

# Power<sup>IT</sup> Compact Secondary Substations, CSS

Data sheet Capella 12W-DG



**ABB**





## Power<sup>IT</sup> Compact Secondary Substation, CSS

### Capella 12W-DG

Drawing number: 1VNA000001X0156

Type: CSS-CW

#### Dimensions in mm (WxLxH)

Enclosure (standard roof): 3400 x 5230 x 2590 mm

Transformer compartment (oil pit): 1800 x 3100 x 2300 mm

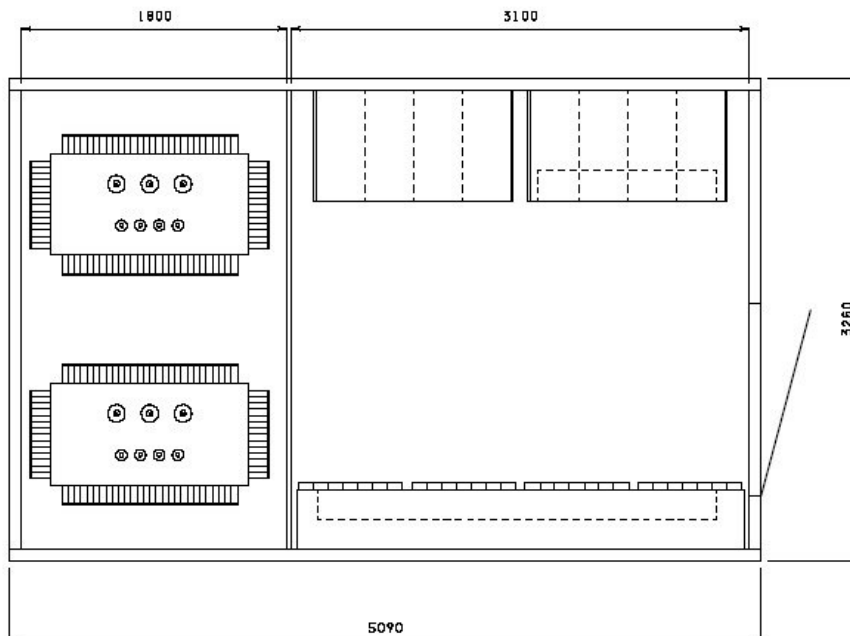
Weight without electrical equipment: 19700 kg

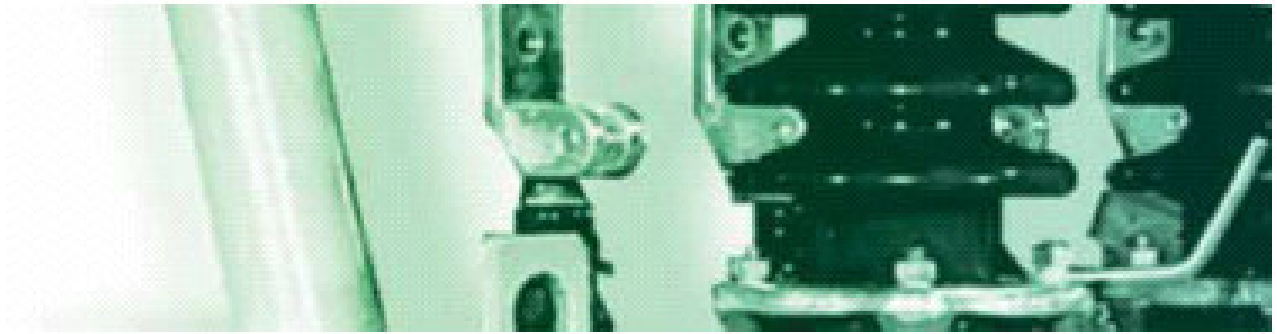
#### Max equipment

Transformer: 2 x 1250 kVA hermetically sealed oil transformer

MV Equipment: 2 x 4-panel SafeRing / SafePlus 12 or 24 kV

LV Equipment: 2 x LVS3-13M





## Product Description

### Enclosure

The Power<sup>IT</sup> CSS is designed according to IEC 61330. The enclosure is one room with MV switchgear, LV switchgear and distribution transformer installed.

The walls and the base are made of 80 mm reinforced concrete (European standard EN 206-1 - C30/37). The standard concrete roof is slightly sloped as the thickness is 120 mm in the middle and 80 mm on the sides. This prevents water penetration or water accumulation on the roof, which is detachable in one piece and secured to the enclosure by bolts from the inside. The walls and the edges of the roof are painted.

The ventilation louvers and the doors are made of aluminum and unpainted. The doors are fitted with cylinder lock. All metallic parts are earthed.

