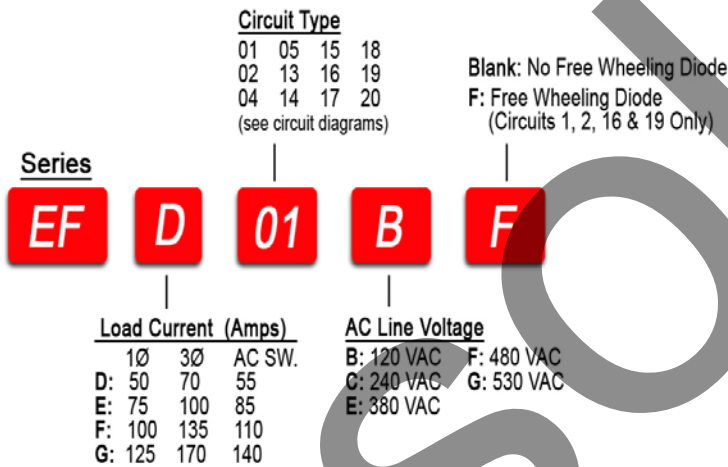


## EF Series



- High Thermal Efficiency
- Complete Power Control Circuits In a Single Package
- UL Recognized E72445

### AVAILABLE OPTIONS



### ELECTRICAL SPECIFICATIONS

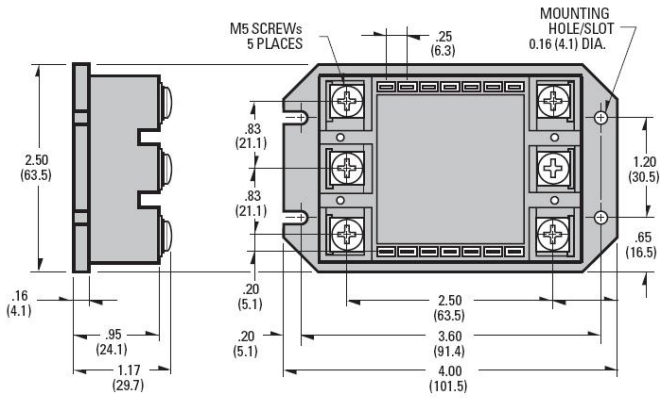
Description	Symbol	D	E	F	G
Maximum DC Output Current (T <sub>c</sub> = 85°C) (Single Phase Rating)	I <sub>D</sub>	50 A	75 A	100 A	125 A
Maximum Voltage Drop @ Amps Peak	V <sub>F</sub>	1.7V @ 50A	1.85V @ 75A	1.4V @ 100A	1.55V @ 125A
Operating Junction Temperature Range	T <sub>J</sub>	-40 - 125°C	-40 - 125°C	-40 - 125°C	-40 - 125°C
Critical Rate of Rise of On-State Current @ T <sub>J</sub> =125°C	di/dt	100A/μs	100A/μs	100A/μs	100A/μs
Critical Rate of Rise of Off-State Voltage [V/μs]	dv/dt	500V/μs	500V/μs	500V/μs	500V/μs
Repetitive Peak Reverse Voltage (AC Line Nominal) [Vpk]	V <sub>RRM</sub>	400 (120 VAC)	600 (240 VAC)	800 (280 VAC)	1200 (480 VAC)
		1400 (530 VAC)			
Maximum Non-Repetitive Surge Current (1/2 Cycle, 60 Hz) [A]	I <sub>TSM</sub>	400	600	1500	1950
Maximum I <sup>2</sup> T for Fusing (t=8.3ms) [A <sup>2</sup> sec]	I <sup>2</sup> T	670	1500	9340	15800
Minimum Required Gate Current to Trigger @ 25°C [mA]	I <sub>GT</sub>	60	80	150	150
Minimum Required Gate Voltage to Trigger @ 25°C [V]	V <sub>GT</sub>	2.5	3.0	3.0	3.0
Average Gate Power [W]	P <sub>G(AV)</sub>	0.5	0.5	0.5	0.5
Maximum Peak Reverse Gate Voltage [V]	V <sub>GM</sub>	5.0	5.0	5.0	5.0
Maximum Thermal Resistance, Junction to Ceramic Base per Chip	R <sub>JC</sub>	0.8°C/W	0.7°C/W	0.36°C/W	0.3°C/W
Isolation Voltage [Vrms]	V <sub>ISOL</sub>	2500	2500	2500	2500

