cynergy3 components™

series F18

25-100Amp • Diode, SCR/Diode Modules

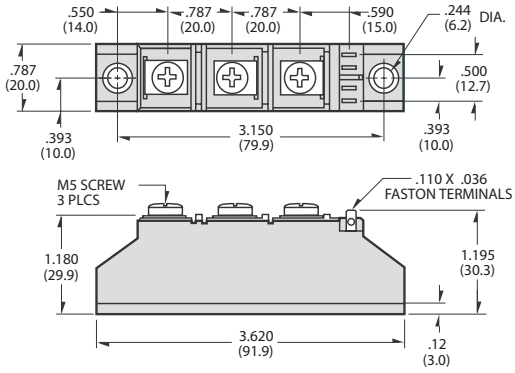


Modules come in an industry standard package, offering nine circuits that can be used singly or as power control building blocks. All models feature highly efficient thermal management for greatly extended cycle life and are UL recognized E72445.

- ***Standard Package and Circuits***
- ***Power Control Building Blocks***

Mechanical Dimensions

All dimensions are in inches (millimeters)



Electrical Specifications

		RATINGS				
		27	42	57	92	107
I_D	Maximum DC Output Current @ Tc = 85˚C (A)	25	40	55	90	105
V_F	Maximum Voltage Drop @ Amps Peak	1.55V@75A	1.4@120A	1.4V@165A	1.4V@270A	1.65@V300A
T_J	Operating Junction Temperature Range	-40˚C to +125˚C				
di/dt	Critical Rate of Rise of On-State Current @ TJ=125˚C (A/µs)	100				
dv/dt	Critical Rate of Rise of Off-State Voltage	500				
V_{RMS}	Repetitive Peak Reverse Voltage AC Line Input Voltage	400 (120Vac) 600 (240Vac) 1000 (380Vac) 1200 (480Vac) 1400 (530Vac) 1600 (600Vac)				
I_{TSM}	Maximum Non-Repetitive Surge Current (A) [$^1/_2$Cycle, 60Hz]	400	1000	1500	1950	2250
I^2T	Maximum I^2T for Fusing (A^2sec) [t=8.3ms]	670	4150	9350	15800	25000
I_{GT}	Maximum Required Gate Current to Trigger @ 25˚C (mA)	150				
V_{GT}	Maximum Required Gate Voltage to Trigger @ 25˚C (V)	3.0				
$P_{G(AV)}$	Average Gate Power	0.5W				
V_{GM}	Maximum Peak Gate Voltage (Reverse)	5.0V				
R_{OJC}	Maximum Thermal Resistance Junction to Ceramic Base per Chip	0.4	0.28	0.25	0.14	0.135
V_{ISOL}	Isolation Voltage	2500 V_{RMS}				

Mechanical Specifications

	Weight (Typical)	4.75 oz. (135g)
	Torque Required	Terminal Stud Screw : 30 inch lb Mounting Screw : 20 inch lb

ISO9001 CERTIFIED

Competitive part number cross-reference available at: www.cynergy3.com

Approvals

UL - E72445

USA

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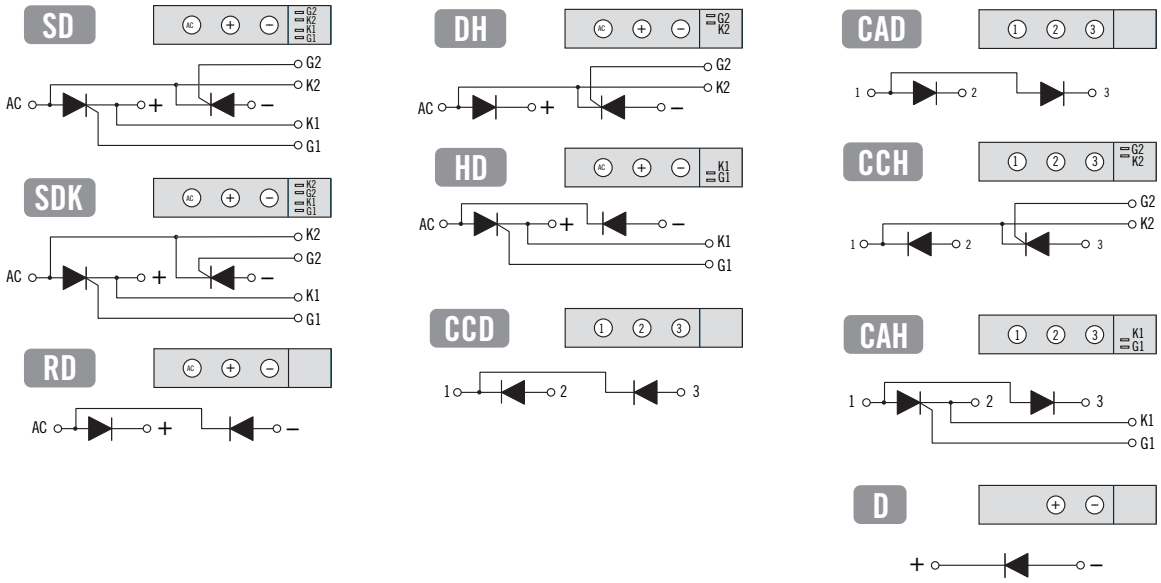
25-100Amp • Diode, SCR/Diode Modules



Part Number Indentification

Series	Current	Circuit Type	AC Line Voltage
F18	27 - 25 Amps	(see schematic	400 - 120 Vac
	42 - 40 Amps	diagrams)	600 - 240 Vac
	57 - 55 Amps	Example:SD	1000 - 380 Vac
	92 - 90 Amps		1200 - 480 Vac
	107 - 105 Amps		1400 - 530 Vac
			1600 - 600 Vac

Example: : F1892SD1200



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