





YRSP-A2 SERIES

Type 2 Surge Protective Device



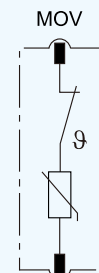
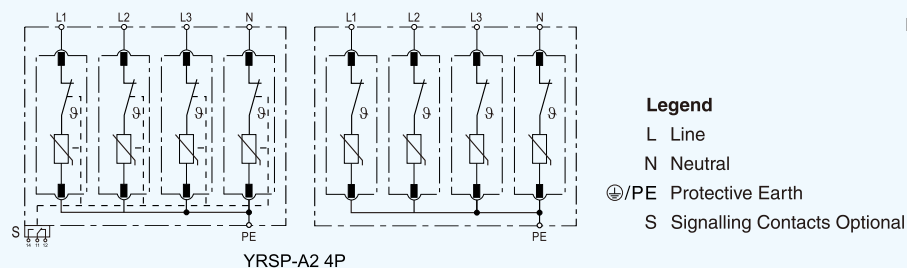
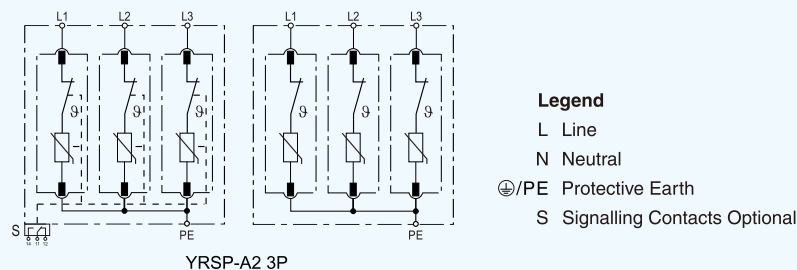
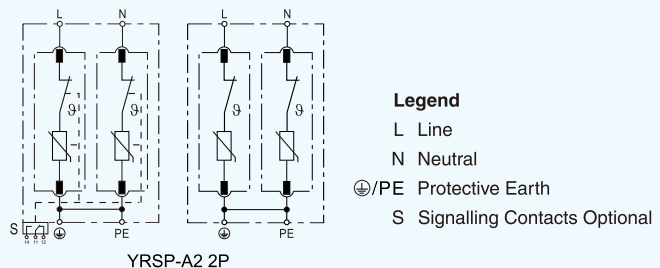
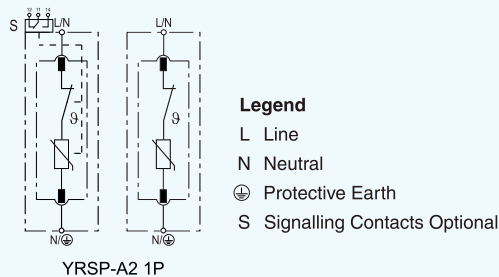
Technical Parameters

Technical Data	
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	$I_n = 20\text{ kA (8/20 } \mu\text{s)}$
IEC/EN Category	Class II / Type 2 / Type 1CA
Protective Elements	High Energy MOV
Housing	Pluggable Design
Compliance	IEC 61643-11:2011 EN 61643-11:2012

IEC ELECTRICAL							
YRSP-A2		75	150	275	385	420	480
Nominal AC Voltage (50/60Hz)	U_o/U_n	60V	120V	230 V	230 V	400 V	480 V
Maximum Continuous Operating Voltage (AC)	U_c	75V	150V	275 V	385 V	420 V	480 V
Nominal Discharge Current (8/20 μs)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 μs)	I_{max}	40 kA	40 kA	40 kA	40 kA	40 kA	40 kA
Voltage Protection Level	U_p	700 V	1000 V	1500 V	1800 V	1800 V	2200 V
Residual Current at U_c	I_{PE}	< 0,5mA					
Response Time	t_A	< 25ns					
Back-Up Fuse (max)		125 A gL / gG					
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA					
TOV Withstand 5s	U_T	90V	180V	335V	335V	580V	
TOV 120min	U_T	115V	230V	440V	440V	765V	
	mode	Withstand	Withstand	Safe Fail	Safe Fail	Safe Fail	Safe Fail
Number of Ports		1					

