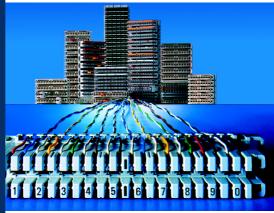
### KRONE Access*NET*

# Protection for LSA-PLUS® and LSA PROFIL Distribution Systems

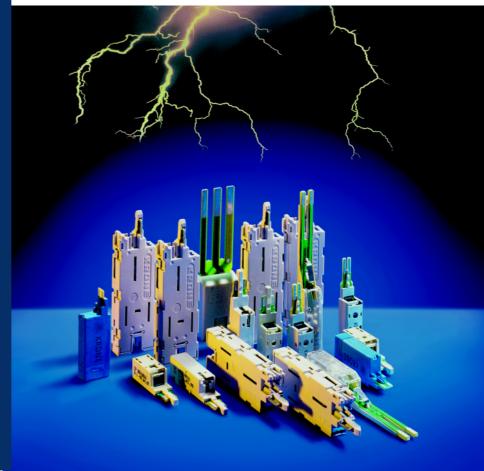
## ComProtect ® Series H

- Compact design protection plug
- Single-pair protection
- Jumpering with plug in place
- Basic protection
- Intermediate protection











KRONE GmbH Beeskowdamm 3-11 D-14167 Berlin Phone 030 / 8453-1422 Fax 030 / 8453-1412 http://www.krone.com protection@krone.com Comprotect protection is designed to protect personnel and equipment from indirect lightning strikes, electro-magnetic disturbances as well as short-circuit conditions between different networks.

The plugs can be fitted in LSA-PLUS or LSA PROFIL Disconnection or Switching Modules. The protection comprises a 3-pole Gas Discharge Tube (GDT), Fail-safe contact as well as reversible current protection components (Type GB..A2, VG..A2 with Polyswitch; GB..A4 and A5 with PTC; EB with standard fuse; DA with no current protection components).

When choosing protection it is important to note that the operating voltage and current must not exceed the values quoted for the components.

Operation of the Fail-safe is irreversible. When, due to an extreme overload condition, the Fail-safe operates, thereby routing the disturbance to earth, the protection plug must be changed out.

#### Installation

After wiring the LSA-PLUS or LSA PROFIL\* module, an earth bar is fitted to the cable side (normally, disturbances come from the network/cable side) of the module thus providing a low-ohmic connection to earth.

The ComProtect plug is inserted into the module so that the groove on the plug mates with the tongue of the earth bar.

#### **Advantages**

- Part or mixed installations, change individual plugs due to the singlepair format
- Compact design allows jumpering to be carried out with the protection in place
- Leading edge component technology guarantees protection of valuable systems
- Designed for use in high transmission-rate networks
- Variants fitted with reversible current protection components

#### **Technical Data**

Type: 2/1 CP H	GB180A2	GB180A4	GB180A5	EB180A2	DA180A2	VG180A2	Unit
Operating voltage DC/AC	<180/127	<180/127	<180/127	<180/127	<180/127	<180/127	$VV_{rms}$
Operating current at +25°C	<120	<100	<120	<250	-	<120	mÄ
Protection level at 100V/sec	<290	<290	<290	<290	<290	<290	V
Protection level at 1kV/µs	<500	<500	<500	<500	<500	<500	V
Nominal surge current; 8/20µs, a/b-e	5	5	5	5	5	5	kA
Nominal alt. discharge current 50Hz,a/	′b-e 5	5	5	5	5	5	$A_{rms}$
Resistance PTC	8	30	40	1	-	8	Ω
Trip time PTC at 500mA/25°C	<3,5	<4	<4	< 2	-	<3,5	sec
Fail-Safe response time at 5A <sub>rms</sub>	<10	<10	<10	<10	<10	<10	sec
Capacitance a/b-e at 1MHz/1V <sub>ac</sub>	5	5	5	5	5	5	pF
Leakage current a/b-e	<0,1	<0,1	<0,1	<0,1	<0,1	<0,1	μΑ
Attentuation loss at $Z_0$ =600 $\Omega$	<0,2	<0,6	<0,7	<0,1	<0,1	<0,2	dB
Operating temperature/Storage temperature/	erature		-20°0	+60°C/-	40°C+80°C		
Environmental conditions			IEC 7	21 part 3-3	3: 3K3, 3Z2, 3I	B1, 3C2, 3S1, 3M3	
Electrical characteristics			ITU-T	K.17, DIN	EN 61644-1 c	ategory C2 and C3	

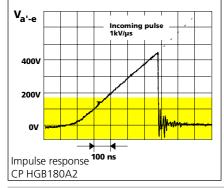
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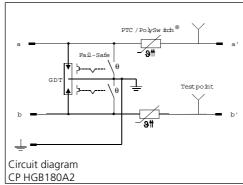
CP HGB180A2, HEB180 CP HGB180A4..A5 CP HVG180

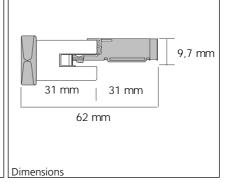
CP HDA180

Distribution systems and end equipment with own secondary overvoltage protection Distribution systems and end equipment with own secondary overvoltage protection Inverse protection when disturbances are expected from the jumper side Individual analogue telephony cabling

up to 8Mbit/s up to 2Mbit/s up to 8MBit/s







Description	Order Number	Pack Quantity
ComProtect 2/1 CP HGB180A2	5909 1 063-05	10 pieces with 1 earth-bar 2/10
ComProtect 2/1 CP HGB180A4	5909 1 063-20	10 pieces with 1 earth-bar 2/10
ComProtect 2/1 CP HGB180A5	5909 1 063-21	10 pieces with 1 earth-bar 2/10
ComProtect 2/1 CP HEB180A2	5909 1 061-05	10 pieces with 1 earth-bar 2/10
ComProtect 2/1 CP HVG180A6	5909 1 063-30	10 pieces with 1 earth-bar 2/10
ComProtect 2/1 CP HDA180A2	5909 1 064-05	10 pieces with 1 earth-bar 2/10

Other pack quantities and variants with other electrical properties on request

#### Accessories

Earth clips*	6089 2 122-00	20 pieces
Insertion tool CP H	6417 3 117-00	1 piece

\* Note: LSA PROFIL modules require additional earth clips to provide continuity between the mounting rails and the earth bar