**GENERAL SPECIFICATIONS**

**Description**

Weight (typical)	7.0 oz (198g)	7.0 oz (198g)	7.0 oz (198g)	7.0 oz (198g)
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**MECHANICAL SPECIFICATIONS**

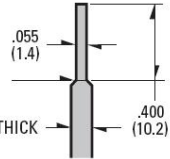


All dimensions are in inches (millimeters)

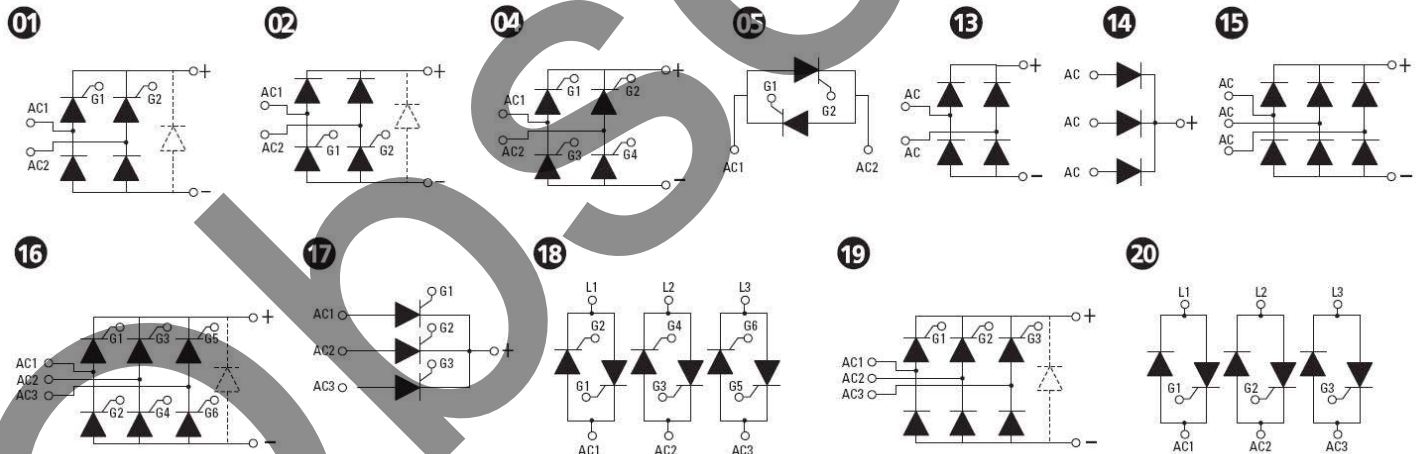
**PIN DETAIL**

CUT HERE FOR FASTON  
(AMP TYPE 61060-1 RECOMMEND)

