

# **DC60 Series**

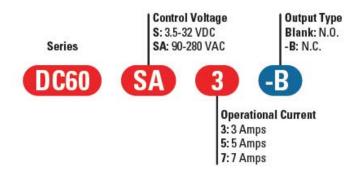


- Bi-polar transistor output
- Ratings from 3A to 7A @ 60 VDC
- AC or DC control
- UL and cUL Recognized (E116950)

### **PRODUCT SELECTION**

Control Voltage	3A	5A	7A
3.5-32 VDC	DC60S3	DC60S5	DC60S7
90-280 Vrms/VDC	DC60SA3	DC60SA5	DC60SA7

#### **AVAILABLE OPTIONS**



## **OUTPUT SPECIFICATIONS (1)**

Description	3A	5A	7A
Operating Voltage [VDC]	3-60	3-60	3-60
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.1	0.1	0.1
Maximum Load Current [ADC] (2)	3	5	7
Minimum Load Current [mA]	20	20	20
Maximum Surge Current [Adc] (10ms)	6	10	14
Maximum On-State Voltage Drop @ Rated Current [Vdc]	1.3	1.5	1.7
Thermal Resistance Junction to Case (Rjc) [°C/W]	2.2	2.2	2.2





# **INPUT SPECIFICATIONS (1)**

Description	DC60Sx	DC60SAx
Control Voltage Range	3.5-32 VDC	90-280 Vrms/VDC
Minimum Turn-On Voltage (3)	3.5 VDC	90 Vrms/VDC
Minimum Turn-Off Voltage (4)	1.0 VDC	10 Vrms/DC
Typical Input Current	2.2 mA @ 5 VDC	2 mA @ 120 V, 4 mA @ 240 V
Nominal Input Impedance	1500 Ohm	60K
Maximum Turn-On Time [msec] (5)	0.1	10
Maximum Turn-Off Time [msec] (6)	0.3	40

## **GENERAL SPECIFICATIONS**

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz) [Vrms]	4000
Minimum Insulation Resistance (@ 500 V DC)	10 <sup>9</sup> Ohm
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-30 to 80°C
Ambient Storage Temperature Range	-40 to 125 °C
Weight (typical)	3.0 oz (86.5g)
Encapsulation	Thermally conductive Epoxy
Terminals	Screws and Saddle Clamps Furnished, Unmounted
Recommended Terminal Screw Torque Range:	6-32 Screws - 10 in lbs. 8-32 and 10-32 Screws -20 in. lbs. (Screws dry without grase)

#### **GENERAL NOTES**

1) All parameters at 25°C unless otherwise specified.

2) Heat sinking required, see derating curves.

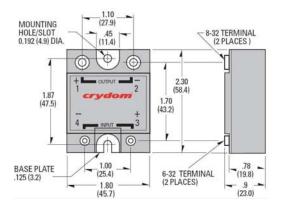
3) Minimum turn-on voltage for -B, DC control is 1VDC and AC control is 10Vrms/VDC.

4) Minimum turn-off voltage for –B, DC control is 3.5VDC and AC control is 90Vrms/VDC.

5) Turn-on time for -B version is 300  $\mu$ s

6) Turn-off time for -B version is 100 µs.

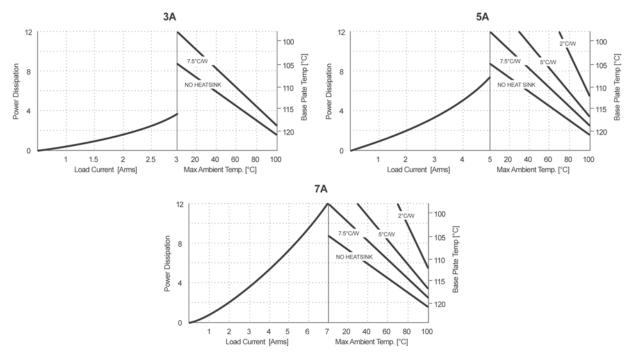
#### **MECHANICAL SPECIFICATIONS**



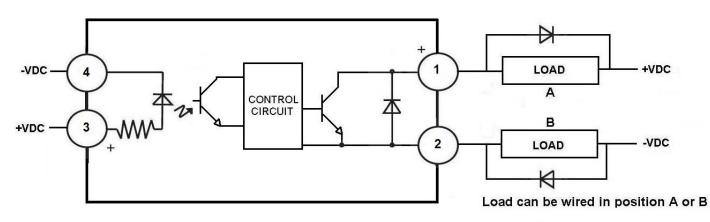




## THERMAL DERATE INFORMATION



#### WIRING DIAGRAM



DC Inductive loads must be diode suppressed to prevent damage to SSR



Rev. 080812

Panel Mount



AZARD OF LECTRIC HOCK, EL XXPLOSION, DR ARC FLASH. Disconnect all power before installing or working with this equipment. Verify all connections and replace all covers before	IESGO DE ESCARGA LECTRICA O XPLOSION. Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo.	RISQUE DE DESCHARGE ELECTRIQUE OU EXPLOSION • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous	GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION. • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor der Inbetriebnahme	ERICOLO / PERIC RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSI ONE. • Spenga tutta l'alimentazion e che fornisce questa apparecchiatu ra prima del lavorare a questa apparecchiatu ra • Verificare tutti i collegamenti	GO RISCO DE DESCARGA ELÉTTRICA OU EXPLOSÃO • Desconectar o equipamento de toda á energia antes de instalar ou trabalhar com este equipamen to • Verificar todas as conexões e recolocar todas
and replace all las conexiones		Vor der		as conexões e	

Derte Panel Mount

A WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / AVISO						
RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE	RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER	GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG				
<ul> <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>	<ul> <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>	<ul> <li>Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren.</li> <li>Beachten Sie die Montageanweisungen,</li> <li>Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein.</li> </ul>				
Failure to follow these instructions can result in serious injury, or equipment damage.	Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.	Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.				
RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD	RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO	RISCO DE DANO MATERIAL E DE AQUECIMENTO				
<ul> <li>Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfrie 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>	<ul> <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>	<ul> <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>				
Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.	La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.	A não observância destas precauções pode provocar a morte, ferimentos graves ou danos materiais.				



crydom



### **ANNEX - ENVIROMENTAL INFORMATION**

#### The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

	Toxic or hazardous Substance and Elements					
Part Name	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	х	0	0	0	0	0
Solder	Х	0	0	0	0	0

#### 此附件所标示的包括电子信息产品污染图标的环保信息 符合中华人民共和国电子行业标准 SJ/T11364 - 2006, 电子信息产品污染控制标识要求



2011	有毒有害物质或元素					
部件 名称	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	x	0	0	0	о	0
焊接点	X	0	0	0	0	0



# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Crydom:

<u>DC60SA5</u> <u>DC60SA3</u> <u>DC60S3</u> <u>DC60S5</u> <u>DC60S5</u> <u>DC60S7</u> <u>DC60SA5-B</u> <u>DC60SA3-B</u> <u>DC60S5-B</u> <u>DC60SA7-B</u> <u>DC60S7-B</u> <u>DC60S7-B</u> <u>DC60S7-B</u> <u>DC60SA7-B</u> <u>DC60S7-B</u> <u>DC60</u>