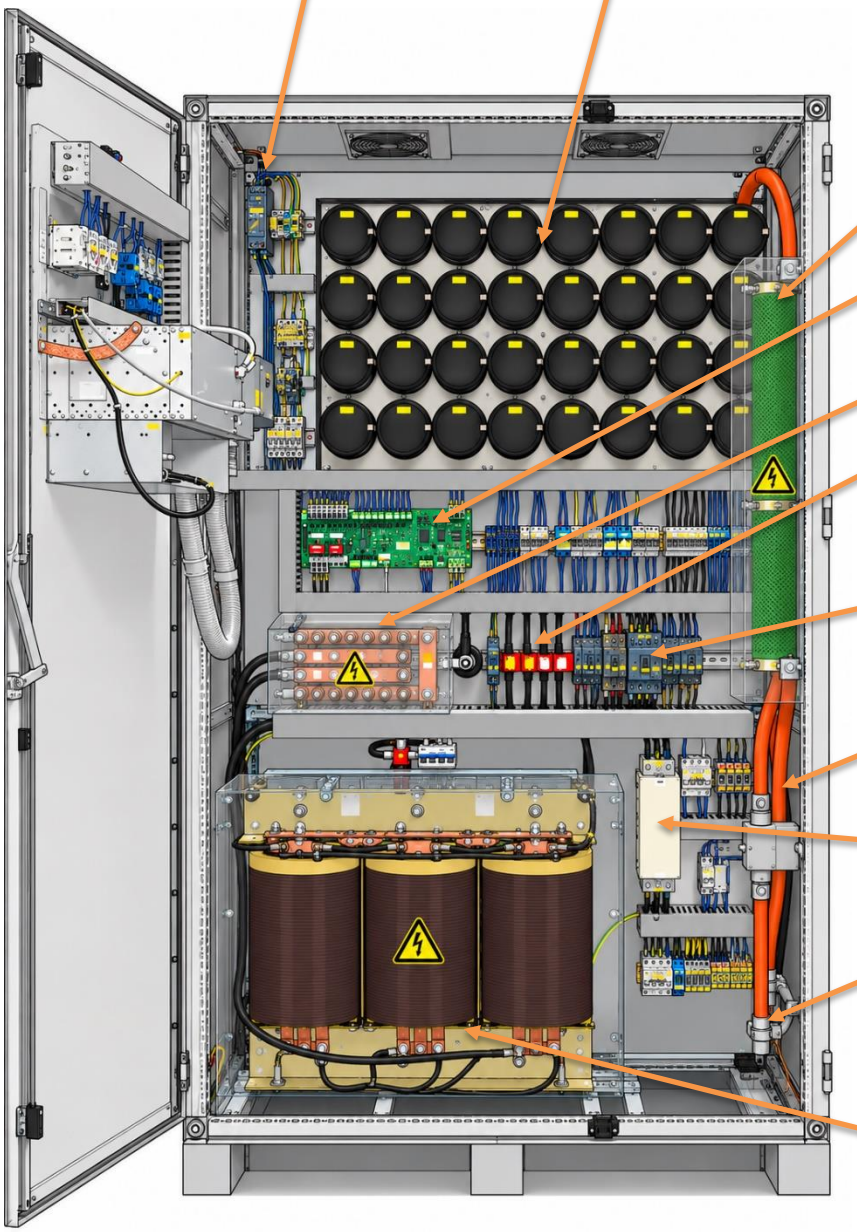
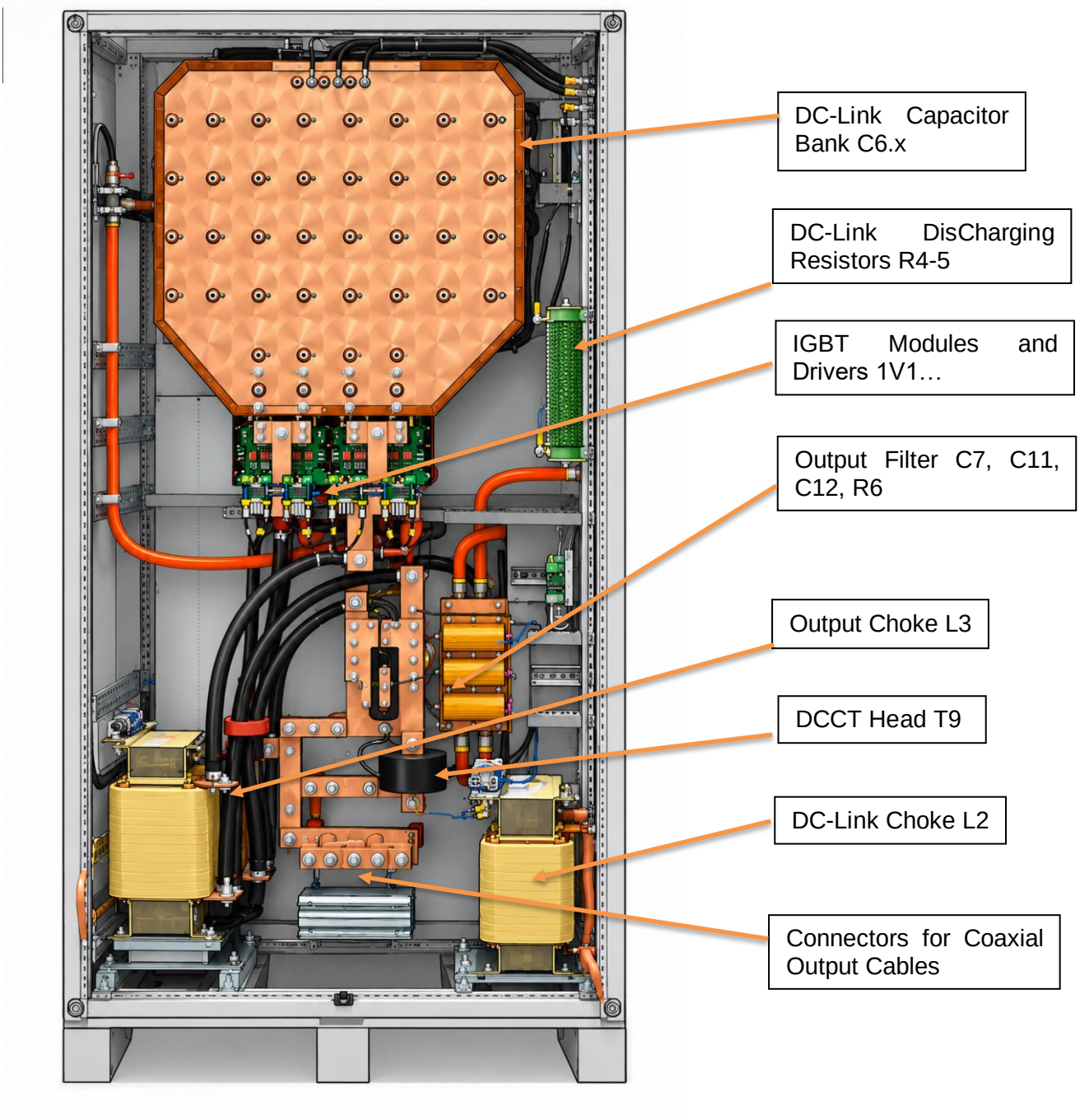
This document describes the mechanical Layout of Alvarez 2.0 SVE60-U type power converters.

