



# Surge Protection Device (SPD)

## FP T1F-275-25

Class 1+2

Surge Protection Device Class 1+2

Uc=275 V, Iimp=25kA, TN-C, Up=2100/1500

Location of use : Main Distribution Boards

Network Systems : TN-C/TN-S, TN-C, TT

Mode of protection : L-PEN/N-PE/ L-PE, N-PE

Class : Class 1+2

Compliance : IEC 61643-11:2011

EN 61643-11:2012+A11:2018



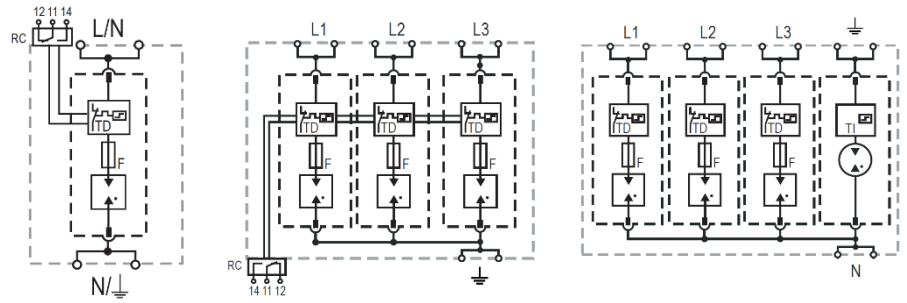
### Technical Data

Reference	24121	24123	24124
Name	FP T1F-275-25-1	FP T1F-275-25-3	FP T1F-275-25-4
Surge protector type	Single-phase	Three-phase	Three-phase+N
Nominal AC voltage (50/60Hz)	U <sub>o</sub> /U <sub>n</sub>	240 V	
Maximum continuous operating voltage	U <sub>c</sub>	275 V	
Nominal discharge current (8/20μs)	I <sub>n</sub>	25kA	
Maximum discharge current (8/20μs)	I <sub>max</sub>	65 kA	
Impulse discharge current (10/350μs)	I <sub>imp</sub>	25kA	
Specific energy	W/R	156.2 kJ / Ω	
Charge	Q	12.5As	
Open circuit voltage of combination wave generator (1.2/50μs)	U <sub>oc</sub>	6 kV	6 kV
Short circuit voltage of combination wave generator (8/20μs)	I <sub>cw</sub>	3 kA	3 kA
Voltage protection level	U <sub>p</sub>	1.5 kV	2.1 kV
Response time	t <sub>A</sub>	< 100 ns	
Overcurrent protection		Not required	
Short-circuit current rating (AC)	I <sub>SCCR</sub>	75kA	100 kA
Follow current interrupt rating (AC)	I <sub>fi</sub>	75kA	100 kA
TOV withstand 120min	U <sub>T</sub>	442 V	
Operating temperature range	T <sub>a</sub>	-40 °C to +85 °C	
Permissible operating humidity	RH	5%...95%	
Terminal screw torque	M <sub>max</sub>	4.5Nm	
Conductor cross section (max)		2 AWG (solid, stranded) / 4 AWG (flexible) 35mm <sup>2</sup> (solid, stranded) / 25mm <sup>2</sup> (flexible)	
Mounting		35mm 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/ Red	
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 <sup>2</sup> (solid)	

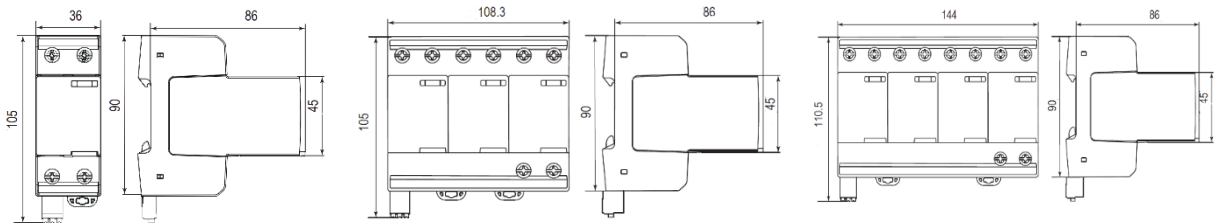
## Internal Configuration

### Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- PE PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnecter
- F Integrated overcurrent disconnecter with high lightning resistance



## Dimensions & Packaging



Reference	24121	24123	24124
Name	FP T1F-275-25-1	FP T1F-275-25-3	FP T1F-275-25-4
Weight	334 g	868 g	1074 g
Number of modules	1	3	4
Packaging dimensions	109 × 115 × 352 mm		

## Spare Plug

Reference	24120	24190
Name	FP T1F-275-25	T1Nf-305-100
Type	Phase	Neutral
Weight	194 g	
Number of modules	1	
Packaging dimensions	109 × 115 × 352 mm	

