

**Solid State Relays & Contactors** 



The Global Expert in Solid State Switching Technology



#### **About us**

Crydom, a brand of Custom Sensors & Technologies (CST) and **global expert in Solid State Switching Technology**, has a distinguished record of providing high quality, world class Solid State Relay and Control Products for a variety of heating, lighting and motion control applications. Crydom products, coupled with **unparalleled technical support, timely delivery and competitive pricing**, provide Crydom's clients with the innovative products and support necessary to succeed in today's competitive and fast paced global markets.

Crydom's extensive selection of standard off-the-shelf products is constantly being updated and expanded through its continuous improvement and aggressive new product development programs. Utilizing state of the art designs, materials and technology, Crydom offers a wide range of AC and DC output SSRs in industry standard Panel Mount, PCB Mount and DIN Rail packages, all **meeting global safety and standards agency requirements** such as CE, RoHS, UL, IEC, etc.

Bolstered by four decades of Solid State Relay operations experience, Crydom specializes **adapted and fully custom-designed SSR products** for nearly any application where unique specifications and optimized performance are critical for success.

Crydom's modern purpose-built **100,000** square foot manufacturing facility houses all aspects of its ISO certified operation including Design and Development Engineering, Manufacturing Operations and Quality Assurance, Customer Service, Finance, Marketing and General Management, permitting close coordination of all aspects of Crydom's activities. Applications Engineering and Sales support are both performed in the field to provide Crydom's Customers with the unparalleled technical and commercial support.

To learn more about Crydom Solid State Switching technology and products visit **www.crydom.com** or contact your authorized Crydom Distributor or Crydom Customer Service Representative today.

www.crydom.com

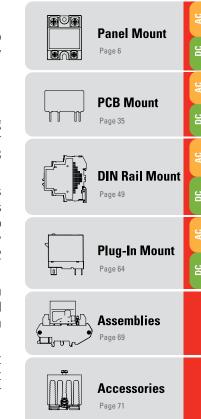
#### **About this catalog...**

Products included in this catalog are only part of the Crydom offer of Solid State Relays and Contactors. To facilitate the use of this catalog, products have been categorized into 6 product groups mainly defined by mounting type.

The following conditions are applicable to product families where specifically noted:

- All dimensions in drawings are in inches [millimeters] and are for reference only.
- B Dimensional drawings shown are for illustrative purposes only. They do not represent the complete variety of products within each series. For complete dimensional drawings for a particular Crydom product visit the CAD Drawings section in the Crydom website.
- C Part Number Nomenclature is color coded as follows:
  - Required for valid part number
  - For options only and not required for valid part number
- Not all part number combinations are available. Contact Crydom Sales Support for information on the availability of a specific part number.
- E Safety agency approvals for SSR/Heat Sink Assemblies may vary depending of selected SSR. Heat sinks do not require safety agency approval.
- F The standard Crydom SSR/Heat Sink Assemblies

- are either DIN Rail or Panel Mounted depending upon model selected and are available with either one, two or three pre-installed single, dual or 3 phase SSR.
- G Installing a CN Series SSR in a socket that does not have matching input/output specifications may result in non-operation or damage to either the SSR, socket or both. See socket-relay compatibility table available in CN Series SSR datasheet.
- III In addition to the possible combinations shown in the part number nomenclature, any standard Crydom PCB Mount SIP type SSR with similar pin centers can be offered as an assembly.
- Listed agency approvals may not apply to all part numbers available within a series. To consult agency approvals for a specific part number contact Crydom Technical Support.
- Required external heat sink for all ratings.





#### **Applications**

Although there are literally thousands of individual uses for Solid State Relays and Contactors, most can be categorized into the following applications:

#### **Heating Control**

This encompasses the largest segment of solid state relay customers. Applications include, but are not limited to: professional food equipment, plastic molding/extrusion machinery, HVAC&R and soldering equipment.

**Benefits:** Temperature accuracy, long life, no maintenance, safe product, easy to interface. Suitable for heater, fan, blower and valve control.

#### **Lighting Control**

These applications are usually broken down into three categories: theatrical, warehouse and commercial. Many of the products used in this segment are designed for the specific application.

**Benefits:** Dimming, silent operation, fast switching, long life, no maintenance, safe product, easy to interface, reduced parts count.

#### **Motion Control**

Includes elevators, lifts, hoists, exercise equipment, conveyor systems, solar, fans, solenoid and valve control.

**Benefits:** Endurance, shock & vibration resistance, Soft Start, reversing, no arcing, fast switching, long life, no maintenance, easy to interface, reduced parts count.

For technical assistance in selecting the Crydom product best suited for your application contact the nearest Crydom Distributor, Representative, local Crydom sales office or contact Crydom Technical Support.

### Solid State Relays versus Solid State Contactors

Crydom has been well known for over 40 years as a supplier of Solid State Relays (SSRs). However, Crydom also designs, manufacturers and markets Solid State Contactors (SSCs). What is the difference between SSRs and SSCs?

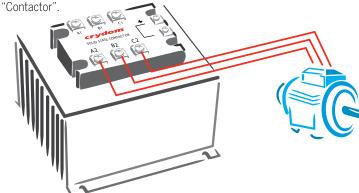
Remarkably, **there is very little actual difference**. They use similar power semiconductors and control circuits, and in some cases, even the same housings. SSRs, being considered as components, are applied in a large variety of applications and uses. SSCs, are generally applied in 3 phase AC heater and motor control applications although the SSCs themselves can be used successfully in almost any load control application. **Why then are they viewed and applied differently?** 

There are two main reasons: **Tradition** and **Ratings**.

**Tradition** is that for most AC power control applications utilizing 3 phase AC power and some DC applications, traditional mechanical contactors are employed. (Note: mechanical contactors rated to switch AC loads are quite different from those rated for DC loads of similar currents due to the arcing and contact degradation associated with making and breaking a DC circuit). Therefore when the need arises to use solid state technology in these type applications rather than EMRs, engineers immediately think of Solid State "Contactors", not Solid State "Relays". So they are disposed to consider SSCs rather than SSRs despite the fact that **SSRs can perform exactly the same switching function as a <b>Contactor**.

Ratings of contactors whether Solid State or Mechanical always include allowed motor load ratings and allowed resistive load ratings. The reason for this is again tradition in that for most mechanical contactors, the switching capabilities and life expectancy vary significantly for each type of load. Further, motor control requires consideration of such aspects as Locked Rotor Rating, Full Load Current Ratings and Horse Power Rating, while resistive load ratings must account for significant inrush current that also degrades mechanical contacts. SSRs and SSCs don't suffer the same type degradation due to load characteristics as mechanical contacts do and therefore the motor and resistive load ratings are not as widely different. However the one significant differentiator is that to be considered a contactor, the SSR or SSC must be evaluated to and carry ratings appropriate for motor control.

So in summary, the major technical difference between an SSR and SSC has to do with the mandatory motor ratings required to be defined as a  $^{\circ}$ 



# **Panel Mount**

Crydom Panel Mount Solid State Relays and Contactors are designed to easily mount on panels or heat sinks for applications which require **single**, **dual or 3 phase output ratings** in the range of **5 to 125 Amps at 24 to 660 VAC** or **1 to 100 Amps at 1 to 1000 VDC**. Available inputs include 24 to 280 VAC, 3 to 32 VDC or analog control depending upon model.

Offered in several configurations including three industry standard size and mounting styles, Crydom Panel Mount SSRs and Contactors provide both an easy means to mechanically secure them in equipment and provide a reliable thermal path to dissipate thermal energy. Models and options include screw termination, quick connections, optional protective covers, input indicator LEDs and thermal interface pads, as well as heat sinks and SSR/Heat Sink Assemblies.

See the product pages for a summary of available ratings, features and Safety Agency approvals. Visit the SSR Accessories and Assemblies sections of the catalog or the Crydom website for additional information on Crydom SSRs, Contactors and available accessories for Panel Mount SSRs. Contactors and Assemblies.



	<mark>utput</mark> Series	Description	5	10	12	15	18	20	25	ng Ai 40 tate	50		90	110	125
7	Series 1	280 V							<b> </b>			<b>.</b>			
8	HA/HD	530 V													
9	Series H1	660 V													
10	CW	HD 660 V													
11	CSW	HD 280 V													
12	CL	Econ 280 V													
13	EL	Mini 280 V													
14	EZ	Low Pro 660 V										D. I.			
15	MCBC	Burst Ctrl					= Cc	ontro 	I 50   ■	lid St	tate	Kela	ys ■ I ■		_
16	MCPC	Phase Ctrl													
17	MCTC	Temp Ctrl													
18	MCS	Soft Start/Stop													
19	PCV	V in Phase Ctrl													
20	LPCV	Linear Ph Ctrl													
21	RPC	R in Phase Ctrl													
22	SMR-6	Monitoring					Γ								
23	Evolution Duals	Screw Term						solia 	Sta	te Du	iai k	elays			_
24	Series 1 Duals	Quick Connect									_				
	OCTICS 1 Duais	Quick Conflict					_ \$	i Solid	Sta	te Co	ontac	ctors	· -		
25	53TP	3 Phase													
26	53RV	Reversing													
DC O	utput								Rati	ng A	mps				
Page	Series	Description			3	5	7		12	20 tate	25		60	80	100
27	DC60	1-60 V						- 30 	iiu S	late	Reid	ys			_
28	DC	1-500 V													
29	1-DC	1-400 V													
30	D06D	Econ 1 - 60 V													
31	EL	Mini 1 - 100 V													
32	SSC	1 - 1000 V													
33	LVD	Disconnect													
34	DP	Reversing						50110	Sta	te Co	ontac	tors			_

#### THE CE WALL













**Series 1 • 10-125 Amps** 



- Crydom's Signature family of Solid State Relays
- Ratings from 10 to 125 Amps @ 24-280 VAC and from 12 to 90 Amps @ 80-530 VAC
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Flexible 3-32 VDC, 18-36 VAC or 90-280 VAC Control Voltage
- "Ultra-low" input current draw (2-4 mAmps DC typical)
- Includes standard output R-C Snubber
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- Elective Internal TVS ("P" suffix) eliminates the need for external Overvoltage Protection
- A pre-attached Thermal Pad can be ordered to eliminate the need for thermal grease using the "H" suffix
- Optional Normally Closed output ("-B" suffix option)
- UL 508 overload endurance rated











