

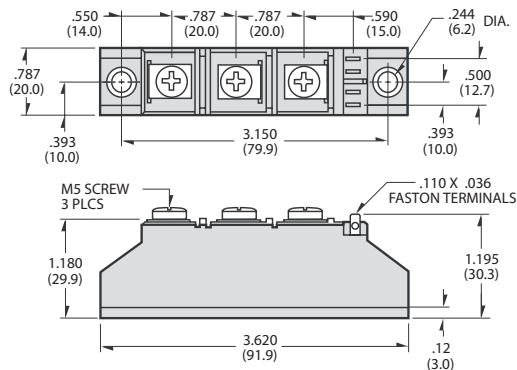


Modules come in an industry standard package, offering nine circuits that can be used singly or as power control building blocks. All models feature highly efficient thermal management for greatly extended cycle life and are UL recognized E72445.

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

Mechanical Dimensions

All dimensions are in inches (millimeters)



Electrical Specifications		27	42	RATINGS		
				57	92	107
I _D	Maximum DC Output Current @ T _c = 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 @ T _J =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 ² T	Maximum I ² T for Fusing (A ² sec) [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 _{ΘJC}	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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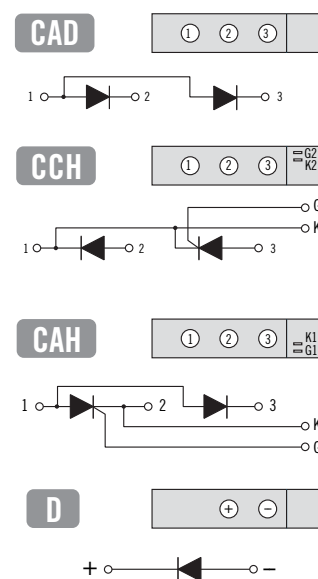
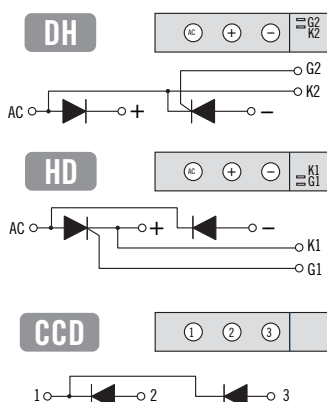
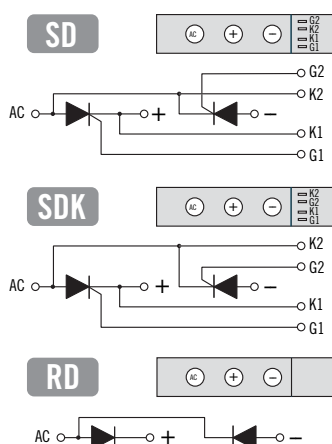
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Part Number Identification

Series	Current	Circuit Type	AC Line Voltage
F18	27 - 25 Amps	(see schematic diagrams)	400 - 120 Vac
	42 - 40 Amps		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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