Mechanical & Environmental		
Operating Temperature Range	T_a	-40 °F to +158 °F [-40 °C to +70 °C]
Permissible Operating Humidity	RH	5%...95%
Atmospheric pressure and altitude		80k Pa ... 106k Pa / -500 m ... 2000 m
Terminal Screw Torque	M_{max}	39.9 lbf-in [4.5 Nm]
Conductor Cross Section (max)		5 AWG (Solid, Stranded) / 5 AWG (Flexible)
		16 mm ² (Solid, Stranded) / 16 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 ok / Red defect
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/0.5 A; DC: 250V/0.1 A; 125V/0.2 A; 75V/0.5 A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)

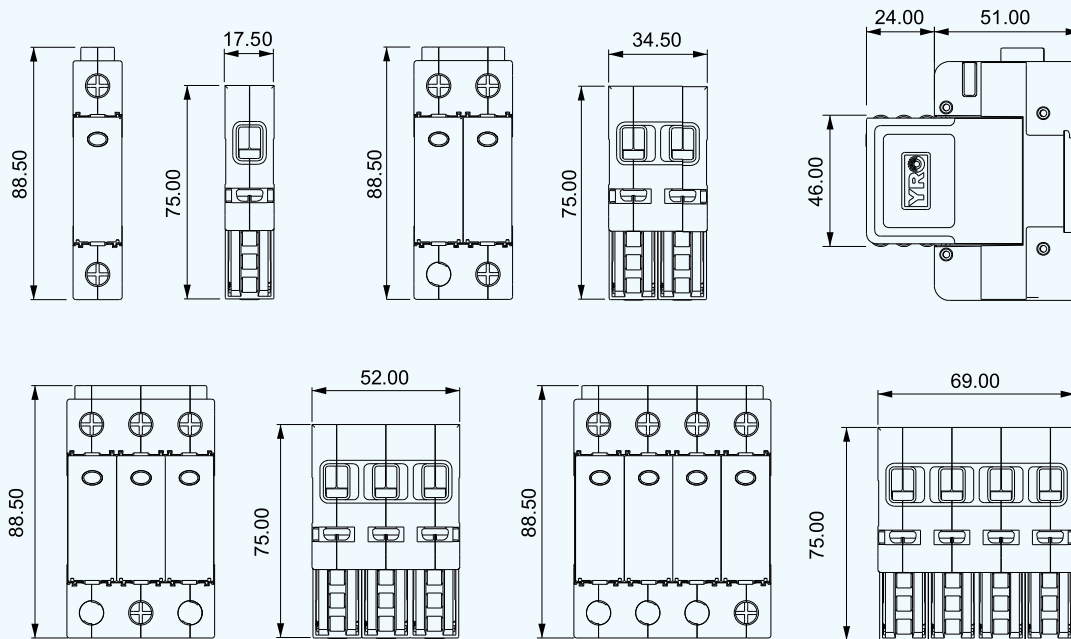
Internal Configuration



Plug Internal Configuration

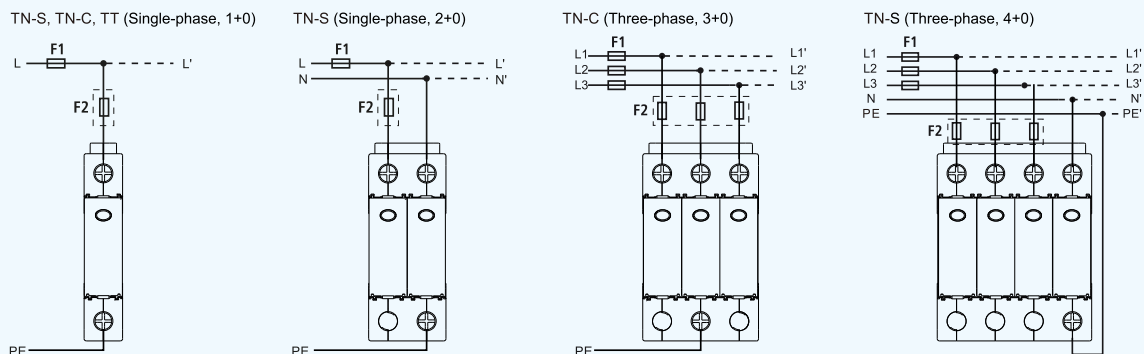
Dimensions & Packaging

Unit: mm



YRSP-A2	275	385	420	480
Single Unit DIN 43880 Dimension	1 CTN			
Packaging Dimensions (Hx WxL)	[520 × 220 × 300 mm]			
Pole	1 Pole	2 Pole	3 Pole	4 Pole
Minimum Order Quantity	144 Units	72Units	48 Units	36 Units

Connection Diagram



Technical Parameters

Technical Data	
Location of Use	Sub-Distribution Boards
Network Systems	TT, TN-S
Mode of Protection	L-N, N-PE
Surge Ratings	$I_n = 20\text{kA}$ (8/20 μs)
IEC/EN Category	Class II / Type 2 / Type 1CA
Protective Elements	High Energy MOV and GDT
Housing	Pluggable Design
Compliance	IEC 61643-11:2011 EN 61643-11:2012



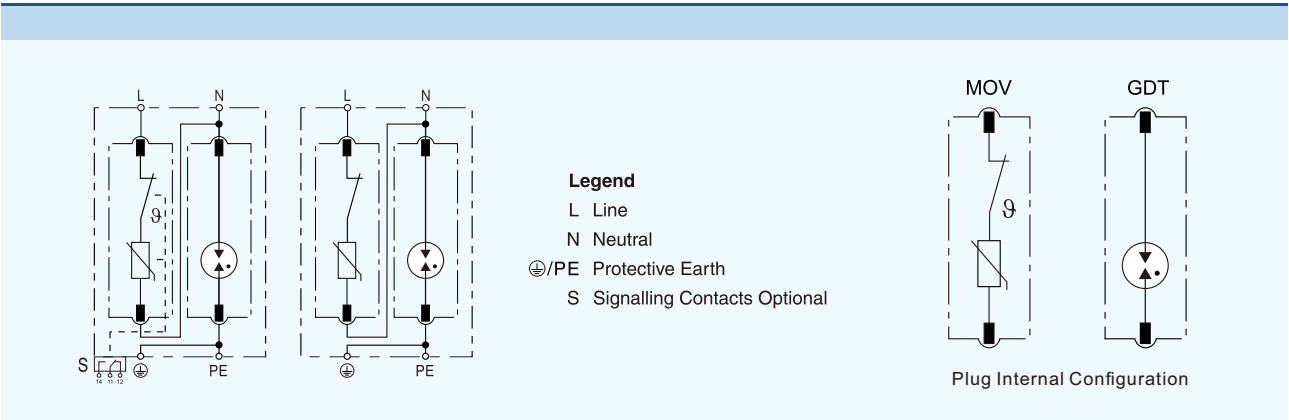
IEC ELECTRICAL							
YRSP-A2 1P+N		75	150	275	320	385	440
Nominal AC Voltage (50/60Hz)		60V	120V	230V	230V	230V	400V