(Not available with -10 option)



Compatible

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(12 & 24 suffix only)



**Control Voltage** 

AxxxxF: 18-36 VAC

A: 90-280 VAC

D: 3-32 VDC















Overvoltage Protection

(12 & 24 suffix only)

Blank: Not Included

P: Included





Blank: Not Included

Thermal Pad

H: Included





**Output Type** 

-B: Normally Closed





#### **Rated Load Current**

10: 10 Amps (12 & 24 suffix only)

25: 25 Amps **40**: 40 Amps

**50**: 50 Amps

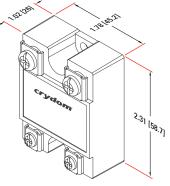
**75**: 75 Amps 90: 90 Amps

110: 110 Amps (24 suffix only) 125: 125 Amps (24 suffix only)

Termination (12 & 24 suffix only) Blank: Screw F: Quick Connect (Up to 50 Amps only)

**Input Status LED** (12 & 24 suffix only) Blank: Not Included G: Included

Switching Type Blank: Zero Voltage Turn-On -10: Random Turn-On



#### HA/HD Series • 12-125 Amps















- Solid State Relay with ratings from 12 to 125 Amps @ 48-660 VAC
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Flexible 3-32 VDC, 18-36 VAC or 90-280 VAC Control Voltage "Ultra-low" input current draw (2-4 mAmps DC typical)
- R-C Snubber network for additional dv/dt attenuation (for HA48/HD48 models only)
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- Elective Internal TVS ("P" suffix) eliminates the need for external Overvoltage Protection
- A pre-attached Thermal Pad can be ordered to eliminate the need for thermal grease using the "H" suffix

Notes: A B C





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Series









60: 48-660 VAC

Voltage



**50**: 50 Amps

90: 90 Amps

**125**: 125 Amps



75: 75 Amps (48 suffix only)

110: 110 Amps (48 suffix only)













P: Included

Overvoltage Protection

Blank: Not Included









Operating **Rated Load Current** Termination **Input Status LED** Blank: Not Included 12: 12 Amps (48 suffix only) Blank: Screw 48: 48-530 VAC 25: 25 Amps F: Quick Connect G: Included

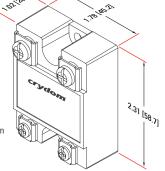
(Up to 50 Amps models)

Thermal Pad

H: Included

Blank: Not Included

Switching Type Blank: Zero Voltage Turn-On -10: Random Turn-On



#### **Series H1 • 25-125 Amps**















- Solid State Relay with ratings from 25 to 125 Amps @ 48-660 VAC
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications Flexible 4-32 VDC Control Voltage
- · Low output off-state leakage current
- · Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- Elective Internal TVS ("P" suffix) eliminates the need for external Overvoltage Protection
- A pre-attached Thermal Pad can be ordered to eliminate the need for thermal grease using the "H" suffix
- IJI 508 overload endurance rated

Notes: A B













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#### **Transient Overvoltage**

2D: 1200 Vpk (with Snubber) 2WD: 1200 Vpk (without Snubber) 6WD: 1600 Vpk (without Snubber)

#### Rated Load Current 25: 25 Amps **50**: 50 Amps

**75**: 75 Amps 90: 90 Amps

125: 125 Amps (2D & 2WD suffixes only)

**Overvoltage Protection** 

(2D & 2WD suffixes only) Blank: Not Included P: Included

#### Thermal Pad

Blank: Not Included H: Included

Series





















#### Operating Voltage

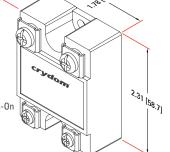
48: 48-530 VAC (2D suffix only) 48-660 VAC 60: 48-660 VAC



F: Quick Connect (Up to 50 Amps models)

**Input Status LED** Blank: Not Included G: Included

Switching Type Blank: Zero Voltage Turn-On -10: Random Turn-On



(2WD suffix only) (6WD suffix only)



#### CW Series • 10-125 Amps

















- Heavy duty Solid State Relay with ratings from 10 to 125 Amps @ 12-280 VAC or 48-660 VAC
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- EMC compliant (LEVEL 3) for reliable operation in harsh electrical environments
- Flexible 3-32 VDC, 18-36 VAC or 90-280 VAC Control Voltage
- · LED indicator for easy identification of control status
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- IP20 "touch safe" Cover provides additional user protection
- Elective Internal TVS ("P" suffix) eliminates the need for external Overvoltage Protection
- A pre-attached Thermal Pad can be ordered to eliminate the need for thermal grease using the "H" suffix
- UL 508 overload endurance rated

Notes: A B C D J K











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Series

D: 4-32 VDC A: 90-280 VAC AxxxxE: 18-36 VAC

**Control Voltage** 



















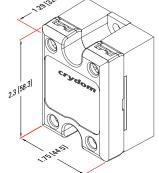
Thermal Pad

H: Included

Blank: Not Included

Overvoltage Protection Blank: Not Included P: Included

Switching Type Blank: Zero Voltage Turn-On -10: Random Turn-On



## Operating

48: 48-660 VAC 50: 50 Amps

90: 90 Amps

Voltage 24: 24-280 VAC

**Rated Load Current** 10: 10 Amps 25: 25 Amps

125: 125 Amps

#### **CSW Series** • 10-90 Amps















- Heavy duty Solid State Relay with ratings from 10 to 90 Amps @ 12-280 VAC
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- EMC compliant (LEVEL 3) for reliable operation in harsh electrical environments
- Flexible 3-32 VDC Control Voltage
- · Low output off-state leakage current
- Elective R-C Snubber network for additional dv/dt attenuation
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase-control or inductive loads) output
- Elective Internal TVS ("P" suffix) eliminates the need for external Overvoltage Protection
- A pre-attached Thermal Pad can be ordered to eliminate the need for thermal grease using the "H" suffix
- UL 508 overload endurance rated

Notes: A B C D J K











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Series

**Operating Voltage** 24: 24-280 VAC

Termination Blank: Screw

F: Quick Connect (Up to 50 Amps models) G: Included

Input Status LED Thermal Pad Blank: Not Included

Blank: Not Included H: Included





















#### **Rated Load Current**

10: 10 Amps

25: 25 Amps

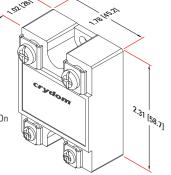
50: 50 Amps

75: 75 Amps 90: 90 Amps

Overvoltage Protection Blank: Not Included P: Included

Snubber Blank: Not Included S: Included

Switching Type Blank: Zero Voltage Turn-On -10: Random Turn-On



#### **CL Series** • 5-10 Amps



Compatible

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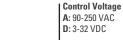


- Economical Solid State Relay with ratings of 5 or 10 Amps @ 24-280 VAC
- · Optional IP20 "touch safe" Cover for additional user protection
- Economical Triac based construction
- LED indicator for easy identification of control status
- Regulated AC or DC Control Voltage
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output

Notes: A B C D J K





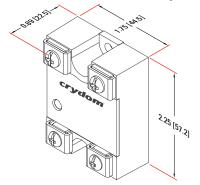


**Load Voltage Rated Load Current** 240: 24-280 VAC **05**: 5 Amps 10: 10 Amps

Switching Type Blank: Zero Voltage Turn-On R: Random Turn-On

Thermal Pad Blank: Not Included H: Included

Cover Blank: Not Included C: Included



Assemblies

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crvdom

#### EL Series • 5-20 Amps







- Mini-puck Solid State Relay to maximize panel space
- Ratings up to 20 Amps @ 24-280 VAC
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- Quick Connect control & output termination for easy installation
- 3.75k VAC optical isolation

Notes: A B C D J K



**Control Voltage** 

05: 4-8 VDC

12: 10-14 VDC

24: 21-27 VDC







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Series



240A





**Rated Load Current** 

**5**: 5 Amps

**10:** 10 Amps

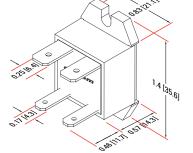
20: 20 Amps





Output Voltage 240 A: 24-280 VAC Switching Type

Blank: Zero Voltage Turn-On R: Random Turn-On



#### EZ Series • 5-18 Amps











crydom classics

- Low profile Solid State Relay
  - Ratings from 5 to 18 Amps @ 48-600 VAC
  - · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
  - Elective R-C Snubber network (240 VAC models) for additional dv/dt attenuation
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- AC or DC Control Voltage options
- Quick Connect control & output termination for easy installation

Notes: A B C D J K









Control Voltage D: 4-15 VDC A: 90-140 VAC ExxxA: 18-36 VAC

Snubber

Blank: Not Included S: Included (240 suffix only)

ExxxD: 15-32 VDC

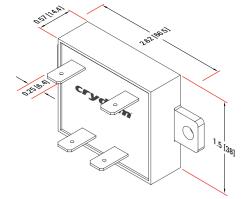
**Operating Voltage** 240: 24-280 VAC 480: 48-660 VAC

**Rated Load Current 5**: 5 Amps (EZ240D suffix only)

12: 12 Amps 18: 18 Amps

Switching Type Blank: Zero Voltage Turn-On

R: Random Turn-On



crydom

Series

#### MCBC Series • 25-90 Amps







- Microprocessor based burst fire controller / SSR
- Ratings from 25 to 90 Amps @ 48-530 VAC
- R-C Snubber network for additional dv/dt attenuation
- Industry standard analogue input (voltage or current) or potentiometer control
- LED indicator for easy identification of output status
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Two time base periods available (10 & 20 cycles)
- · For use with resistive loads only

Notes: A B D J K











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Line Voltage 12: 48-140 Vrms 24: 180-280 Vrms Series 48: 330-530 Vrms

