

# Modular Stack Solutions **Westack**

MAY 2006 Issue 2

A standard assembly module provides the basic building block for the new Westack range of assemblies.

Assembly modules can either incorporate single or dual devices and allow for the building of:

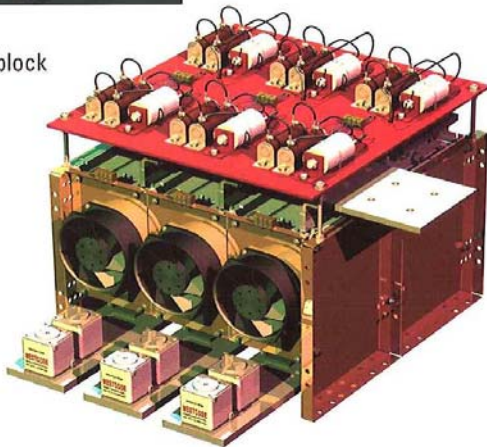
Single-Phase diode and thyristor bridges

Three-Phase diode and thyristor bridges

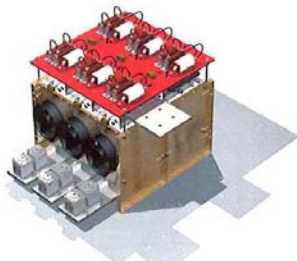
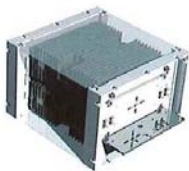
Six-Phase single way diode and thyristor assemblies

A custom built assembly can be provided when a standard solution is not suitable.

Fully dimensioned drawings are available upon request.



## Features and Benefits



**Cooling** - Each module section is provided with a low noise 115/230 V ac fan which is protected against overloading by an integral thermal cut-out.

**Surge Suppression and Fusing** - To provide reliable and safe operation, surge suppression (protecting the devices from voltage transients) and high speed fuses (to protect against short circuit) are available. Details available from Westcode.



Certificate No. FM 26085

All plastic components are UL recognised and meet the requirements of the European Union Directive 2002/95/EC covering the restricted use of certain hazardous substances in electrical and electronic equipment.

ISO 9000 2000 provides the standard against which all our products and services are measured.

## Modular Stack Solutions are available in six standard configurations, others by request.

Single phase diode bridges										Approx. total loss 2xI <sub>DC</sub> @ 25°C		
Assembly Part Number	I <sub>DC</sub> amps Air Forced 2.5m/s			I <sub>FSM</sub> amps	P <sub>t</sub> A/S	Dimensions mm			Mass Kgs	Device Type and Quantity	Heat Sink Type	
	T <sub>a</sub> 25°C	T <sub>a</sub> 35°C	T <sub>a</sub> 45°C			Fig.	W	H				D
SXB1375B	1375	1303	1230	19500	1.9x10 <sup>-6</sup>	1	382	325	405	20	W2058LC (4)	B(2x83, 1x180)
SXB2096B	2096	1987	1874	33000	5.45x10 <sup>-6</sup>	1	382	325	405	20	W3270NC (4)	B(2x83, 1x180)
SXB3442B	3442	3277	3109	53000	13.5x10 <sup>-6</sup>	2	382	593	405	40	W5696VC (4)	B(2x180)
SXB4264B	4264	4051	3835	72000	22.5x10 <sup>-6</sup>	2	382	593	405	40	W8405ZC (4)	B(2x180)

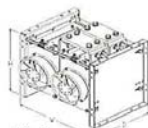


Fig 1

Three phase diode bridges										Approx. total loss 2.5xI <sub>DC</sub> @ 25°C		
Assembly Part Number	I <sub>DC</sub> amps Air Forced 2.5m/s			I <sub>FSM</sub> amps	P <sub>t</sub> A/S	Dimensions mm			Mass Kgs	Device Type and Quantity	Heat Sink Type	
	T <sub>a</sub> 25°C	T <sub>a</sub> 35°C	T <sub>a</sub> 45°C			Fig.	W	H				D
SXB1920G	1920	1822	1721	19500	1.9x10 <sup>-6</sup>	3	548	325	405	30	W2058LC (6)	B(2x83, 1x180)
SXB2393G	2393	2788	2634	33000	5.45x10 <sup>-6</sup>	3	548	325	405	30	W3270NC (6)	B(2x83, 1x180)
SXB4866G	4869	4640	4407	53000	13.5x10 <sup>-6</sup>	4	548	593	405	60	W5696VC (6)	B(2x180)
SXB5993G	5993	5701	5402	72000	22.5x10 <sup>-6</sup>	4	548	593	405	60	W8405ZC (6)	B(2x180)

