

- **2 groups of 25 digitals inputs**
(from 4 to 25 bits in gray encoding)
- **3 relays outputs + 1 Watchdog output**
Differential thresholds programmable
- **Application :**
Control of synchronisation of 2 encoders



The CCN165 is a comparator of parallel digitals inputs. It monitor the 2 groups of inputs to control the simultaneity of 2 mechanical organs. The outputs relays is activated if the code difference is too big or on a operating fault. The display allows a fast diagnostic of operating and is use for parameters setting.

Description :

Digital parallel inputs :

- 2 x 25 digital inputs. dry contact or voltage level (22Vdc polarization voltage available)
- The 2 inputs groups are with common ground
- Encoding used : GRAY
- Configurable resolution from 1 to 25 bits (partial using of inputs)

Front panel:

- LCD display 2 lines, 16 characters (with backlight)
- Display of logic state of inputs or difference between 2 inputs codes
- The input code is displayed in 3 ways (selection by "displays button") :
 - 1) logic state (each bit is display as 0 or 1)
 - 2) decimal value (the gray code is interpreted in decimal value)
 - 3) with a custom display range (conversion factor)
- The display allows to take into account an offset independent on each inputs groups (to compensate any initial offset of the sensors positions)
- Three LED for direct viewing of relays state.

Configuration:

- The three push buttons allows the user to easily configure the device (protected access possible).
- saving of setting parameters in FLASH memory, data retention guarantee >40 years

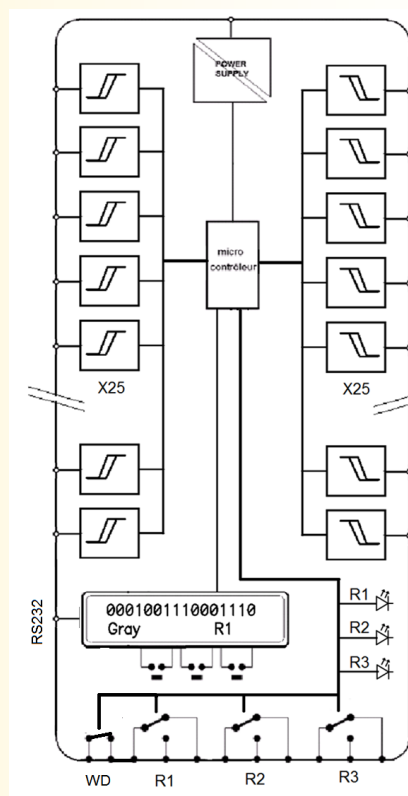
Relay:

- The device embedded 3 configurable relays: (threshold and activation delay)
- The threshold are define on the absolute value of the difference of code
- Each relay may be configured in positive or negative security (N.O / N.C)
- A watchdog relay output (Normally close contact) signals a default on device or a power supply loss.

Feature:

- 9 Modules DIN rail enclosure,
- pluggable terminal blocks
- connection with spring terminal blocks up to 1.5 mm²,
- conformal coating .
- protection rating : IP20 (enclosure / terminal blocks)

Synoptic:



Version and order code

[Request a quote](#)

CCN165/R3 : Standard version
Digital inputs 2 x 25 bits
3 relays outputs with 3 different alarms

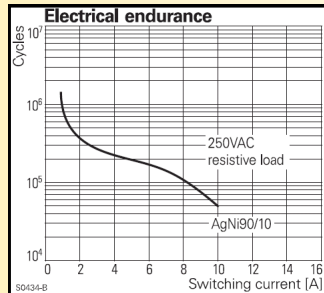
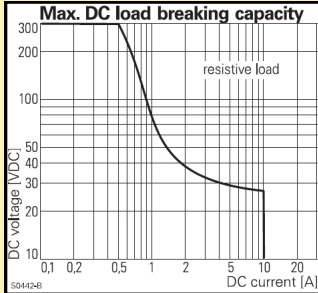
CCN165/S : Security version
Digital inputs 2 x 25 bits
3 relays outputs on single alarm
(face colour : yellow)

DIGITAL INPUTS

Logical state	Mini	Maxi
Logical "0"	0 V	1 V
Logical "1"	12 V	150 V
Input impedance :	100 kOhms	
External polarization voltage :	22Vdc	
(All inputs are with common ground)		
Measure cycle :	100 per second	
Difference time compraison :	10uS maximum	

Relays

R1,R2,R3 :Switching power : 250Vac / 10A (200 Vdc / 0.6A)
 response time (programmable) from 20 ms to 60 sec
 Relays « Watchdog » Type NF : 60Vac-dc 0.5A (static relay)



POWER SUPPLY universal

(to be defined at order)

Standard version: 20 to 265 Vac-dc, 3 VA
 Option: Low voltage version : 11 to 30 dc, 3 VA

ENVIRONMENT

Operating temperature	-20 to 60 °C
Storage temperature	-20 to 85 °C
thermal drift	< 0.01 % / °C
Humidity	85 % non condensed
Weight	250 g
protection rating	IP 20
Dielectric strength :	1500 Vac continuous
input/supply/relays:	(not isolated, common ground)
input/input	

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:

