

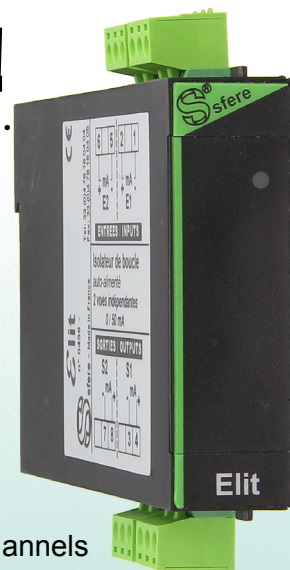
SELF-POWERED LOOP ISOLATOR

ATI10/ATI20 - ELIT10/ELIT20

ARDETEM

SFERE

EFFICIENT AND ECONOMICAL !



ADVANTAGES

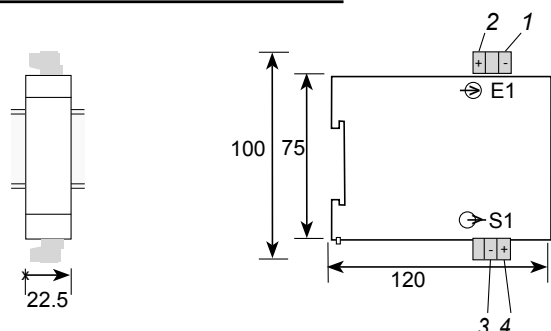
- ▶ The ATI/ELIT solves the common point problems which may appear on measure loops and also reduces the rejection of the disturbances induced on the cables.
- ▶ The ATI/ELIT isolates the sensors or transmitters from the process receivers (PLCs, recoders, etc.)

Functions

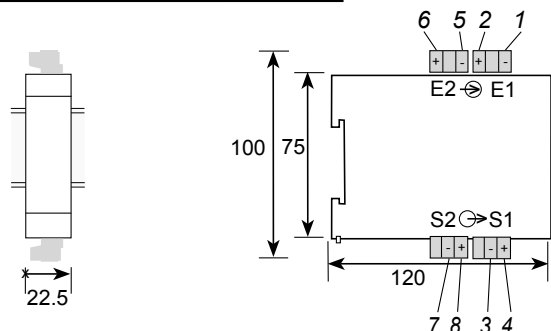
- ▶ 1 or 2 isolated measure channels
- ▶ Isolation between input / output
- ▶ Transfer ratio 1 / 1
- ▶ High transmission accuracy
- ▶ High load impedance
- ▶ Powered by the input signal
- ▶ Reduced dimensions

Dimensions

ATI10/ELIT10: dimensions: 75 x 22.5 x 120 mm



ATI20/ELIT20: dimensions: 75 x 22.5 x 120 mm



Applications

- Isolation of current loops.
- Isolation of measure transmitters from the PLC boards.
- Isolation of 4-20mA signals from thermocouples which may start to have isolation problems when the temperature increases.

Coding

1 channel loop isolator
ARDETEM reference: ATI10
SFERE reference: ELIT10

2 channel loop isolator
ARDETEM reference: ATI20
SFERE reference: ELIT20

Technical features at 23°C

		ATI10/ELIT10	ATI20/ELIT20
INPUT	Number of channels	1 channel	2 channels
	Current	0..4..20 mA	0..4..20 mA
	Internal voltage drop at 20mA	$\leq 1.8 \text{ V}$	$\leq 1.8 \text{ V}$
	Load loss	$I \times L_r + 1.8 \text{ V}$	$I \times L_r + 1.8 \text{ V}$
	Max. voltage drop (output loop open)	$U_e = 16 \text{ VDC}$	$U_e = 16 \text{ VDC}$
OUTPUT	Impedance in Ω at 20 mA	$L_r + 90 \Omega$	$L_r + 90 \Omega$
	Number of channels	1 channel	2 channels
	Current	0..4..20 mA	0..4..20 mA
	Max. load (L_r in Ω) admissible at 20 mA	650 Ω	650 Ω
SUPP.	Power supply	Self-powered by the input loop	Self-powered by the input loop
GENERAL DATA	Nominal response time (0 to 90%)	1 ms	1 ms
	Accuracy at the nominal conditions Class	0.15 % at $L_r = 100 \Omega$	0.15 % at $L_r = 100 \Omega$
	Temperatures Operating Storage	0 to 55°C -20 to +70 °C	0 to 55°C -20 to +70 °C
	Others Transforming ratio Isol. input/output and betw. channels Condense free dampness Standards	1 / 1 2 Kv 50Hz 1mn 85 % CE acc. EN50081-2 & EN50082-2	1 / 1 2 Kv 50Hz 1mn 85 % CE acc. EN50081-2 & EN50082-2
MCHANICAL	Dimensions H x L x D	75 x 22.5 x 120 mm	75 x 22.5 x 120 mm
	Tightening	Horizontal symmetrical DIN rail	Horizontal symmetrical DIN rail
	Sealing	Housing / terminals IP 20	Housing / terminals IP 20
	Terminals	Screw-in connectors for flexible or rigid 2.5 mm ² wires	Screw-in connectors for flexible or rigid 2.5 mm ² wires
	Weight	90 g	125 g

Connectings

