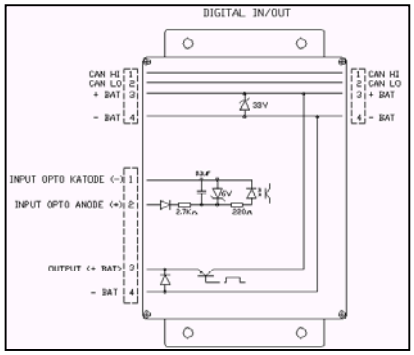
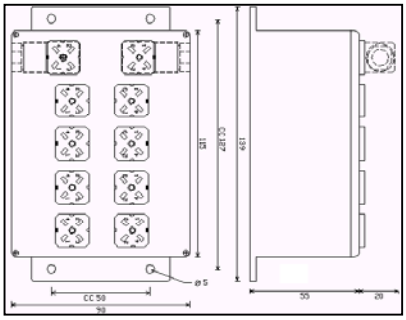
# CanCom

*8 DIGITAL I/O*

**DIGITAL V3.70** CE

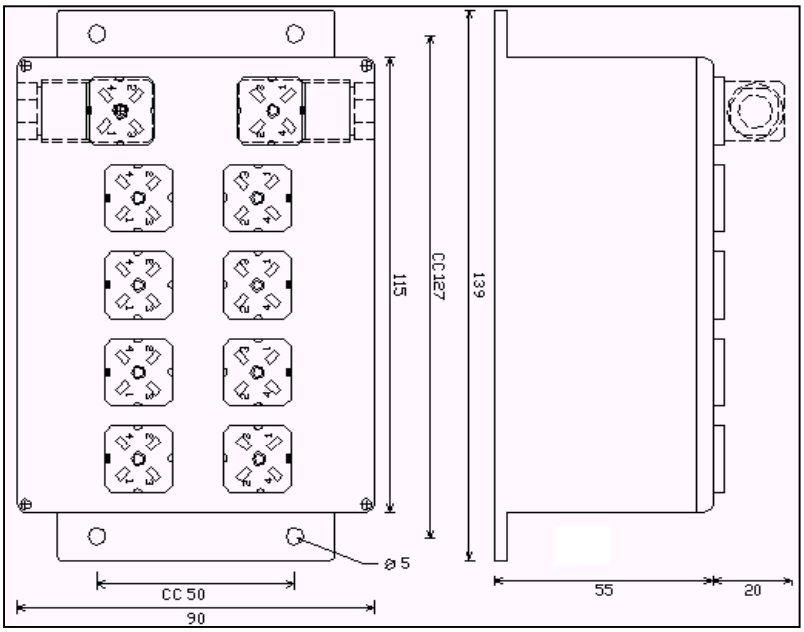
JÖRGENSEN

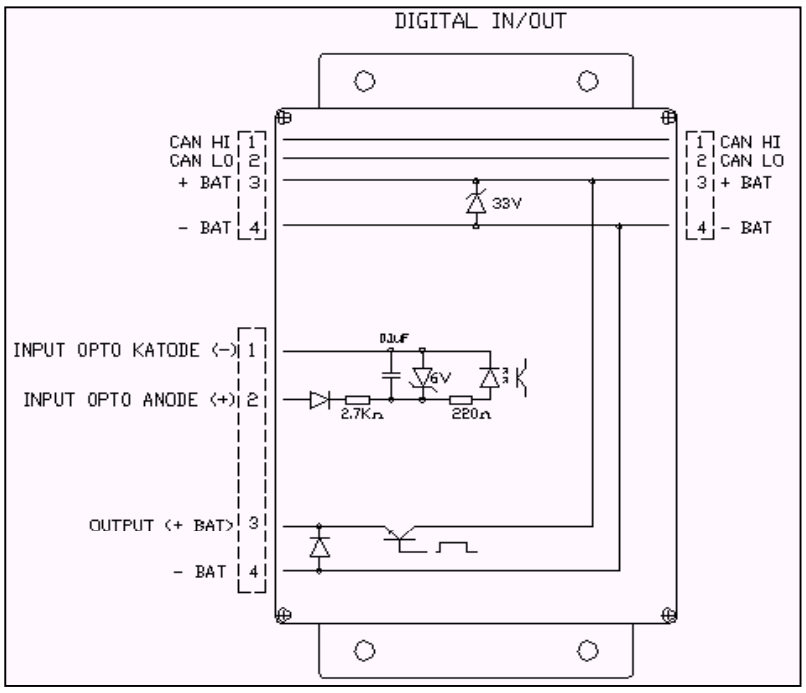


| **Specifikation** | **Specification** | | |
|---|---|---|---|
| Matningsspänning | Power supply | 10-30 | VDC |
| Spänningsrippel | Voltage ripple | <3 | V t-t |
| CAN protokoll | CAN protocol | 2.0B | 150Kbit |
| CAN drivkrets | CAN driver | 82C251 | Philips |
| Antal I/O | Number of I/O | 8 | I/O |
| I/O adress | I/O address | 1-25 | ID |
| Modulkontaktdon | Module connectors | G4A5M | Hirschmann |
| Kabelkontaktdon | Cable connectors | G4W1F | Hirschmann |
| Operativsystem | Operating system | CanCom | CanPro |
| CPU | CPU | 98AZ60 | Motorola |
| Flashminne | Flash memory | 60 | kB |
| Kapsling | Housing | Black painted | Aluminium |
| Egenförbrukning | Internal consumtion | 60 | mA |
| Vikt | Mass | 0.75 | Kg |
| Omgivningstemp. | Operating temp. | -30 - +50 | Celcius |
| | | | |
| **Utgångar** | **Output** | | |
| Belastbarhet | Maximum load | 2000 | mA / IO |
| Övertemp skydd. | Overtemp protected | +150 | Celcius |
| Kortslutningsskydd | Short circuit protect | 5 | A |
| Återställning av skydd | Reset protection | Interupt power | >2s |
| Aktiveringstid | I/O response time | 25 | ms |
| *Ingångar* | *Inputs* | | |
| Ingångar | Inputs | Isolated | Opto |
| Ingång aktiv "1" | Input activated "1" | >3 | VDC |
