

FRONT GUARD COMPACT IV

Protection against transient electric surges for electro electronic equipment connected to the electric power supply.



- Surge current capacity of 180kA per phase
- Protection in all modes, L-G, L-N, L-L and N-G
- MOV technology for protection between L-G and L-N and GDT technology between N-G
- Backup fuse inside
- Event counter
- Meets with UL 1449 2nd edition.

Description

FRONT GUARD COMPACT IV M180 G120 SR/SF is constituted of two protection technologies, Metal Oxide varistor - MOV for phases and Gas Discharge Tube – GDT for protection between neutral and ground. It is a three phase product in which each of the phases is protected in relation to neutral and ground, through VCL Slim module and between neutral and ground through GCL Slim. Each MOV module is equipped with visual signals of protection in service or defect in addition to reversible contacts (C – NC – NO) fully electrically isolated from internal circuit. It also has a yellow led to show energized protector and a red led to show defect in any modules. Cartridge fuses, one per phase, assembled on modules for DIN Rail, offer backup protection from over currents in case of short circuit above capacity of disruption of MOV modules.

It is assembled in carbon steel box with powder electrostatic painting, protection level IP65 and can be installed visible, embedded or in open air.

An Event Counter (EC) counts the number of times the equipment has been used. The event counter is self-fed by a 3Vdc internal battery, has permanent memory and recording is shown through a 7 digit LCD.

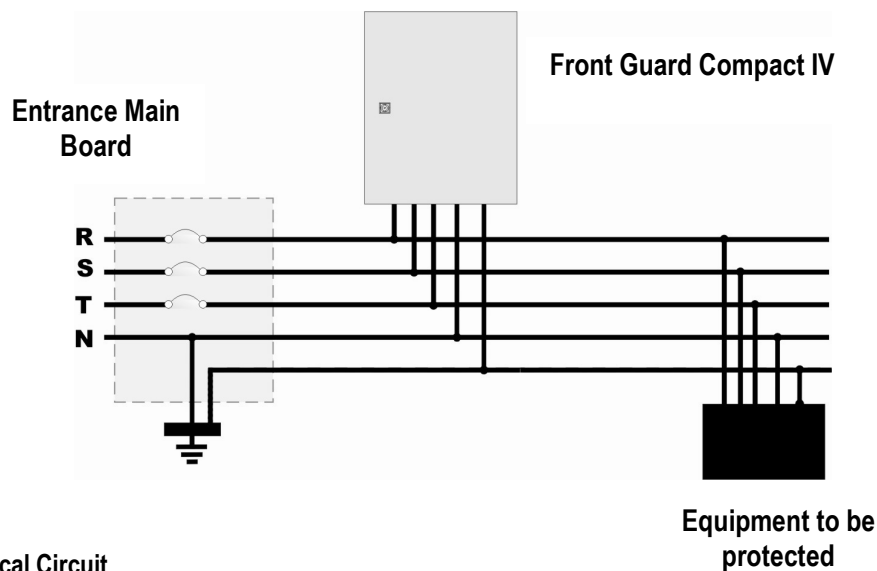
Technical features

Technical Features	127/220V three phase	220/380V three phase
Electrical System	Three phase 03 phases+ N + T	
Frequency	50/60Hz	
Protection Technology (Phases)	VCL Slim (Metal Oxide Varistor – MOV) –UL Recognized	
Protection Technology (Neutral-Ground)	GCL Slim – (Gas Discharge Tube)	
Rated Service Voltage (RMS)	127 Volts (Phase/Neutral)	220 Volts (Phase/Neutral)
Protected conductors	04 (four) L-N, L-L, L-G, N-G)	
Component response time (theory)	VCL Slim - MOV: <1 nanosecond GCL Slim - GDT: <100 nanoseconds	
Maximum Continuous Operating Voltage	175V (Phase/Neutral)	275V (Phase/Neutral)
Suppressed Voltage Rating (UL 1449)	330V	600V
Maximum Surge Current (8/20µs per conductor)	MOV: 180kA GDT: 120kA	
Energy Absorption Capacity	MOV: 5000 Joules	
Max. values for remote supervision contact	10A @ 120Vac o 10A @ 24Vdc	
Backup Fuses	50 A gL	
Phase and Neutral Connections	Terminal for cable connection up to 35mm ²	
Remote Supervision Connection	Terminals and screw for cable connection up to 2,5mm ²	
Enclosure	Assembled in a steel case with polyester powder electrostatic coat and IP65 protection degree	
Operating Temperature	-30°C to +85°C	
Dimension	Length: 320mm	Width: 170mm Height: 380mm
Weight	13 Kg	

