Green Power Solutions

New Flux Capacitor Modules

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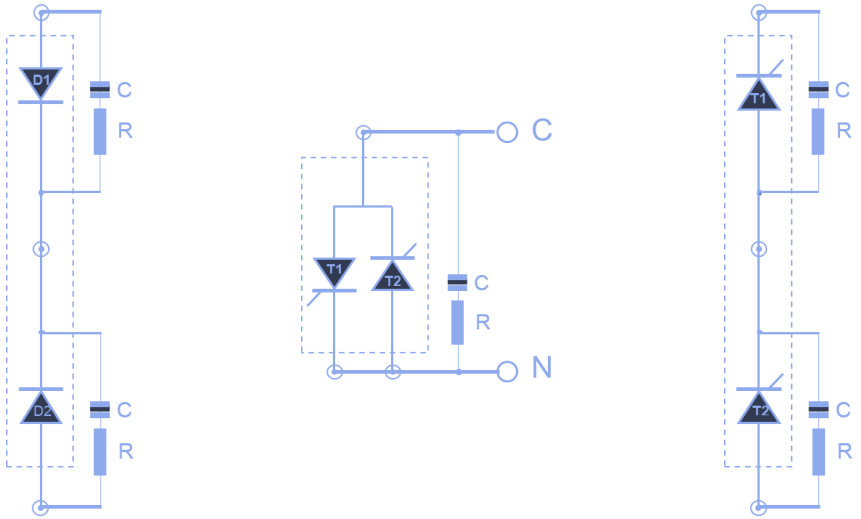
GPS Tech Seminar 2023

GEM F.C. Modules DUAL

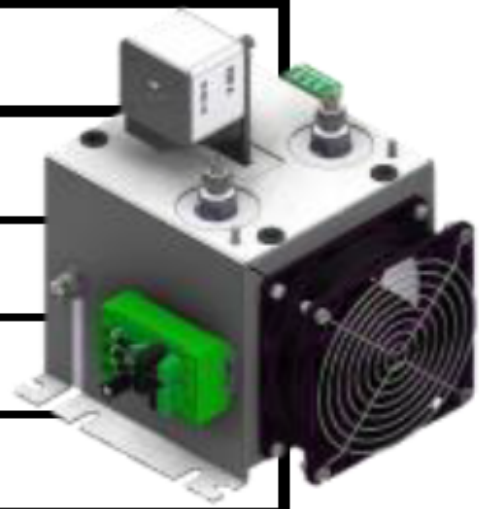
The simplest ones, embedding two devices



Dual F.C. Module – Key Features

1 GEM5 scr_013_015_017_020 GEM5_013,_020.pdf

	GEM_013	GEM_015	GEM_017	GEM_020	
V_{DRM}/V_{RRM} [V]	1600	400	1600	400	
Circuit Type	**Id [A]**	**Id [A]**	**Id [A]**	**Id [A]**	
AC switch	302	349	381	458	
Center tap	270	313	341	410	
Two pulse bridge	270	313	341	410	
Six pulse bridge	391	455	491	603	
Double star with I.P.	784	910	986	1204	



GEM F.C. Modules QUAD

Those embedding four devices (two AC-Switches ideal to make a regen bridge), also for significant output currents