Maximum Continuous Operating Voltage (AC)	(L-N) U _c (N -PE) U _c	75V	150V	275V	320V	385V	440V
Nominal Discharge Current (8/20 μs)	(L-N)/(N-PE) I _n	255V					
Maximum Discharge Current (8/20 μs)	(L-N)/(N-PE) I _{max}	20kA / 20 kA					
Voltage Protection Level	(L - N)/ (N -PE) U _p	40kA / 40kA					
Follow Current Interrupt Rating	(N-PE) I _{fi}	0.4kV/1.5kV 1.0kV/1.5kV 1.5kV/1.5kV 1.6kV/1.5kV 1.8kV/1.5kV 2.0kV/1.5kV					
Residual Current at U _c	I _{PE}	100A _{RMS}					
Response Time	(L-N)/(N-PE) t _A	none					
Back-Up Fuse (max)		< 25 ns / < 100 ns					
Short-Circuit Current Rating (AC)	(L-N) I _{SCCR}	125 A gL / gG					
TOV Withstand 5s	(L-N) U _T	25 kA					
TOV 120min	(L-N) U _T	90V	180V	335V	335V	335V	580V
TOV 200ms	(N-PE) U _T	115V	230V	440V	440V	440V	765V
Number of Ports		mode	Withstand	Withstand	Safe Fail	Safe Fail	Safe Fail
		1200V					
		1					
Mechanical & Environmental							
Operating Temperature Range	T _a	-40 °F to +158 °F [-40 °C to +70 °C]					
Permissible Operating Humidity	RH	5%...95%					
Atmospheric pressure and altitude		80k Pa ... 106k Pa / -500 m ... 2000 m					
Terminal Screw Torque	M _{max}	39.9 lbf-in [4.5Nm]					
Conductor Cross Section (max)		5 AWG (Solid, Stranded) / 5 AWG (Flexible)					
		16 mm² (Solid, Stranded) / 16 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 ok / Red defect					
Remote Contacts (RC)		Optional					
RC Switching Capacity		AC: 250V/0.5 A; DC: 250V/0.1 A; 125V/0.2 A; 75V/0.5 A					
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm² (Solid)					

