



M50 SERIES

POWER MODULES



Features

- Over 40KW output Capability
- 8 Different Circuits to Choose from
- 50 and 100 A outputs
- UL Recognized E72445

ORDERING OPTIONS

M50 - **50** - **1** - **2** - **F** - **V**

Series	M50
Load Current	50 : 50 Amps 100 : 100 Amps
Circuit Type	1 2 3 4 5 6 7 8 (See schematic diagrams)
AC Line Voltage	1 : 120 VAC 2 : 240 VAC 3 : 280 VAC 2 : 380 VAC 3 : 480 VAC
Free Wheeling Diode	Blank : Not Included F : Included (Circuits 1 & 2 only)
External Suppressor	Blank : Not included V : Include (Circuits 1, 2, 3, 4, 6 & 7 only)

Required for valid part number
 For options only and not required for valid part number

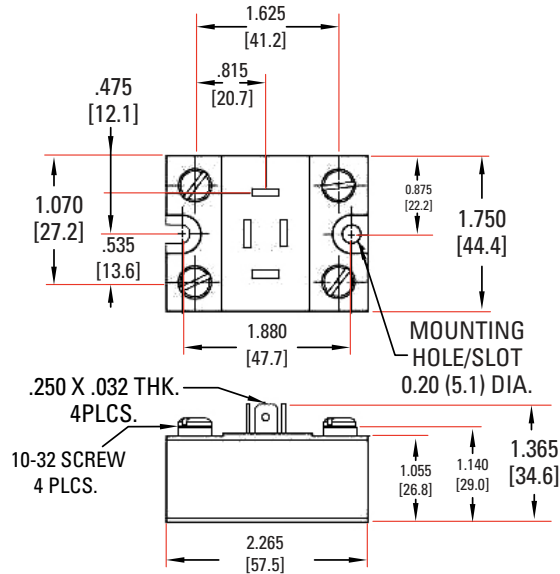
NOTE: Not all Combinations available

ELECTRICAL SPECIFICATIONS

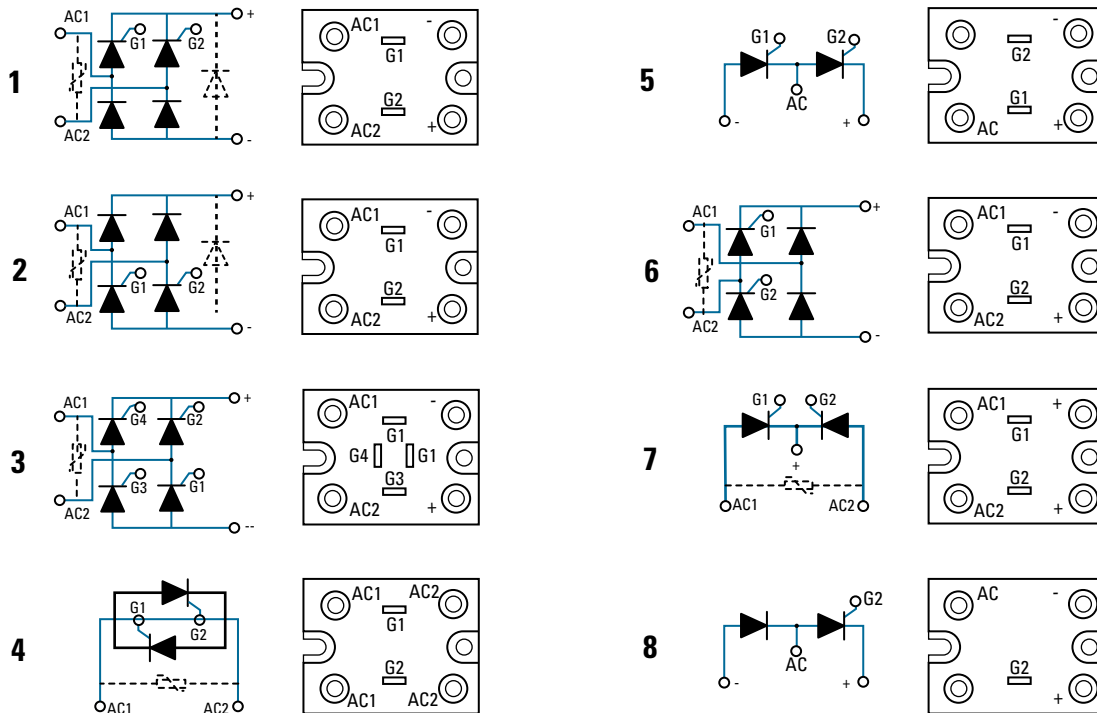
Description	Symbol	M5060	M50100
Maximum DC Output Current (T _c = 85°C)	I _D	60 A	100 A
Maximum Voltage Drop @ Amps Peak	V _F	1.35V @ 50A	1.2V @ 100 A
Operating Junction Temperature Range	T _J	-40 - 125°C	-40 - 125°C
Repetitive Peak Reverse Voltage (AC Line Nominal) [Vpk]	V _{RRMS}	400 (120 VAC)	
		600 (240 VAC)	
		800 (280 VAC)	
		1200 (480 VAC)	
		1400 (530 VAC)	
		1600 (600 VAC)	
Maximum Non-Repetitive Surge Current (1/2 Cycle, 60 Hz) [A]	I _{TSM}	800	1500
Maximum I ² t for Fusing (t=8.3ms)[A ² sec]	I ² T	2650	9350
Maximum Thermal Resistance, Junction to Ceramic Base per Chip [°C/W]	R _{Jc}	0.45°C/W	0.3°C/W
Insulation Voltage [Vrms]	V _{ISOL}	2500	
Weight (typical)		4.5 oz (158g)	

MECHANICAL SPECIFICATIONS

Tolerances: ±0.02 in / 0.5 mm
All dimensions are in: inches [millimeters]



CIRCUIT DIAGRAMS





 WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
 - Follow proper mounting instructions including torque values
 - Do not allow liquids or foreign objects to enter this product
- Failure to follow these instructions can result in serious injury, or equipment damage.**



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
 - Verify all connections and replace all covers before turning on power
- Failure to follow these instructions will result in death or serious injury**

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