

- High Thermal Efficiency
- Complete Power Control Circuits in a Single Package

These circuits provide complete power control in a single package, utilizing high thermal efficiency to assure long life and reliable performance. Twelve standard models provide 2500 Vrms isolation from all terminals to ceramic base and are UL recognized (file no. E72445).

Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

PART NUMBER IDENTIFICATION

Series Type EF-Case style	Current (Amps)			Circuit Type (see schematic diagrams) Example: 01	Voltage	Options F - Free Wheeling Diode (Circuits 1, 2, 16, 19 Only)
	1Ø	3Ø	AC SW.			
Example: EFD02CF	D -	50	70	55	B - 120 Vac	
	E -	75	100	85	C - 240 Vac	
	F -	100	135	110	E - 380 Vac	
	F -	100	135	110	F - 480 Vac	
	G -	125	170	140	G - 530 Vac	

ELECTRICAL SPECIFICATIONS

SYMBOL	SPECIFICATION	CURRENT CODE	D	E	F	G
I _D	Maximum DC Output Current (T _c = 85°C)		See Part Number Identification Above for Ratings of Single Phase, Three Phase and AC Switch Circuits			
V _F	Maximum Voltage Drop @ Amps Peak		1.7V @ 50A	1.85V @ 75A	1.4V @ 100A	1.55V @ 125A
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		100A/µs	100A/µs	100A/µs	100A/µs
dv/dt	Critical Rate of Rise of Off-State Voltage [V/µs]		500V/µs	500V/µs	500V/µs	500V/µs
V _{RRM}	Repetitive Peak Reverse Voltage (AC Line)			400 (120 Vac) 600 (240 Vac) 1000 (380 Vac) 1200 (480 Vac) 1400 (530 Vac)		
I _{TSM}	Maximum Non-Repetitive Surge Current (1/2 Cycle, 60Hz)		400A	600A	1500A	1950A
I ² T	Maximum I ² T for Fusing (t=8.3ms) [A ² sec]		670	1500	9340	15800
I _{GT}	Maximum Required Gate Current to Trigger @ 25°C		60mA	80mA	150mA	150mA
V _{GT}	Maximum Required Gate Voltage to Trigger @ 25°C		2.5V	3.0V	3.0V	3.0V
P _{G(AV)}	Average Gate Power		0.5W	0.5W	0.5W	0.5W
V _{GM}	Maximum Peak Gate Voltage (Reverse)		5.0V	5.0V	5.0V	5.0V
R _{θJC}	Maximum Thermal Resistance Junction to Ceramic Base per Chip		0.8°C/W	0.7°C/W	0.36°C/W	0.3°C/W
V _{ISOL}	Isolation Voltage		2500 V _{RMS}	2500 V _{RMS}	2500 V _{RMS}	2500 V _{RMS}

MECHANICAL SPECIFICATIONS

Weight: (typical)

7.0 oz. (198g)

APPROVALS

UL E72445

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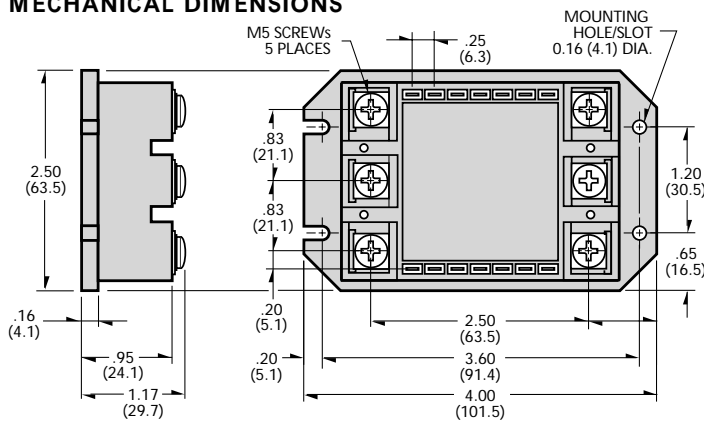
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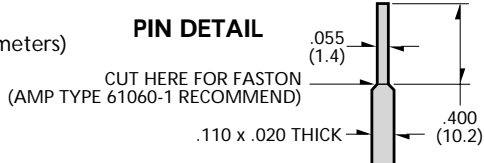
Example: EFD02CF