| Frekvensingång | Frequency counter | 1-255 | Hz |
| Ingångs resistans | Input resistance | 3000 | ohm |
| Buss uppdateringstid | Bus update time | typ. 50 | ms |
| Tid mellan inläsningar | Input capture | typ. 50 | ms |
| | | | |
| **EMC** | **EMC** | | **2004/108/EC** |
| Emission CISPR 25 | Emission CISPR 25 | 30-1000MHz | Broad, Narrow |
| | | | |
| Immunitet | Immunity | Industrial | |
| EN61000-4-6 | Conducted | 30V/m 80% | 1-80MHz |
| EN61000-4-3 | Radiated | 30V/m 80% | 80-600MHz |
| EN61000-4-3 | Radiated | 20V/m 80% | 600MHz-1GHz |
| EN61000-4-2 | ESD | Air/Contact | 8/4 KV |
| ENV 50204 | Radiated pulse | 30V/m | 900MHz / 200 |
| EN61000-4-8 | Magnetic field | 30A/m | 50Hz |
| ISO 7637-1 | 12V system | Pulse | 4 |
| ISO 7637-2 | 24V system | Pulse | 1a,1b,2,3a,3b |

utgåva/issue 2


115
CC127
139
ø 5
CC 50
90
55
20


DIGITAL IN/OUT
CAN HI
CAN LO
+ BAT
- BAT
33V
INPUT OPTO KATODE (-)
INPUT OPTO ANODE (+)
0.1uF
6V
2.7Kn
220n
OUTPUT (+ BAT)
- BAT

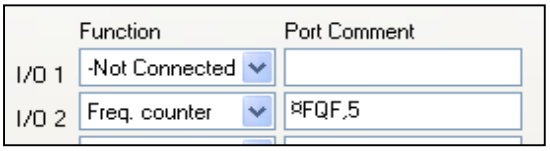
**V35-**
**Port simulator:**
8 flags can be sent to the CAN-bus for analysis, or to be used as conditions.

To activate the functions the digital module must have the comment ¤SIM,mm,ff
mm is simulated CAN-bus ID and ff flag (and 7 more flags).
Always state two numbers for ID and Flag, e.g. ID1 Flag 5 is written ¤SIM,01,05
In the example below: ¤SIM,20,28 flag 28-35 will be sent to ID20 as port 1-8.
Make sure to write SIM with capital letters.

