

- **MEASURE U, I, F**
- **Fully configurable**
- **Direct and alternative measure**
- **CPL23L: 1 analog output**
- **CPL23: 2 analog outputs**
- **Response time: < 150 ms**



The CPL23 is a converter intended to electrical networks measures. It is free configurable by the the user, to adapt all of electrical measures.

FUNCTIONALITY:

Measure:

- 200 mV voltage for external shunt measures,
- direct voltage: +/- 700 V, direct current. +/- 5 A,
- effective voltage: 500 V, effective current 5 A, for a 40 to 70 Hz frequency range,
- frequency, 40 to 500 Hz,
- configurable current / voltage transformation ratio,
- programming of the zoom effect on the measure.

Output:

- 2 individually configurables analog outputs, 0 ... 4 ... 20 mA or 0 ... 10 V, not insulated each other and with common ground,
- in option, each outputs can be programmed in dual slide, 3 points output configuration, zoom effect on a part of the range.

General characteristics:

- DIN rail case (symmetrical / asymmetrical),
- connection on 2,5 mm² screw terminal.
- saving of the configuration parameters in FLASH, safety of data holding > 10 years,
- watchdog supervising the program process,
- galvanic insulation inputs / outputs / power supply.

CONFIGURATION:

The device can interact via the RS232 serial link (3,5 jack), with any system emulating a terminal.

Example: Terminal program in Windows (Free supply of cable on single request).

Warning: the RS 232 link is not insulated from outputs.

Through the terminal, the user will be able to:

- visualize the measure,
- configurate the device,

The configuration mode allows to choose:

- the type and the value of the input signals,
- the transformation ratio (TP -TI)
- the type and the range of the output value,
- output signals parameters, filtering and limitation.


INPUT		
TYPE	RANGE	ACCURACY
alternative voltage	200 mV	+/- 0.6 mV
direct voltage	+/- 280 mV	+/- 0.6 mV
input impedance	800 Ω	
alternative voltage	125 V	+/- 0.37 V
direct voltage	+/- 180 V	+/- 0.37 V
input impedance	500 kΩ	
absorbed power	0.03 W	
alternative voltage	500 V	+/- 1.5 V
direct voltage	+/- 700 V	+/- 1.5 V
input impedance	2 MΩ	
absorbed power	0.12 W	
alternative current	1A	+/- 3 mA
direct current	+/- 1 A	+/- 3 mA
input impedance	0.25 Ω	
absorbed power	0.25 W	
alternative current	5 A	+/- 15 mA
direct current	+/- 5 A	+/- 15 mA
input impedance	0.05 Ω	
absorbed power	1.25 W	
standard overload voltage	3 UN during 3 s	
standard overload current	6 IN during 3 s	
measure threshold	5 % of the caliber	
measure conditions:	frequency 40 to 70 Hz caliber 20 to 100 %	
Note: use a transformer for an upper range (only in alternative).		
frequency	40 to 70 Hz 70 to 500 Hz	+/- 0.2 Hz +/- 0.6 Hz
reponse time	< 150 ms	

OUTPUT (12 bits resolution)		
TYPE	RANGE	ACCURACY
current	0 ... 4 ... 20 mA	+/- 10 μA
Load	550 Ω	
voltage	0 ... 10 V	+/- 10 mV
output impedance	500 Ω	
POWER SUPPLY (to specify at the order)		
230 Vac 50-60 Hz +/- 10 %, 3.2 VA		
115 Vac 50-60 Hz +/- 10 %, 3.2 VA		
20 to 70 Vac / Vdc, 3.2 VA		
80 to 265 Vac / Vdc, 3.2 VA		
9 to 30 Vdc, 3.2 W		
Protection against reverse polarity		
ENVIRONMENT		
RECOMMENDED OPERATING CONDITIONS		
temperature		
operating		-10 to 60 °C
storage		-20 to 85 °C
influence		< 0.03 % / °C (% of the full scale)
Relative humidity		85 % (not condensed)
weight		~ 200 g
tightness		IP20
dielectric strength		1500 Veff

Electromagnetic compatibility

Generic standards: **NFEN50081-2 / NFEN50082-2**

EN55011	meet	group 1 / class A		
EN61000-4-2	no influence	B	ENV50140	< +/- 5 % A
EN61000-4-4	< +/- 5 %	B	ENV50141	< +/- 10 % A
EN61000-4-5	< +/- 5 %	B	ENV50204	no influence A
EN61000-4-8	no influence	A		
EN61000-4-11	< +/- 5 %	B	DBT	73/23/CEE



WIRING AND OUTLINE DIMENSIONS:

