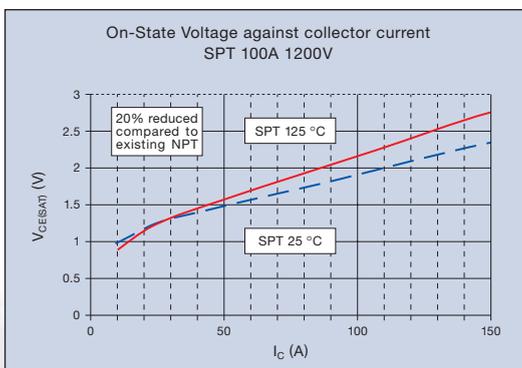
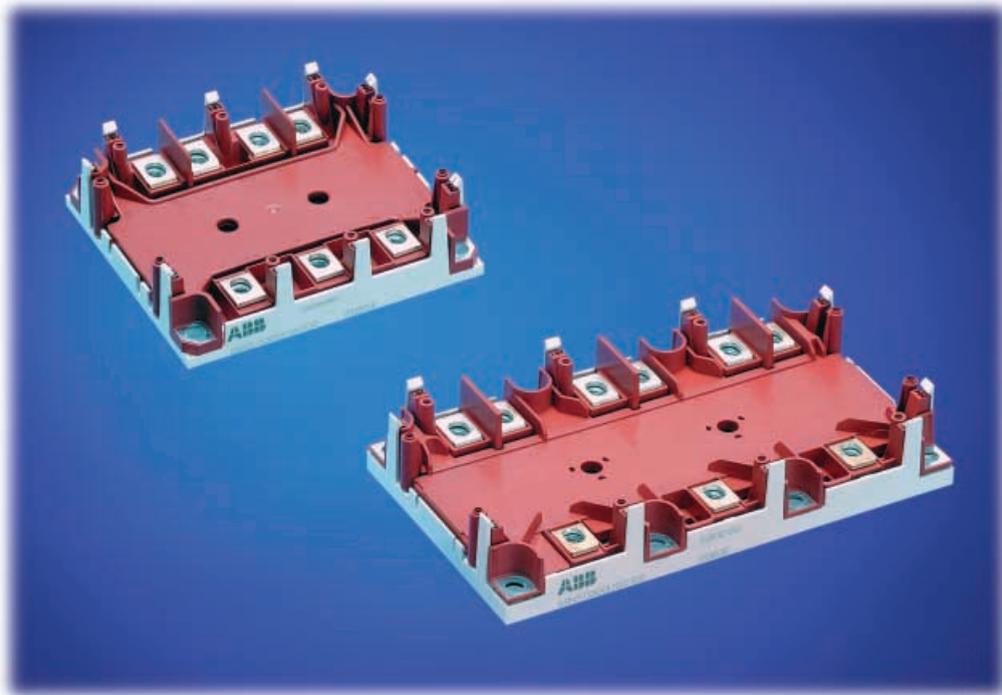


