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150-A IGBT Modules Boost Higher Power Density

Infineon Technologies is expanding the product portfolio of the IGBT modules with the EconoPIM 3 package. The current rating of the module is thereby increased from 100 A by 50% to 150 A. The new power modules serve the growing demand for higher power density within the same footprint. Typical applications are motor controls for drives in elevators, escalators, fans or pumps.

EconoPIM modules are characterized by a high integration of different functionalities. For example, each contains a three-phase rectifier, a brake chopper, a three-phase inverter and a NTC thermistor for temperature measurement. With a blocking voltage of 1200 V, the new EconoPIM 3 reaches a maximum current rating of 150 A—the highest current in the market for this design, according to the company.

The housing is equipped with a base plate and corresponds to the industrial standard regarding dimensions (see the figure). It can therefore easily be implemented as a drop-in replacement for already existing designs. When used in drives, the EconoPIM 3 therefore allows up to 30% more output power with the same footprint. The modules integrate the IGBT4 chip with Trenchstop technology, which is proven to have a high degree of robustness and reliability.

The new EconoPIM module with the specifications 1200 V/150 A is available either with solder pins or PressFIT pins. This applies to all variants featuring the IGBT4 chip in Trenchstop technology. In addition, the modules are optionally available with thermal interface material. The production of the new power modules has started, samples can be ordered. More information is available at www.infineon.com/EconoPIM.

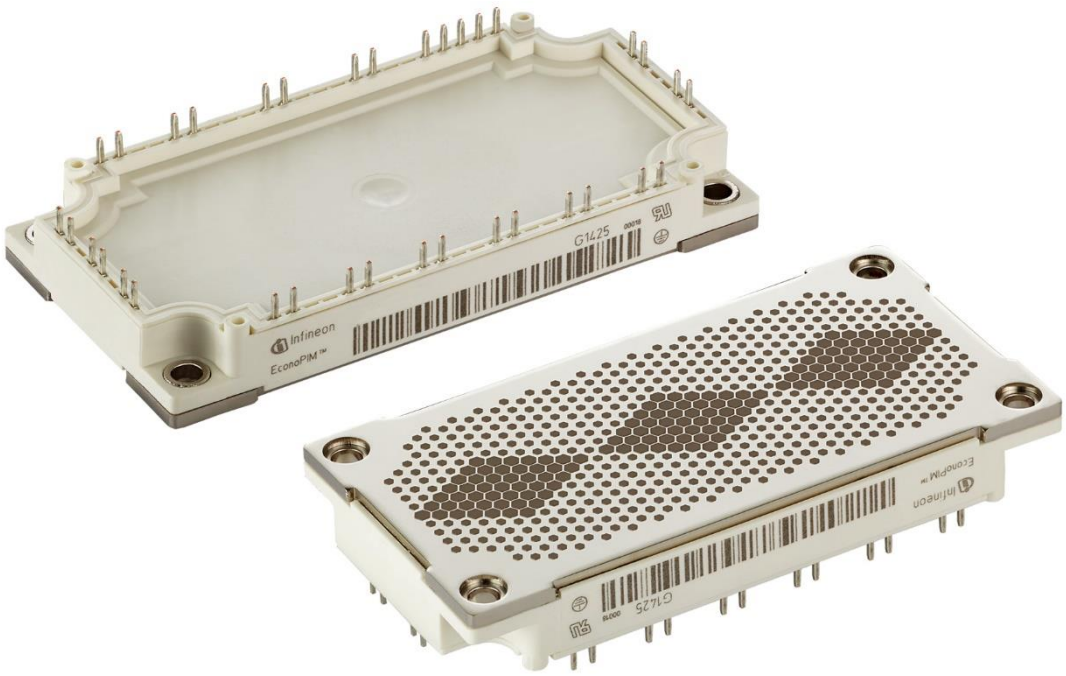

Figure. Targeting motor controls for drives in elevators, escalators, fans or pumps, IGBT modules in the EconoPIM 3 package offer a 150-A current rating in a footprint that previously was limited to 100 A. Highly integrated, each module contains a three-phase rectifier, a brake chopper, a three-phase inverter and an NTC thermistor for temperature measurement.