

PRESS RELEASE

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New water cooler for very large power semiconductors



Westcode Semiconductors Limited (An IXYS company) announces a new addition to its range of power semiconductor water coolers. The Nickel-plated copper cooler has a 127mm diameter contact plate, making it suitable for press-pack devices with electrode contacts up to 125mm diameter.

The new coolers incorporate geometric water channels designed to ensure low values of thermal resistance, even at moderate coolant flows, while retaining a robust structure compatible with the high clamping force required by large area power semiconductors. The geometric design used for the water channels also ensures a highly uniform cooling over the entire surface area. Typical cooler to input water thermal resistance for flow rate of 10 l/m are 4.3 K/kW (two coolers + 1 semiconductor) and 5.6 K/kW (three coolers + 2 semiconductors).

The high quality surface finish, typical flatness 20µm, makes the cooler ideal for use with Westcode's high performance Press-pack IGBTs (T1800EB45A & T2400EB45E). Additionally, the coolers are suitable for use with all large area power devices such as Thyristors and Rectifier Diodes, with contact electrodes from 90mm to 125mm diameter and clamping pressure up to 13×10^6 Pa. Typical applications for the coolers would be in Megawatt drives and high power rectifiers, such as chemical power supplies or trackside substations, as well as all applications in the utilities field.

The cooler is available in two versions; XW180GC34A without integral connecting bus bar and XW180GC34B with integral connecting bus bar. Limit dimensions of the cooler are 147mm x 142mm (262mm for the version with bus bar) x 34mm thick, water connection is 3/8 BSPP x 34mm Deep (minimum thread depth 14mm). Adapted versions with customised bus bar connections can be considered, please consult factory.

For data sheets please go to the Westcode website at www.westcode.com or please contact us at (email: WSL.sales@westcode.com) or telephone: +44 (0) 1249 444524 for quotation.

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