MECHANICAL DIMENSIONS

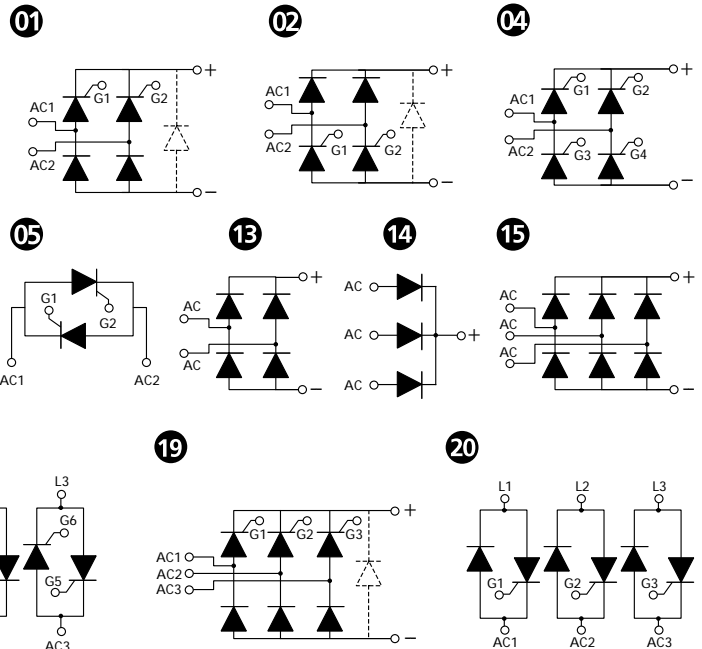


All dimensions are in inches (millimeters)

PIN DETAIL

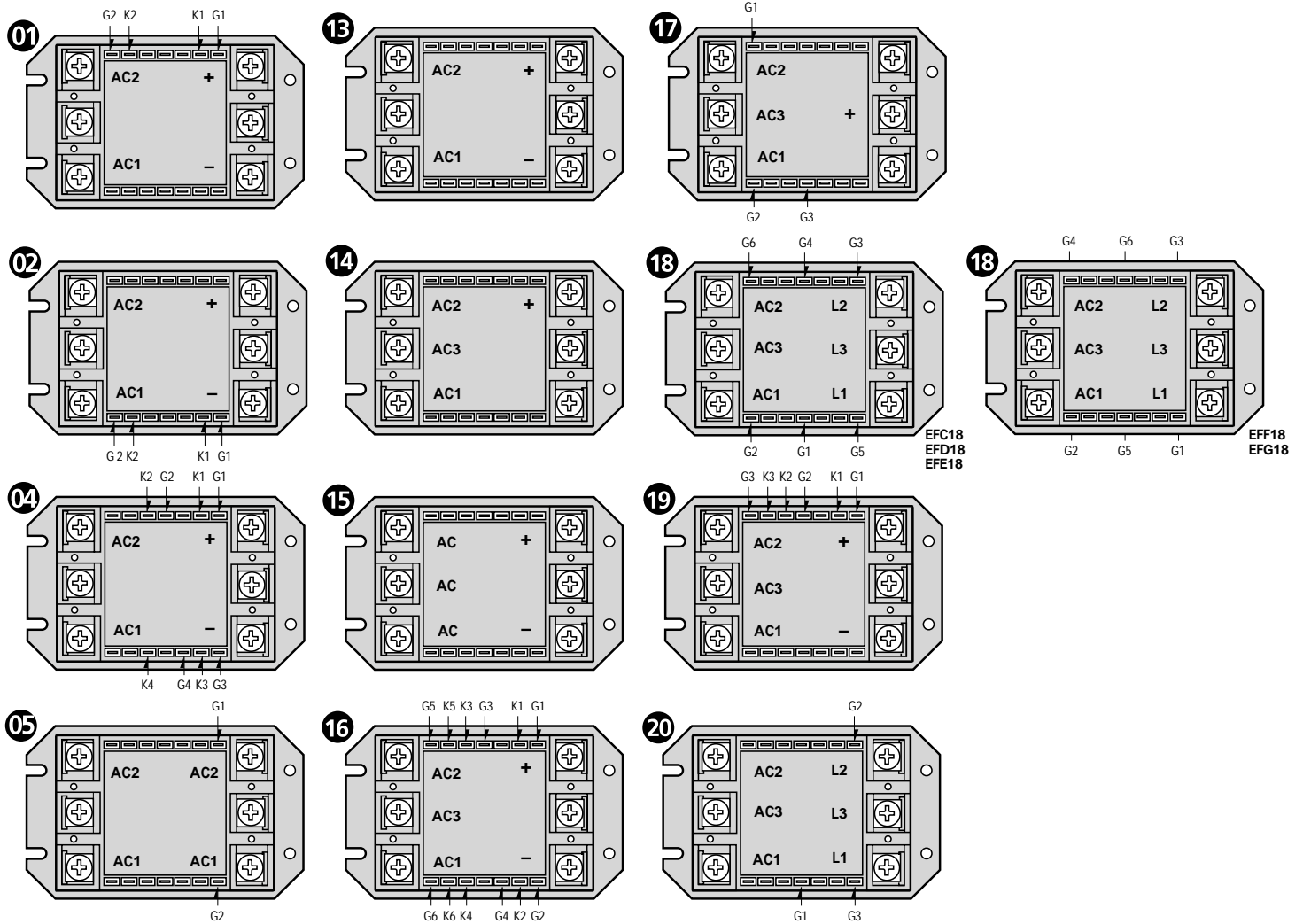


SERIES EF CIRCUITS



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TERMINAL ORIENTATION



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