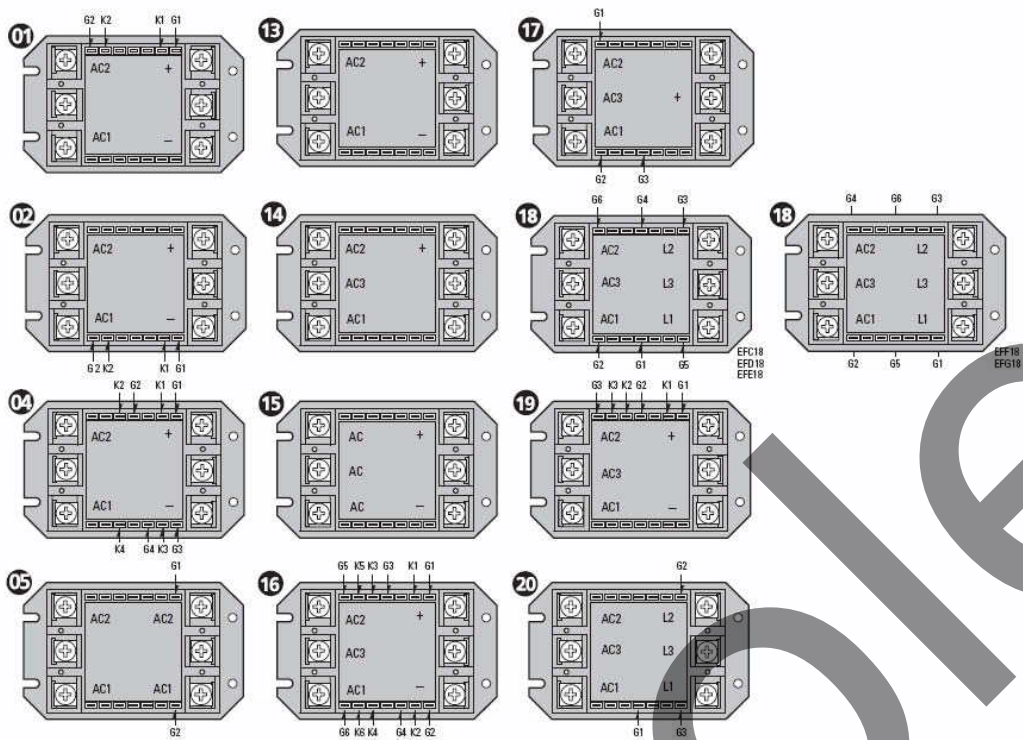
.110 x .020 THICK



**CIRCUIT DIAGRAMS**




**TERMINAL ORIENTATION**




**AGENCY APPROVALS**



Rev 012710

 <b>DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / PERIGO</b>					
<p><b>HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH.</b></p> <ul style="list-style-type: none"> <li>Disconnect all power before installing or working with this equipment.</li> <li>Verify all connections and replace all covers before turning on power.</li> </ul> <p><b>Failure to follow these instructions will result in death or serious injury.</b></p>	<p><b>RIESGO DE DESCARGA ELECTRICA O EXPLOSION.</b></p> <ul style="list-style-type: none"> <li>Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo.</li> <li>Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo.</li> </ul> <p><b>El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.</b></p>	<p><b>RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION</b></p> <ul style="list-style-type: none"> <li>Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil</li> <li>Vérifier tous connections, et remettre tous couverts en olace avant de mettre sous</li> </ul> <p><b>De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses sérieuses.</b></p>	<p><b>GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION.</b></p> <ul style="list-style-type: none"> <li>Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen</li> <li>Vor der Inbetriebnahme alle Anschlüsse überprüfen und alle Gehäuseteile montieren.</li> </ul> <p><b>Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.</b></p>	<p><b>RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE.</b></p> <ul style="list-style-type: none"> <li>Spenga tutta l'alimentazione e che fornisce questa apparecchiatura prima del lavorare a questa apparecchiatura</li> <li>Verificare tutti i collegamenti e sostituire tutte le coperture prima della rotazione sull'alimentazione</li> </ul> <p><b>L'omissione di seguire queste istruzioni provocherà la morte o di lesioni serie</b></p>	<p><b>RISCO DE DESCARGA ELÉTRICA OU EXPLOÇÃO</b></p> <ul style="list-style-type: none"> <li>Desconectar o equipamento de toda a energia antes de instalar ou trabalhar com este equipamento</li> <li>Verificar todas as conexões e recolocar todas as tampas antes de religar o equipamento</li> </ul> <p><b>O não cumprimento destas instruções pode levar a morte ou lesões sérias.</b></p>

 <b>WARNING / AVERTISSEMENT / WARNUNG / ADVERTENCIA / AVVERTENZA / AVISO</b>		
<p><b>RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE</b></p> <ul style="list-style-type: none"> <li>The product's side panels may be hot, allow the product to cool before touching.</li> <li>Follow proper mounting instructions including torque values.</li> <li>Do not allow liquids or foreign objects to enter this product.</li> </ul> <p><b>Failure to follow these instructions can result in serious injury, or equipment damage.</b></p>	<p><b>RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER</b></p> <ul style="list-style-type: none"> <li>Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher.</li> <li>Respecter les consignes de montage, et notamment les couples de serrage.</li> <li>Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit.</li> </ul> <p><b>Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.</b></p>	<p><b>GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG</b></p> <ul style="list-style-type: none"> <li>Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren.</li> <li>Beachten Sie die Montageanweisungen, Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein.</li> </ul> <p><b>Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.</b></p>
<p><b>RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD</b></p> <ul style="list-style-type: none"> <li>Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo.</li> <li>Respetar las instrucciones de montaje, y en particular los pares de apretado.</li> <li>No dejar que penetren líquidos o cuerpos extraños en el producto.</li> </ul> <p><b>Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.</b></p>	<p><b>RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO</b></p> <ul style="list-style-type: none"> <li>I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo.</li> <li>Seguire le istruzioni di montaggio corrette.</li> <li>Non far entrare liquidi o oggetti estranei in questo apparecchio.</li> </ul> <p><b>La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.</b></p>	<p><b>RISCO DE DANO MATERIAL E DE AQUECIMENTO</b></p> <ul style="list-style-type: none"> <li>Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar.</li> <li>Siga devidamente as instruções de montagem.</li> <li>Não permita a entrada de líquidos e de objectos estranhos no produto.</li> </ul> <p><b>A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.</b></p>