- ***Direct control of synchronous static relay***
  Whole wave train (PWM)

  - fix dosing mode
  - Analog setpoint converter mode

- ***Switchable setpoint***
  - Internal potentiometer
  - External (4 ... 20mA, 0 ... 10V, potentiometer)

- ***Application:***
  - Control of heating resistors for:
    - Ovens, bath oils, industrial process
    - Climatic chambers
    - Test benches .....

- ***Voltage output signal or static relay dry contact:***
  - 0...10V ; ……...

This power controller with it's control analog input signal (current, voltage, internal or external potentiometer) provide a time proportional output for driving "zero-crossing" static relay for regulation of heating element.

Description:

The device supplied a pulse width output proportional to the command. The type of output (voltage or contact) and the cycle time (period) depending on the model. These parameters are factory adjustable according to the needs of the application.

The output modulation is done by:
- The potentiometer on the front graduated from 0 to 100%,
- The analog input signal 4-20mA or ,0-10V,
- The remote external potentiometer.

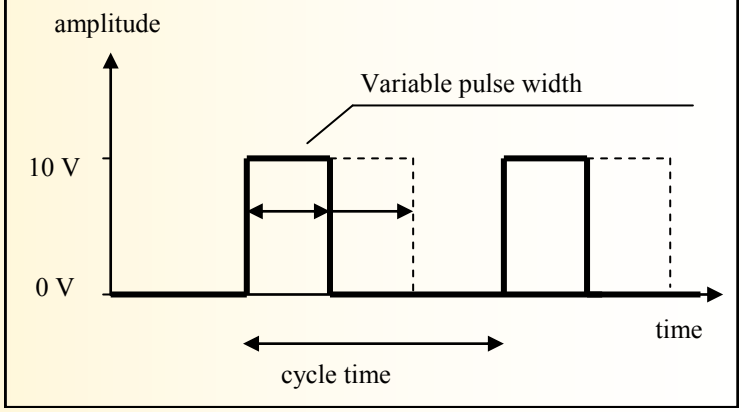
The choice of the setpoint type is made by a dip switch on the front with consistency check:
Green power LED fixed => selection OK
Green power LED flashing if no or more than one setpoint is selected (output fixed at 0%)

High flexibility of the power and the type of load to be controlled due to the wide choice of compatible SSR.

Copying the state of the output by a red LED on the front for assessing the power supplied.

Output Protection against short-circuit by limiting the output current to 35 mA (output voltage version only).

Output signal timing



Feature:

- DIN rail mounting,
- Connection by screw terminals, (2.5 mm² max).
- Protection rating (enclosure / terminals block) IP20,
- Conformal coating,

Version and order code: Request a quote

CMi30 : 0/10V output, 1.2 s (0.833Hz) cycle time

CMi31 : dry contact output (static), 300 ms (3.33Hz) cycle time

others models available on request

INPUT (external set point)

dip switch selectable

Current input:	4...20mA
Input impedance 250 ohms	
Voltage input:	0….10 Volts
Input impedance 50 k ohms	
Potentiometer:	1k …..100k ohms
(reference 5V, +/- 1%, 20mA maxi)	
Thermal drift	100 ppm
Resolution	10 bits (1024 points)

OUTPUT

CMi30 :	
Period (cycle time)	1.2 seconds
Response time	800 ms
Time resolution (10ms)	7 bits (128 points)
Output signal (active)	10V
Max output current (short circuit)	35 mA
CMi31 :	
Period (cycle time)	0.3 seconds
Response time	200 ms
Time resolution (2.5ms)	7 bits (128 points)
Output signal (dry contact)	60Vac-dc 0.5A

POWER SUPPLY

Universal: (2 versions: standard and low voltage not polarized)
Standard: 20....to.....265 Vac/dc
low voltage: 9 Vdc....to.....30 Vdc.
consumption < 3 VA