Analog Control Signal A: 0-5 VDC

B: 0-7 VDC

C: 0-10 VDC

D: 4-20 mA

E: Internal Potentiometer



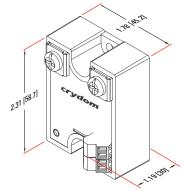


**Product Type** BC: Burst Fire Controller **Rated Load Current** 

25: 25 Amps **50**: 50 Amps 90: 90 Amps

Time Base Period F: 10 AC Cycles

L: 20 AC Cycles



# Assemblies

#### MCPC Series • 25-90 Amps







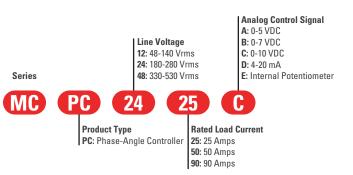
- Microprocessor based phase angle controller / SSR
- Ratings from 25 to 90 Amps @ 48-530 VAC
- Industry standard analogue input (voltage or current) or potentiometer control for setpoint
- LED indicator for easy identification of output status
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Designed to provide proportional AC power to a wide range of resistive loads

Notes: A B D J K







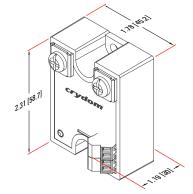






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# Panel Moun

#### **MCTC Series** • 25-90 Amps







- Microprocessor based temperature controller / SSR
- Ratings from 25 to 90 Amps @ 48-530 VAC
- Industry standard analogue input (voltage or current) for temperature setpoint
- Direct J or K Thermocouple input
- LED indicators for easy identification of output and temperature status
- Open Thermocouple protection
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Available Temperature Range option "R" for refrigeration cycle including 2 minute short cycle protection
- Option "E" provides a regulated 5 V/10 mAmps source for use with external potentiometer control

Notes: A B C D J K





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#### Line Voltage 24: 24-280 Vrms 48: 48-530 Vrms

#### Thermocouple Type

J: Type J K: Type K

#### Setpoint Input | Aditional Features E: 5 VDC regulated A: 0-5 VDC B: 0.7 VDC

output for external C: 0-10 VDC setpoint (setpoint A option only) **D**: 4-20 mA



















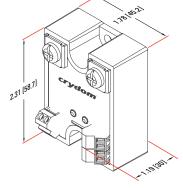


**Rated Load Current** 25: 25 Amps

**50**: 50 Amps 90: 90 Amps

#### Temperature Range

L: 100°F to 500°F, 38°C to 260°C H: 300°F to 700°F, 149°C to 371°C VH: 500°F to 900°F, 260°C to 482°C EH: 700°F to 1100°F, 371°C to 593°C R: +100°F to -100°F. +38°C to -73°C



#### MCS Series • 25-90 Amps







- Microprocessor based Soft Start / Soft Stop controller / SSR
- Ratings from 25 to 90 Amps @ 48-530 VAC
  - R-C Snubber network for additional dv/dt attenuation
  - Industry standard analogue input (voltage or current) or potentiometer control
- LED indicator for easy identification of output status
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Adjustable ramp rates

Notes: A B D J K











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Series

#### Line Voltage

12: 48-140 Vrms 24: 180-280 Vrms 48: 330-530 Vrms

#### Analog Control Signal A: 0-5 VDC

B: 0-7 VDC

C: 0-10 VDC D: 4-20 mA

E: Internal Potentiometer







#### Product Type

ST: Soft Start SP: Soft Stop

SS: Soft Start/Stop

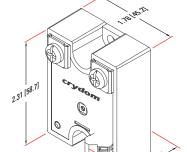
#### **Rated Load Current**

**25**: 25 Amps 50: 50 Amps 90: 90 Amps

#### Ramp Time On/Off

S: 100 ms-1 sec

M: 1 sec-10 sec



#### PCV Series • 15-90 Amps











- · Easy to use proportional (phase angle) controller
- Ratings from 15 to 90 Amps @ 100-240 VAC
- Simple 2-7 VDC or 2-10 VDC analogue Control Voltage
- Designed to provide proportional AC power to a wide range of resistive loads

Notes: A B D J K















Compatible Accessories Page 71

Series











**Operating Voltage** 

24: 100-240 VAC

**Control Voltage** 7: 2-7 VDC 10: 2-10 VDC

#### **Rated Load Current**

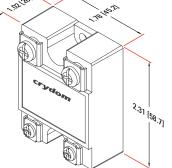
15: 15 Amps

**25**: 25 Amps

50: 50 Amps (10 prefix only)

75: 75 Amps (10 prefix only)

90: 90 Amps (10 prefix only)



#### **LPCV Series** • 15-110 Amps





- crydom classics
- · Easy to use linear proportional (phase angle) controller
  - Ratings from 15 to 110 Amps @ 20-300 VAC
  - Simple 0-5 VDC, 0-10 VDC or 4-20 mAmps analogue Control Voltage
  - Included 12 VDC source for use with external potentiometer control
- Requires accessory power supply PS120 or PS240 to provide 20 VAC for logic internal logic circuit
- Designed to provide proportional AC power to a wide range of resistive loads







Notes: A B D J K

Series

Control Voltage 5: 0-5 VDC 10: 0-10 VDC **20**: 4-20 mAmps Operating Voltage 24: 20-300 VAC

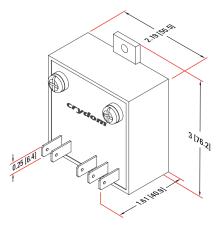
**Rated Load Current** 

**15**: 15 Amps 25: 25 Amps

40: 40 Amps

75: 75 Amps

110: 110 Amps



#### **RPC Series** • 15-40 Amps



Compatible





- · Easy to use proportional (phase angle) controller
- Ratings from 15 to 40 Amps @ 130 VAC, 240 VAC or 480 VAC
- Simple 150k or 1M Ohm potentiometer control
- Designed to provide proportional AC power to a wide range of resistive loads

Notes: A B D J K











12: 90-130 VAC 24: 200-240 VAC 48: 400-480 VAC





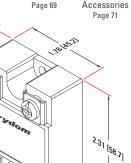


#### **Rated Load Current**

15: 15 Amps

25: 25 Amps

40: 40 Amps



Assemblies



#### SMR-6 Series • 25-90 Amps















- · Solid State Relay with built-in current monitoring & diagnostics circuit
- Ratings from 25 to 90 Amps @ 60-280 VAC
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Inverting or non-inverting Control Voltage (flexible 8-32 VDC)
- Normally Open or Normally Closed alarm output
- Wide range of built-in fault condition monitoring alarms
- · Zero Voltage Turn-On (resistive loads) output
- UI 508 overload endurance rated

Notes: A B D J K











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Rated Load Current

25: 25 Amps 50: 50 Amps 90: 90 Amps

Series

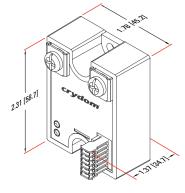


**Operating Voltage** 24: 60-280 VAC 48: 96-553 VAC

Features

Input: Inverting or Non Inverting

Alarm Output: Normally Open or Normally Closed



#### **Evolution Dual Series • 25-50 Amps**



- Independently controlled dual output Solid State Relay
- Ratings of 25 & 50 Amps @ 24-280 VAC or 48-600 VAC
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Optional IP20 "touch safe" Cover for additional user protection
- 4-15 VDC & 15-32 VDC or flexible 4-32 VDC Control Voltage
- Four Input Connector options for additional assembly flexibility
- LED indicator for each output channel for easy identification of control status
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output

Notes: A B

















Option 4

Series

**Operating Voltage** 24: 24-280 VAC 48: 48-660 VAC

**Control Voltage** D: 4-15 VDC E: 15-32 VDC W: 4-32 VDC

**Output Terminal** Orientation U: A channel top,

B channel bottom V: A channel on left. B channel on right Thermal Pad Blank: Not Included H: Included



















Switching Type Blank: Zero Voltage Turn-On





C: Included D: Not Included **Rated Load Current** 

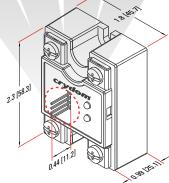
25: 25 Amps **50**: 50 Amps **Input Connector** 

1: 4 Pin Standard

R: Random Turn-On 2: Key Locking Connector

3: 4 Pin Connector accepting Screw Terminals

4: 4 Pin Spring Terminal



#### Series 1 Duals • 25-40 Amps













- Independently controlled dual output Solid State Relay
- Ratings of 25 Amps & 40 Amps @ 24-280 VAC or 48-530 VAC
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- 4-15 VDC or 15-32 VDC Control Voltage
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- Quick Connect termination; 120/240 V models include pin control termination
- UL 508 overload endurance rated

Notes: A B C D J K









(D24)





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Heat Sinks & other Accessories Page 73

Series

**Rated Load Current** 25: 25 Amps 40: 40 Amps

Thermal Pad

Blank: Not Included H: Included

H12D48

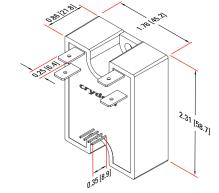




**Operating Voltage** D24: 24-280 VAC H12D48: 48-530 VAC

**Control Voltage** D: 4-15 VDC **DE**: 15-32 VDC

Switching Type Blank: Zero Voltage Turn-On -10: Random Turn-On



# Assemblies Accessories

#### 53TP Series • 25-50 Amps

















- 3 Phase Solid State Contactor with ratings of 25 & 50 Amps per phase @ 48-530 VAC
- Up to 7.5 HP / 5.5 kW Motor Controller ratings
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- EMC compliant (LEVEL 3) for reliable operation in harsh electrical environments
- Direct Bond Copper (DBC) substrate for superior thermal performance
- R-C Snubber network for additional dv/dt attenuation
- Flexible 4-32 VDC, 18-36 VAC or 90-140 VAC / 180-280 VAC Control Voltage
- LED indicator for easy identification of control status
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- Optional IP20 "touch safe" Cover (shown) provides additional user protection
- Internal TVS eliminates the need for external Overvoltage Protection
- · A pre-attached Thermal Pad can be ordered to eliminate the need for thermal grease using the "H" suffix
- UL 508 overload endurance rated









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Rated Load Current 25: 25 Amps

50: 50 Amps

Thermal Pad

Blank: Not Included H: Included















#### **Control Voltage**

A: 90-280 VAC (without IP20 cover) B: 90-140 VAC (with IP20 cover)

