



# ULCOS 600

## Alternative Input Converter



Universal power  
supply

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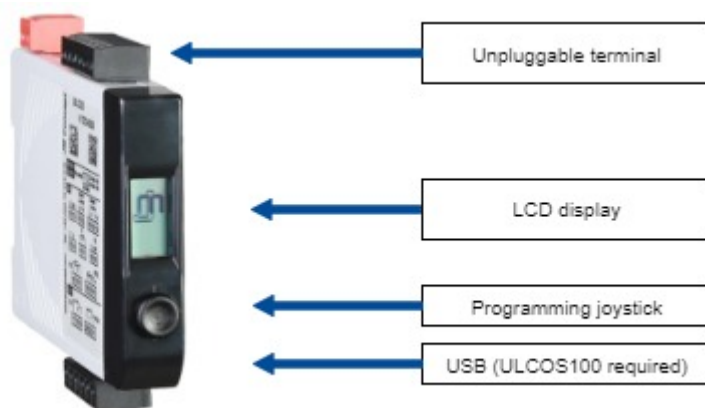
## Presentation

ULCOS 600 is a converter for alternating current or voltage input with the possibility of having 1 or 2 analog outputs and 2 relay outputs.

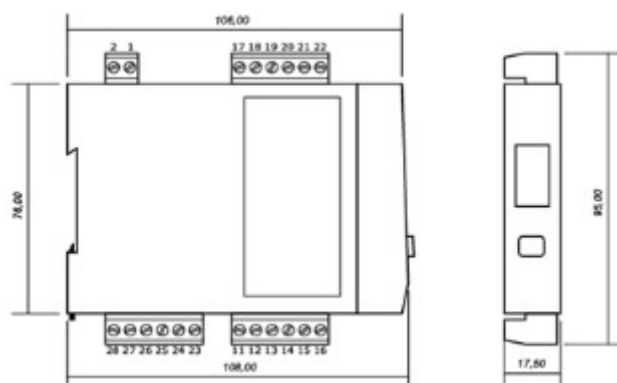
ULCOS 600 is guaranteed for **10 years**.

## Range

Converter	Inputs		Outputs			Communication
			Number of Analog		Number of Relay	
	Alternating current	Alternating voltage	1	2	2	Indirect USB
ULCOS 600I1	✓		✓			✓
ULCOS 620I2	✓			✓	✓	✓
ULCOS 600V1		✓	✓			✓
ULCOS 620V2		✓		✓	✓	✓



## Dimensions



Dimensions : Width : 17,5 mm - Height : 76 mm - Depth : 106 mm

Case connecting on DIN rail

## Factory settings

ULCOS 6XXIX	ULCOS 6XXVX
Input : 0-5A without CT	Input : 0-500V without VT
Output 1 : 4-20mA Output 2 : 4-20mA	Output 1 : 4-20mA Output 2 : 4-20mA
Frequency : 50Hz	Frequency : 50Hz
Relay : High, Threshold : 5	Relay : High, Threshold : 500
Display : 0.0 à 5.0 without CT	Display : 0.0 à 500.0 without VT

Other settings on demand

## Inputs - Outputs

### Input gauges

Alternating current ULCOS 6XXIX	Standard scales : 0-1A ; 0-5A Adjustable scales : From 0 to 6,5A
Alternating voltage ULCOS 6XXVX	Standard scales : 0-10V ; 0-50V ; 0-120V ; 0-250V ; 0-500V Adjustable scales : From 0 to 1000V
External CT choice	Value : 1-9999 or 5-9999KA
External VT choice	Value : 1-9999KV

### Output gauges

Output Current	Standard scales : 0-20mA ; 4-20mA Adjustable scales : From 0 to 22mA
Output Voltage	Standard scales : 0-10V Adjustable scales : From 0 to 11V Possible assignment I (ULCOS 6XXIX) / V ULCOS 6XXVX) or F
Output Relay	Relay 1RT - Max current : 500mA Max voltage : 250Vac/220Vdc - Max power : 60Vac/30W Possible assignment I (ULCOS 6XXIX) / V ULCOS 6XXVX) or F
Communication	USB Cable (ULCOS 100) on Front Panel

