

# 38mm Ø Pole Face 4.5kV Asymmetric GTO Thyristor

May 2010 Issue 2

Features and Benefits

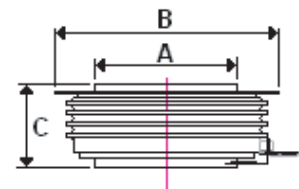
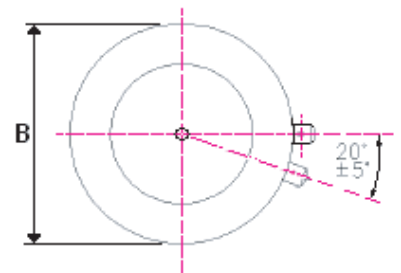
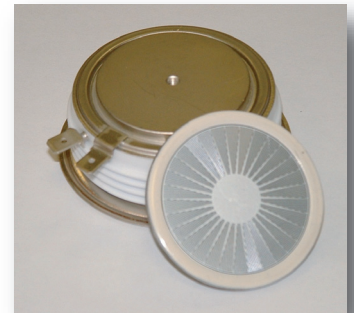
The new asymmetric blocking device has a nominal current rating of 1000A and is encapsulated in a 38mm pole face hermetic pressure contact package and has been developed using Westcode's unique long finger cathode pattern, which offers an unrivalled robust switching performance.

This new addition to IXYS extensive range of Westcode branded GTO thyristors has a controllable turn-off current of 1000A when used with a 2µF snubber capacitor and is suitable for applications presenting a DC link voltage up to 2.8kV.

The device is offered in two voltage grades:  
G1000QC400 with  $V_{DRM}=4000V$  and G1000QC450 with  $V_{DRM}=4500V$ .



Type		$V_{DRM}$ $V_{GK}=-2V$	$V_{RRM}$	$I_{TGM}$ @ $C_S$	Typ. Switching Times		$V_T$ $I_T=I_{TGM}$	Fig. No.	
Part No.	Old Part No.	V	V	A	$t_{gt}$ µs	$t_{gr}$ µs	V		
G1000NC450	N/A	4500	18	1000	2.0	4.5	14	4.0	C
G1000QC400	GX152QC400	4000	18	1000	1.0	3	13	4.0	B
G1000QC450	GX152QC450	4500	18	1000	1.0	3	13	4.0	B
GX185QC250	N/A	2500	18	1000	1.0				B
G2000VC250	WG20025SN	2500	18	2000	4.0	5.0	24	2.8	D
G2000VC450	WG20045SN	4500	18	2000	4.0	8.0	25	3.5	D
G3000TC250	WG30025SN	2500	18	3000	5.0	3.0	25	2.5	E
G3000TC450	WG30045SN	4500	18	3000	6.0	9.0	28	4.0	E
G3000TC600	WG30060SN	6000	18	3000	3.0	7.5	28	3.5	E
G4000EC450	WG40045SN	4500	18	4000	6.0	7.5	28	4.4	F



Outline Ref	A mm	B mm	C mm
A	30	50	16
B	38	60	26
C	47	75	28
D	63	93	26
E	75	108	26
F	85	120	26

## Applications

Applications for the new GTO thyristor are auxiliary converters in rail applications such as coach hotel facilities, as well as main drives in mass transport systems such as the tram or trolley bus. This versatile device is also suitable for other applications outside traction including all power conversion systems up to 500KW, with DC link voltages to 2.8kV.

The industry standard outline of this new device makes it a suitable substitute, in maintenance of existing equipment, for which the originally specified part is no longer available.



Certificate FM26085

Westcode Semiconductors Limited's BS EN ISO 9001 Quality System is registered by BSI.

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