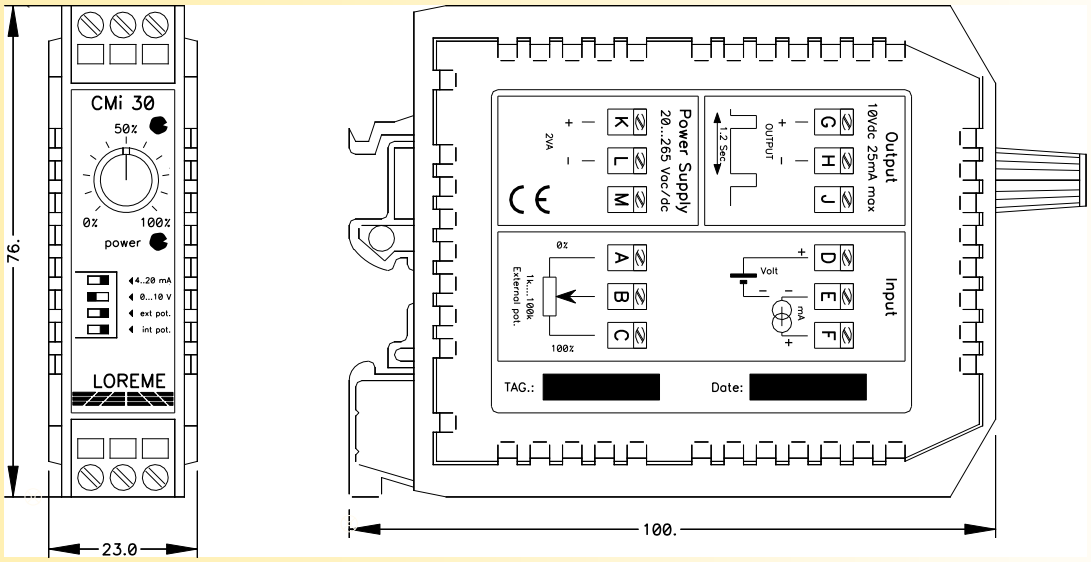
ENVIRONMENT

Operating temperature	-10 to +60 °C
Storage temperature	-40 to +85 °C
Humidity	95 % (no condensed)
Dielectric strength	1500 Vrms continuous
Insulation resistance	>100Mohms at 1000Vdc
Weight	105 g
Protection rating	IP20 + conformal coating

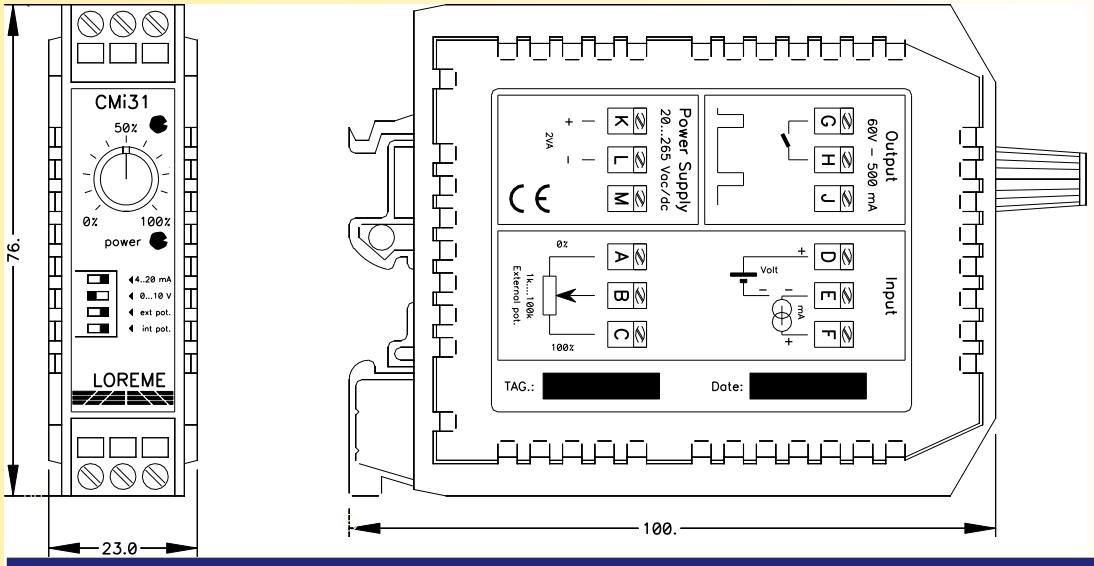
Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

Immunity standard for industrial environments EN 61000-6-2		Emission standard for industrial environments EN 61000-6-4
EN 61000-4-2 ESD	*EN 61000-4-8 AC MF*	*EN 55011*
EN 61000-4-3 RF	*EN 61000-4-9 pulse MF*	
EN 61000-4-4 EFT	*EN 61000-4-11 AC dips*	*group 1*
EN 61000-4-5 CWG	*EN 61000-4-12 ring wave*	*class A*
EN 61000-4-6 RF	*EN 61000-4-29 DC dips*	

WIRING AND OUTLINE DIMENSIONS:



Voltage output model



Contact output model