## Characteristics

<b>Display</b>	
Type	Non backlit LCD
Color	Green
Number of characters	4
Numbers of lines	4
Programming joystick	5 positions
<b>Input characteristics</b>	
Current input impedance	on CT
Voltage input impedance	>10M $\Omega$
Frequency	From 40Hz to 70Hz From 360 to 440Hz
Maximum measurable voltage	ULCOS 6XXVX : 1000V
Maximum measurable current	ULCOS6XXIX : 6,5A
Overload	ULCOS6XXIX : <ul style="list-style-type: none"> <li>• 50A maximum for 1s</li> <li>• 10A maximum permanent</li> </ul>
<b>Output characteristics</b>	
Permissible impedance on the current output	<900 $\Omega$
Permissible impedance on the voltage output	>800 $\Omega$
<b>Isolation</b>	
Supply / Input-Output 1-Output 2-USB	4200Vrms, 50Hz, 1mn
Input / Output 1-Output 2	2500Vrms, 50Hz, 1mn
Input / USB	Without
Output 1-Output 2 / USB	2500Vrms, 50Hz, 1mn
Output 1 / Output 2	Without

<b>Auxiliary source</b>	
Voltage supply	22-240Vdc or 90-230Vac 50/60Hz
<b>General characteristics</b>	
Precision class	0,25
Input analog/digital conversion	24 bits
Output analog/digital conversion	16 bits
Response time	<200ms
RMS	True up to rank 11
Thermal drift	<25ppm
Residual ripple on current output	<20µA
Residual ripple on voltage output	<10mV
Maximum of consumption	<7VA
Operating temperature	-10°C ... +60°C
Storage temperature	-25°C ... +80°C
Protection factor	IP20 Black self-extinguishing polyamide housing V0

## Options listing

Option	Device code
Tropicalization	ULCOS 6XXXX-T

## Functions

<b>Display functions</b>	
LCD display	Graphic display by LCD screen
5 positions joystick	Allows you to configure the parameters displayed on the front panel screen
Programming lock	Locking of the programming on the front panel or by the IXLOG software Unlock by long press on the joystick
Programming	Programming by Joystick on the front panel or by USB via the special cable <b>ULCOS 100</b> and the <b>IXLOG</b> software
Memory Mini / Maxi	Storage of the maximum and minimum value of the measurement on each input channel
Customizing the display	Resolution, Comma, Contrast adjustment
<b>Input</b>	
Inputs display	The display allows to visualize the input in physical value and in programmed value
Adjustable input scale	Allows to zoom on the input either in manual or automatic mode
Cut Off	Manual adjustment of the input offset
<b>Smart functions</b>	
Sensor signal loss	Translates the sensor signal loss on : <ul style="list-style-type: none"> <li>• the display,</li> <li>• each of the analog outputs,</li> <li>• the digital output,</li> <li>• the status of the relays</li> </ul>
Filtering	Integration of the measurement over the defined time
Pilot function/simulation	The pilot function makes it possible to act on the display value influencing the output(s), independently of the input The Pilot function is activated either by the digital link (RS485 or USB) or by the joystick on the front panel
Segmentation in 99 points	Linearization in 99 points (free choice for each point), allows to create an output function by segmentation of the signal of each input channel

<b>Outputs</b>	
Visualization of the outputs	The display allows to visualize the outputs, in physical value and percentage; as well as the status of the relays
Output assignment	Assignment of outputs to inputs or to the control function, independently for each channel
Adjustable output scale	Allows you to zoom in on the outputs
Output limitation	Possibility to limit the value of the outputs - High limit and Low limit
Relay assignment	Assignment of relays to inputs or to the control function, independently for each channel
Thresholds	Single or band mode, with positive or negative safety Adjustment of thresholds, hysteresis and time delay (independent on rise or fall) Direct access to the thresholds
Acknowledgement of alarms	Independently for each alarm
Storage of alarms and/or relay status	Independently for each alarm
<b>Links and communication</b>	
Indirect USB on the front panel	USB on the front panel allowing to connect to the USB socket of a PC via a special <b>ULCOS 100</b> cable for programming with the <b>IXLOG</b> software



## Wiring

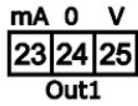
### ULCOS 600I1

**POWER SUPPLY** No polarity 1 2 20-240 VDC  
50-60Hz 80-256 VAC

**IN**



**OUT**



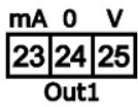
### ULCOS 600V1

**POWER SUPPLY** No polarity 1 2 20-240 VDC  
50-60Hz 80-256 VAC

**IN**



**OUT**



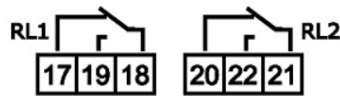
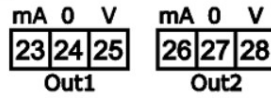
### ULCOS620I2

**POWER SUPPLY** No polarity 1 2 20-240 VDC  
50-60Hz 80-256 VAC

**IN**



**OUT**



### ULCOS 620V2

**POWER SUPPLY** No polarity 1 2 20-240 VDC  
50-60Hz 80-256 VAC

**IN**



**OUT**

