



ComProtect® Overvoltage Protection

Intermediate Protection Plug for LSA-PLUS® and LSA PROFIL® Modules

The single-pair, intermediate protection plug is recommended for protection of switching and terminal equipment in conjunction with already installed secondary overvoltage protection.

The plug is designed for the partial or complete equipping of LSA-PLUS® or LSA PROFIL® disconnection and switching modules in conjunction with earth bars and earth contact clips.

The protection circuit consists of a 3-pole overvoltage arrestor, fail-safe and overcurrent protection components. When choosing protection, operating voltage and current must not exceed the values noted for the components.

Operation of the fail-safe component is irreversible; the protection plug must be replaced if the fail-safe operates due to extreme overload conditions.

Features and Benefits

- Flexible 1-pair form allows changing of individual plugs as required
- Limits overvoltage and overcurrents
- Designed for use in high transmission-rate networks, the leading edge component technology guarantees protection of valuable systems
- Compact design allows jumpering with protection in place
- Provides measurement and test access
- Versions available with reversible current protection components
- Installation height is approximately 33mm above the LSA-PLUS® or LSA PROFIL® module

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Installation

After wiring the LSA-PLUS® or LSA PROFIL® module, an earth bar is fitted to the cable side (disturbances typically come from the network/cable side) of the module, thus providing a 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.

LSA PROFIL® modules require additional earth clips to provide continuity between the mounting rails and the earth bar.

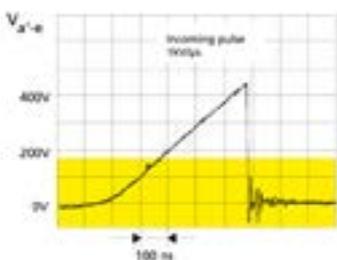
Application

Configuration	Application	Transmission Rate
CP HVB180A1	Distribution systems and end equipment with secondary overvoltage protection	to 8Mbps
CP HVG180A6	Inverse protection when disturbances are expected from the jumper side	to 8Mbps
CP HDA180A1	Individual analogue telephony cabling	

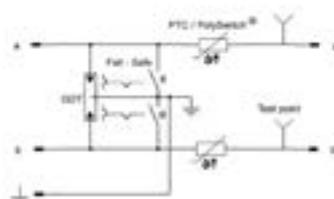
Product Specifications

Electrical Characteristics

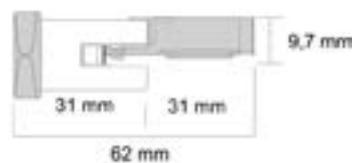
ComProtect® Configuration	GB180A1	DA180A1	VG180A6	Unit
Operating voltage (DC/AC)	<180/127	<180/127	<180/127	V/V _{rms}
Operating current (at +25°C)	<120	-	<120	mA
Protection level at 100V/sec	<290	<290	<290	V
Nominal surge current 8/20µs	5	5	5	kA
Nominal alternating discharge current 50Hz, a/b-e	5	5	5	A _{rms}
Resistance (positive temperature resistors)	8	-	8	Ω
Trip time (positive temperature resistors) at 500mA/25°C	<25	-	<25	sec
Fail-safe response time at 5A _{rms}	<10	<10	<10	sec
Capacitance at 1MHz/1V _{ac}	<5	<5	<5	pF
Leakage current	<0.1	<0.1	<0.1	µA
Attenuation loss at Z ₀ =600 Ω	<0.2	<0.2	<0.2	dB
Electrical characteristics	EN 61643-21:2001 Category C2 and C3			



Impulse response CP HGB180A1



Circuit diagram CP HGB180A1



Dimensions, in mm

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Characteristics

Temperature Characteristics

Operating temperature: -20°C to +60°C

Storage temperature: -40°C to +80°C

Environmental Characteristics

IEC 721 Part 3-3: 3K3, 3Z2, 3B1, 3C2, 3S1, 3M3

Ordering Information

Description	Catalogue Number
Intermediate protection plug for LSA-PLUS® Series 2 blocks	
Installation height: up to 33 mm above block 2/1 CP HGB180A1, maximum operating voltage: 180V Quantity: 10 pieces per pack, including 1 earth bar 2/10	5909 1 063-40
2/1 CP HDA180A1, maximum operating voltage: 180V, without overcurrent protection Quantity: 10 pieces per pack, including 1 earth bar 2/10	5909 1 064-00
2/1 CP HVG180A6, maximum operating voltage: 180V, nominal resistance 8 Ohm. Inverted circuit configuration for installation in distributor block on the system side, as disturbance is expected from the jumper side Quantity: 10 pieces per pack, including 1 earth bar 2/10	5909 1 063-30
Accessories	
Earth clips (NOTE: LSA PROFIL® modules require additional earth clips to provide continuity between mounting rails and earth bar) Quantity: 1 piece (max. 1000 pieces per pack)	6089 3 202-00
Insertion tool	6417 3 117-00



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