 °C to +85 °C]	
Permissible Operating Humidity		RH	5%...95%	
Altitude			13123 ft [4000 m]	
Terminal Screw Torque		M_{max}	39.9 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)	
Housing Material			Thermoplastic: Extinguishing Degree UL 94 V-0	
Thermal Protection			Yes	
Operating State / Fault Indication			Green Flag / Not Green Flag	
Remote Contacts (RC)			Optional	
RC Switching Capacity			AC: 250 V / 1A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A	
RC Conductor Cross Section (max)			16 AWG (Solid) / 1.5 mm^2 (Solid)	
Order Information				
Order Code			300	350
SafeTec T2-xxx-3+1			59.0198	59.0200
SafeTec T2-xxx-3+1-R (with remote contacts)			59.0199	59.0201
SafeTec T2-xxx-P			59.0127	59.0128
SafeTube T2-40-P			59.0274	59.0274

SafeTec T2 3+1

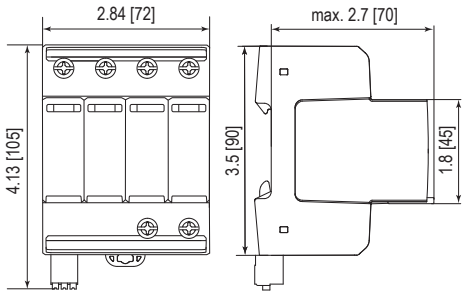
Internal Configuration

Legend

- *L Line*
- *N Neutral*
- *⏚ Protective Earth*
- *RC Remote Contacts Optional*
- *TC Thermal Control Function*



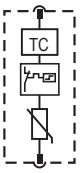
Dimensions & Packaging



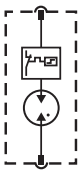
Dimensions & Packaging			
SafeTec T2-xxx-3+1		**300**	**350**
Single Unit Weight	pounds	.792	.810
	grams	359	367
SafeTec T2-xxx-3+1-R		**300**	**350**
Single Unit Weight	pounds	.812	.829
	grams	368	376
Single Unit DIN 43880 Dimension		4 TE	
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]	
Minimum Order Quantity		4 Units	

Plug Internal Configuration

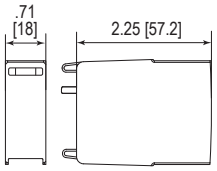
SafeTec T2-xxx-P



SafeTube T2-40-P



Dimensions & Packaging



Dimensions & Packaging			
SafeTec T2-xxx-P		**300**	**350**
Single Unit Weight	pounds	.144	.161
	grams	65	73
SafeTube T2-40-P		**40**	
Single Unit Weight	pounds	.093	
	grams	42	
Single Unit DIN 43880 Dimension		1 TE	
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]	
Minimum Order Quantity		28 Units	

RoHS COMPLIANT

Applicable connection configurations can be found beginning on page 220.

inches
[mm]

Pluggable Single-Pole SPD

SafeTube T2 40 0+1

Class II • Type 2 • Type 1CA



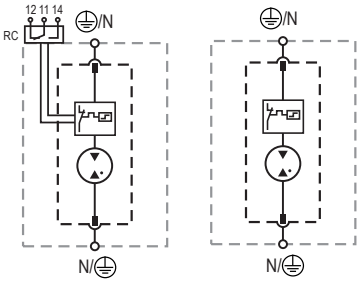
Location of Use: Sub-Distribution Boards
Network Systems: TT, TN-S
Mode of Protection: N-PE
Surge Ratings: I_n = 20 kA (8/20 µs)
IEC/EN/UL Category: Class II / Type 2 / Type 1CA
Protective Elements: GDT with Thermal Disconnector
Housing: Pluggable Design
Compliance: IEC 61643-11:2011
EN 61643-11:2012
UL 1449 4th Edition

Technical Data

SafeTube T2-xx 0+1(-R)		40
IEC Electrical		
Nominal AC Voltage (50/60Hz)	U_o/U_n	0 V
Maximum Continuous Operating Voltage	U_c	305V
Nominal Discharge Current (8/20 µs)	I_n	40 kA
Maximum Discharge Current (8/20 µs)	I_{max}	65 kA
Voltage Protection Level	U_p	1500 V
Follow Current Interrupt Rating	I_{fi}	100 A_{RMS}
Response Time	t_A	< 100 ns
TOV Withstand 200ms	U_T	1200 V
Number of Ports		1
UL Electrical		
Maximum Continuous Operating Voltage (AC)	MCOV	305V
Voltage Protection RatingN)	VPR	1000 V
Nominal Discharge Current (8/20 µs)	I_n	20 kA
Mechanical		
Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Altitude		13123 ft [4000 m]
Terminal Screw Torque	M_{max}	39.9 lbf·in [4.5 Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)
		35 mm² (Solid, Stranded) / 25 mm² (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
Operating State / Fault Indication		Green Flag / Not Green Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250 V / 1A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm² (Solid)
Order Information		
Order Code		**40**
SafeTube T2-xxx-0+1		59.0281
SafeTube T2-xxx-0+1-R (with remote contacts)		59.0337
SafeTube T2-40-P		59.0274

SafeTube T2 0+1

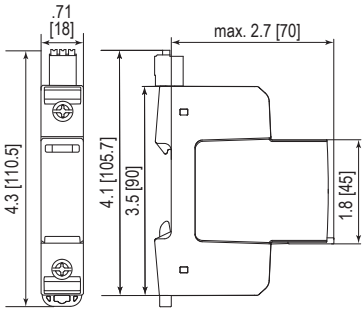
Internal Configuration



Legend

L	*Line*
N	*Neutral*
⏚	*Protective Earth*
RC	*Remote Contacts Optional*
TC	*Thermal Control Function*

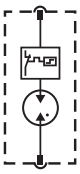
Dimensions & Packaging



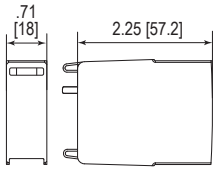
Dimensions & Packaging		
SafeTube T2-xxx-0+1		**40**
Single Unit Weight	pounds	.255-
	grams	116
SafeTube T2-xxx-0+1-R		**40**
Single Unit Weight	pounds	.275
	grams	125
Single Unit DIN 43880 Dimension		1 TE
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Minimum Order Quantity		12 Units

Plug Internal Configuration

SafeTube T2-xxx-P



Dimensions & Packaging



Dimensions & Packaging		
SafeTube T2-40-P		**40**
Single Unit Weight	pounds	.093
	grams	42
Single Unit DIN 43880 Dimension		1 TE
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Minimum Order Quantity		28 Units

RoHS COMPLIANT

Applicable connection configurations can be found beginning on page 220.

inches
[mm]