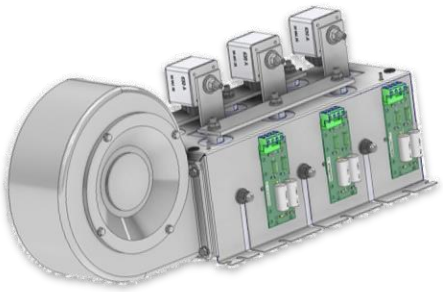
Quad F.C. Module - Key Features

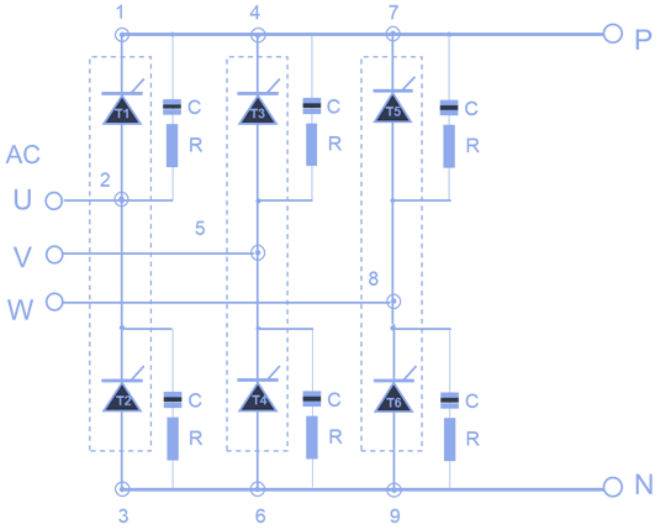
2 GEM FC G_014Q_022Q **G_014Q,_022Q.pdf**

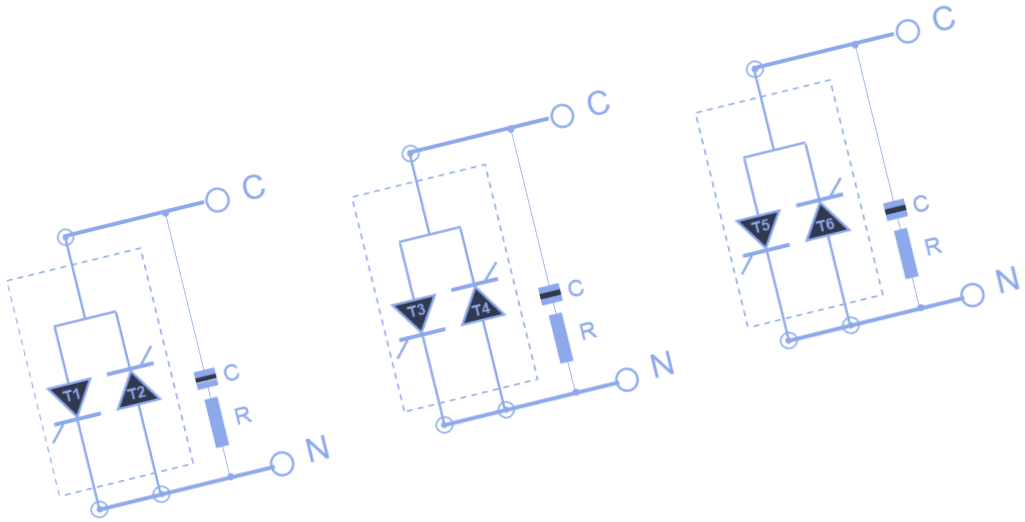
	G_016	G_014	G_022	G_018	G_017
V_{DRM}/V_{RRM} [V]	400	1600	400	1600	2200
Circuit Type	**Id [A]**	**Id [A]**	**Id [A]**	**Id [A]**	**Id [A]**
AC switch	371	321	497	409	383
Two pulse bridge	332	288	444	366	344

