



Motor Drives

Power Electronics for Motor Drives



Power Modules

MiniSKiiP

SEMIPACK

SEMITRANS

SEMITRANS 10

SEMiX

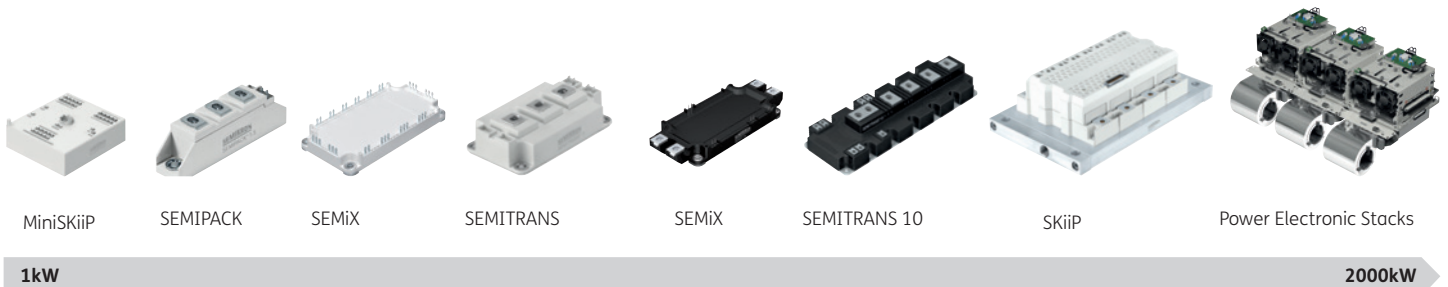
IPMs

SKiiP 4

Power Electronic Stacks

Our Solutions for Motor Drives

Since the first appearance of motor drives, SEMIKRON has been committed to supplying solutions for every power range. Starting with the first insulated power module, rectifier modules from the SEMIPACK series more than 40 years ago, the MiniSKiiP in particular has revolutionised the motor drive design for low and medium-power systems. Completed with industry standard power modules such as SEMiX and SEMITRANS, the portfolio is rounded off with high-power SKiiP 4 IPMs and power electronic stacks. The new generation 7 IGBTs boost performance and power density.



Product Overview Power Modules

IGBT 7 MiniSKiiP

- Quick and easy mounting with one or two screws using the highly reliable SPRiNG technology
- Full inverter system with rectifier, brake chopper and inverter on one PCB, scalable from 1 to 90kW

SEMITRANS

- SEMITRANS, reliable standard in 34 and 62mm width
- Brake choppers and half-bridges in 650V, 1200V and 1700V
- SEMITRANS 10 extends the power range to more than 600kW in a proven design

SEMiX Spring

- Flexible standard: 17mm high, in five different package sizes, perfectly scalable for 650V, 1200V and 1700V
- 3-phase and single-leg rectifiers (uncontrolled and half-controlled), brake choppers, half-bridges and 6-packs

IGBT 7 SEMiX 3 Press-Fit

- Medium/high power 17mm power module in 1200V/1700V
- Half-bridges, chopper and rectifiers
- Optional Plug & Play driver and integrated current measurement shunts
- Optimised costs and short time-to-market with optional Plug & Play driver and integrated current measurement shunts

IGBT 7 SEMiX 6p

- 1200V CIB, sixpack and rectifier modules
- The new benchmark in press-fit contacted power modules

SEMiX 5

- Available as 6-pack in 650V, 1200V and 1700V
- 3-phase rectifier modules for consistent system design

SEMIPACK

- Rectifier modules from the inventor and market leader
- Full range of uncontrolled, half controlled or fully controlled rectifier legs
- State-of-the-art SEMIKRON diode and thyristor chips

IPMs

SKiiP 4 high-power IPM

- Integrated water or air cooler
- High reliability: Single Sided Sintering, ASIC chipset and 100% burn-in test

Power Electronic Stacks

- Fast time-to-market with ready-to-use power stacks
- Customized designs for individual requirements
- UL ready

IGBT 7

The latest generation 7 IGBTs from several suppliers are designed specifically for motor drive applications. They bring about major reductions in forward voltage drop and allow for smaller chip sizes. This increases power density by up to 45% thanks to higher nominal current ratings in the same module package.

