Programmable converter with variable duty cycle output Positioning relay — *DNL35-MLi*

- ***Process inputs***
  (Volt , mA, Sensor supply, potentiometer)
- ***2 , 3 or 4 relays outputs***
  (programmable output in PWM)
- ***Measure display (10 000 pts)***
  (Setting with front face or RS232)
- ***Universal power supply***
- ***Low cycle time 20ms***

The DNL35-MLi allows the conversion of analog signals in pulse width modulated free potential contact (duty cycle is proportional to input signal).
The transfer function (slope, offset, dead zone) are freely configurable to adjust to application.

DESCRIPTION:
Process inputs:
- Current (with or without sensor supply)
- Voltage, potentiometer.

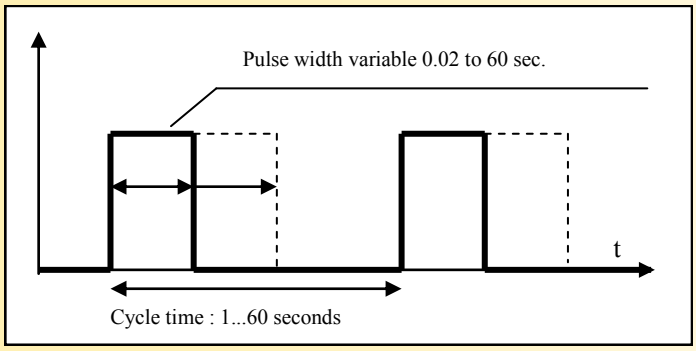
Calculation function :
- special linearization on 26 points

Front face :
- 1 Green LED for power
- Matrix alphanumeric 4 digits LED display
- 2 push buttons for device configuration
- 4 Red LED for relay status indication

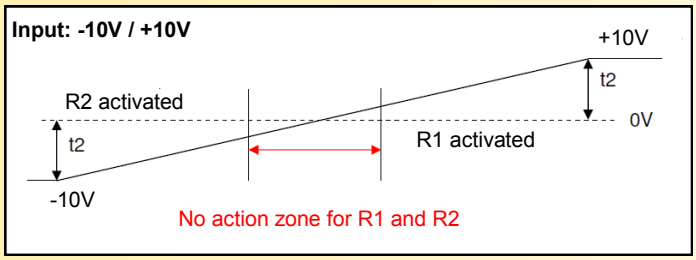
Relays:
- up to 4 relays outputs (Normally open contact).

cycle time (period) and operating range configurable
temporal resolution 20 ms mini (cycle time of converter)

Chronogram of output signal :



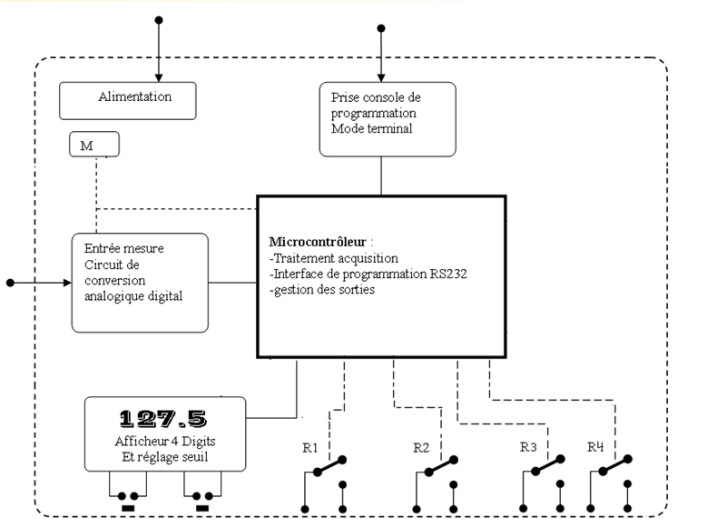
Example of transfer function :



Feature:
- Din rail mounting, 23mm width
- Pluggable terminal blocks, section maxi 2.5mm²
- Universal switching power supply:
  20....to.....265Vac/dc or 9Vdc.....to.....30Vdc
- Conformal coating.
- galvanic isolation input/output/power supply

CONFIGURATION:
This device may be configured via the front face button or with the RS232 serial link (jack 3.5), under any system with can emulate a terminal.
(No specific software to install, interface cord provided separately).
- configuration setting saved in FLASH memory, data retention > 20 years,
- Firmware evolution possible (uploaded via the RS232 link)

Synoptic:



Version and order code:

Request a quote

DNL35-MIi :	Standard version with 2 relays outputs	
option	**/R3 :**	3 relays
	/R4 :	4 relays

Input

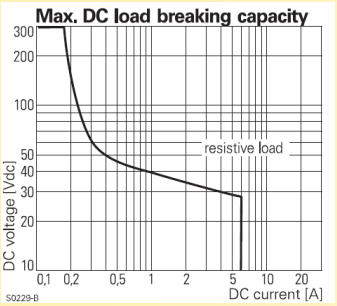
(resolution :14 bits ; reference 5 ppm)