YRSP-A2 1P+N SERIES

Type 2 Surge Protective Device

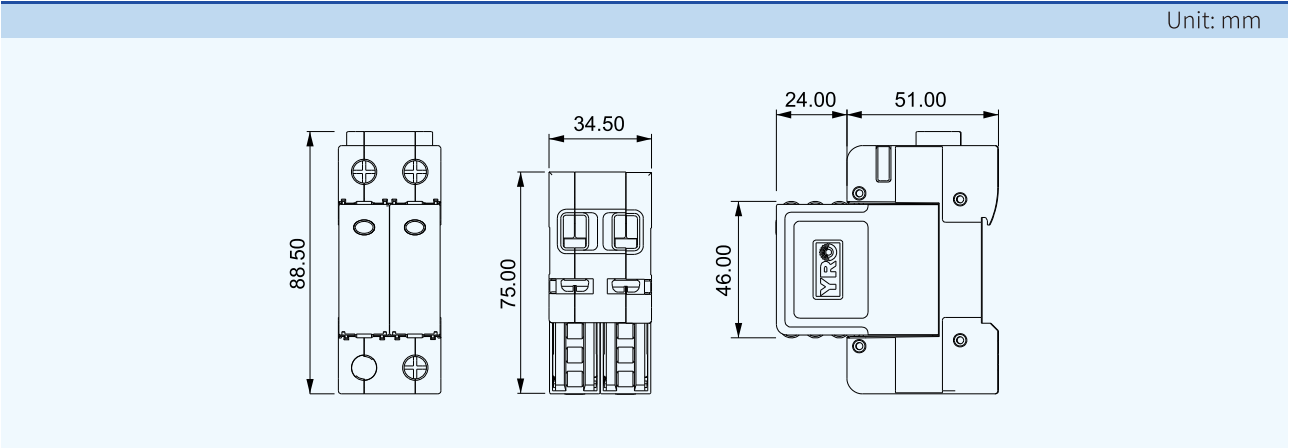


Internal Configuration

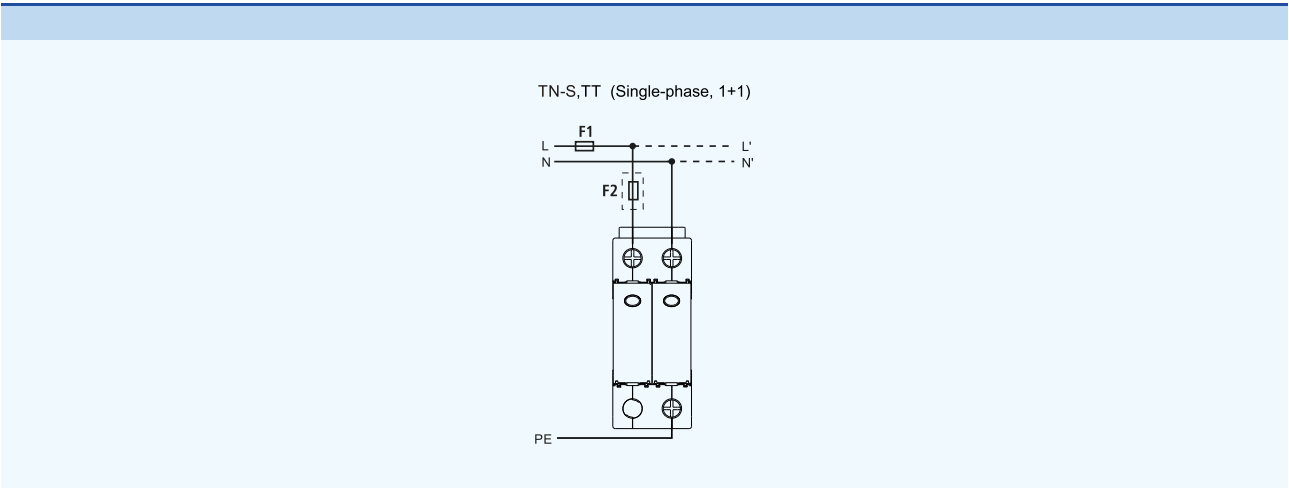


Dimensions & Packaging

Unit: mm



Connection Diagram



YRSP-A2 3P + N SERIES

Type 2 Surge Protective Device



Technical Parameters

Technical Data	
Location of Use	Sub-Distribution Boards
Network Systems	TT, TN-S
Mode of Protection	L-N, N-PE
Surge Ratings	$I_n = 20\text{kA}$ (8/20 μs)
IEC/EN Category	Class II / Type 2 / Type 1CA
Protective Elements	High Energy MOV and GDT
Housing	Pluggable Design
Compliance	IEC 61643-11:2011 EN 61643-11:2012



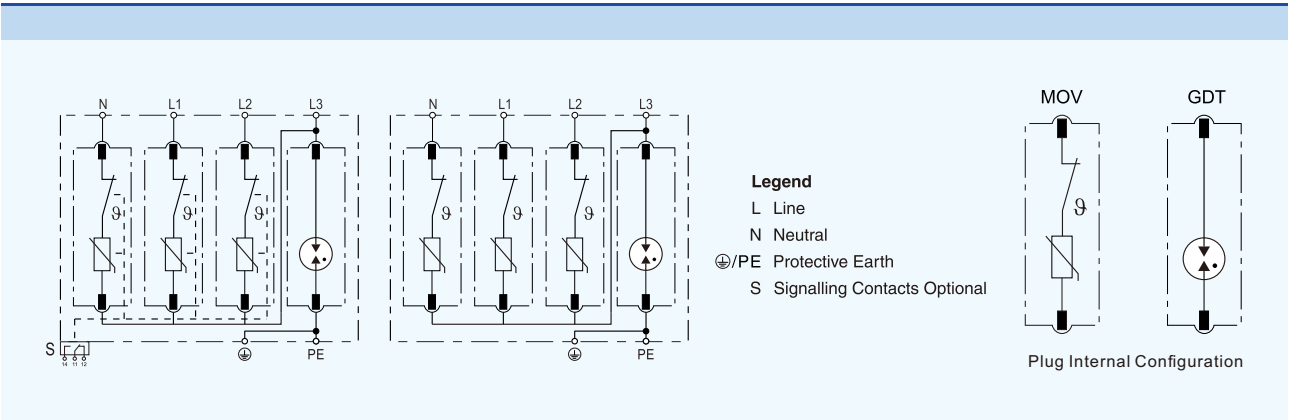
IEC ELECTRICAL						
YRSP-A2 3P+N		150	275	320	385	440
Nominal AC Voltage (50/60Hz)		120V	230V	230V	230V	400V
Maximum Continuous Operating Voltage (AC)	(L-N) U _c	150V	275V	320V	385V	440V
	(N -PE) U _c	255V				
Nominal Discharge Current (8/20 μs)	(L-N)/(N-PE) I _n	20kA / 20 kA				
Maximum Discharge Current (8/20 μs)	(L-N)/(N-PE) I _{max}	40kA / 40kA				
Voltage Protection Level	(L - N)/ (N -PE) U _p	1.0kV/1.5kV	1.5kV/1.5kV	1.6kV/1.5kV	1.8kV/1.5kV	2.0kV/1.5kV