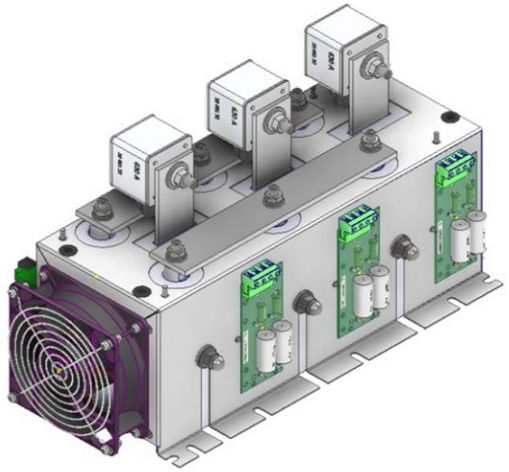
GEM F.C. Modules HEXA

The most popular ones, embedding six devices





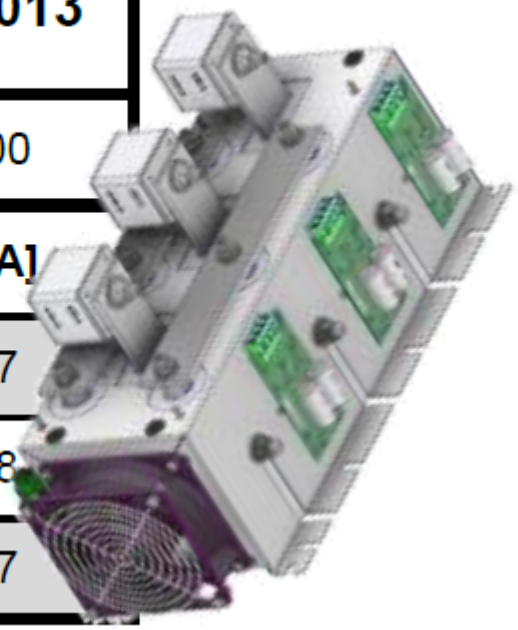




HEXA FC Modules – Key features

5 GEM FC HEXA A G11_G17 **GH_011,_17.pdf**

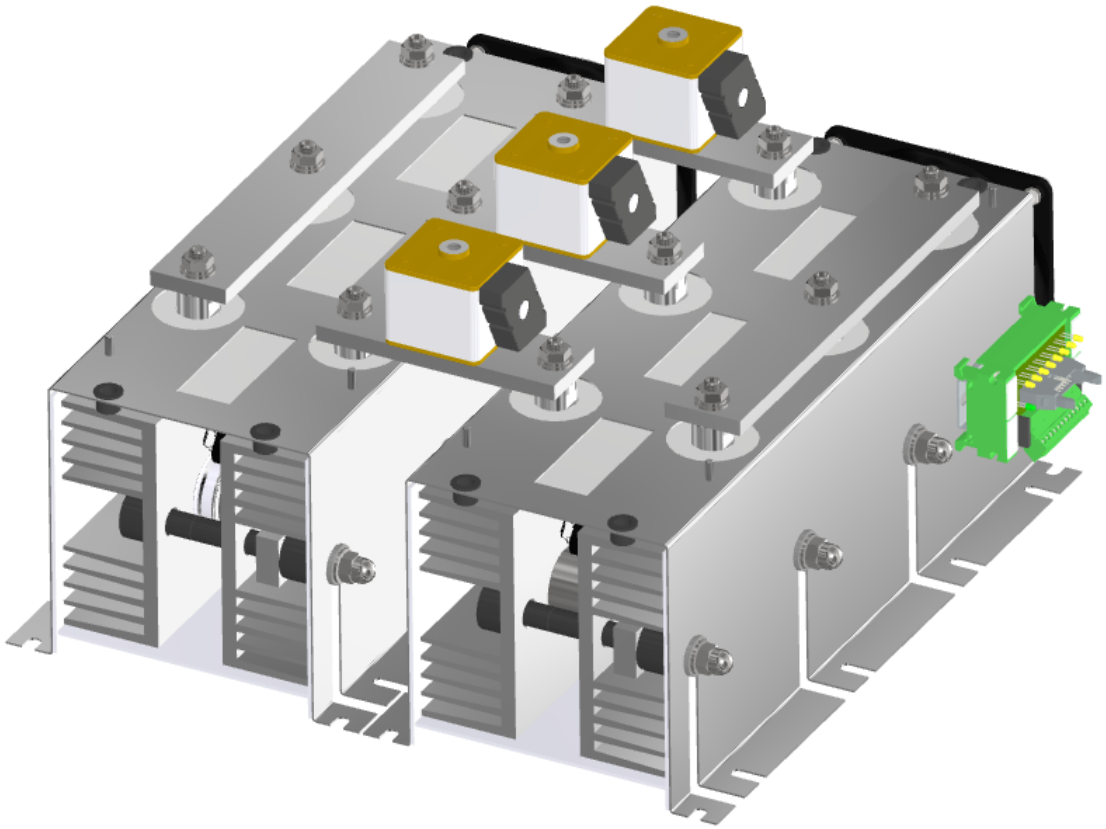
	GH_013	GH_011	GH_017	GH_014	GH_013
V_{DRM}/V_{RRM} [V]	400	1600	400	1600	2200
Circuit Type	**Id [A]**	**Id [A]**	**Id [A]**	**Id [A]**	**Id [A]**
Three Phase AC switch	306	264	387	326	307
Six pulse bridge	400	343	511	423	398
Double star with I.P. transf	800	686	1019	848	797



