**VCC**

**Distributed Processing Unit**

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**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.

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**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)

Weight of unit: 3.8 kg.

Mounting:
Screws (4 pcs M5)

Connections, pluggable screw terminals:

High voltage: Terminals 2.5 mm²
24V DC /AC: Terminals 2.5 mm²

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