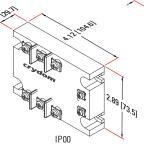
Series

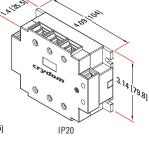
C: 180-280 VAC (with IP20 cover) D: 4-32 VDC

E: 18-36 VAC (with IP20 cover)

D: Not Included (IP00) C: Included (IP20)

#### Switching Type Blank: Zero Voltage Turn-On -10: Random Turn-On





#### 53RV Series • 25-50 Amps













- Motor Reversing Contactor with ratings of 25 & 50 Amps per phase @ 48-530 VAC
- Up to 7.5 HP / 5.5 kW Motor Controller ratings
- Built-in interlock circuit protects the relay/load if both Forward & Reverse inputs are simultaneously actuated
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- EMC compliant (LEVEL 3) for reliable operation in harsh electrical environments
- Direct Bond Copper (DBC) substrate for superior thermal performance
- R-C Snubber network for additional dv/dt attenuation
- Flexible 4-32 VDC Control Voltage
- LED indicators for easy identification of the Forward / Reverse control status
- IP20 "touch safe" Cover provides additional user protection
- · A pre-attached Thermal Pad can be ordered to eliminate the need for thermal grease using the "H" suffix
- UI 508 overload endurance rated











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Heat Sinks & other Accessories





Series



Type RV: 3 Phase Motor Reversing SSR

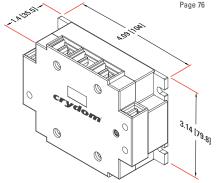
Cover C: Included





Rated Load Current/phase | Thermal Pad 25: 25 Amps **50**: 50 Amps

Blank: Not Included H: Included



#### DC60 Series • 3-7 Amps







- Economical bipolar transistor output Solid State Relay
- Ratings up to 7 Amps @ 60 VDC
- Available with either a Normally Open (standard) or Normally Closed ("-B" option) output
- Flexible 3.5-32 VDC or 90-280 VAC/DC Control Voltage
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)

Notes: A B C D J K











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Compatible Accessories Page 71

Series



Output Type Blank: Normally Open

-B: Normally Closed





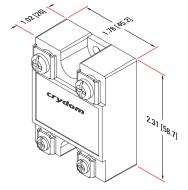






#### **Rated Load Current**

- 3: 3 Amps
- **5**: 5 Amps
- 7: 7 Amps



#### DC Series • 10-100 Amps





PowerPLUS

- Solid State Relay with ratings up to 100 Amps @ 60 VDC, 100 Amps @ 100 VDC, 60 Amps @ 200 VDC and 20 Amps @ 400 VDC
- Logic compatible control options of either 4 to 32 VDC or 90 to 140 VAC
- Optional IP20 "touch safe" Cover for additional user protection & thermal interface pad
- Optically isolated high speed trigger circuit for enhanced switching
- Easily paralleled for high current applications
- Low impedance MOSFET output minimizes total power dissipation
- LED indicator for easy identification of control status
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)
- UL General Use (resistive) ratings

Notes: A B C D J K



Cover

Blank: Not

C: Included

Included





Thermal Pad

H: Included

Blank: Not Included



Assemblies

Compatible Accessories

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Series

**Control Voltage** 

A: 90-140 VAC

D: 4-32 VDC





#### Operating Voltage

60: 7-48 VDC 100: 7-72 VDC 200: 7-150 VDC 400: 7-300 VDC

#### **Rated Load Current**

10: 10 Amps

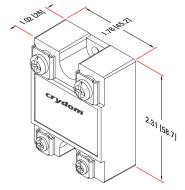
20: 20 Amps (Not valid with 400A suffix)

40: 40 Amps (Not valid with 400x suffixes)

60: 60 Amps (Not valid with 200A, 400x suffixes)

80: 80 Amps (60D & 100D suffixes only)

100: 100 Amps (60D & 100D suffixes only)



#### 1-DC Series • 7-100 Amps







- Solid State Relay with low impedance MOSFET output to minimize total power dissipation
- Ratings up to 100 Amps @ 100 VDC, 40 Amps @ 200 VDC, 12 Amps @ 400 VDC, and 10 Amps @ 500 VDC • Easily paralleled for high current applications
- Flexible 3.5-32 VDC Control Voltage
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)

Notes: A B D J K









1D: 0-100 VDC

2D: 0-200 VDC

4D: 0-400 VDC

5D: 0-500 VDC







#### **Rated Load Current**

**07:** 7 Amps

10: 10 Amps (500 VDC only)

12: 12 Amps (not for 500 VDC)

20: 20 Amps (100 VDC only)

40: 40 Amps (100 & 200 VDC only)

60: 60 Amps (100 VDC only)

80: 80 Amps (100 VDC only)

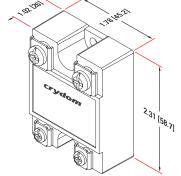
100: 100 Amps (100 VDC only)



Compatible

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#### D06D Series • 60-100 Amps







- Solid State Relay with low impedance MOSFET output to minimize total power dissipation
- Ratings from 60 to 100 Amps @ 60 VDC
- Easily paralleled for high current applications
- Flexible 3.5-32 VDC Control Voltage
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)

Notes: A B D J K









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Series

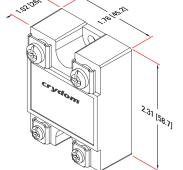
Operating Voltage 06D: 0-60 VDC







**Rated Load Current 60**: 60 Amps 80: 80 Amps 100: 100 Amps



#### EL Series • 5-10 Amps







- Mini-puck Solid State Relay to maximize panel space
- Ratings of 5 & 10 Amps @ 3-100 VDC
- Easily paralleled for high current applications
- Low impedance MOSFET output minimizes total power dissipation
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)
- Quick Connect control & output termination for easy installation

Notes: A B D J K



**Control Voltage** 

05: 4-8 VDC

12: 10-14 VDC

24: 21-27 VDC







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Heat Sinks Page 74



Thermal Pad Page 79

Series

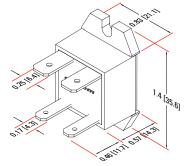


**Rated Load Current** 

**5**: 5 Amps

**10**: 10 Amps

**Output Voltage** 100D: 3-100 VDC





#### SSC Series • 25 Amps







- Solid State Relay with ratings of 25 Amps @ up to 1k VDC
- · High voltage IGBT output
- Internal TVS included in 800 VDC model eliminates the need for external Overvoltage Protection (800 suffix only)
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)

Notes: A B D J K









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Compatible

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Series

SSC

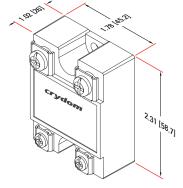
1000: 0-1000 VDC

Operating Voltage 800: 0-800 VDC

**Rated Load Current** 25: 25 Amps

**Control Voltage** 12: 8-16 VDC 24: 20-28 VDC

36: 32-40 VDC



crvdom

#### LVD Series • 40-100 Amps







- Low Voltage Disconnect with ratings up to 100 Amps @ 3-75 VDC
- · Monitors and automatically disconnects battery systems from loads at low voltage conditions to prevent deep discharge of the batteries
- Low impedance MOSFET output minimizes total power dissipation
- Six DC control ranges available for a variety of 12 VDC and 24 VDC battery systems

Notes: A B C D J K





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**100**:100 Amps **H**: Included

I Thermal Pad

Blank: Not Included

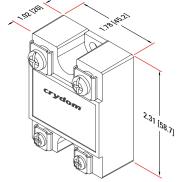
Rated Load Current 40: 40 Amps

**60:** 60 Amps

**80**: 80 Amps

#### **Control Voltage Code**

A: 18 VDC max., Hysteresis 11.0-11.5 VDC B: 18 VDC max., Hysteresis 11.5-12.0 VDC C: 18 VDC max., Hysteresis 12.0-12.5 VDC D: 36 VDC max., Hysteresis 23.0-24.0 VDC E: 36 VDC max., Hysteresis 24.0-25.0 VDC F: 36 VDC max., Hysteresis 25.6-26.6 VDC



#### **DP Series** • 20-60 Amps











- Motor Reversing Contactor with ratings up to 60 Amps @ 48 VDC
- Low impedance MOSFET switches in an H-Bridge configuration for motor reversing
- Control features to combine Soft Start/Ramp Up, Soft Stop/Ramp Down & Braking functions on each polarity
- · Built-in interlock circuit protects the relay/load if both Forward & Reverse inputs are simultaneously actuated
- UL & IEC General Use & Motor Controller ratings
- LED indicators for easy identification of the Forward / Reverse control status

Notes: A B











20 Amps Model



40 & 60 Amps Model



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Start Mode

Blank: Instant Start

SA: Soft Start/Ramp Up. 0.2 sec | Control Voltage SB: Soft Start/Ramp Up, 0.5 sec SC: Soft Start/Ramp Up, 1 sec

**D**: 4.5-15 VDC

E: 18-32 VDC

#### Stop Mode

Blank: Stop Mode matches Start Mode

B2: Dynamic Brake, 0.2 sec B5: Dynamic Brake, 0.5 sec

B8: Dynamic Brake, 0.8 sec

B: Dynamic Brake, Continuous

Series

















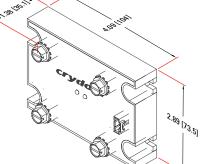


60: 48 VDC

Load Rated Current 20: 20 Amps

40: 40 Amps 60: 60 Amps

Thermal Pad Blank: Not Included H: Included



Operating Voltage

Crydom offers an extensive line of PCB Mount Solid State Relays including the **popular industry standard footprint SIP, Mini SIP and DIP configurations** and most Crydom SIP type SSRs are also offered as DIN Rail mountable Assemblies.

Models are available for applications requiring ratings from 1 to 25 Amps at 24 to 660 VAC or 1 to 20 Amps at 1 to 200 VDC. Inputs are available covering 24 to 140 VAC or 3 to 32 VDC depending upon model. Excepting some AC output models rated greater than 10 Amps where forced air is used for improved output ratings (forced air is not required for DC output), all Crydom PCB Mount Relay output ratings are based upon free air and 40 °C ambient.

