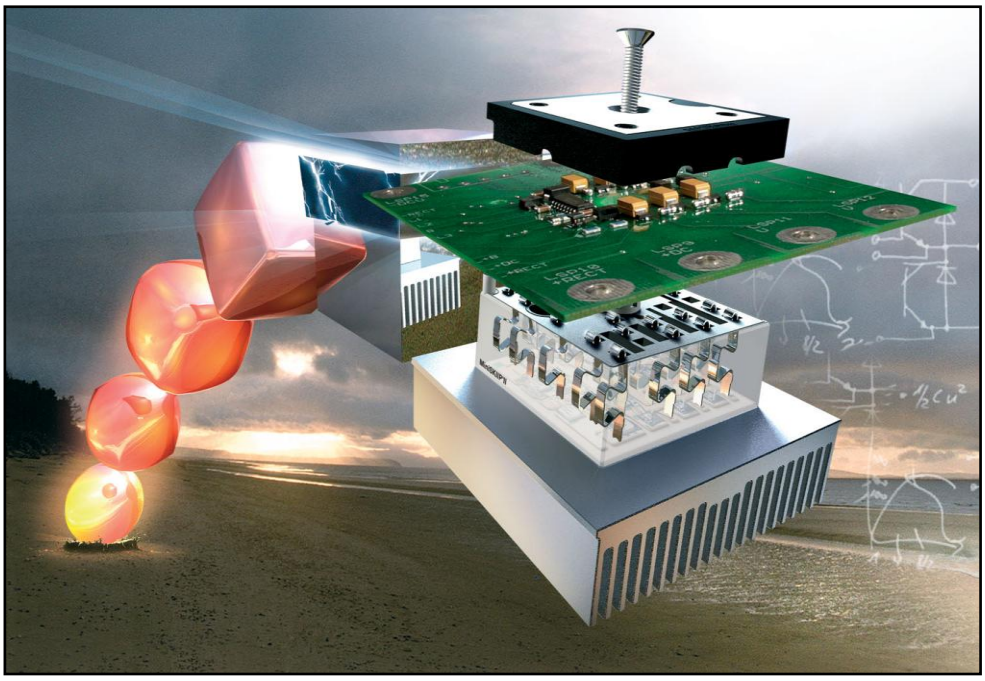
Technical Information
MiniSKiiP® II Generation



1 Introduction

1.1 Features

- Compact CIB (**C**onverter **I**nverter **B**rake)
- Converter and Inverter Modules in 4 different case sizes for modern inverter designs from several hundred W up to 37kW motor power
- Different topologies: CIBs, sixpack modules, input bridges with brake chopper and 3-level modules for various applications
- Rugged fast mounting spring contacts for all power and auxiliary connections
- Easy one or two screw mounting
- Full isolation and low thermal resistance due to DCB ceramic without base plate
- Integration of latest chip technologies:
  - Fast 1200 V Trench IGBT, 1200V Trench 4, Ultrafast 600 V NPT, 600V and 650V Trench IGBTs with anti-parallel CAL-diodes
  - Thyristors for controlled rectifiers
  - Input diodes with high surge currents
- Integrated PTC temperature sensor

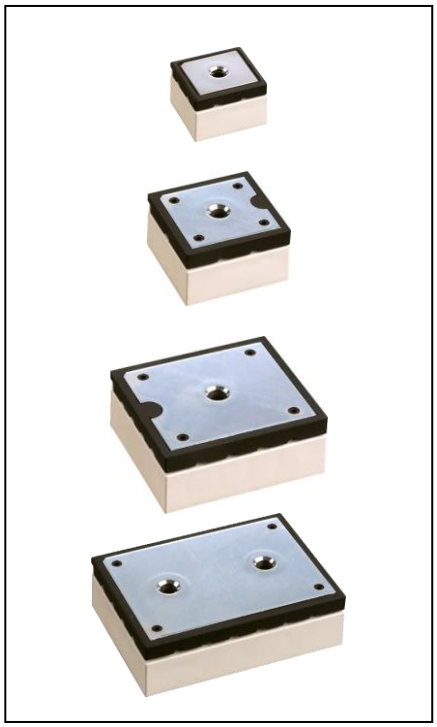


Fig. 1.1

1.2 Advantages

Utilising the reliability of pressure contact technology the patented MiniSKiiP® is a rugged, high-integrated system including converter, inverter, brake (CIB) topologies for standard drive applications up to 37 kW motor power. An integrated temperature sensor for monitoring the heat sink temperature enables an over temperature shoot down. All components integrated in one package greatly reduce handling. The reduced number of parts increases the reliability.
MiniSKiiP® is using a well-approved Al_2O_3 DCB ceramic for achieving an isolation voltage of AC 2.5 kV per 1min and superior thermal conductivity to the heat sink.
Due to optimised current density, matched materials for high power cycling capability and pressure contact technology, MiniSKiiP® is a highly reliable, compact and cost effective power module.

2 Disclaimer

The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliancesand systems is subject to prior specification and written approval by SEMIKRON. Wetherefore strongly recommend prior consultation of our personal.