

PRESS RELEASE

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IXYS UK Westcode introduces new optimised higher current 3.6kV phase control thyristors



IXYS UK Westcode Ltd. introduces new 3.6kV pressure contact phase control thyristors with increased power density. The new improved design offers up to 52% increase in average current rating over the established designs, while retaining the overall package footprint.

The improvement in performance is achieved by maximising the die size and an improved package design. The new silicon die are alloyed to a metal disc and encapsulated in fully hermetic ceramic packages. Overall the new mechanical design presents reduced thermal resistance and the die has enhanced electrical performance.

The new 56mm die device has average current rating of 1725A and the package has a 50mm electrode contact diameter, with an industry standard overall diameter of 74mm. This new device will ultimately replace two older designs based on 53mm die; part designations N1314NC360 & N1478NC300, offering a respective increase in average current of 31% & 17%. The new thyristors remain mechanically compatible with the old designs and can be used in the same mechanical systems. This new device is also an alternative to the current 50mm die design offering the potential of 52% more current rating in the same mechanical footprint as long as the cooling and clamping systems are appropriately scaled to accommodate the larger die area.

This new device falls within the mid-range current rating of IXYS UK's product portfolio and offers the highest ever power in this package size and voltage class. The larger die size offers the best performance and value for money and continues the IXYS strategy to supply products with more power and less package. Higher currents in smaller packages allow our customers to optimise their designs to use less material and so save cost as well as reduce impact on the environment.

The new device is available in an industry standard 26mm thick package and two voltage grades. Designations are: N1725MC320 (V_{drm}/V_{rrm} 3200V), N1725MC360 (V_{drm}/V_{rrm} 3600V). A version of this device optimised for series operation in medium voltage applications will also be available, please consult IXYS UK for details

Typical applications include soft starters, DC drives, and all controlled rectifier applications requiring devices in this power rating.

For more information please go to the IXYS UK website at www.ixysuk.com or please contact us at (email: sales@ixysuk.com) or telephone: +44 (0)1249 444524 for quotation.

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