

### GENERAL CHARACTERISTICS



The **Universal counter VLC.810.MC** combines, in a single unit, all functions of the signal processor VLC.602.M with an advanced section of counting, specially designed for the sensors with frequency output.

**The instrument can perform counts and measurements of the flow rates at the same time.**

The standard input signals of this universal processor are 0-5V, 0-10V, 0-20mA, 4-20mA, Potentiometric 500 to 20K $\Omega$ , pulses and frequency for batch counts.

**And it is possible to represent on the display two simultaneous indications**, both digital and analog (bar-graph) expressed in the most common engineering units.

The measured value can be transmitted to remote data acquisition systems and it is also possible the linearization of signals from sensors with a non-linear transfer function. All programming parameters can be set via the front keyboard and are stored in a nonvolatile memory to avoid the loss of data.



- LCD display with back light.
- Programmable measuring units and range.
- Frequency and pulses input.
- Input/output signals: (0)4 ÷ 20mA , 0 ÷ 5V, 0 ÷ 10V
- Up to 6 alarm thresholds with LED indication

### GENERAL TECHNICAL DATA

Tab.1

Description	Technical data	Code
Power supply	230 / 24 Vac ( $\pm 10\%$ ) / 50/60 Hz	<b>230/24VAC</b>
	24 Vdc	On request <b>24VDC</b>
Power consumption	10 VA	-
Housing	Epoxi painted metal plate – shielded against electromagnetic fields	-
Temperature range	-20°C / +50°C	-
Degree of protection	IP40	-
Mounting	Front panel	-
Weight	650g	-

### BATCH COUNTER MODE

Tab.2

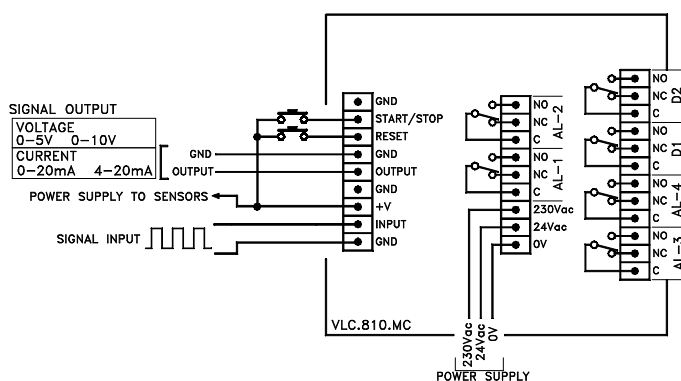
Description	Technical data	Code
Signal input	Frequency 0,1 – 30KHz      Pulses 0 – 2.000 Pulses / sec.	-
Signal output	0÷5V      0÷10V      0÷20mA      4÷20mA	-
Power supply to sensors	5 / 24 Vdc stabilized - 50mA	-
LCD display	Flow / Events      Flow / Batch      Events / Batch      Flow      Batch      Events	-
	Digital – Up to 2 engineering units	-
Measuring units	ml      cl      l      m <sup>3</sup> cc/min      l/min      l/h      m <sup>3</sup> /h      n°      events	-
Maximum count	Batch counter      0 – 999.999	-
	Events counter      0 – 999.999	-
Divider	1 – 99.999	-
Counting mode	Programmable up or down	-
Standard digital output	2 x SPDT 230Vac 6A      1 for batch counter - 1 for events counter	-
Alarm relays	<b>2A</b> SPDT relay 230Vac 6A      Alarm threshold for flow rate measurements	<b>2A</b>
	<b>4A</b> SPDT relay 230Vac 6A	On request <b>4A</b>
Functions indicator	Red LED	-
Alarm adjustment	Adjustable within entire measuring range	-
Alarm hysteresis	Independents and adjustable within entire measuring range	-
Reset	Auto or manual      Independents for batch and events counter	-
Reset delay (Auto mode)	0,1 – 99,9 sec.      Batch counter $\geq$ events counter	-
Counter commands	From front keyboard and / or from rear terminal board	-
External commands	Start–Stop–Reset      Monostable / bistable	-
Safety	Keyboard lock      Safe-stop function	-

### UNIVERSAL PROCESSOR MODE Tab.3

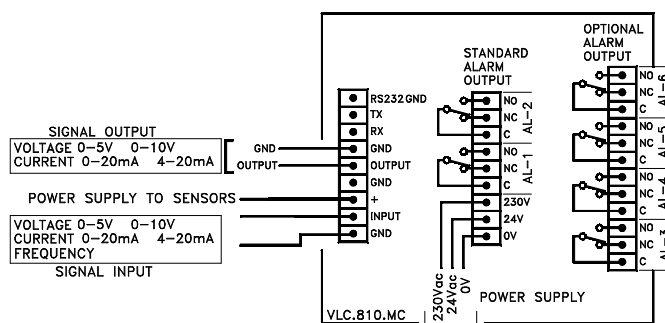
Description	Technical data										Code	
Signal input	Potentiometric (500Ω ÷ 20KΩ), 0 ÷ 5V, 0 ÷ 10V, (0)4 ÷ 20mA, Frequency (0,1 ÷ 30KHz)										-	
Signal output	0÷5V, 0÷10V, 0÷20mA, 4÷20mA										-	
Power supply to sensors	5 / 24 Vdc stabilized - 50mA										-	
LCD display	Digital - Analog (bar-graph) 0 ÷ 100%										-	
Measuring units	l	cm <sup>3</sup>	m <sup>3</sup>	%	Pa	Kpa	mmH <sub>2</sub> O	mbar	bar	-	-	
	°C	°F	cc/min	l/min	l/h	m <sup>3</sup> /h	m/sec	mm	cm	m		
Alarm relays	N. 2 SPDT relay 230Vac 6A										<b>2A</b>	
	N. 4 SPDT relay 230Vac 6A										On request	
	N. 6 SPDT relay 230Vac 6A										On request	
Alarm indication	Red LED										-	
Alarm adjustment	Adjustable within entire measuring range										-	
Alarm hysteresis	Independents and adjustable within entire measuring range										-	
Communication output	RS-232-C ANSI standard communication protocol										On request	<b>RS-232</b>

### WIRING

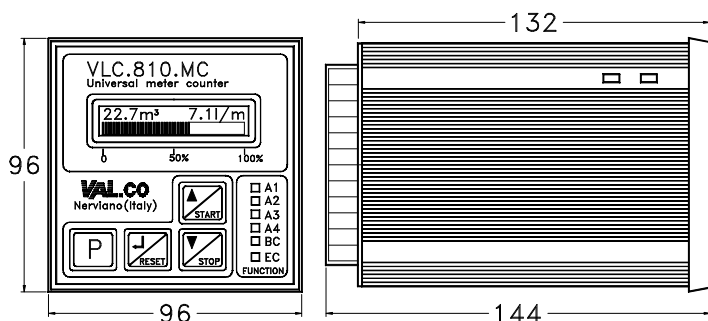
#### BATCH COUNTER MODE



#### UNIVERSAL PROCESSOR MODE



### DIMENSIONS mm.



### NOMENCLATURE

VLC.810.MC	2A	230/24CA	RS232	Type
•				Tab.1 Number of alarm relays, N.2 standard
	•			Tab.1 Main power supply
		•		Tab.1 RS232 communication output, on request
			•	