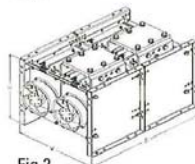


Fig 2

Six phase diode, single way with IPT										Approx. total loss 1.25xI <sub>DC</sub> @ 25°C		
Assembly Part Number	I <sub>DC</sub> amps Air Forced 2.5m/s			I <sub>FSM</sub> amps	P <sub>t</sub> A/S	Dimensions mm			Mass Kgs	Device Type and Quantity	Heat Sink Type	
	T <sub>a</sub> 25°C	T <sub>a</sub> 35°C	T <sub>a</sub> 45°C			Fig.	W	H				D
SXB3840HEX	3840	3644	3442	19500	1.9x10 <sup>-6</sup>	5	548	325	395	30	W2058LC (6)	B(2x83, 1x180)
SXB5977HEX	5977	5576	5268	33000	5.45x10 <sup>-6</sup>	5	548	325	395	30	W3270NC (6)	B(2x83, 1x180)
SXB9377HEX	9377	9281	8813	53000	13.5x10 <sup>-6</sup>	6	548	593	395	60	W5696VC (6)	B(2x180)
SXB11877HEX	11897	11401	10804	72000	22.5x10 <sup>-6</sup>	6	548	593	395	60	W8405ZC (6)	B(2x180)

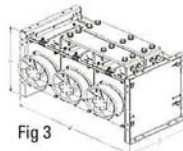


Fig 3

Six phase thyristor, single way with IPT										Approx. total loss 1.5xI <sub>DC</sub> @ 25°C		
Assembly Part Number	I <sub>DC</sub> amps Air Forced 2.5m/s			I <sub>FSM</sub> amps	P <sub>t</sub> A/S	Dimensions mm			Mass Kgs	Device Type and Quantity	Heat Sink Type	
	T <sub>a</sub> 25°C	T <sub>a</sub> 35°C	T <sub>a</sub> 45°C			Fig.	W	H				D
SXB2428HEXT	2428	2233	2030	15000	1.13x10 <sup>-6</sup>	5	548	325	395	30	N1265LS (6)	B(2x83, 1x180)
SXB3529HEXT	3529	3244	2949	29600	4.38x10 <sup>-6</sup>	5	548	325	395	30	N1802NS (6)	B(2x83, 1x180)
SXB4649HEXT	4649	4270	3878	37000	6.85x10 <sup>-6</sup>	6	548	593	395	60	N2500VC (6)	B(2x180)
SXB6240HEXT	6240	5714	5173	64000	20.5x10 <sup>-6</sup>	6	548	593	395	60	N4085ZC (6)	B(2x180)

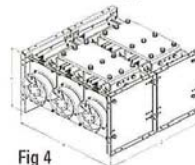


Fig 4

Single phase fully controlled bridges										Approx. total loss 2.5xI <sub>DC</sub> @ 25°C		
Assembly Part Number	I <sub>DC</sub> amps Air Forced 2.5m/s			I <sub>FSM</sub> amps	P <sub>t</sub> A/S	Dimensions mm			Mass Kgs	Device Type and Quantity	Heat Sink Type	
	T <sub>a</sub> 25°C	T <sub>a</sub> 35°C	T <sub>a</sub> 45°C			Fig.	W	H				D
SXB868FB	868	797	724	15000	1.13x10 <sup>-6</sup>	1	382	325	405	20	N1265LS (4)	B(2x83, 1x180)
SXB1265FB	1265	1161	1054	29600	4.38x10 <sup>-6</sup>	1	382	325	405	20	N1802NS (4)	B(2x83, 1x180)
SXB1864FB	1645	1508	1367	37000	6.85x10 <sup>-6</sup>	2	382	593	405	40	N2500VC (4)	B(2x180)
SXB2167FB	2167	1981	1790	64000	20.5x10 <sup>-6</sup>	2	382	593	405	40	N4085ZC (4)	B(2x180)

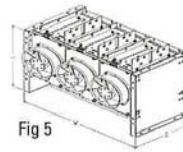


Fig 5

Three phase fully controlled bridges										Approx. total loss 3xI <sub>DC</sub> @ 25°C		
Assembly Part Number	I <sub>DC</sub> amps Air Forced 2.5m/s			I <sub>FSM</sub> amps	P <sub>t</sub> A/S	Dimensions mm			Mass Kgs	Device Type and Quantity	Heat Sink Type	
	T <sub>a</sub> 25°C	T <sub>a</sub> 35°C	T <sub>a</sub> 45°C			Fig.	W	H				D
SXB1214FG	1214	1116	1015	15000	1.13x10 <sup>-6</sup>	3	548	325	405	30	N1265LS (6)	B(2x83, 1x180)
SXB1764FG	1764	1622	1475	29600	4.38x10 <sup>-6</sup>	3	548	325	405	30	N1802NS (6)	B(2x83, 1x180)
SXB2324FG	2324	2135	1939	37000	6.85x10 <sup>-6</sup>	4	548	593	405	60	N2500VC (6)	B(2x180)
SXB3120FG	3120	2857	2586	64000	20.5x10 <sup>-6</sup>	4	548	593	405	60	N4085ZC (6)	B(2x180)

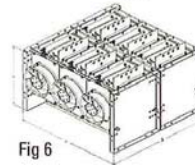


Fig 6

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