Follow Current Interrupt Rating	(N-PE) I _{fi}	100A _{RMS}				
Residual Current at U _c	I _{PE}	none				
Response Time	(L-N)/(N-PE) t _A	< 25 ns / < 100 ns				
Back-Up Fuse (max)		125 A gL / gG				
Short-Circuit Current Rating (AC)	(L-N) I _{SCCR}	25 kA				
TOV Withstand 5s	(L-N) U _T	180V	335V	335V	335V	580V
TOV 120min	(L-N) U _T	230V	440V	440V	440V	765V
	mode	Withstand	Safe Fail	Safe Fail	Safe Fail	Safe Fail
TOV Withstand 200ms	(N-PE) U _T	1200V				
Number of Ports		1				
Mechanical & Environmental						
Operating Temperature Range	T _a	-40 °F to +158 °F [-40 °C to +70 °C]				
Permissible Operating Humidity	RH	5%...95%				
Atmospheric pressure and altitude		80k Pa ... 106k Pa / -500 m ... 2000 m				
Terminal Screw Torque	M _{max}	39.9 lbf-in [4.5Nm]				
Conductor Cross Section (max)		5 AWG (Solid, Stranded) / 5 AWG (Flexible)				
		16 mm² (Solid, Stranded) / 16 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 ok / Red defect				
Remote Contacts (RC)		Optional				
RC Switching Capacity		AC: 250V/0.5 A; DC: 250V/0.1 A; 125V/0.2 A; 75V/0.5 A				
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm² (Solid)				

