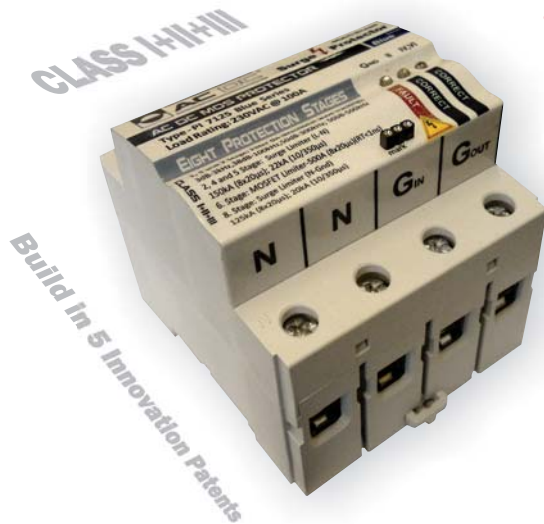


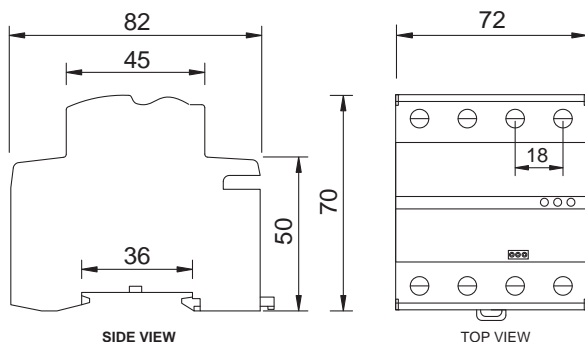
## ACDC SURGE PROTECTOR

### NINE (9) STAGES SERIES PROTECTOR 1/1 & 3/3

#### HARD WIRE INSTALLATION - MODULAR SYSTEM



**NEW!**



### Innovation Approach to Surge Protection

ACDC Multi-Stage Surge Protectors have built-in five (5) patents and use four (4) complementary different protection technologies, (Varistor, Gas Tube, Nanocrystalline Cores and TVS technology) in one unit. That result with reducing the surge current up to 99.9% at single point.

This characteristic can not offer competitive surge products and present a fundamental improvement in Surge Protection technology. Implementation of ACDC Surge Protectors are simple and applicable for professions such as planners, construction engineers, designers, electricians and others.

**ACDC Surge Protector Type - PI 7100 Red Series** is advanced multi-stage surge protector consists of 9 (nine) & 100A protection stages that provides effective and reliable protection against surges and transients coupled with high grade EMI/RFI filtering. The protector have separate cascade bi-directional filtering of phase (L) and neutral (N) wire with option for ground (GND) filtering.

**Application:** The scope of applications of ACDC Surge Protectors is quite wide and refers to the protection of electrical devices against impulse surge and high-frequency (electromagnetic) disturbance, oscillation, speaks in network power supply and atmospheric discharge. Those protectors have high-grade bidirectional filtering and they are tracking AC waveform of power network supply. ACDC Surge protectors are filtering the network pollution and ensures the delivered AC waveform to be sinusoidal as possible.

These protectors have special design to protect and improve functioning of sophisticate equipment in Telecommunications, Broadcast, Medical equipment, Computers, Military, Solar Photovoltaic and Residential.

**Technical Specifications:** The basic module of type ACDC Surge Protector - Red Series is 9 (nine) stages Single Phase Protector with modular configuration for single or three phase applications for load currents of up to 100A per phase.

**Investment:** Installation of ACDC Surge Protector type - PI is excellent choice for investment in the quality of your power network supply, extended equipment life and reduce their down time and errors.

**Reliability:** If the stages 2,4 and 6 are out of function, the stages 1,3,7 and 8 are still provide a high grade cascade bi-directional filtering along with ultimate (5-th) protection stage.