LoPak

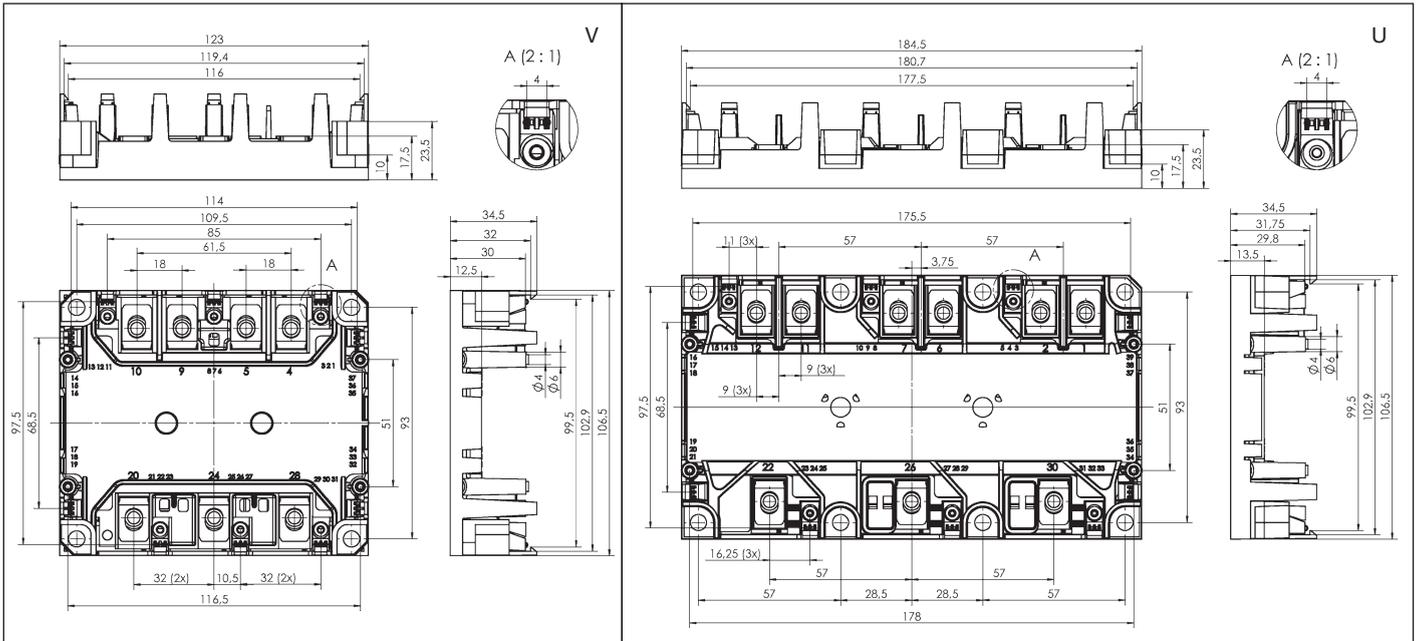
Low profile, low inductance three-phase bridges



ABB's LoPak range of three-phase IGBT modules are designed with reliability and high life expectancy in mind. LoPak uses DCB substrates (Direct Copper Bonding) for high IOL (Intermittent Operating Life). The ceramic substrate has a thin copper sheet bonded to it by metal oxide fusion. This eliminates the thermo-mechanical stresses, which normally exist when ceramic is soldered to a copper base-plate. Thus, the module has no copper base-plate from which the substrates could delaminate during frequent power cycles, making these devices the module of choice in such applications as Traction Auxiliaries and Light Rail inverters. Industrial applications such as Servo Drives will also benefit from this capability. The LoPak product range uses ABB's trademark SPT chip technology (Soft Punch Through), ensuring ruggedness and smooth, controlled switching characteristics essential for good EMC (Electro-Magnetic Compatibility) and low switching transients. The LoPak

range consists of "six-packs" up to 300A at 1200V and up to 225A at 1700V. These six-packs can be parallel connected for use in higher power systems so that a whole range of inverters for 400V – 690V AC line can be manufactured from only five part numbers. System assembly with LoPak is extremely fast, simple and reliable, due, in part, to the snap-on driver concept, which avoids awkward and irreversible soldering. LoPaks are intended for compact, fast switching applications where low assembly costs and long life expectancy are the design criteria.

- Fast, simple, reliable assembly
- Easy to parallel
- Wide inverter range configurable from two packages
- One platform for Industry and Traction
- Compact construction
- Excellent thermal cycling capability
- Smooth switching characteristics



Dimensions in mm.

Part number	Voltage V_{CES} (V)	Current I_c (A)	Pkg	Package	Circuit schematic
5SNS 0150V120100	1200	6 * 150	V	LoPak4 SPT	
5SNS 0200V120100	1200	6 * 200	V	LoPak4 SPT	
5SNS 0150V170100 5SNS 0150V172100	1700	6 * 150	V	LoPak4 SPT LoPak4 Low R_{TH} SPT**	
5SNS 0300U120100	1200	6 * 300	U	LoPak5 SPT	
5SNS 0225U170100 5SNS 0225U172100	1700	6 * 225	U	LoPak5 SPT LoPak5 Low R_{TH} SPT**	

** Industry standard package
(Please refer to website for details)

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