Power Electronics Systems – SEMISTACK

SEMISTACK® with SKiiP® 3

- Standard air range up to 700 kW without paralleling
- Standard water range up to 1 MW without paralleling
- Extremely high power density
- Electrolytic or polypropylene capacitors
- · High reliability thanks to SKiiP technology
- · Improved protection features
- Designed according to EN 50178

Options

- Low inductance busbar
- · DC filtering capacitors
- Heat sinks
- Thermal Management
- Fans
- Drivers
- · Thermal switches

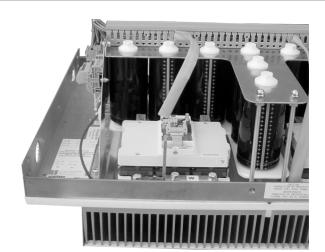
Mains voltage	SKiiP Type	Nominal current ¹⁾	Power rating ²⁾
V _{RMS}		Α	kW
400	SKiiP 1803 GB 123	810 / 680	475
	SKiiP 2013 GB 123	900 / 800	530
	SKiiP 2403 GB 123	990 / 845	580
690	SKiiP 1803 GB 172	570 / 485	580
	SKiiP 2013 GB 172	640 / 555	650
	SKiiP 2403 GB 172	680 / 590	690

¹⁾ Currents are calculated for a forced air configuration without thermal stacking, heat sink for SKiiP 3 is PX16, with SKF16B fan. First value: Maximal permanent current without overload; Second value: nominal current, with 150 % overload at 2 Hz (U/f constant) Ratings are: V_{dc} = 350, 540 or 950 V_{dc}, switching frequency = 3 kHz, ambient temperature = 35 °C, V_{ac} = 230, 400 or 690 V_{RMS} sinus output current

²⁾ Power rating is for a $\cos \varphi = 0.85$ and constant nominal conditions

SEMISTACK® using SKiiP® 3 for wind generators (detail view)





Modular SEMISTACK® using SKiiP® 3 to give 1/6th of a 4-Quadrant Converter (700 kW, 660 Arms) for wind generators up to 2 MW

All SEMISTACKs can be manufactured for a wide range of current and power ratings and also cooling methods (natural, forced-air or water), depending on customer-specific requirements. Please contact SEMIKRON for more information.