

CW48 Series

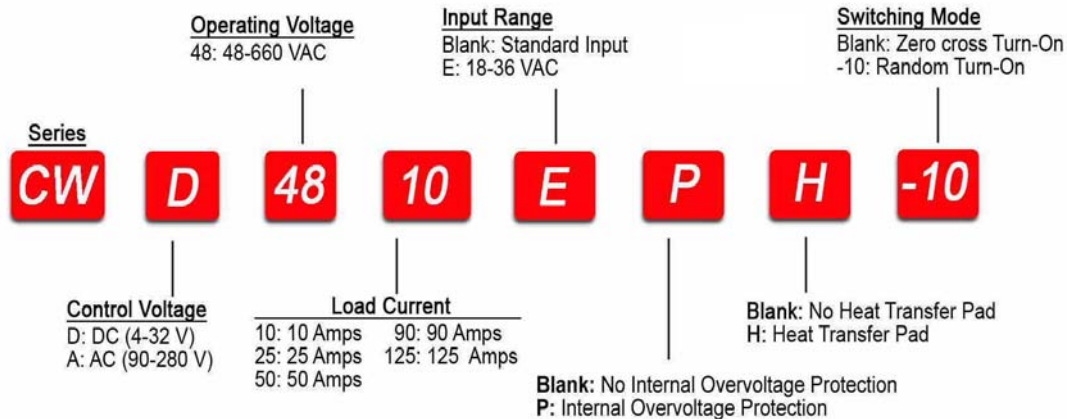


- Ratings from 10A to 125A @ 24-280 VAC and 48-660 VAC
- SCR output for heavy industrial loads
- EMC Compliant for reliable operation in harsh environments
- Removable IP 20 touch-safe cover
- DBC substrate for superior thermal performance
- LED input status indicator
- AC or DC input
- UL/CSA/VDE Approved, CE Compliant to EN60950-1

PRODUCT SELECTION

Description	10A	25A	50A	90A	125A
4-32 VDC	CWD4810	CWD4825	CWD4850	CWD4890	CWD48125
90-280 Vrms	CWA4810	CWA4825	CWA4850	CWA4890	CWA48125
18-36 Vrms	CWA4810E	CWA4825E	CWA4850E	CWA4890E	CWA48125E

AVAILABLE OPTIONS



OUTPUT SPECIFICATIONS (1)

Description	10A	25A	50A	90A	125A
Operating Voltage (47-63Hz) [Vrms] (8)	48-660	48-660	48-660	48-660	48-660
Transient Overvoltage [Vpk]	1200	1200	1200	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mA rms]	1.0	1.0	1.0	1.0	1.0
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] (2)	500	500	500	500	500
Maximum Load Current (3) [A rms]	10	25	50	90	125
Minimum Load Current [A rms]	0.15	0.15	0.15	0.25	0.25
Maximum Surge Current (16.6ms) [A pk]	400	600	850	1350	2000
Maximum Surge Current (20ms) [A pk]	380	570	810	1290	1900
Maximum On-State Voltage Drop @ Rated Current [V pk]	1.3	1.3	1.3	1.3	1.25
Thermal Resistance Junction to Case (Rjc) [°C/W]	0.35	0.35	0.2	0.14	0.13
Maximum I ² t for Fusing (8.3 msec) [A ² sec]	660	1500	3000	7560	16600
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5	0.5	0.5

INPUT SPECIFICATIONS (1)

Description	CWD	CWA	CWxxxxE
Control Voltage Range	4-32 VDC	90-280 Vrms	18-36 Vrms
Minimum Turn-On Voltage	4 VDC	90 Vrms	18 Vrms
Minimum Turn-Off Voltage	1.0 VDC	10 Vrms	2 Vrms
Typical Input Current	10 mA @ 12 VDC	6 mA @ 120 Vrms	24 mA @ 24 Vrms
Nominal Input Impedance	See note 5	14.2 K Ohms (6)	1.0 K Ohms
Maximum Turn-On Time [msec] (4)	1/2 Cycle	50	50
Maximum Turn-Off Time [msec]	1/2 Cycle	50	50