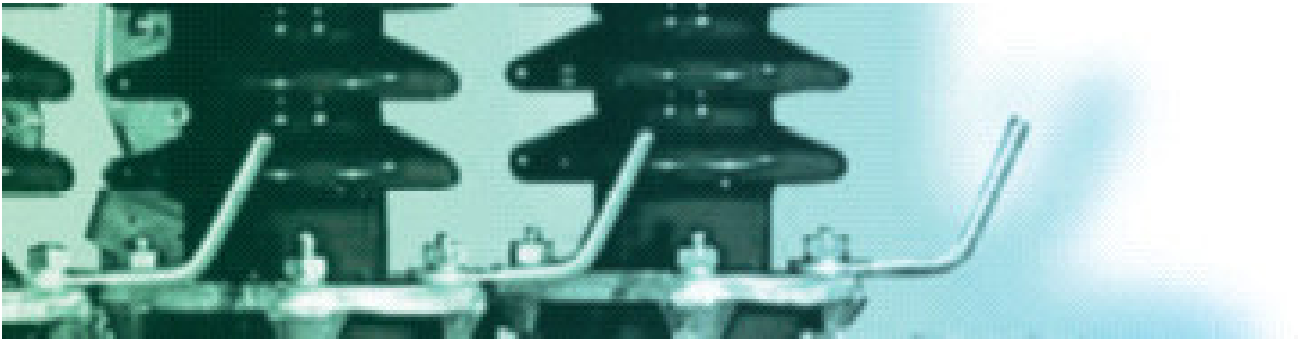
The electrical equipment is installed through the roof and the complete CSS can be lifted with all electrical equipment installed. The CSS is lifted by means of a lifting device fastened to the lifting lugs at the base.

The temperature class of the enclosure is as standard 20K.

### Transformer

The CSS is dimensioned for a 2 x 1250 kVA hermetically sealed oil transformer. Please note that the dimensions of transformers can vary and it should be checked if the desired type of transformer fits in the CSS, taking safety distances and ventilation into consideration. The dimensions of the transformer compartment are 1800 x 3100 x 2300 mm (WxLxH). The transformer compartment is equipped with an oil pit, to collect the transformer oil in case of leakage. The oil pit can contain 100% of the transformer oil.





### **MV Equipment**

The CSS can be equipped with maximum a 2 x 4-panel SafeRing / SafePlus 12 or 24 kV.

The MV transformer cables are as standard 25 mm<sup>2</sup> Cu. If the tee-off of the SafeRing / SafePlus is with a vacuum circuit breaker, 95 mm<sup>2</sup> Al cables will be installed.

### **LV Equipment**

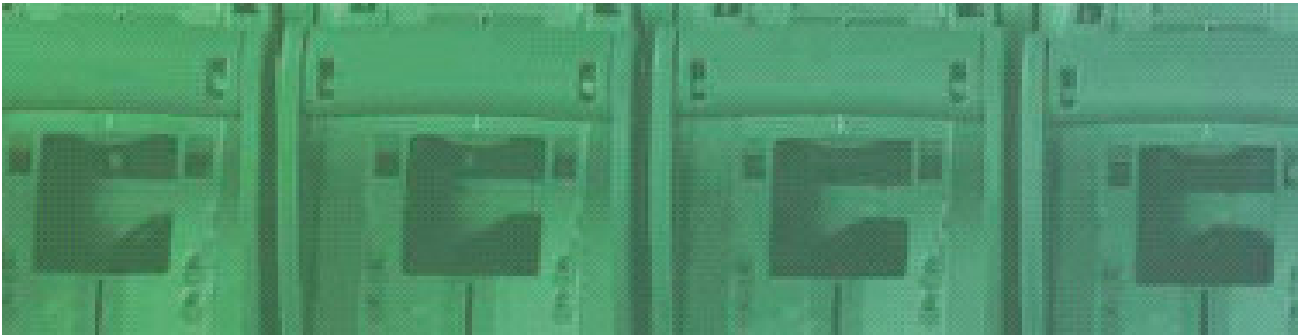
The CSS is dimensioned for two low voltage switchgears of the type LVS1, LVS2 or LVS3 up to 13 modules (1300 mm).

In a 13-module switchboard there is room for:

- 13 x 400 A InLine fuse switches
- 8 x 400 A Kabeldon fuse switches

The LVS2 and LVS3 can be configured with various metering and measuring equipment, please check relevant brochures for details.





### **Styling**

Various styling can be selected if the CSS needs to blend in with the environment.

### **Colors**

The concrete walls can be painted in the following standard colors:

- Light Ivory - NCS1110-Y22R
- Signal Green - NCS3040 G10Y
- Light Grey Beige - NCS3010 Y50R
- Cream - NCS0500 N

### **Façade finish**

The standard façade finish of the concrete CSS is stipple rolled BY112. However, various finishes can be selected:

- Wood structure
- Rough plaster BY103
- Brushed BY107
- Granite A3

### **Add-Ons**

- Filters for ventilation doors
- Door gaskets IP 54
- Cable cellar
- Earthing system to 20 kA on MV





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