To be able to use the ports as conditions, a module need to be entered in the module configuration, in this case ID20. Set chosen ports as inputs and add port comments if desired.

**V36-**
**Function FQF (FreQuencyFilter):**
Filter function on inputs that is chosen to be frequency inputs.
The function is activated with ¤FQF,A in the comment for the port, where A is damping. The value can be 1-255. If A is set to 1, you get the original frequency. (0 cannot be used, then the function will be invalid).

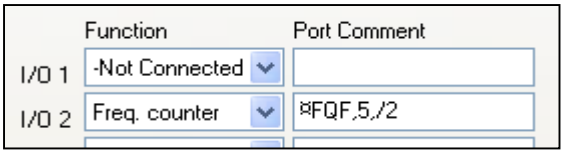
Example: ¤FQF,5 written in the comment for port 2 give you a damping of the frequency with factor 5.

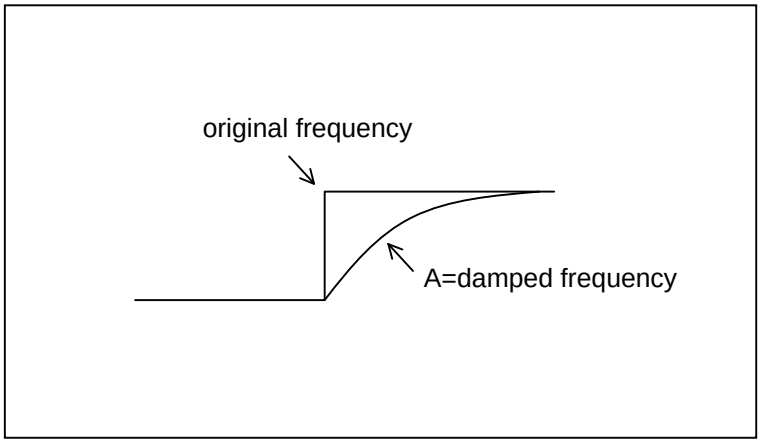



If the value needs to be rescaled add *B or /B to the condition.
The function will then either be ¤FQF,A,*B or ¤FQF,A, /B
The result of the rescaled frequency for port 1 is presented in flag 25, for port 2 in flag 26 and so on. (Port 1=Flag 25 . . . . . Port 8=Flag 32). The other flags will be unchanged.

Example: ¤FQF,5,/2 written in the comment for port 2 give you a damping of the frequency with factor 5 and in flag 26 the frequency divided by 2, that is 0-255 corresponds to a frequency that is 0-512 Hz.

The flags keep the value of the rescaled frequency.



**Instruction for installation:**

**Assembly:**
The module can be assembled in any optional position.
When installing the module, the casing of the module shall have good electrical contact with the base frame of the vehicle.

**Electrical installation:**
Secure the module with maximum 10 Ampere fuse.
The connectors is made for maximum 10 Ampere.
The module has no built-in CAN termination.

**Other:**
The module is hermetically moulded in PUR.
The enclosure is made of powder coated aluminium.
The module enclosure is potential free.

**Declaration of Conformity according to the EMC directive 2004/108/EC**

**Försäkran om överensstämmelse enligt EMC direktivet 2004/108/EC**

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By signing this document the undersigned declares as manufacture that the equipment in question complies with the protection requirements of directive(s)

Genom att underteckna detta dokument försäkrar undertecknad såsom tillverkare att angiven utrustning uppfyller skyddskraven i rubricerade direktiv

## *CanCom* Digital I/O module

| | |
|---|---|
| **CISPR25** | **Radiated RF emission** |
| **EN 61000-4-3** | **Radiated immunity** |
| **EN 61000-4-6** | **Conducted immunity** |
| **ENV 50204** | **Radiated immunity pulse** |
| **ISO 7637-1 puls 4** | **Conducted transients on power lines** |
| **ISO 7637-2 puls 1a,1b,2,3a,3b** | **Conducted transients on power lines** |
| **EN 61000-4-2** | **ESD (4kV contact, 8kV Air)** |
| **EN 61000-4-8** | **Magnetic field (50Hz 30A/m)** |

CE

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