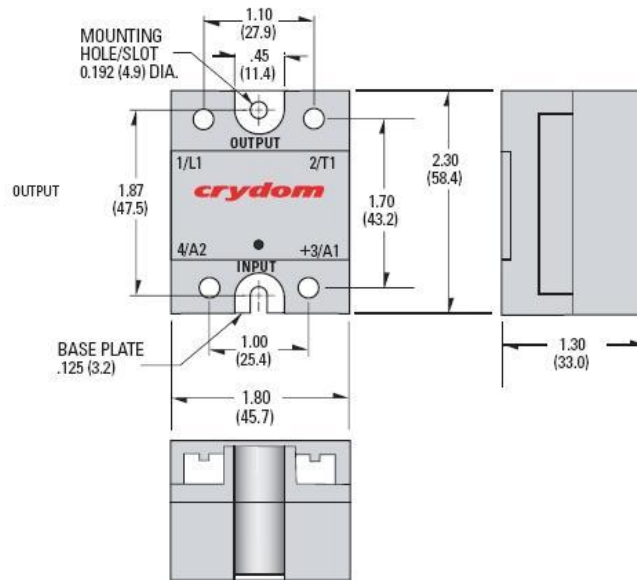
GENERAL SPECIFICATIONS

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 V DC)	10 ⁹ Ohm
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80 °C
Ambient Storage Temperature Range	-40 to 125 °C
Weight (typical)	3.0 oz (86.5 g)
Encapsulation	Thermally conductive Epoxy
Terminals	Screw Type, Finger Proof Output: 8-32, Combo Drive Input: 6-32, Combo Drive
Max. Torque	Output: 20 in lb (2.2Nm) Input: 10 in lb (1.1Nm)
Max. Wire Size	Output: 2 x AWG 8 (3.8mm) Input: 2 x AWG 12 (2.5mm)

GENERAL NOTES

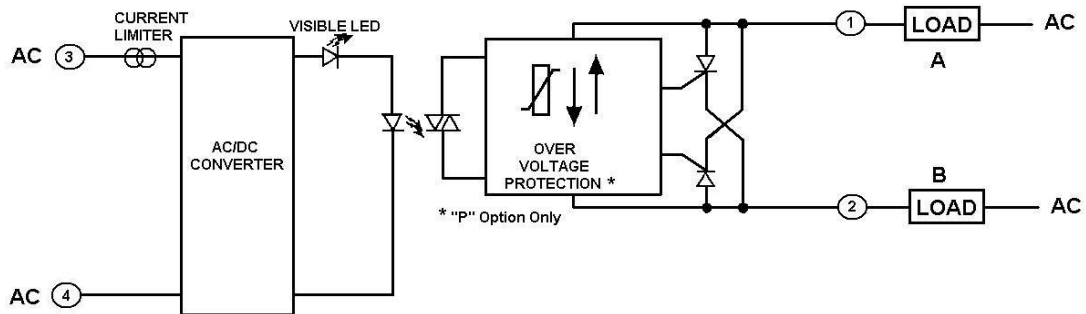
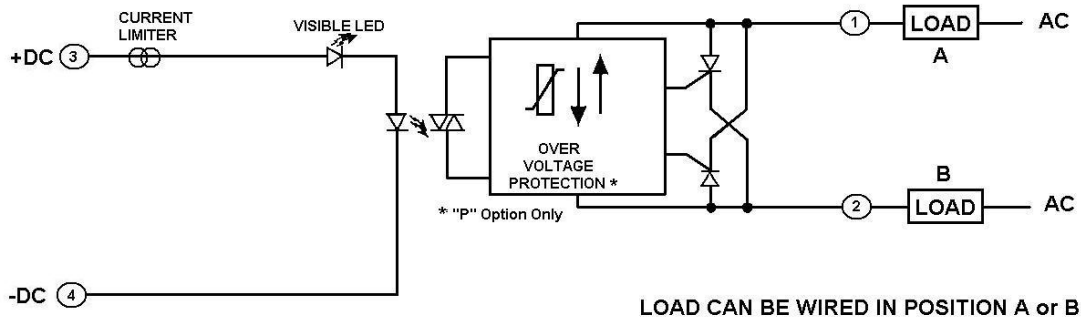
- 1) All parameters at 25°C unless otherwise specified.
- 2) Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
- 3) Heat sinking required, for derating curves see page 2.
- 4) Turn-on time for random turn-on version is 0.02 msec.
- 5) Input circuit incorporates active current limiter
- 6) 21.5K ohms for random turn-on version (-10 suffix)