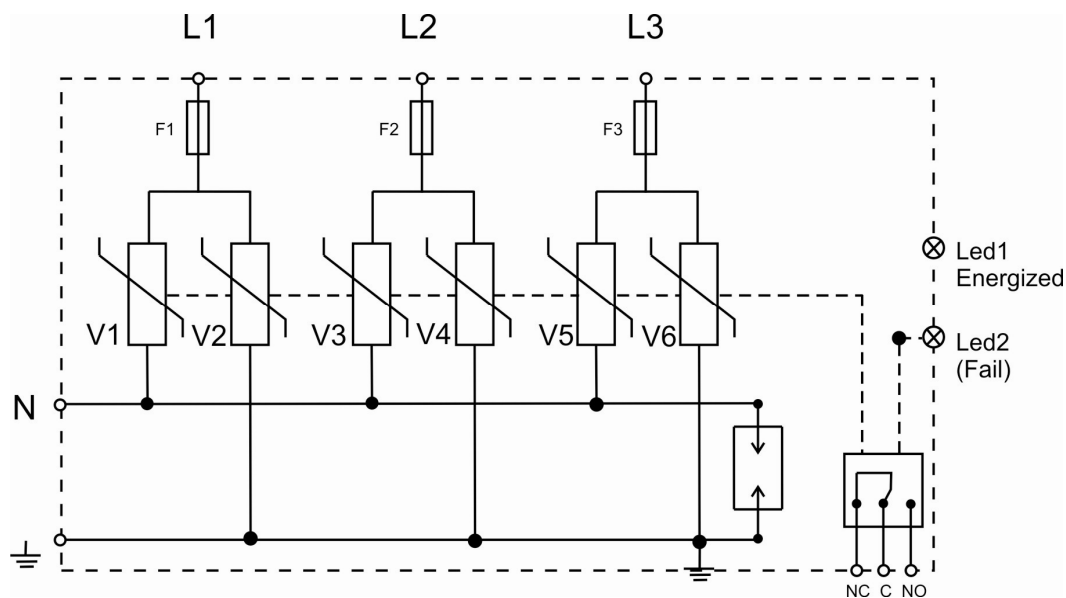
TECHNICAL DATA

Product:		Date:	Revision:	Page:					
FRONT GUARD COMPACT IV		April 2006		1/2					
Website:	www.clamper.com.br	SAC:	0800 7030 555	Tel:	55 31 3689 9500	Fax:	55 31 3689 9501	E-mail:	suporte@clamper.com.br

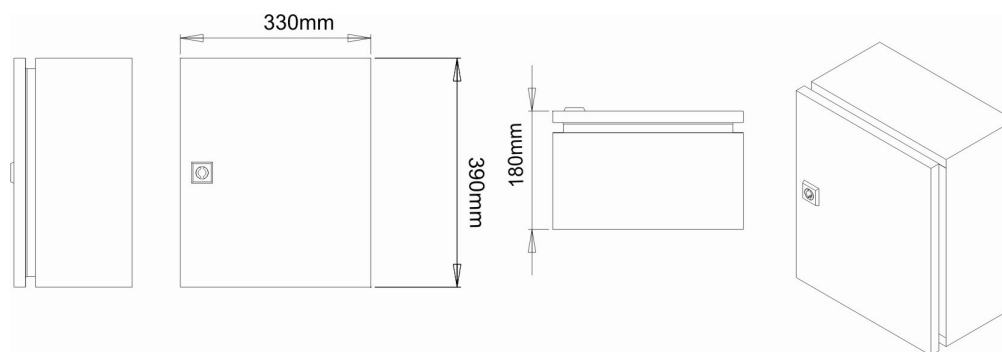
Installation Diagram




Equivalent Electrical Circuit



Mechanical Drawing



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