

## KRONE™ LSA-Plus® Telephone Signal Protection

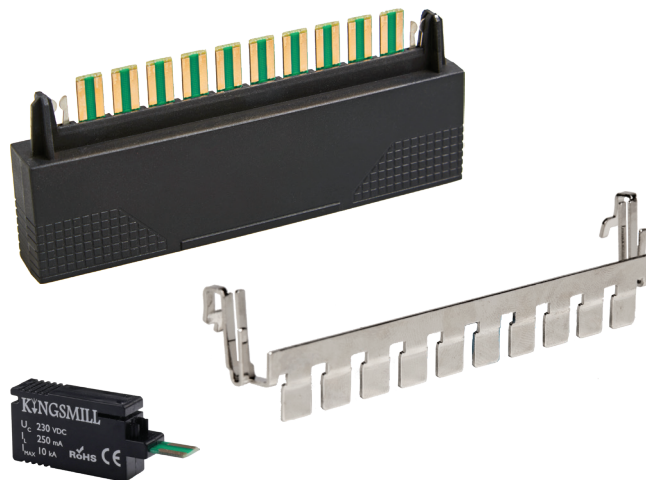
Use the Kingsmill KP series of products for telephone and signal line protection for signals utilising the KRONE™ LSA-PLUS® 10-way connection blocks.

### Two stages of protection

Standard KRONE™ surge arresters only provide a single stage of protection which cannot prevent equipment from being exposed to excessive voltages during a surge event. The KP series of products utilise a two stage protection approach that keeps the voltage let through to an absolute minimum.

### Telephone and Signal protection

The KMKP-10 devices are designed for protecting PSTN and digital PABX signals with a maximum line voltage of up to 200V. They protect all common signalling systems.



### Ordering Information

Model	Signal Type		Ordering Codes	
KMKP-x	PSTN	PABX	KMKP-1 (1 pair)	KMKP-10 (10 pairs)

*The KMKP-1 must be used in conjunction with the Earth Bar KM-KP-EB.*

### Electrical specification

Order number	KMKP-1		KMKP-10
Connection type	in series		
Modes of protection	transverse and common mode		
Number of lines	1 pair	10 pairs	
Maximum continuous voltage (AC/DC)	$U_c$	140V AC/200V DC	
Maximum discharge current (8/20µs)	$I_{max}$	5kA per line (10kA common mode)	
Impulse durability	C2 10 x 5kA 8/20µs		
Maximum load current	$I_L$	250mA	
L-L Voltage protection level at 1kV/µs	$U_p$	220V	
L-L Voltage protection level at 100V/s		235V	
L-PE Voltage protection level at 1kV/µs	$U_p$	350V	
L-PE Voltage protection level at 3kA 8/20µs	$U_p$	600V	
L-PE Voltage protection level at 100V/s		230V	
AC durability	5 x 1s, 1A rms		
Overstressed fault mode	Mode 3 (open circuit)		
Response time	$t_a$	<5ns	
Line resistance	2.7Ω		
L-L capacitance	18pF		
L-PE capacitance	4.5pF		
Insertion loss @ 150Ω	<0.5dB (<1MHz)		
3dB frequency @ 150Ω	70MHz		

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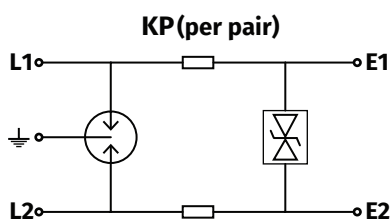
### Mechanical specification

Order number	KMKP-1	KMKP-10
Degree of protection	IP20	
Range of operating temperatures (min - max)	-40°C - +85°C	
Humidity range	5% to 95% non-condensing	
Mounting	KRONE LSA-PLUS®	
Earthing	Additional earth bar for KMKP-1 (KM-KP-EB)	-
According to standard	EN 61643-21:2012, AS/NZS 1768:2007, UL 1449 3rd edition & UL 497B, ITU-T K.44:2012, AS/CA S008:2010, AS/NZS 4117:1999	
Weight	6.5g	150g

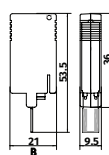
### Standards

Order number	KMKP-1	KMKP-10
EN 61643-21:2012	SPD connected to telecommunications and signalling networks - Cat C2, D1	
AS/NZS 1768:2007	Signalling/telecommunications surge protection	
UL 1449 3rd edition & UL 497B	Protectors for data communications and fire-alarm circuits	
ITU-T K.44:2012	Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents	
AS/CA S008:2010	Requirements for Customer Cabling Products	
AS/NZS 4117:1999	Surge Protective Devices for Telecommunications Applications	

### Dimensions and wiring diagram



**KMKP-1**



**KMKP-10**

