



PRIMARY PROTECTION



SECONDARY PROTECTION



## PRODUCT OVERVIEW

RDU5 series surge protector is mainly applicable to TN-C, TT, IT and other power supply systems with AC 50Hz/60Hz, nominal discharge current of 5Ka~60Ka, maximum discharge current of 10Ka~100Ka, and rated working voltage of 220V/380V and below to limit and protect the lightning overvoltage and surge overvoltage of the power grid. It is widely applicable to surge protection requirements in residential, transportation, electric power, tertiary industry and industrial fields.

The product complies with the national standard GB18802.1-2002.

## SELECTION GUIDE

RDU5	A	15	2P	Uc420
Item code	Protection class	Maximum discharge current	Poles	Maximum sustainable operating voltage
Surge protector	A: Primary protection B: Secondary protection	A: 15、25、50 B: 10、20、40、60、80、100	1P 2P 3P 3P+N 4P	Uc420

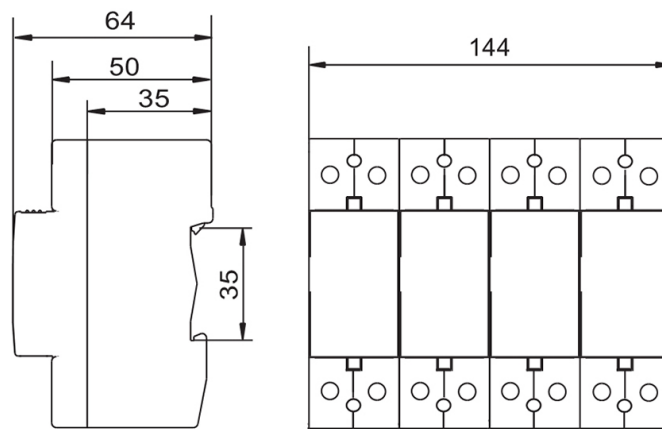
## TECHNICAL CHARACTERISTICS

- RDU5 series surge protection diagram adopts a varistor with excellent nonlinear characteristics, which is connected between the phase line and the neutral line (L-N), the phase line and the region (L-PE), and the equal line and the ground wire (N-PE). Under normal conditions, the surge protector is in a very high resistance state, and the leakage current is almost zero to ensure the normal power supply of the power system, The surge protective device (SPD) can be turned on quickly within nanosecond, limit the amplitude of overvoltage within the safe working range of the equipment, and guide the energy of overvoltage to the ground, thus protecting electrical equipment. Subsequently, the circuit protection ring quickly changes to a high resistance state, so it does not affect the normal power supply of the power system.
- Class I lightning arrester is a composite lightning arrester designed according to the requirements of SPD Class I classification test, which can be used for load equipment of power lines Secondary protection, which prevents low-voltage equipment from overvoltage interference or even direct lightning damage, is applied to LPZOA-2 interface of lightning protection zone,
- The switch type composite lightning arrester is designed and manufactured according to IEC61643-1 and GB/T18802.1 standards, with high lightning current discharge capacity, and the maximum impact current of a single module can reach 25KA (s). It can be widely used for the first level lightning protection of equipment system power supply in areas with high lightning risk, and can be used for single/three-phase power supply lines after fine combination.
- Internal wiring, compact overall structure, convenient installation and wiring
- High speed response. Fast action time.
- The working status is obvious, green (normal), red (fault).
- Additional functions. Such as audible and visual alarm (B), fault remote signaling contact (X).

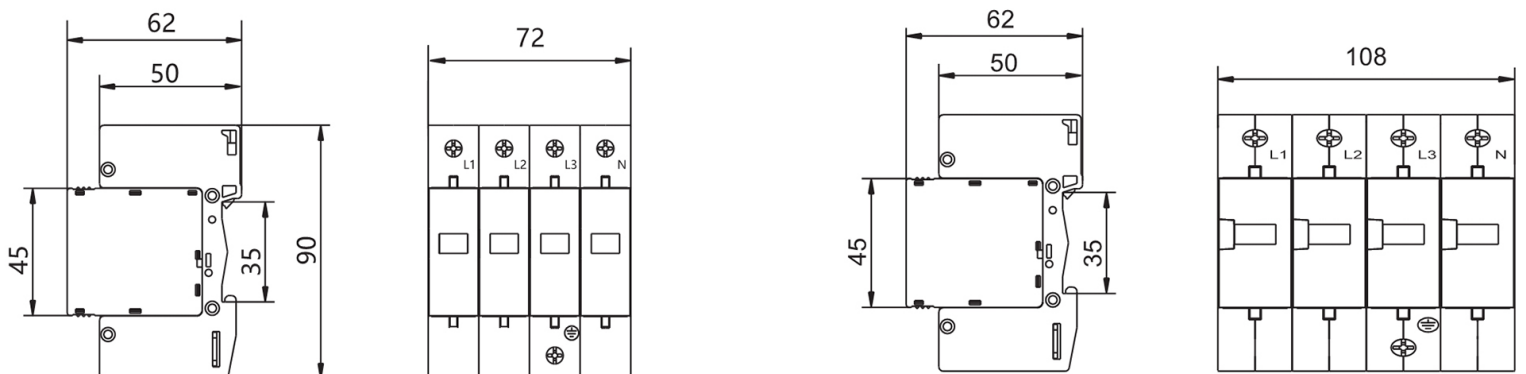
## Main Technical Parameters

Protection Class	A: Primary Protection	B: Secondary Protection
Rated current In (A)	15、25、50	10、20、40、60、80、100
function	Lightning overvoltage protection, surge overvoltage protection	
Number of poles	1P、2P、3P、3P+N、4P	
Rated frequency (Hz)	50	
Maximum continuous operating voltage Ui (V)	420	
Maximum amplified current I <sub>max</sub> ( μ s)	8/20	
Lightning impulse current I <sub>imp</sub> ( μ s)	10/350	
Short circuit withstand 1 (kA)	25	
Response time (ns)	≤ 100	≤ 25
Protection level up (KV)	2.0、2.5、2.5	1.2、1.5、1.8、2.2、2.4、2.5
Degree of protection	IP20	
Reference setting temperature (°C)	30°C	
class of pollution	2	
Wiring capacity (mm <sup>2</sup> )	1~35	
Operating ambient temperature (°C)	-35~+70	
Altitude (m)	≤ 2000	
Relative air temperature	+Not more than 95% at 20 °C+ Not more than 50% at 40 °C	
Installation category	Class II and III	
Installation method	TH35-7.5 mounting rail	
Incoming mode	Upper incoming line	

## Boundary and installation dimensions



Primary protection



Secondary protection