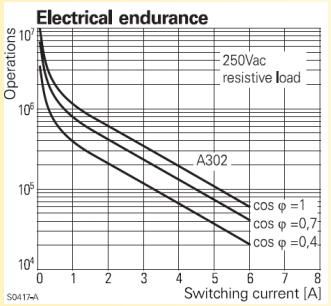
Type	Range	Accuracy
Voltage (Low level)	- 250 to 2000mVdc	+/- 40 uV
Input impedance	1 Mohms	to +/-1 mV
(on two measure ranges : 250mV and 2000 mV)		
Voltage (High level)	- 25 to 200Vdc	+/- 0.02 V
Input impedance	500 kOhms	to +/-0.8 V
(on two measure ranges : 25 V and 200 V)		
Current	- 4mA à 40 mA	+/- 0.01 mA
Input impedance	50 Ohms	

RELAYS

electro mechanic relay (static relay in option)

Switching power	5A - 250Vac-dc
close delay	5ms maxi
open delay	5ms maxi





POWER SUPPLY

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

AUXILIARY

Sensor supply	22 V regulated +/- 5% (50mA)
Potentiometer reference	5 V regulated +/- 0.15% (20mA)

ENVIRONMENT

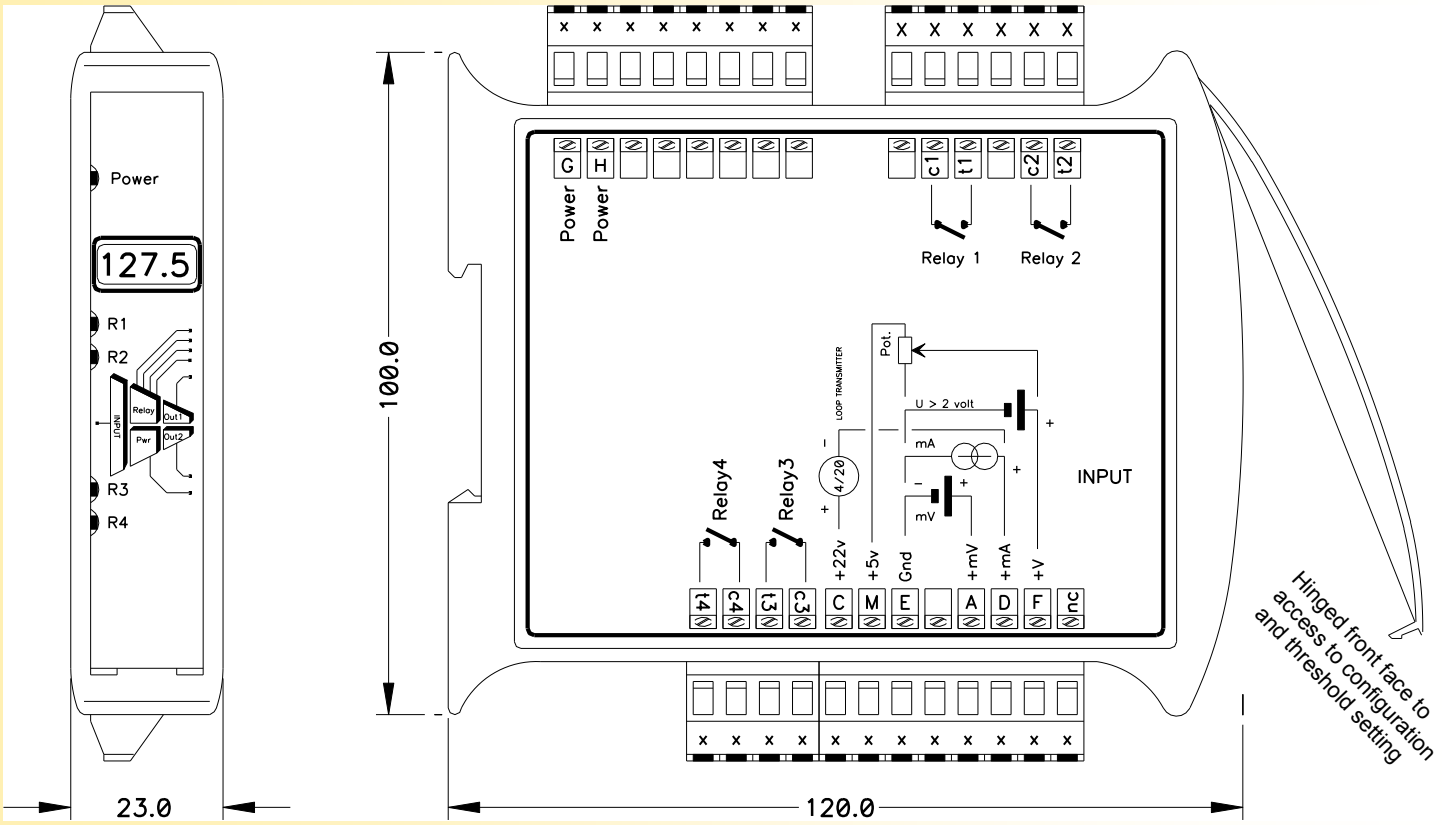
Operating temperature	-10 to +60 °C
Storage temperature	-20 to +85 °C
Thermal drift	< 20 PPM / °C (of full scale)
Humidity	85 % (non condensed)
Weight	~ 160 g
Protection rating	IP20
Dielectric strength	1500 Vac continuous 2500 Vac 1 minute.

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*	

CE

WIRING AND OUTLINE DIMENSIONS:



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