SELF-POWERED LOOP ISOLATOR WITH INTEGRATED LIGHTNING PROTECTOR FUNCTION

ATIS-PF ELIT93-PF

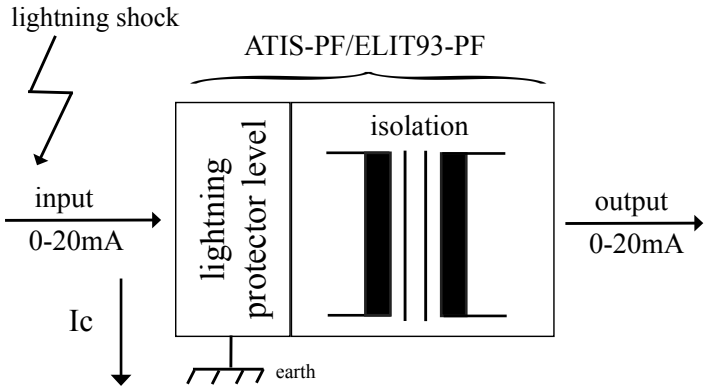
ARDETEM **SFERE**

Advantages

- The ATIS/ELIT solves common point problems which may occur on measure loops, and also reduces the rejections of the disturbances induced on the cables.
- The ATIS/ELIT isolates the sensors or transmitters from the process receivers (PLC's, recorders, etc.)
- The lightning protector functions limits the residual voltage on the output of the ATIS/ELIT after a lightning shock on the input to 21V.
The ATIS-PF/ELIT93-PF can admit more than 10 consecutive 5000A shocks, or more than 300 consecutive 500A shocks without the product metrological features being destroyed or modified.

Functions

- 1 isolated measure channel with integrated lightning protection.
- Admits shocks up to 5000A without destruction.
- Conform with the lightning protection standards CEI 61643-21.
- Isolation between input / output.
- Transfer ratio 1/1.
- High transmission accuracy.
- High load impedance.
- Powered by the input signal.
- Reduced dimensions.



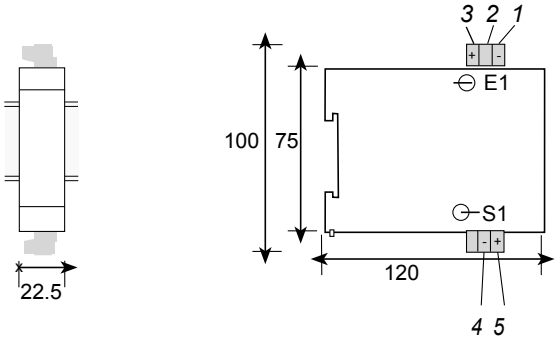
Ic: lightning shock current induced on the input
N: number of shocks admissible by the lightning protector level without destruction
Ic = 5000 A N > 10
Ic = 500 A N > 300

Applications

- Isolation of current loops.
- Isolation of measure transmitters from the PLC cards.
- Protection of the items connected on the ATIS-PF/ELIT-PF output in case of lightning shock on the current loop.

Dimensions

ATIS/ELIT: dimensions: 75 x 22.5 x 120 mm



ARDETEM SFERE
69510 SOUCIEU EN JARREST - France - **Tél. 04 72 31 31 30 - Fax. 04 72 31 31 31**

Technical features at 23°C

		ATIS-PF/ELIT93-PF
INPUT	**Current**	0..4..20..50 mA
	Internal voltage drop at 20mA	≤ 2.2 V
	Load loss	I x Lr + 2.2 V
	Max. voltage drop (output loop open)	Ue = 16 VDC
	Impedance in Ω at 20 mA	Lr + 110 Ω
OUTPUT	**Current**	0..4..20..50 mA
	Max. load (Lr in Ω) admissible at 20 mA	700 Ω
SUPP	**Power supply**	**Self-powered** by the input loop
GENERAL DATA	**Nominal response time (0 to 90%)** For a load Lr = 20 Ω Lr = 100 Ω Lr influence 100 ≤ Lr ≤ 700 Ω	0.3 ms 1 ms 0.7 ms / 100 Ω
	Accuracy at nominal conditions Class Temperature influence Influence of the load resistance Lr	0.15 % at Lr = 100 Ω ±0.001 % / °C ±0.05% / 100Ω for Lr ≤ 500Ω ±0.1% / 50Ω if ≥ 500Ω
	Temperatures Operating Storage	0 to 55°C -20 to +70 °C
	Other information Transforming ratio Insulation input / output and betw. chan. Condense free dampness Standards	1 / 1 2 Kv 50Hz 1mn 85 % CE conform with EN50081-2 and EN50082-2

		ATIS-PF/ELIT93-PF
LIGHTNING PROTECTOR	Test standard: IEC test class:	CEI 61 643-21 : 2001 C1 C2 C3 D1
	Discharge current (8/20µs) nominal	In 5 kA
	Discharge current (8/20µs) maximum	Imax 10 kA
	Maximum service voltage	Uc 20 Vdc
	Nominal current at 55°C	In 50 mA
	Limitation of the output voltage for 1kV/µs in differential mode	Up 21 V
	Limitation of the output voltage for 1kV/µs in common mode	Up 650 V
MECHANICAL	**Dimensions H x L x D**	75 x 22.5 x 120 mm
	Tightening	Horizontal symmetrical DIN rail
	Tightness	Housing / terminals IP 20
	Terminals	Screw-in terminals for flexible or rigid 2,5 mm² wire
	Weight	90 g

Types:

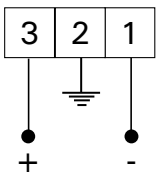
ARDETEM reference: ATIS-PF
SFERE reference: ELIT93-PF

Connectings

ATIS-PF/ELIT93-PF

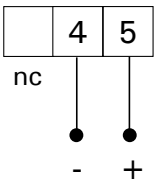
Upper connector

INPUT E1



Lower connector

INPUT S1



IMPORTANT :
The earth must be connected to terminal 2 on the product to garantee an efficient lightning protection function.

This appliance is designed for industrial applications. It has to be installed in an electrical cabinet, or equivalent.

ARDETEM SFERE

e-mail : info@ardetem.com
http : //www.ardetem.com

Route de Brindas
Parc d'activité d'Arbora N°2
69510 SOUCIEU EN JARREST
FRANCE

Tél. : 33 (0)4 72 31 31 30
Fax. : 33 (0)4 72 31 31 31

Your representative