See the product pages for a summary of **available package size and pin out, ratings, features and Safety Agency approvals**. Visit the SSR Assemblies section of the catalog or the Crydom website for additional information on Crydom PCB Mount SSRs and Assemblies.

AC Output							Rating Amps						
Page	Series	Description	1	1.5	2		4	5	-	12			
						_ :	Solid	Stat	e Re	lays	_		
36	ASO	Mini SIP											
37	LC	Mini SIP											
38	MP	SIP											
39	CX	SIP											
40	MCX	SIP											
41	LS	SIP											
42	PF	SIP											
43	SPF	SIP											
44	DPA	DIP											
45	SDV	DIP											

DC Output			Rating Amps									
Page	Series	Description		5								
			Solid	Stat	e Re	lays	_					
46	DMO	Mini SIP										
47	CMX	SIP										
48	MP	SIP										



#### **ASO Series** • 1.5-2 Amps









- crydom classics
- Compact design Solid State Relay ideally suited for high density PCB applications • Ratings up to 2 Amps @ 12-280 VAC
  - · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
  - · Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
  - Solderable 0.015" x 0.030" pins can also plug fit SIP type IC socket









Series

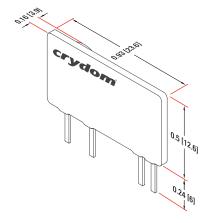
**Rated Load Current** 241: 1.5 Amps 242: 2 Amps







Switching Type Blank: Zero Voltage Turn-On R: Random Turn-On



# LC Series • 1.5-2 Amps













- · Compact design Solid State Relay ideally suited for high density PCB applications
- Ratings up to 2 Amps @ 12-280 VAC
- 4-10 VDC Control Voltage
- · Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output









Series

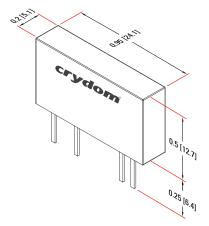
**Operating Voltage** 24: 12-280 VAC

**Rated Load Current** 

1: 1.5 Amps

2: 2 Amps

Switching type Blank: Zero Voltage Turn-On R: Random Turn-On



# **DIN Rail Mount** Plug-In Mount Assemblies • Accessories

# **MP Series** • 3-4 Amps













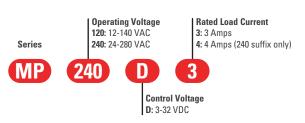


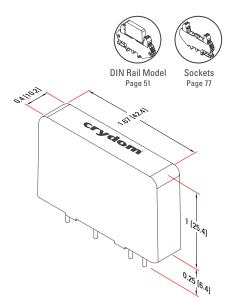
- SIP Solid State Relay ideally suited for high density PCB applications
- Ratings up to 4 Amps @ 24-280 VAC
- Control Voltage of 3-32 VDC
- 10 mm plastic housing allows for operation at -40°C























CX Series • 5 Amps



- SIP Solid State Relay ideally suited for high density PCB applications
- Ratings up to 5 Amps @ 48-660 VAC
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- · High surge current rating
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- AC or DC Control Voltage options

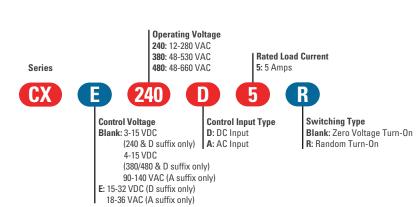
Notes: A B C D J

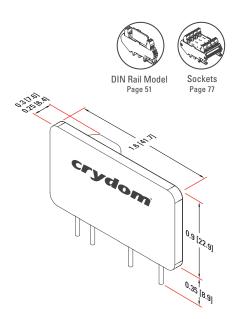












Accessories

# **MCX Series** • 5 Amps











Sockets

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- SIP Solid State Relay ideally suited for high density PCB applications
- Ratings up to 5 Amps @ 48-660 VAC
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- · High surge current rating
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- AC or DC Control Voltage options
- 10 mm plastic housing allows for operation at -40°C

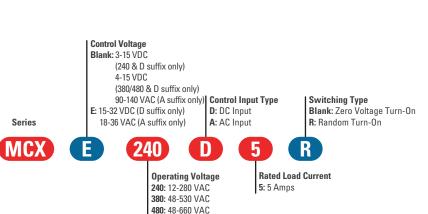
Notes: A B C D J













1 [25.4]

Accessories

# LS Series • 8-12 Amps















- SIP Solid State Relay ideally suited for high density PCB applications
- Ratings up to 12 Amps @ 24-280 VAC with external heat sink
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-on (phase control or inductive

loads) output

Notes: A B C D J















**Control Voltage** 

Blank: 4-10 VDC

E: 20-28 VDC





| Operating Voltage

240: 24-280 VAC





8: 8 Amps

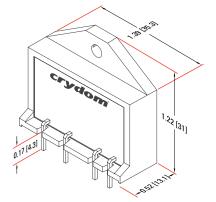
12: 12 Amps



**Rated Load Current** 

Control Input Type D: DC Input

**Switching Type** Blank: Zero Voltage Turn-On R: Random Turn-On





# Assemblies Accessories

# PF Series • 25 Amps









Sockets





- SIP Solid State Relay ideally suited for high density PCB applications
- Ratings up to 10 (convection) or 25 Amps (forced air flow) @ 48-660 VAC
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- · Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- AC or DC Control Voltage options

Notes: A B C D J











Rated Load Current 25: 25 Amps



Series











**Control Voltage** Blank: 3-15 VDC

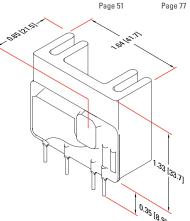
**Control Input Type** D: DC Input A: AC Input (240 & D suffix only) 4-15 VDC

(380/480 D suffix only) 90-140 VAC (A suffix only) E: 15-32 VDC (D suffix only) 18-36 VAC (A suffix only)

#### Switching Type

Blank: Zero Voltage Turn-On R: Random Turn-On





# **SPF Series** • 25 Amps







- SIP Solid State Relay ideally suited for high density PCB applications
- . Ratings up to 10 (convection, vertical or horizontal mounting) or 25 Amps (forced air flow) @ 48-660 VAC
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- AC or DC Control Voltage











240: 12-280 VAC 380: 48-530 VAC

480: 48-660 VAC

**Rated Load Current** 25: 25 Amps













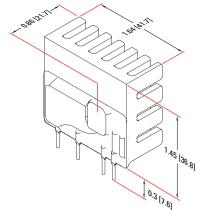
**Control Voltage** Blank: 3-15 VDC (for 240)

**Control Input Type** D: DC Input 4-15 VDC (for 380/480) A: AC Input

E: 15-32 VDC 18-36 VAC

Switching Type

Blank: Zero Voltage Turn-On R: Random Turn-On



**DIN Rail Model** 

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Sockets

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Accessories

# **DPA Series** • 1 Amp













- DIP Solid State Relay ideally suited for high density PCB applications
- crydom Ratings to 1 Amp @ 280 VAC classics
  - Control options include 3.5-10 VDC or 10-35 mAmps DC
  - · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
  - Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
  - Solderable Pin layout fits IC grid pattern and pluggable IC DIP type sockets

Notes: A B D J







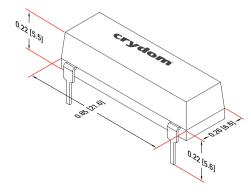
Series

**Operating Voltage** 41: 20-140 VAC 61: 20-280 VAC





Control Voltage 11: 10-35 mA DC 19: 3.5-10 VDC



**DIN Rail Mount** 

## **SDV Series** • 1.5 Amps











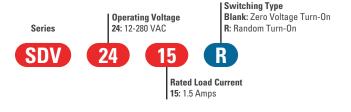


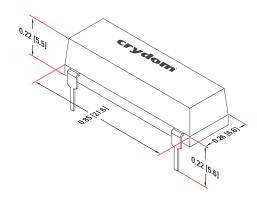
- classics
- DIP Solid State Relay ideally suited for high density PCB applications
  - Ratings to 1.5 Amps @ 280 VAC
  - Control Voltage of 3.5-10 VDC
  - · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- Solderable Pin layout fits IC grid pattern and pluggable IC DIP type sockets

Notes: A B C D J









# Series Accessories

# **DMO Series** • 3 Amps





- · Compact design Solid State Relay ideally suited for high density PCB applications
- Ratings up to 3 Amps @ 60 VDC
- 3-10 VDC Control Voltage
  - Low impedance MOSFET output minimizes total power dissipation
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)
- Solderable 0.015" x 0.030" pins can also plug fit SIP type IC socket

Notes: A B D J









**Rated Load Current** 

063: 3 Amps

|0.5<sub>[12.6]</sub>

# CMX Series • 3-20 Amps







- SIP Solid State Relay ideally suited for high density PCB applications
- Low impedance MOSFET output minimizes total power dissipation
- Ratings up to 20 Amps @ 60 VDC, 10 Amps @ 100 VDC or 3 Amps @ 200 VDC
- Easily paralleled for high current applications
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)





**Rated Load Current** 3: 3 Amps (200 VDC only)

5: 5 Amps (60 VDC only)

6: 6 Amps (100 VDC only)

20: 20 Amps (60 VDC only)

10: 10 Amps (60 & 100 VDC only)







Page 60

Sockets Page 77

Series









Operating Voltage

60: 0-60 VDC

100: 0-100 VDC

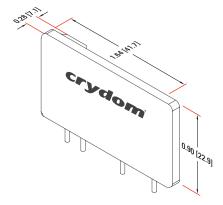
200: 0-200 VDC



**Control Voltage** Blank: 3-10 VDC **Control Input Type** D: DC Input

4-10 VDC (200 VDC only)

E: 20-28 VDC





**PCB Mount** 

# **MP Series** • 3 Amps















- SIP Solid State Relay ideally suited for high density PCB applications
- Ratings up to 3 Amps @ 60 VDC
- 10 mm plastic housing allows for operation at -40°C
- Normally Closed version available ("-B" suffix option)
- · Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)

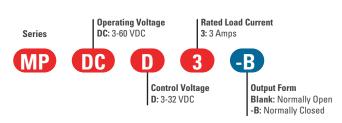
Notes: A B C D J

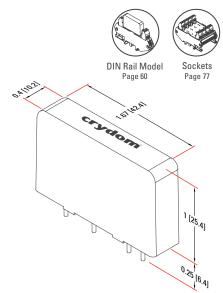












# **DIN Rail Mount**

Crydom DIN Rail Mounted Solid State Relays and Contactors are available in **single**, **dual and 3 phase output ratings** in the range of **2 to 65 Amps per phase at 24 to 660 VAC** or **2 to 30 Amps at 1 to 100 VDC** in housing widths varying from 6 mm for the lowest output rating versions to 45 mm for 3 phase output rating versions and 62 mm for 3 phase reversing versions. Inputs cover the range of 24 to 280 VAC or 3 to 32 VDC and feature LED input status indicator. All output ratings are free air in a 40° C ambient temperature.

