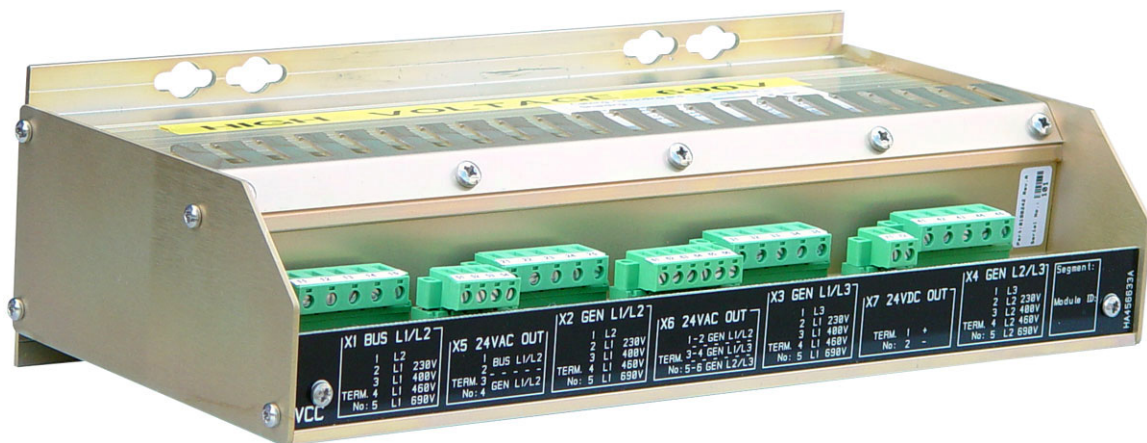




KONSGBERG

# VCC

## Distributed Processing Unit



### General description

The voltage converter controller module is dedicated to use in main switchboards. The module secures the installation of the power management & generator protection installation, by transforming the higher voltages to low and safe levels.

See the functional specification and technical description for detailed specification of the various channels.

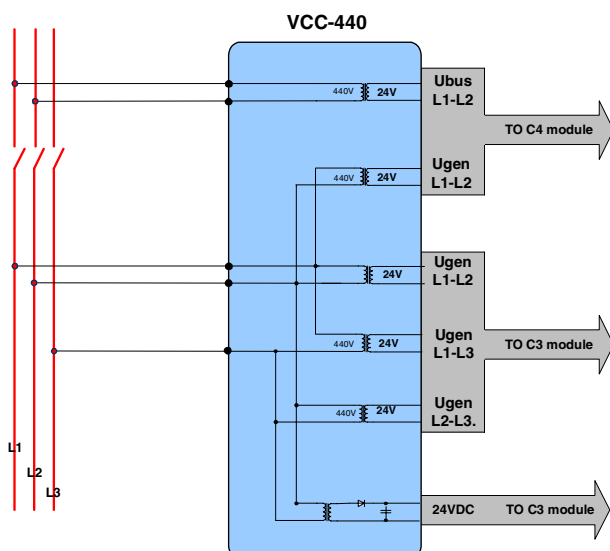
### Functions

The voltage converter controller module is equipped with 6 voltage transformers, 440 / 24 VAC.

The module has three major tasks to handle:

- Supply the C3 generator protection module with AC voltage from the measured three phase generator busbars, L1-L2, L1-L3 and L2-L3, derated from 440 to 24 VAC.
- Supply the C3 generator protection module with a 24VDC power (1A), with the generator busbar (L2-L3) as a source.
- Supply the C4 power management module with single phase AC voltage from the generator busbar L1-L2 and the switchboard busbar L1-L2, derated from 440 to 24 VAC.

As an option the VCC module can be equipped with transformers based on the primary voltage 690 VAC; VCC-690.



## Specifications

### Input voltage:

0-440 VAC (+20% over voltage)

- 3 phase input from generator.
- 1 phase input from bus.

### Power dissipation:

Total dissipation: Maximum 12W  
(Depending on load on DC output)

**Operating temperature:** -15°C to +70 °C

**Storage temperature:** -25°C to +70°C

Max rel. Humidity: 96% non-condensing

### Mechanical environment:

Maximum 0.7g

### EMC properties:

According to:

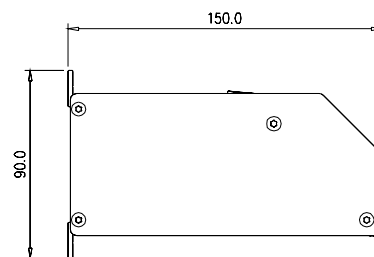
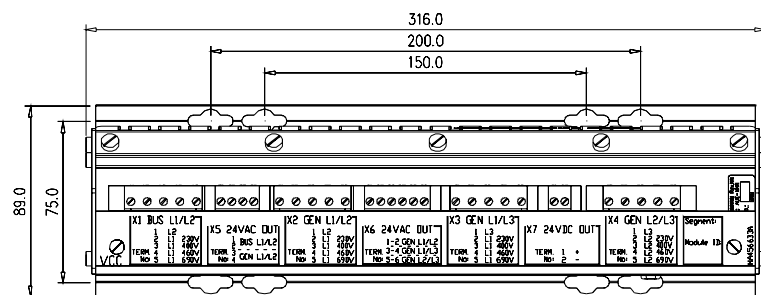
IACS E10 (2001)

IEC 60945 (1996/2002)

**Weight of unit:** 3.8 kg.

**Mounting:** Screws (4 pcs M5)

### Connections, pluggable screw terminals:



High voltage: Terminals 2.5 mm<sup>2</sup>  
24V DC /AC: Terminals 2.5 mm<sup>2</sup>

### Isolation:

Isolation between input terminal and ground: 2000VAC

Isolation between input terminals: 2000VAC

### 2 ACV output synchronisation:

1 phase generator and 1 phase bus.

Range: 0-24VAC

Accuracy: ± 1.0 [%]

### 3 phase ACV output protection:

3 phase generator.

Range: 0-24VAC

Accuracy: ± 1.0 [%]

### 1 DC output (Protection backup power):

Voltage: 24VDC

Maximum current: 1000mA

Accuracy: ± 5.0 [%]

### Type Approval:

ABS, BV, GL, KR, LR, RRS, NK, PRS, Rina, CCS, DNV

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