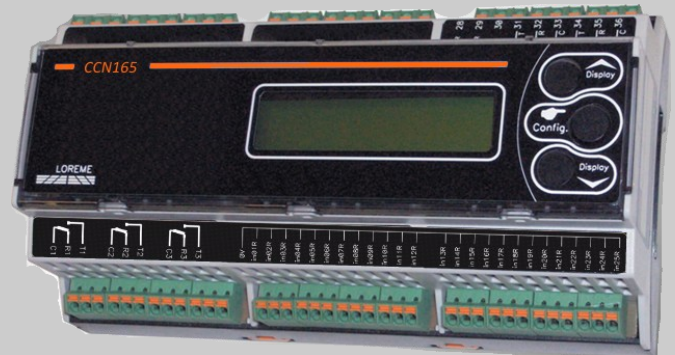


comparator encoders TYPE : CCN165



- **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

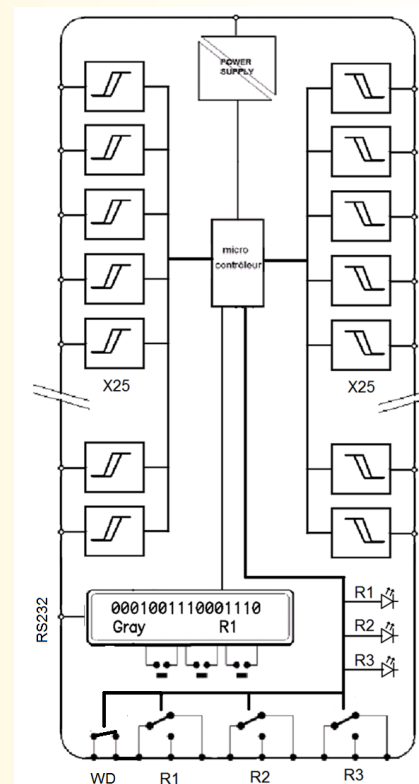
Relay:

- 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

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

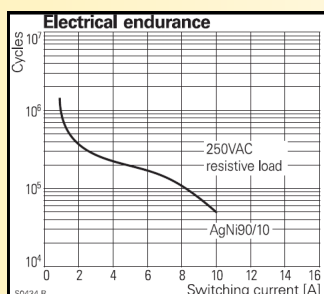
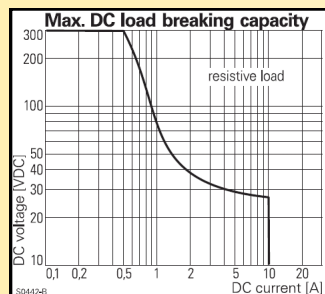
CCN165/S : Security version
Digital inputs 2 x 25 bits
3 relays outputs on single alarm
(face colour : yellow)

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 comparison : 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 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

EN 55011
 group 1
 class A



WIRING AND OUTLINE DIMENSIONS:

