

Power controller with pulse width modulation output
For driving SSR type : CMi70

LOREME

- **Direct control of synchronous static relay**
whole wave trains modulation
- **selectable setpoint input**
 - 4..20mA , 0...10V , 0...20V, potentiometer
- **Application:**
Control of heaters for:
 - Ovens, bath oils, industrial process
 - Climatic chambers
 - Test benches



The converter CMi70 allows, from a standard analog signal (4 .. 20 mA, 0 ..10V,), to generate a logic signal with a 0 to 100% variable duty cycle to drive power units or static relays used for regulation of heating element.

Description :

The power controller supplied an output pulse of 10 V amplitude and of variable width (0 to 1200ms) proportional to the command.

The output variation is done by an analog input signal 4 20mA, 0 10V, 0 ... 20V or a remote external potentiometer. The setpoint type is selectable by dip switch .

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

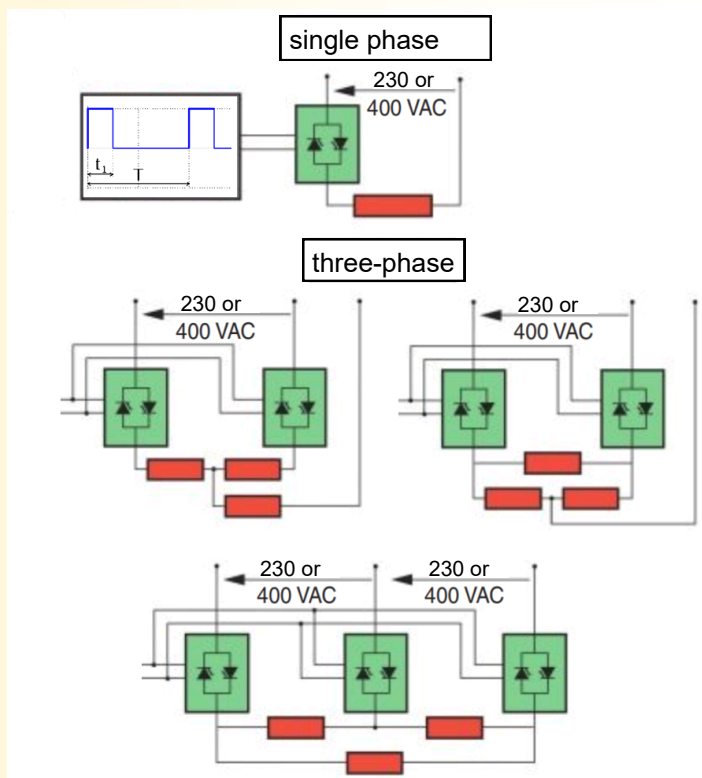
Copying the state of the output by a red LED on the front for assessing the power supplied.

Output Protection against short-circuit by limiting the output current to 70 mA.

DIN rail mounting, Connection by screw terminals, wire section up to 2.5 mm².

Green LED to control presence of power supply.

Synoptic for static relay using



Version and order code

CMi70 : selectable setpoint input

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	
Voltage input:	0...20 Volts
Input impedance 100 k ohms	
Potentiometer:	1k100k ohms
(reference 5V, +/- 1%, 20mA maxi)	
Thermal drift	100 ppm
Resolution	10 bits (1024 points)

OUTPUT

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)	70 mA

POWER SUPPLY

standard : 230 Vac +/- 20% 50 / 60Hz
on request 115 Vac +/- 20% 50 / 60 Hz
consumption < 2 VA

RECOMMENDED OPERATING CONDITIONS

Operating temperature	-10 to +60 °C
Storage temperature	-20 to +85 °C
Humidity	85 % (no condensed)
Dielectric strength	1500 Vrms continuous
Insulating resistance : > 100 Mohms at 1000Vdc	
Weight	105 g
Protection	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 group 1 class A
EN 61000-4-3 RF	EN 61000-4-9 pulse MF	
EN 61000-4-4 EFT	EN 61000-4-11 AC dips	
EN 61000-4-5 CWG	EN 61000-4-12 ring wave	
EN 61000-4-6 RF	EN 61000-4-29 DC dips	

**WIRING AND OUTLINE DIMENSIONS:**