Crydom DIN Rail mounted SSRs and Contactors are "ready-to-use" and carry Safety Agency approvals as noted on each catalog sheet. Visit the DIN Rail SSR and Contactors section of the catalog or Crydom website for additional information on Crydom DIN Rail Mount SSRs and Contactors.





60 DRA

CKM

63 DRA4D

SeriesOne DR

10/54 mm

11/18 mm

45 mm

Reversing

AC O	utput												Ratii	ng A	mps				
Page	Series	Description	2	2.4	3	4	4.2	5	6	8	10	12					45	55	65
'	Solid State Relays													_					
50	DRA-CN	6 mm																	
51	DRA	10/54 mm																	
52	SeriesOne DR	11 mm																	
53	CKR	22.5 mm																	
54	CMR	45 mm																	
55	SeriesOne DR Dual	18 mm																	
	Solid State Contactors																		
56	DRA3P	3 Phase																	
57	DRA3R	Reversing																	
58	CTR	3 Phase																	
DC Output Rating Amps																			
	Series	Description						Λ1	2.4	2	3.5			11g A	111ps 8	10	12	20	30
rage	Series	Description						0.1	2.4	3	3.3		id St				12	20	30
59	DRA-CN	6 mm										1							

# **DRA-CN Series** • 2 Amps







- Thin 6.2 mm DIN Rail mount Solid State Relay
- Ratings of 2 Amps @ 240 VAC
- LED indicator for easy identification of control status

· Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output

Notes: A B C D J







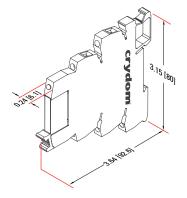


**ID Marker Strips** Page 77

Series

Operating Voltage 240A: 24-250 VAC, 2 Amps Switching Type Blank: Zero Voltage Turn-On R: Random Turn-On

**Assembly Input Voltage** 05: 3-12 VDC 24: 15-30 VDC



# Assemblies Accessories

# **DRA Series** • 3-8 Amps







- Ready-to-use DIN Rail mountable Solid State Relays assemblies using standard Crydom SIP SSRs
- Slim 10 mm (single channel) & 54 mm (four channels) packages
- Ratings from 3 to 8 Amps
- Operating Voltage of 12-530 VAC with back-to-back SCR output for added reliability in commercial and heavy industrial applications
- Fits standard 35 mm DIN Rail profiles
- · Cage style screw termination for easy and reliable wire connection
- AC & DC Control Voltage versions available depending upon selected SSR
- · Available with Normally Closed output
- · Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (inductive loads) output
- LED indicator for easy identification of control status

Notes: A B D H J







#### **Number of Channels** 1: One N.O. Channel

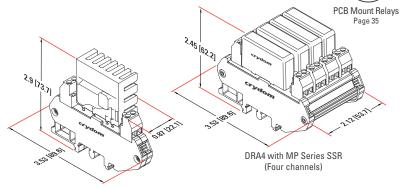
Series

4: Four N.O. Channels

**SPF240D25** 

Standard Crydom SSR p/n including the following series: CX/CXE MCX/MCXE MP (One Channel only) PF (One Channel only)

SPF/SPFE (One Channel only)



DRA1 with SPF Series SSR (One channel)



# Accessories

# SeriesOne DR • 6-12 Amps





- DIN Rail mount 11 mm (6 Amps) or 18 mm (12 Amps) wide Solid State Relay
- Operating Voltage of 24-280 VAC and 48-600 VAC
- Fits standard 35 mm DIN Rail profiles
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Flexible Control Voltage of 4-32 VDC, 18-36 VAC, 90-140 VAC, 208-265 VAC
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (inductive loads) output
- IP20 housing for greater safety with lug type terminals
- LED indicator for easy identification of control status
- UI 508 overload endurance rated

Notes: A B C D J







Series

#### **Operating Voltage** 24: 24-280 VAC 48: 48-600 VAC (D suffix only)

**Rated Load Current** 

06: 6 Amps 12: 12 Amps









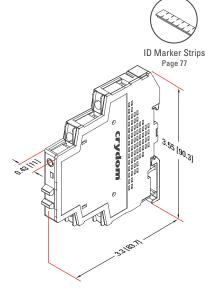
#### **Control Voltage** A: 208-265 VAC

B: 90-140 VAC D: 4-32 VDC

E: 18-36 VAC

#### **Switching Type**

Blank: Zero Voltage Turn-On R: Random Turn-On (D suffix only)



# CKR Series • 10-30 Amps













- Solid State Relay with ratings from 10 to 30 Amps
- Operating Voltage of 24-660 VAC
- Fits standard 35 mm DIN Rail profiles
- Slim 22.5 mm (width) package
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Flexible Control Voltage of 4-32 VDC, 18-36 VAC, 90-280 VAC
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (inductive loads) output
- · LED indicator for easy identification of control status
- Elective Internal TVS ("P" suffix) eliminates the need for external Overvoltage Protection
- Enhanced surge current ratings for the 30 Amps (facilitates the use of circuit breakers instead of fuse protection)

Notes: A B C D J









#### Series

**Control Voltage** D: 4-32 VDC A: 90-280 VAC **AxxxxE**: 18-36 VAC















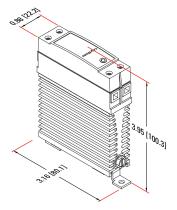
**Overvoltage Protection** 

Blank: Not Included

P: Included

**Rated Load Current** Operating Voltage 10: 10 Amps 24: 24-280 VAC 20: 20 Amps 48: 48-530 VAC 30: 30 Amps

Switching Type Blank: Zero Voltage Turn-On -10: Random Turn-On





60: 48-660 VAC

Accessories

# CMR Series • 35-65 Amps













- Solid State Relay with ratings from 35 to 65 Amps
- Operating Voltage of 24-660 VAC
- Fits standard 35 mm DIN Rail profiles
  - · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Flexible Control Voltage of 4-32 VDC, 18-36 VAC, 90-140 VAC
- Available with Zero Voltege Turn-On (resistive loads) or Random Turn-On (inductive loads) output
- · LED indicator for easy identification of control status
- Elective Internal TVS ("P" suffix) eliminates the need for external Overvoltage Protection

Notes: A B C D J









Series

**Control Voltage** D: 4-32 VDC A: 90-140 VAC AxxxxE: 18-36 VAC





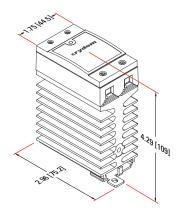
**Rated Load Current** Operating Voltage 35: 35 Amps 24: 24-280 VAC 45: 45 Amps 48: 48-530 VAC 55: 55 Amps 60: 48-660 VAC 65: 65 Amps

**Overvoltage Protection** 

Blank: Not Included

P: Included

Switching Type Blank: Zero Voltage Turn-On -10: Random Turn-On



Accessories

## SeriesOne DR Dual • 6 Amps







- DIN Rail mount 18 mm wide Solid State Dual Relay
- Two independent channels (6 Amps)
- Operating Voltage of 24-280 VAC and 48-600 VAC
- Fits standard 35 mm DIN Rail profiles
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Flexible Control Voltage of 4-32 VDC
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (inductive loads) output
- IP20 housing for greater safety with lug type terminals
- LED indicator for easy identification of control status
- UL 508 overload endurance rated





Series









Operating Voltage 24: 24-280 VAC

48: 48-600 VAC





**06**: 6 Amps

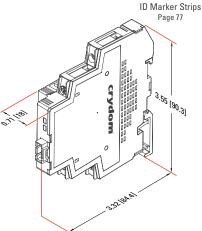


Rated Load Current

**Number of Channels** D: Two N.O. Channels

Control Voltage D: 4-32 VDC

Switching Type Blank: Zero Voltage Turn-On R: Random Turn-On



# **DRA3P Series** • 2.4-4.2 Amps













- 2.4 & 4.2 Amp rated 3 phase Solid State Contactor
- Operating Voltage of 48-510 VAC, 3-Phase
- Fits standard 35 mm DIN Rail profiles
  - No heat sink required & cage style screw terminals for easy installation & reliable wire

#### connection

- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Wide range of Control Voltage of 5 VDC, 24 VDC, 48 VAC, 115 VAC, 230 VAC
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (inductive loads) output
- LED indicator for easy identification of control status
- Overvoltage Protection included
- HP & kW (IEC) rated
- UL 508 overload endurance rated

















Function

**3P**: 3 Phase





Operating Voltage

48: 48-510 VAC









**D**: 4-6 VDC E: 18-28 VDC A: 200-265 VAC B: 90-140 VAC C: 36-60 VAC

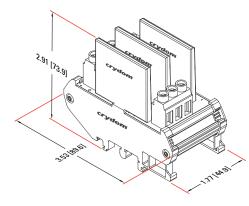
#### **Rated Load Current**

2: 2.4 Amps/1HP @ 480 VAC 4: 4.2 Amps/2HP @ 480 VAC



#### Switching Type Blank: Zero Voltage Turn-On

R: Random Turn-On



# DRA3R Series • 2.4-4.2 Amps











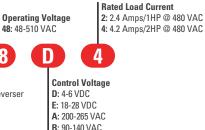


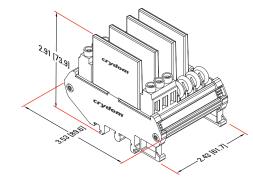
- 2.4 & 4.2 Amps rated Motor Reversing Solid State Contactor
- Operating Voltage 48-510 VAC, 3 phase
- Protective Forward/Reverse interlock built-in function
  - Fits standard 35 mm DIN Rail profiles
- No heat sink required & cage style screw terminals for easy installation & reliable wire connection
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Wide range of Control Voltage of 5 VDC, 24 VDC, 48 VAC, 115 VAC, 230 VAC
- Input status LED, Forward (green), Reverse (yellow)
- Overvoltage Protection included
- HP & kW (IEC) rated
- UL 508 overload endurance rated