## Technology

Multi-Stage Surge Protection  
Nine (9) Stages Series Protector

## Specification

Cascade bi-directional EMI-RFI filtering of  
phase (L), neutral (N) and ground (GND) wire

## Load

Up to 100A per phase; 12kW per phase for  
120VAC; 22kW per phase for 230VAC

## Basic Options

Indication for bed grounding  
Remote alarm

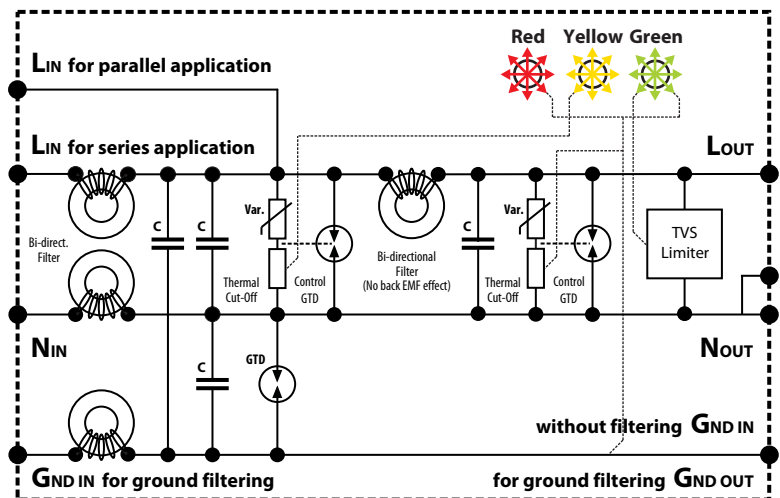
## Installation

Hard wire installation  
Modular System

## Product Standard





IEC61643-1 Class II+III; IEC60939-2

## Basic Circuit Diagram per Phase - Red Series:



Protection Stage	Technical Specification per Phase ACDC Surge Protector Type-PI 7100 Red Series	Function	Technology
1. First stage	L=0.7mH; I <sub>max</sub> =up to 100A	Bi-directional filtering (L-N); Front signal edge reduction;	Nano Crystalline Core (L-C configuration)
2. Second stage	Surge Cur. 100kA (8/20μs) or 15kA (10/350μs)	Suppression signal shape (L-N), 8/20μs or 10/350μs	Varistor with thermal cut-off; Control Gas Tube Discharge
3. Third stage	L=0.7mH; I <sub>max</sub> =up to 100A	Bi-directional filtering (L-N); Front signal edge reduction;	Nano Crystalline Core (L-C configuration)
4. Fourth stage	Surge Cur. 25kA (8/20μs)	Suppression signal shape (L-N), 8/20μs	Varistor with thermal cut-off
5. Fifth stage	Ultimate protection stage. He switch-off the circuits breaker install upstream, if the pick voltage > 520VDC appears on the output. Circuits breaker should be < 250A gI/gG.	Long term signal suppression from 1μs to 2sec.	Control Gas Tube Discharge
6. Sixth stage	TVS Limiter 500A (8/20μs); Typical response < 1nsec (nanosecond)	High speed efficiency signal suppression	Transient Voltage Suppressor
7. Seventh stage	L=0.7mH; I <sub>max</sub> =up to 100A	Bi-directional filtering (N-L); Front signal edge reduction;	Nano Crystalline Core (L-C configuration)
8. Eight stage	L=0.7mH	Ground filtering	Nano Crystalline Core (L-C configuration)
9. Ninth stage	Surge Cur. 100kA (8/20μs) or 15kA (10/350μs)	Suppression signal shape (N-Gnd), 8/20μs or 10/350μs	Control Gas Tube Discharge

## Single and Three phase Models - ACDC Surge Protectors type - PI 7100 Red Series

Single Phase	Three Phase	Three Phase	Three Phase
			
Type	Type	Type	Type
Type - PI 7100 1/1-RS	Type - PI 7100 1/1-RS x 3	Type - PI 7100 3/3-M-RS	Type - PI 7100 3/3-MCB-RS
Order Code	Order Code	Order Code	Order Code
800.136-1/1	800.136-1/1 x 3	800.136-3/3-M	800.136-3/3-MCB
Total Surge Cur.	Total Surge Cur.	Total Surge Cur.	Total Surge Cur.
125kA(8/20μs) or 18kA(10/350μs)	375kA(8/20μs) or 54kA(10/350μs)	375kA(8/20μs) or 54kA(10/350μs)	375kA(8/20μs) or 54kA(10/350μs)
Dimension (WxDxHmm)	Dimension (WxDxHmm)	Dimension (WxDxHmm)	Dimension (WxDxHmm)
82x72x70	82x216x70	250x250x150	300X250X150
Weight (kg)	Weight (kg)	Weight (kg)	Weight (kg)
0,47	1,41	5,1	7,1