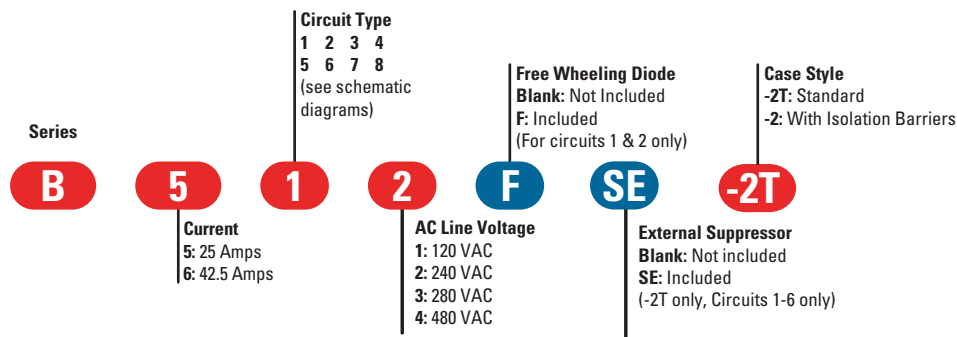




## B-2T, B-2 Series

- Eight Circuits to Choose from
- For AC or DC Variable Voltage Output Up to 15KW
- UL Recognized E72445