1 Cabinet Front

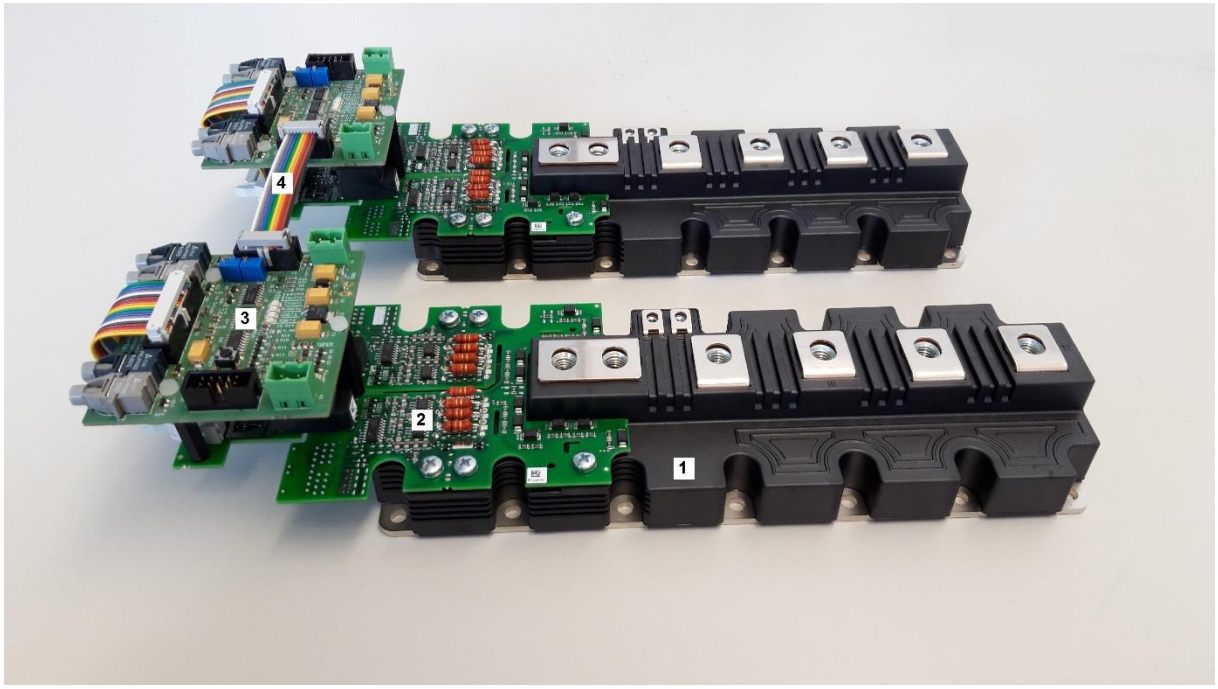



AC Power Supplies and Fuses B02/04, F1, F…
DC-Link Capacitor Bank C6.x
DC-Link Charging Resistors R1-3
Interlock & Control Module B8
Diode Rectifiers V5-7 with cooling plate
AC Current Transformers T3-5
Main and Charging Contactor K1, K11
Flow Meter S15
Mains In and EMI Filters
Cooling Water Hose Connectors
AC Power Transformer T2

2 Cabinet back



3 IGBT Drivers



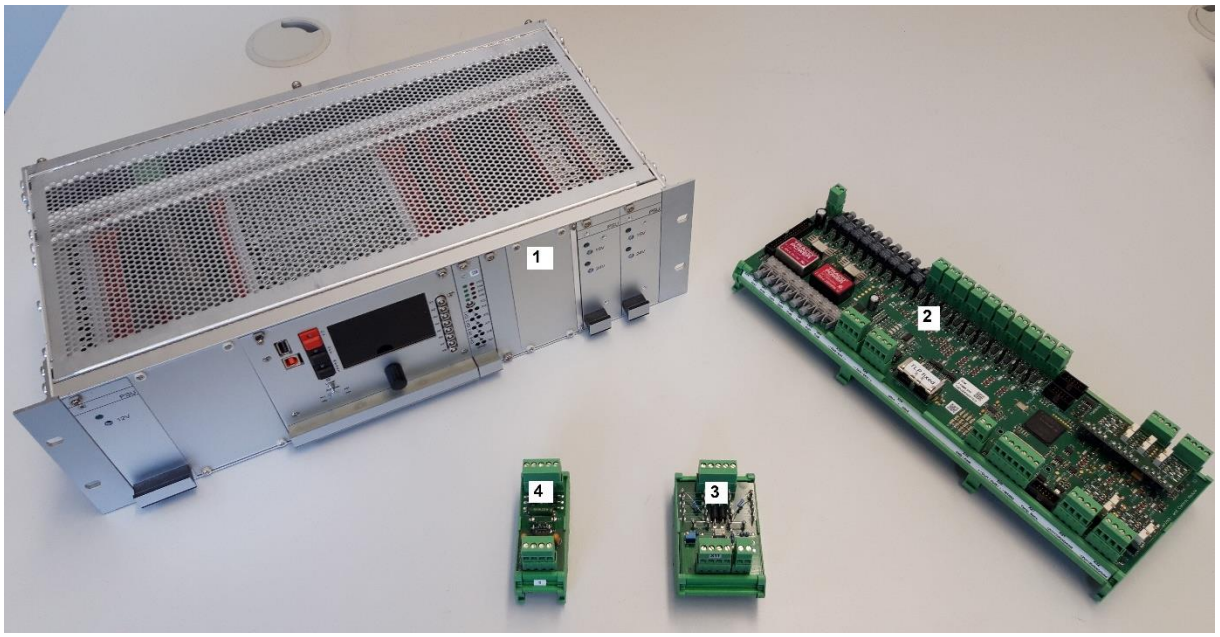
Sample setup with 2 IGBT modules, including drivers and an interface, in a parallel configuration.

Shown in the image:

1. “Semikron SKM1400GB12P4” IGBT module
2. “Power Integrations 2SP0320T2C0-12” IGBT driver
3. “GSI FG662_010” driver interface
4. Ribbon cable* for parallel operation of the two IGBT modules

*The length of the 10-pin ribbon cable can be adjusted as needed, but it should be kept as short as possible.

4 ACU and Modules



Shown in the image:

1. ACU in a 19" rack, with connections on the rear
2. FG660_059_001 Interlock & Control Module with circuit board holder for DIN rail mounting
3. FG506_230 Voltage Detection Module with circuit board holder for DIN rail mounting
4. FG506_240 Ground fault detection (same circuit board also serves as primary current detection) with circuit board holder for DIN rail mounting