Notes: A B D J









Series









C: 36-60 VAC

Function 3R: Motor Reverser

# **CTR Series** • 25 Amps











- 3 Phase Solid State Contactor with ratings 25 Amps per phase @ 600 VAC
- Fits standard 35 mm DIN Rail profiles
- 90 mm width package
- Back-to-back SCR output provides added reliability in commercial and heavy industrial

#### applications

- Flexible Control Voltage of 4-32 VDC, 90-140 VAC, 180-280 VAC
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (inductive loads) output
- · LED indicator for easy identification of control status
- Internal TVS eliminates the need for external Overvoltage Protection
- UL 508 overload endurance rated

Notes: A B C D J







Series

**Control Voltage** B: 90-140 VAC C: 180-280 VAC D: 4-32 VDC

crydom

CTRD6025

Rated Load Current 25: 25 Amps/phase

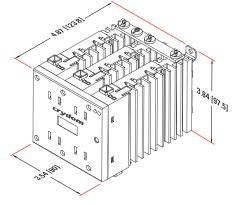




-10

**Operating Voltage** 60: 48-600 VAC

**Switching Type** Blank: Zero Voltage Turn-On -10: Random Turn-On (DC Control only)



# **DRA-CN Series** • 0.1-3.5 Amps







- Thin 6.2 mm DIN Rail mount Solid State Relay
- Available with ratings of 3.5 Amps @ 24 VDC or 100 mAmps @ 48 VDC
- LED indicator for easy identification of control status
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/ solenoid coils must be diode suppressed)

Notes: A B D J









**ID Marker Strips** Page 77

**Operating Voltage** 024D: 0-24 VDC, 3.5 Amps 048D: 0-48 VDC, 0.1 Amps



Series



**Assembly Input Voltage** 05: 3-12 VDC

24: 15-30 VDC



# DRA Series • 3-10 Amps







- Ready-to-use DIN Rail mountable Solid State Relay assemblies using standard Crydom SIP SSRs
- Slim 10 mm (single channel) & 54 mm (four channels) packages
- Ratings from 3 to 10 Amps
- Operating Voltage of 1-200 VDC with high efficiency FETs
- Fits standard 35 mm DIN Rail profiles
- · Cage style screw termination for easy and reliable wire connection
- · Available with Normally Closed output
- · LED indicator for easy identification of control status

Notes: A B D H J





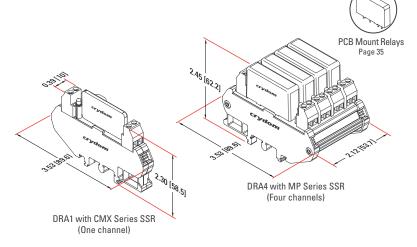


#### Number of Channels 1: One N.O. Channel Series 4: Four N.O. Channels



CMX100D10

Standard Crydom SSR p/n including the following series: CMX/CMXE MP (One Channel only)



# Assemblies Accessories

# SeriesOne DR • 6-12 Amps







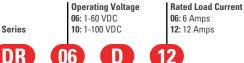
- DIN Rail mount 11 mm (6 Amps) or 18 mm (12 Amps) wide Solid State Relay
- 6 & 12 Amp Rated Load Current
- Operating Voltage of 1-60 VDC and 1-100 VDC
- Fits standard 35 mm DIN Rail profiles
- MOSFET output provides added reliability in commercial and heavy industrial applications
- Flexible Control Voltage 4-32 VDC
- IP20 housing for greater safety with lug type terminals
- · LED indicator for easy identification of control status
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)
- UL & cUL approved including General Purpose & Motor Controller ratings
- UL 508 overload endurance rated

Notes: A B D J

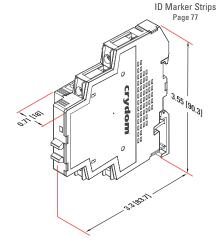








**Control Voltage** D: 4-32 VDC





**DIN Rail Mount** 

# Assemblies

# **CKM Series** • 10-30 Amps







- Solid State Relay with ratings from 10 to 30 Amps @ 60 VDC
- Fits standard 35 mm DIN Rail profiles
- Slim 22.5 mm (width) package
- · Low leakage MOSFET output provides added reliability in commercial and heavy industrial

#### applications

- Flexible Control Voltage 4-32 VDC
- · LED indicator for easy identification of control status
- · Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)

Notes: A B D J







Series

**Operating Voltage** 06: 0-60 VDC





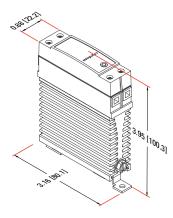


**Rated Load Current** 

10: 10 Amps

20: 20 Amps

**30**: 30 Amps



# **DRA4D Series** • 6-12 Amps













- 6 & 12 Amps ratings
- Operating Voltage of 1-100 VDC & 1-250 VDC
  - Protective Forward/Reverse interlock built-in function
- Fits standard 35 mm DIN Rail profiles
- No heat sink required & cage style screw terminals for easy installation & reliable wire connection
- Convenient FET switches in H-Bridge configuration
- DC Control Voltage options
- Input Status LED, Forward (green), Reverse (yellow)
- . HP & kW (IEC) rated

Notes: A B D J







**Rated Load Current** 

6: 6 Amps/1/3HP @ 240 VDC

12: 12 Amps/1/3HP @ 90 VDC











Operating Voltage

100: 1-100 VDC

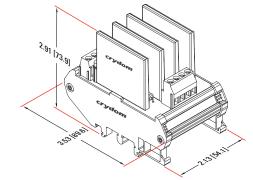
250: 1-250 VDC





Function 4D: Motor Reverser

**Control Voltage** D: 5-15 VDC E: 18-32 VDC





# Plug-In Mount

Crydom Plug-In Relays are designed to install in industry standard relay sockets. They can also be soldered directly on PCB assemblies if so desired. Available for applications requiring from 2 to 5 Amps at 24 to 280 VAC or 0.1 to 5 Amps at 1 to 100 VDC with inputs covering the range of 24 to 140 VAC or 2 to 32 VDC, these Single Pole Single Throw Normally Open (SPST) relays offer the speed and dependability of Solid State switching in a traditional mechanical relay format. Visit the Accessories and Assemblies sections of the catalog for information on compatible sockets and "ready-to-use" Assemblies. Visit the Plug-In SSR section of the catalog or Crydom web site for additional information on Crydom Plug-In Mount SSRs.

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	Output Series	Description	Rating Amps 2 3 5						
Ü			Solid State Relays						
65	CN	280 V / 2 A							
66	ED	280 V / 5 A							
DC C	)utput								
ט טע	<i>r</i> utput		Rating Amps						
	Series	Description	0.1 3.5 5						
		Description	• .						
		<b>Description</b>	0.1 3.5 5						





# CN Series • 2 Amps







- Thin Solid State Relay ideally suited for high density PCB applications
- Ratings up to 2 Amps @ 24-280 VAC
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications · Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive

#### loads) output

- R-C Snubber network for additional dv/dt attenuation
- Pluggable into industry standard relay sockets or solderable
- . DIN Rail mountable using DRSCN series sockets
- UL 508 overload endurance rated
- UL pilot duty rated

Notes: A B C D G J













DIN Rail Model ID Marker Strips Page 50 Page 77

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**Operating Voltage** 240A: 24-280 VAC, 2 Amps Switching Type

Blank: Zero Voltage Turn-On R: Random Turn-On

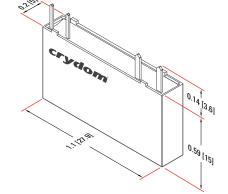








**Control Voltage** 05: 3-12 VDC 24: 15-30 VDC 60: 38-72 VDC



# **ED Series** • 3-5 Amps











- AC Output Solid State Relay in an industry standard EMR plug-in package
- Ratings of 3 & 5 Amps
- Operating Voltage of 24-280 VAC
- No moving parts eliminates arcing & contact bounce, significantly increasing the life expectancy

over equivalent

- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- LED indicator for easy identification of control status
- Wide range of AC or DC Control Voltage options
- Quick Connect termination for easy installation in sockets or on boards
- DIN Rail & PCB mountable sockets available
- Silent operation (no acoustical switching noise)
- UL & IEC General Use & Motor Controller Ratings available



**Rated Load Current** 

5: 5 Amps \*





3: 3 Amps (not available with B & E suffixes)











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Series

**Operating Voltage** 24: 24-280 VAC











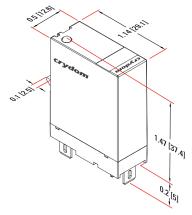


B: 100-140 VAC C: 18-32 VDC D: 3-15 VDC

E: 18-36 VAC F: 35-72 VDC

#### **Switching Type**

Blank: Zero Voltage Turn-On R: Random Turn-On



<sup>\*</sup> Drawing shown on the right

# CN Series • 0.1-3.5 Amps







- Thin Solid State Relay ideally suited for high density PCB applications
- Ratings of 0.1 Amps @ 48 VDC or 3.5 Amps @ 48 VDC
- Pluggable into industry standard relay sockets or solderable
- DIN Rail mountable using DRSCN series sockets
- UL 508 overload endurance rated