### AVAILABLE OPTIONS



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

Note: Not all combinations available

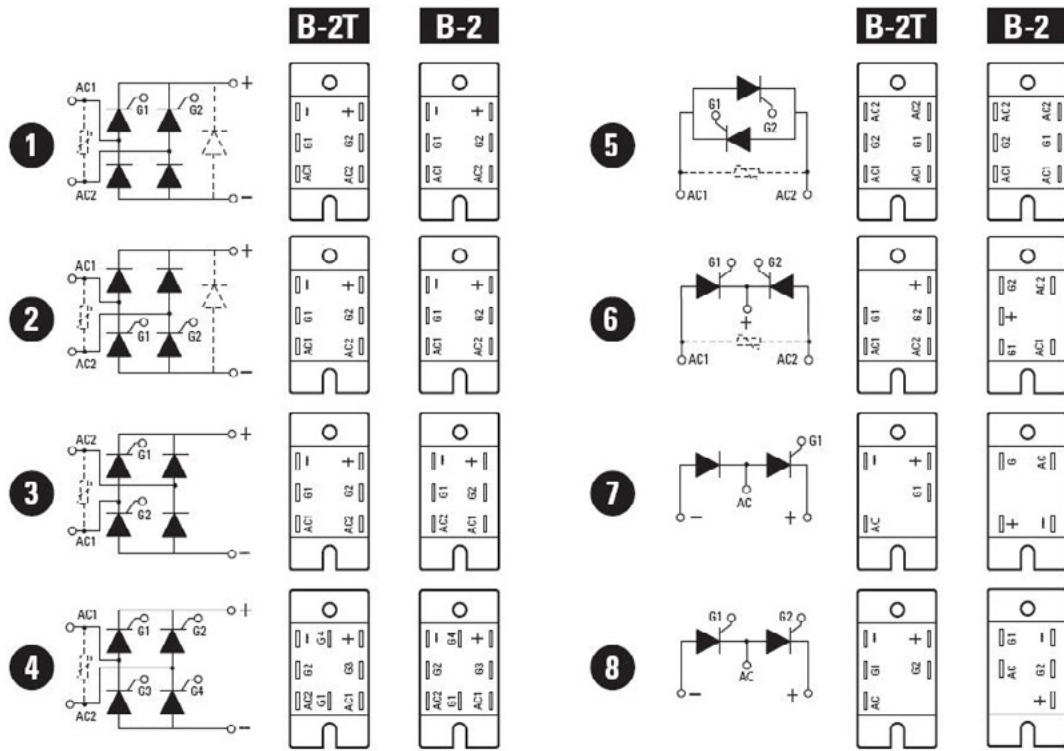
### ELECTRICAL SPECIFICATIONS

|  | Symbol             | B5                         | B6                         |
|--|--------------------|----------------------------|----------------------------|
| Maximum DC Output Current (Tc = 85°C)                              | I <sub>D</sub>     | 25A                        | 42.5A                      |
| Maximum Voltage Drop @ Amps Peak                                   | V <sub>F</sub>     | 1.65V @ 25A                | 1.65V @ 42.5A              |
| Operating Junction Temperature Range                               | T <sub>J</sub>     | -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                    |
| Critical Rate of Rise of Off-State Voltage [V/μs]                  | dv/dt              | 500V/μs                    | 500V/μs                    |
| AC Line Input Voltage (Repetitive Peak Reverse Voltage)            | V <sub>RMS</sub>   | 120 (400V <sub>RMS</sub> ) | 100 (400V <sub>RMS</sub> ) |
| AC Line Input Voltage (Repetitive Peak Reverse Voltage)            | V <sub>RMS</sub>   | 240 (400V <sub>RMS</sub> ) | 240 (400V <sub>RMS</sub> ) |
| AC Line Input Voltage (Repetitive Peak Reverse Voltage)            | V <sub>RMS</sub>   | 280 (400V <sub>RMS</sub> ) | 280 (400V <sub>RMS</sub> ) |
| AC Line Input Voltage (Repetitive Peak Reverse Voltage)            | V <sub>RMS</sub>   | 480 (400V <sub>RMS</sub> ) | 480 (400V <sub>RMS</sub> ) |
| Maximum Non-Repetitive Surge Current (1/2 Cycle, 60 Hz)            | I <sub>TSM</sub>   | 250A                       | 600A                       |
| Maximum I <sup>2</sup> T for Fusing (t=8.3ms) [A <sup>2</sup> sec] | I <sup>2</sup> T   | 260                        | 1500                       |
| Minimum Required Gate Current to Trigger @ 25°C                    | I <sub>GT</sub>    | 60mA                       | 80mA                       |
| Minimum Required Gate Voltage to Trigger @ 25°C                    | V <sub>GT</sub>    | 2.5V                       | 3.0V                       |
| Average Gate Power   | P <sub>(GAV)</sub> | 0.5W                       | 0.5W                       |
| Maximum Peak Reverse Gate Voltage                                  | V <sub>GM</sub>    | 5.0V                       | 5.0V                       |
| Maximum Thermal Resistance, Junction to Ceramic Base per Chip      | R <sub>JC</sub>    | 0.9°C/W                    | 0.7°C/W                    |
| Isolation Voltage  | V <sub>ISOL</sub>  | 2500 Vrms                  | 2500 Vrms                  |

### GENERAL SPECIFICATIONS

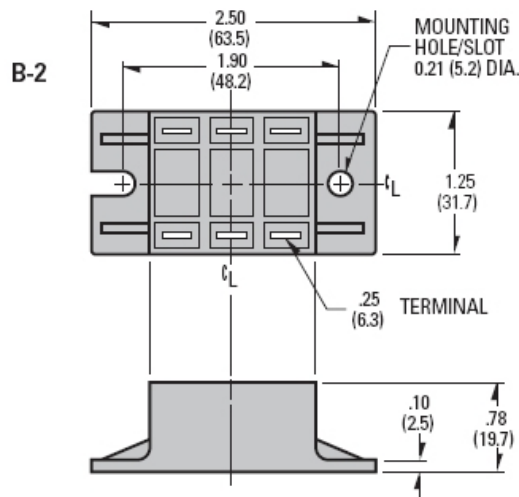
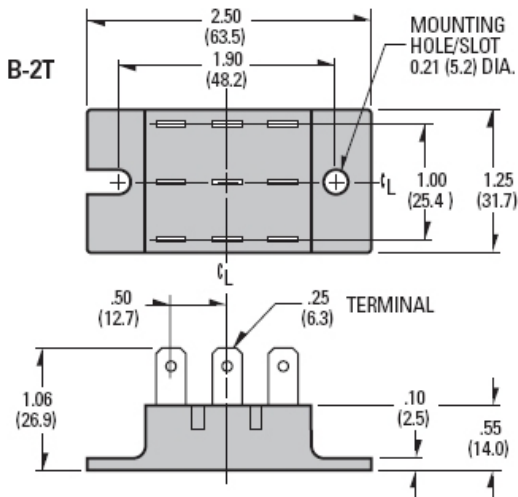
| Description      | Parameters     |
|------------------|----------------|
| Weight (typical) | 1.5 oz (42.5g) |

**CIRCUIT DIAGRAMS**



**MECHANICAL SPECIFICATIONS**

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



**Agency Approvals**



Rev. 121411

**! DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / 危險**

|  |  |  |  |  |   |
|--|--|--|--|--|---|
| <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 connexions, et remettre tous couverts en place avant de mettre sous</li> </ul> <p><b>De non-suivi de ces instructions provoquera la mort ou des lésions 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 dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen.</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 che fornisce questa apparecchiatura prima di lavorare a questa apparecchiatura</li> <li>Verificare tutti i collegamenti e sostituire tutte le coperture prima dell'accensione</li> </ul> <p><b>L'omissione di queste istruzioni provocherà la morte o lesioni serie</b></p> | <p><b>存在电击、爆炸或电弧闪烁危险</b></p> <ul style="list-style-type: none"> <li>在操作此设备之前请先关闭电源。</li> </ul> <p><b>若不遵守这些说明,可能会导致严重的人身伤害甚至死亡。</b></p> |
|--|--|--|--|--|---|

**! WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / 警告**

|   |  |   |
|---|--|---|
| <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 SOBRECIENTAMIENTO 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>材料损坏和高温外壳的危险性</b></p> <ul style="list-style-type: none"> <li>产品的一侧面板可能很热, 在其冷却前请不要触碰。</li> <li>遵照正确的安装说明, 包括扭矩值。</li> <li>请勿让液体及其他异物进入本产品。</li> </ul> <p><b>如不能正确执行这些操作说明, 极有可能造成严重人体伤害或者设备的损坏。</b></p>   |