MECHANICAL SPECIFICATIONS



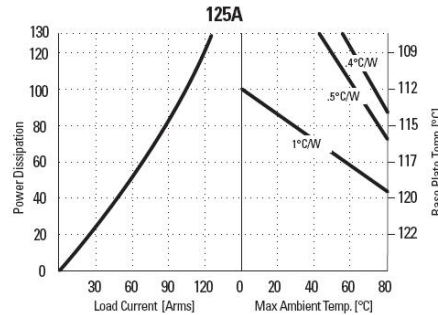
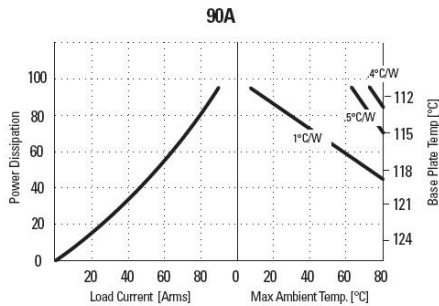
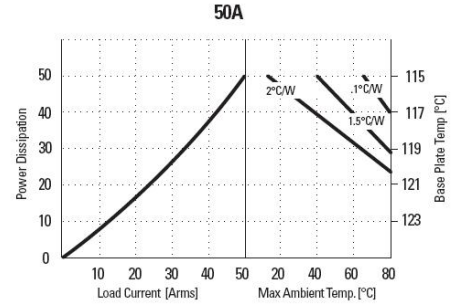
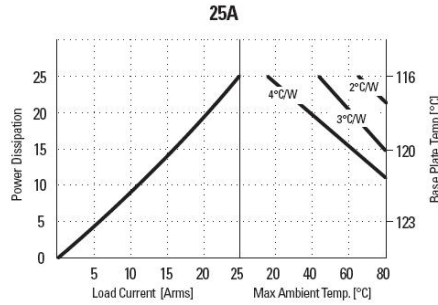
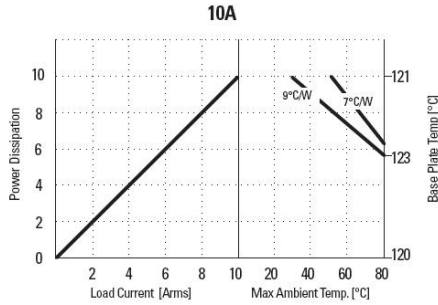
All dimensions are in inches (millimeters)

WIRING DIAGRAM



THERMAL DERATE INFORMATION

CURRENT DERATING CURVES




AGENCY APPROVALS


- EN60950 : Meets the requirements of sections 1.5: 1.7: 2.9: 2.10.5.3: 4.2: 4.5: 4.7:
- IEC 1000-4-2 : Electrostatic Discharge – Level 3 (with “P” option)
- IEC 1000-4-3 : Radiated Electromagnetic Noise – Level 3 (with “P” option)
- IEC 1000-4-4 : Electrically Fast Transients – Level 3 (with “P” option)
- IEC 1000-4-5 : Electrical Surges – Level 3 (with “P” option)
- IEC 1000-4-6 : Conducted Electromagnetic Noise – Level 3 (with “P” option)

UL E79183
CSA 1405925
VDE 40007242



Rev. 091710

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

 WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO		
<p>RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE</p> <ul style="list-style-type: none"> • 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. <p>Failure to follow these instructions can result in serious injury, or equipment damage.</p>	<p>RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER</p> <ul style="list-style-type: none"> • Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. • Respecter les consignes de montage, et notamment les couples de serrage. • Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. <p>Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.</p>	<p>GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG</p> <ul style="list-style-type: none"> • Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. • Beachten Sie die Montageanweisungen, • Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. <p>Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.</p>
<p>RIESGO DE DAÑOS MATERIALES Y DE SOBRECIENTAMIENTO DE LA UNIDAD</p> <ul style="list-style-type: none"> • Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. • Respetar las instrucciones de montaje, y en particular los pares de apretado. • No dejar que penetren líquidos o cuerpos extraños en el producto. <p>Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.</p>	<p>RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO</p> <ul style="list-style-type: none"> • I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. • Seguire le istruzioni di montaggio corrette. • Non far entrare liquidi o oggetti estranei in questo apparecchio. <p>La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.</p>	<p>RISCO DE DANO MATERIAL E DE AQUECIMENTO</p> <ul style="list-style-type: none"> • Os painéis laterais do produto podem estar quentes; dê tempo ao produto para arrefecer antes de lhe tocar. • Siga devidamente as instruções de montagem. • Não permita a entrada de líquidos e de objectos estranhos no produto. <p>A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.</p>