CAP Plus-SI

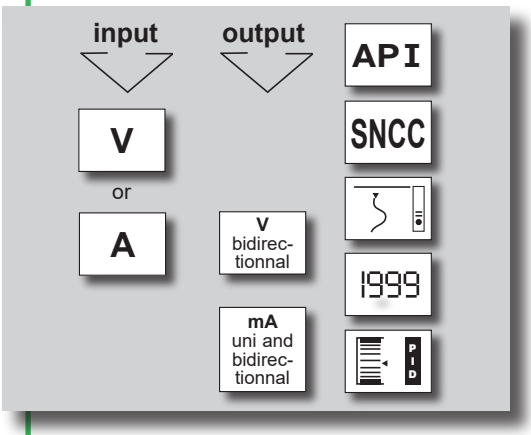
for DC voltage or current

The CAP Plus-SI has **intrinsic safety inputs**:
This is associated equipment, placed in safe area. It has input circuits for connection to a sensor placed in hazardous area and output circuits for connection in safe area only .

This instrument has obtained a **UE** examination certificate of the type according to the prescriptions of the standards EN 60079-0 (2006), EN 60079-11 (2007), EN 60079-26 (2007), EN 61241-0 (2006) and EN 61241-11 (2006) in accordance with the directive ATEX 2014/34/UE: Marking Ex II(1)GD, [Exia]IIC and [Ex iaD]

- ***Type:***

The CAP Plus-SI is an insulated measure transmitter which accepts as INPUT a standardized voltage signal 0-10VDC or current 0-4/20 mADC, and then converts its into a standardized OUTPUT signal:



- voltage: 0-10VDC or bidirectionnal ±10VDC
- current: bidirectionnal ± 20mADC or unidirectionnal 0/4-20 mADC active or passive (optional)

- ***Accessibilities:***
  - Reduced dimensions
  - Plug-off connectors for screwed connections
  - Internal selection of the output calibers by jumpers, accessible under the front face.

- ***Functions:***
  - Galvanic partition:
    inputs / [outputs, supply]: 3.8 kV
  - broad supply range
  - Low response time: 10ms

Applications

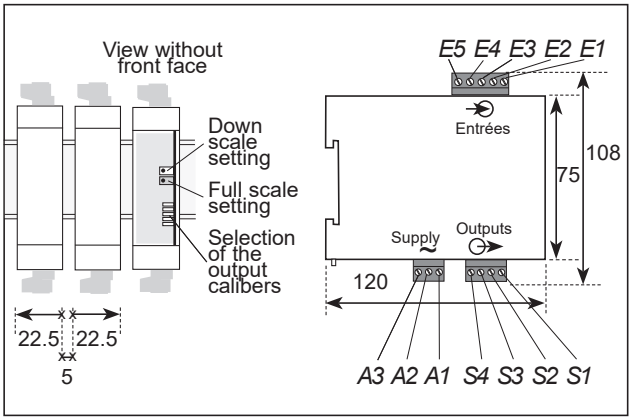
- PLC input interface.
- Data centralising on PLC
- Acquisition, regulation, recording, watching of signals.

Environment

- Operating temperature: -10 to +60°C.
- Storage temperature: -30°C to +80°C.
- CE according to IEC 61000-6-4, IEC 61000-6-2 (industrial environment).
- Disturbance immunity according to the standard IEC 61000-6-2 (IEC 61000-4-3 level 3, IEC 61000-4-4 level 4, IEC 61000-4-6 level 3)

Description

- **Housing**: (H x L x D) 75 x 22.5 x 120 mm (H=108, with terminals)



- **Protection**: Case / terminals: IP 20
- **Housing**: Self-extinguishing case of black UL 94VO ABS, for latching on symmetrical DIN rail (mount the cases vertically and provide a 5 mm space between each).
  Plug-off connectors for screwed connectings (2.5mm², flexible or rigid).
- **Weight**: 185g (with packaging).

sfere®
The friendly interface

CONVERTER

CA
CO/72

Technical features at 23°C

INPUTS

Voltage	0-10VDC (input resistance: 1MΩ) (±24VDC max. between terminals E1 and E3)	Integrated supply for 2-wire sensor 23.1V max. / 14V min. at 20mA / 14.5V min. at 22mA
Current	0-20m4, 4-20mA (input resistance: 5Ω) (|I max.| ≤ [5 x IPE] & |I max.| ≤ 100mA between terminals E2 and E3)	(I max.: 25 mA) Fine settings by multi-turn potentiometers. Possibility to achieve shifted scales.

OUTPUTS

Current	0-20mA, 4-20mA, ±20 mA,	(Lr* < 750Ω) (Lr* < 320Ω)	**Voltage**	0-10V ±10V	(Lr* > 1kΩ) (Lr* > 1kΩ)

POWER SUPPLY

2 Versions:	High or low voltage *(specify on order)*		**Power draw:**	on load < 4 VA (2W) empty < 3 VA (1.3W)
High voltage	90...265 VAC and 88 ...350 VDC	50/60/400 Hz		
Low voltage	20...40 VAC and 20...64 VDC	50/60/400 Hz		

TRANSFER

Accuracy rating:	≤ 0.2	**Response time**	: ≤ 250ms [Tr]
Ripple:	≤ 0.5%	**Pass-band**	: 1.5 Hz (-3 decibels) [Bp = 0.35/Tr]
Galvanic partition	: input / [output, supply] 3.8kV eff. 50Hz 1min.	**Temperature coeff.**	: ≤ 0.015%/°C
outputs / supply	2kV eff. 50Hz 1min.		

OPTIONS

Shifted or inverted scales.		Short response time:	> 10 ms
Passive current output	0-20mA, 4-20mA (U: 30V max.)	Long response time:	< 40 s

*Lr: load resistance

ELECTRICAL PARAMETERS RELATED TO THE INTRINSIC SAFETY

Inputs	Terminals	Uo (Vdc)	Io (mAdc)	Po (mW)	Lo (mH)	Co (µF)
Sensor supply	E5, E2	23.1	100	578	4	0.138
Current	E2, E3	5.5	0.6	0.8	900	58
Voltage	E1, E3	5.5	0.6	0.8	900	58
Um < 375 Vdc and Um < 265 Vac						

Coding

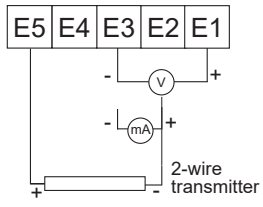
CAP Plus-SI

Supply: *High or low voltage (specify)*
(2) high voltage : 90...265 VAC or 88...350 VDC
(3) low voltage : 20...40 VAC or 20...64 VDC

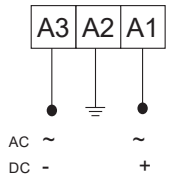
Order example:
For a ***CAP Plus-SI*** powered in 230 V / 50Hz,
request reference: ***CAP Plus-SI 2***

Connectings

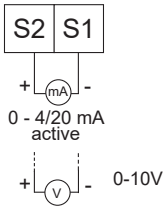
Inputs



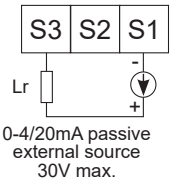
Supply



Active current and voltage output



Passive current output (optional)



This appliance is dedicated to industrial applications. It has to be mounted in an electrical switchbox, or equivalent.

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