Dual Semi-Hexa F.C. Modules

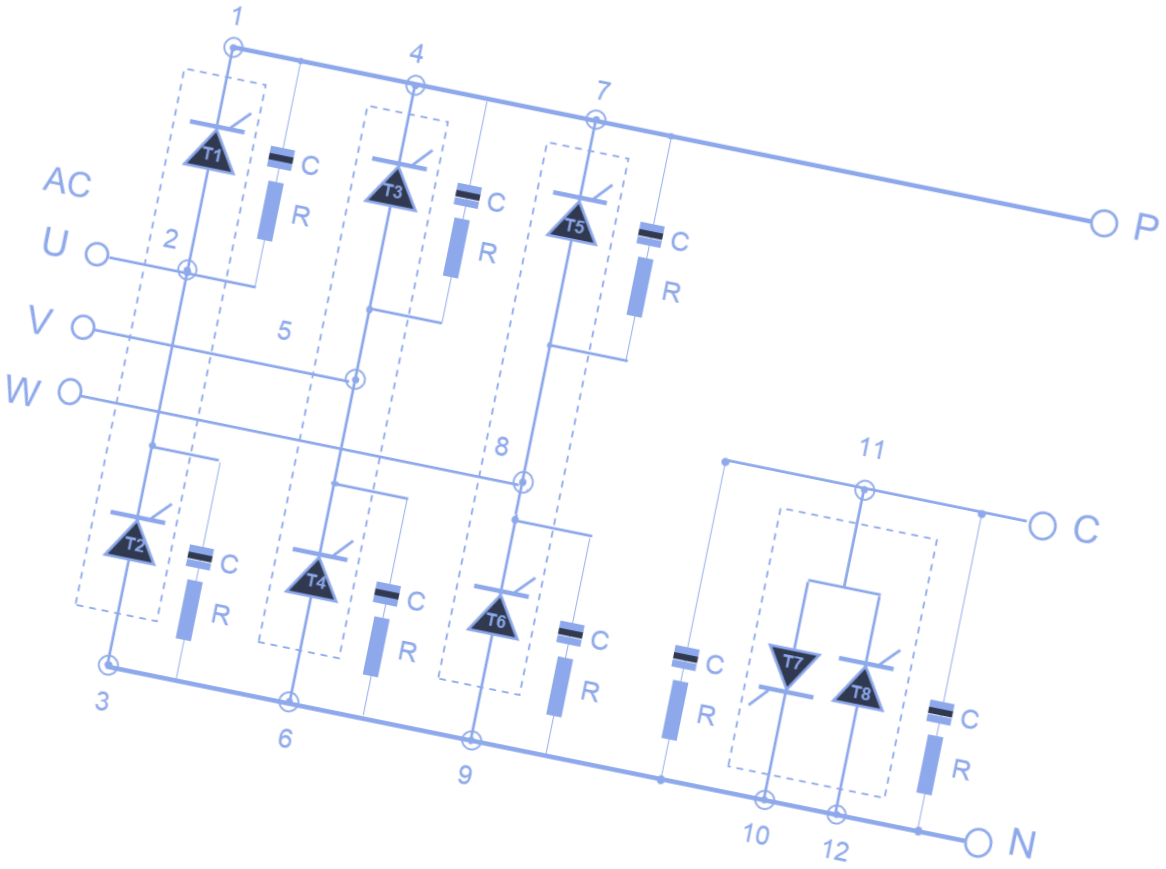
They are made still with six devices but in such a way to provide them twice the cooling, hence achieving much higher current ratings.

