



# Surge Protection Device (SPD)

## FP T2F-440-15

Class 2+3

Surge Protection Device Class 2+3

Uc=440V, In=15kA, Up2000V

Location of use : Sub-Distribution Boards

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

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

Class : Class 2+3

Compliance : IEC 61643-11:2011

EN 61643-11:2012+A11:2018



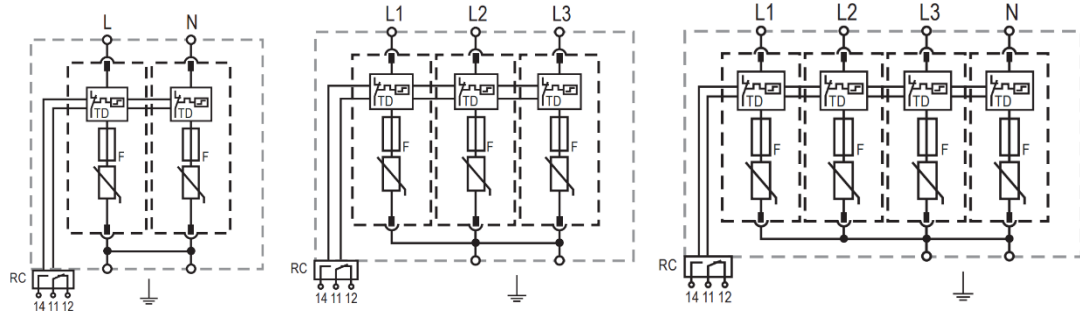
### Technical Data

Reference		24232	24233	24234
Name		FP T2F-440-15-2	FP T2F-440-15-3	FP T2F-440-15-4
Surge protector type		Single-phase	Three-phase	Three-phase+N
Nominal AC voltage (50/60Hz)	$U_o/U_n$		240V	
Maximum continuous operating voltage	(L-N)/(N-PE) $U_c$		440V	
Nominal discharge current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_n$		15kA	
Maximum discharge current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_{max}$		30kA	
Open circuit voltage of combination wave generator (1.2/50 $\mu$ s)	$U_{oc}$		6kV	
Short circuit current of combination wave generator (8/20 $\mu$ s)	$I_{cw}$		3kA	
Voltage protection level	(L-N)/(N-PE) $U_p$		2kV	
Response time	(L-N)/(N-PE) $t_A$		< 25ns	
Overcurrent protection (max)			Not Required	
Short-circuit current rating (AC)	(L-N) $I_{SCCR}$		100kA	
TOV withstand 5s	(L-N)		580V	
TOV withstand 120 min	(L-N) $U_T$		630V	
	<b>Mode</b>		Safe Fail	
Operating temperature range	$T_a$		-40 °C to +85 °C	
Permissible operating humidity	RH		5%...95%	
Terminal screw torque	$M_{max}$		4.5Nm	
Conductor cross section (max)			2 AWG (solid, stranded) / 4 AWG (flexible) 35mm <sup>2</sup> (solid, stranded) / 25 mm <sup>2</sup> (flexible)	
Mounting			35 mm rail DIN, 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)			Yes	
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) / 1.5mm <sup>2</sup> (solid)	

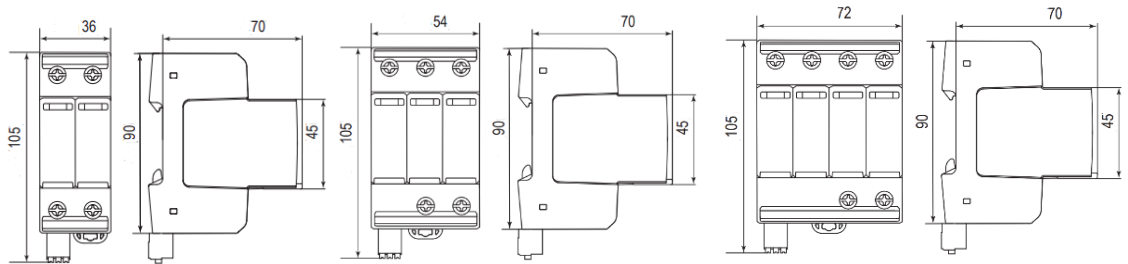
## Internal Configuration

### Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- PE PE Conductor Terminal
- RC Remote Contacts Terminal
- TD Thermal Disconnecter
- F Integrated Surge Adapted Backup Fuse



## Dimension & Packaging



Reference	24232	24233	24234
Name	FP T2F-440-15-2	FP T2F-440-15-3	FP T2F-440-15-4
Weight	285 g	414 g	496 g
Number of modules	2	3	4
Packaging dimensions	109 × 115 × 352 mm		

## Spare Plug

Reference	24230
Name	T2F-440-15
Type	Phase / Neutral
Weight	76 g
Number of modules	1
Packaging dimensions	83 × 116 × 305 mm