YRSP-A2 3P+N SERIES

Type 2 Surge Protective Device

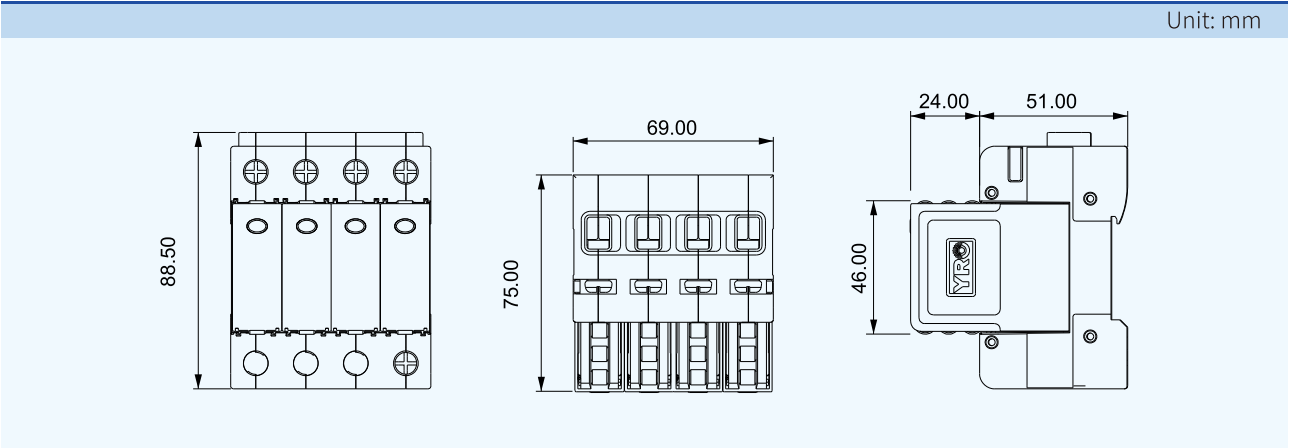


Internal Configuration



Dimensions & Packaging

Unit: mm



Connection Diagram