A three phase diode bridge has more than 1500 A output current @ 100 V_{RMS} line voltage, T_a = 40 °C, 1000 msl



GEM F.C. Modules OCTAL

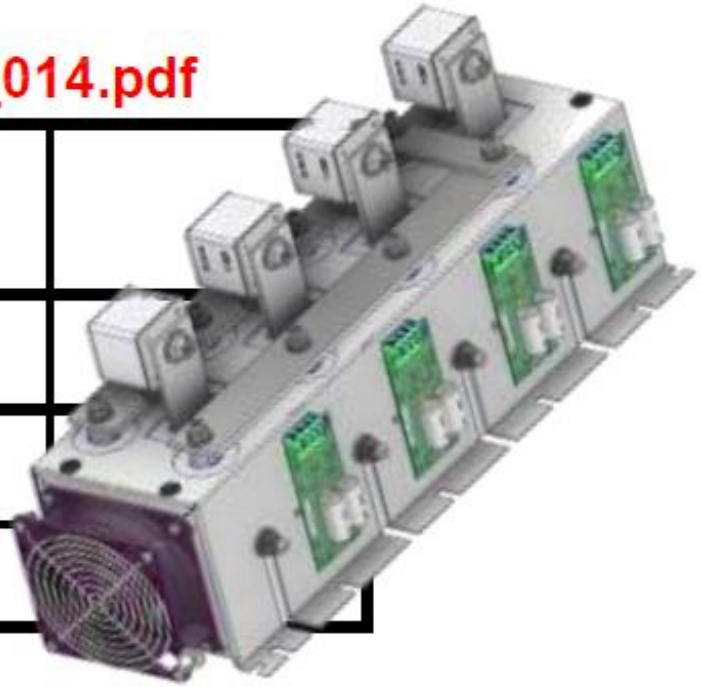
The most complex ones, embedding eight devices.
These modules are suitable for complete three-phase Field Power Supplies with AC crowbar, all in one module, a very rugged and compact design very appreciated by System Integrators.
Another convenient application is a 4-way AC-Switch.



OCTAL FC Modules – Key features

7 GEM FC OCTAL A SCR 011 014 **GO_011,_014.pdf**

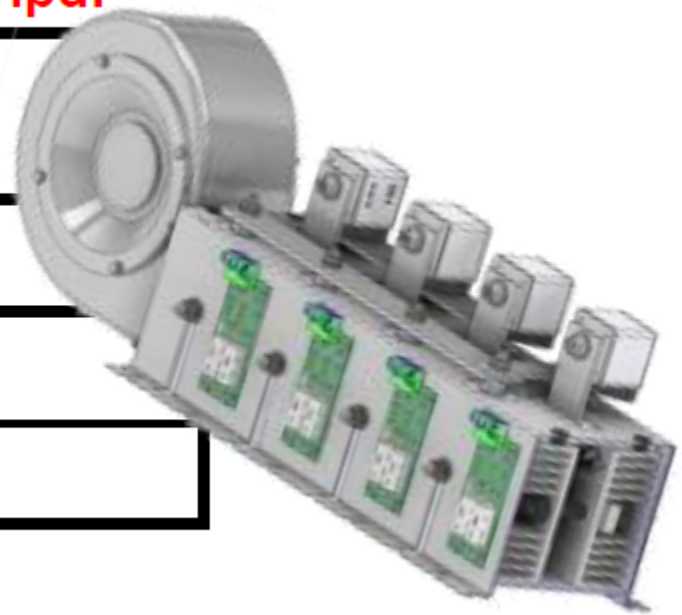
	G0_011	G0_014	G0_013		
V_{DRM}/V_{RRM} [V]	1600	1600	2200		
Circuit Type	**Id [A]**	**Id [A]**	**Id [A]**		
Six pulse bridge	343	423	398		



OCTAL FC Modules – Key features *(cont)*

8 GEM FC OCTAL C SCR 016 017 **GO_016,_017.pdf**

		GO_017	GO_016		
V_{DRM}/V_{RRM} [V]		1600	2200		
Circuit Type		**Id [A]**	**Id [A]**		
Six pulse bridge		511	480		



Thanks for your attention!

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