Notes: A B D G J











**Operating Voltage** 

024D: 0-24 VDC, 3.5 Amps 048D: 0-48 VDC, 0.1 Amps





**Control Voltage** 05: 3-12 VDC

24: 15-30 VDC 60: 38-72 VDC

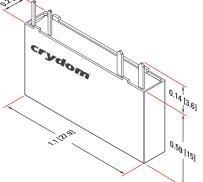






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Sockets Page 78



# **ED Series** • 5 Amps











- DC output Solid State Relay in an Industry standard EMR plug-in package
- 5 Amps rated
- Operating Voltage of 1-48 VDC and 1-80 VDC
- No moving parts eliminates arcing & contact bounce, significantly increasing the life expectancy

over equivalent rated electromechanical relays and contactors

- · LED indicator for easy identification of control status
- Wide range of AC or DC Control Voltage options
- Quick Connect termination for easy installation in sockets or on boards
- DIN Rail & PCB mountable sockets available
- Silent operation (no acoustical switching noise)
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)
- UL & IEC General Use & Motor Controller Ratings available





DIN Rail Sockets Page 78

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Notes: A B D J







Series

Operating Voltage 06: 1-48 VDC

10: 1-80 VDC

**Rated Load Current 5**: 5 Amps







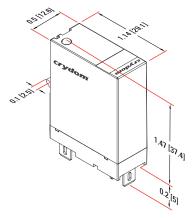


**Control Voltage** 

B: 90-140 VAC \* C: 18-32 VDC

D: 5-15 VDC E: 18-36 VAC\*

F: 35-72 VDC



<sup>\*</sup> Drawing shown on the right

# **Assemblies**

Crydom offers a variety of "ready-to-use" assemblies featuring proven Crydom Solid State Relays and Contactors installed in DIN Rail Sockets or on Panel or DIN Rail mounted Heat Sinks. Assemblies are available for applications ranging from 1 to more than 80 Amps in both AC or DC output versions. Any standard Crydom Panel Mount or SIP type PCB Mount SSR or Contactor can be offered as a "ready-to-use" Assembly. Contact the nearest Crydom Distributor, Representative or local Crydom Sales Office if you don't locate your exact needed Assembly in the catalog or in the Crydom website.







#### **Heat Sink / SSR Assemblies**





- Standard single, dual and 3 phase SSRs mounted on high efficiency HS Series heat sinks
- Ready-to-use assemblies with optimum SSR / thermal pad / heat sink combination simplifying selection, ordering and installation
- Thermal efficiency ratings from 5.0°C/W to 0.5°C/W @ 40°C ambient
- Full SSR assembly ratings up to 82.5 Amps (single phase) or 27.5 Amps per phase (three phase) in a 40°C ambient
- DIN Rail and Panel mountable versions available for both stand-alone heat sinks and SSR assemblies (most models)
- Customized solutions available using single, dual and 3 phase SSRs
- · Wide variety of accessories available

Notes: A B C D E F











Panel Mount Relays Page 6

Heat Sinks &

other Accessories

#### **Total Number of Accepted Standard SSRs**

1: 1 SSR (50, 35, 30, 27, 25, 27, 30 & 35 suffix only) 2: 1 or 2 SSRs (20, 17, 12 & 07 suffix only)

3: 1-3 SSRs or 1 3phase (10 & 05 suffix only)

Standard Crydom SSR p/n

















### Thermal Resistance

50: 5.0 °C/W (DR suffix only) 35: 3.5 °C/W 30: 3.0 °C/W

27: 2.7 °C/W 25: 2.5 °C/W 20: 2.0 °C/W

17: 1.7 °C/W

15: 1.5 °C/W 12: 1.2 °C/W

10: 1.0 °C/W 07: 0.7 °C/W

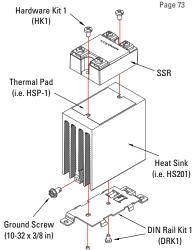
05: 0.5 °C/W

#### **DIN Rail Bracket** Blank: Not included Blank: 1

DR: Included (50, 35, 30, 27, 20, 15, **3**: 3 12 & 10 suffix only)

Number of Mounted SSRs

**2**: 2



# Accessories

Crydom supports its extensive SSR and Contactor product lines with a comprehensive offer of accessories including **Heat Sinks, Thermal Pads, Protective Covers, Sockets, Terminal Lugs, Hardware Kits, Marker Strips and DIN Rail Kits** to make it easy to employ Crydom SSRs and Contactors in any application. Crydom can also create **special configuration SSRs or Contactors** that include installed accessories if so desired. Visit the catalog or Crydom website for additional information on Crydom SSR accessories.

#### **Heat Sink/Accessories Compatibility**

Page	Part number	HK1	HK2	HSP-1 HSP-2	HSP-3 HSP-5	HSP-6	KS100	KS300	DRK1
73	HS501DR	2		$\Diamond$			<b>\$</b>		
74	HS351	1	2	$\Diamond$		0	<b>&gt;</b>		<b>3</b>
74	HS301	1	2	$\Diamond$			<b>\$</b>		<b>3</b>
74	HS251	1		$\Diamond$			<b>&gt;</b>		
75	HS201	1	2	$\Diamond$			<b>&gt;</b>		<b>*</b>
75	HS172	1	2	$\Diamond$					
75	HS151	1	2	$\Diamond$					3
76	HS103	1		$\Diamond$	$\Diamond$		<b>\$</b>		
76	HS072	۵		$\Diamond$			<b>\$</b>		
76	HS053	۵		$\Diamond$	$\Diamond$		<b>\$</b>		



# **Covers** • Hockey Puck

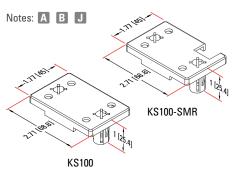


Part no.: KS100

Clear plastic cover for standard hockey puck package SSRs (2.25 x 1.75 in). Safety covers provide added protection from electric shock when installing or checking equipment.

Part no.: KS100-SMR

Clear plastic cover with cut out window for SMR-6 and MC Series. Safety covers provide added protection from electric shock when installing or checking equipment.



# **Covers** • Large Puck

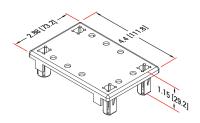




Part no.: KS300

Clear plastic cover large puck panel mount SSRs (4 x 2.9 in). Safety covers provide added protection from electric shock when installing or checking equipment.

Notes: A B J



# **DIN Rail Bracket**

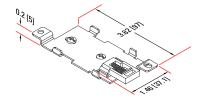




#### **DIN Rail Kit 1**

Part no.: DRK1

Spring, retaining clip, 45 mm DIN Rail bracket and 2 screws 6-32 x 1/4 in.



#### Filters • AC Filters



RoHS

Part no.: 1F25

EMI noise suppression filter for SSR in AC single phase systems

Part no.: 3F20 (shown above)

 $\ensuremath{\mathsf{EMI}}$  noise suppression filters for SSR in three phase

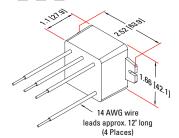
systems

Part no.: 3F20-4 (shown below)

EMI noise suppression filters with neutral for SSR in

three phase systems

Notes: A B J



# **Hardware Kits**





Part no.: HK1

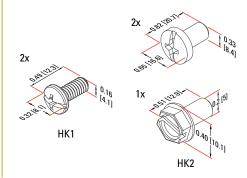
Bag with 2 SSR mounting screws 8-32 x 3/8 in.

Part no.: HK2

Bag with 1 ground screw 10-32 x 3/8 in and 2 bracket

screws 6-32 x 1/4 in.

Notes: A B J



# **Heat Sinks • HS501DR**



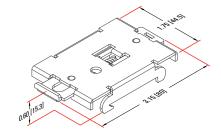




- 5.0°C/W Thermal resistance
- Suitable for 1 single or dual SSR
- DIN Rail mountable
- Heat sink material is steel with yellow

zinc surface finish

Notes: A B J



#### **HS501DR** includes

DIN Rail Mounting Bracket M4 Mounting Screws Latch Release



#### Heat Sinks • HS351

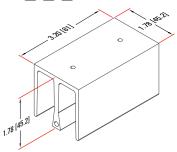






- 3.5°C/W Thermal resistance
- Suitable for 1 single or dual SSR
- Panel mountable or DIN Rail mountable version available as HS351DR
- Heat sink material is aluminum with natural finish

Notes: A B J



#### **HS351DR** includes

Ground Screw (10-32 x 3/8 in) DIN Rail Kit 1 (DRK1) Heat Sink (HS351) One Hardware Kit 1 (HK1)

### Heat Sinks • HS301





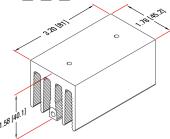


- 3.0°C/W Thermal resistance
- Suitable for 1 single or dual SSR
- Panel mountable or DIN Rail mountable version available as HS301DR
- Heat sink material is aluminum with black anodized finish

Notes: A B J







#### **HS301DR** includes

Ground Screw (10-32 x 3/8 in) DIN Rail Kit 1 (DRK1) Heat Sink (HS301) One Hardware Kit 1 (HK1)

# **Heat Sinks • HS251**





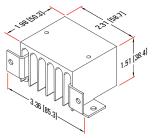


- 2.5°C/W Thermal resistance
- · Suitable for 1 single or dual SSR
- Panel mountable
- Heat sink material is aluminum with

natural finish







Assemblies

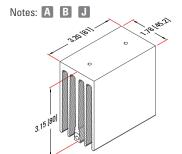
### Heat Sinks • HS201







- 2.0°C/W Thermal resistance
- Suitable for 1 single or dual SSR
- Panel mountable or DIN Rail mountable version available as HS201DR
- Heat sink material is aluminum with black anodized finish



#### **HS201DR** includes

Ground Screw (10-32 x 3/8 in) DIN Rail Kit 1 (DRK1) Heat Sink (HS201) One Hardware Kit 1 (HK1)

### Heat Sinks • HS172





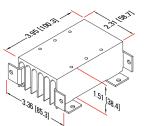


- 1.7°C/W Thermal resistance
- Suitable for 1 or 2 single or dual SSRs
- Panel mountable
- · Heat sink material is aluminum with

natural finish







#### **Heat Sinks • HS151**





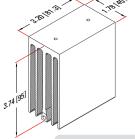


- 1.5°C/W Thermal resistance
- Suitable for 1 single or dual SSR
- Panel mountable or DIN Rail mountable version available as HS151DR
- Heat sink material is aluminum with black anodized finish

Notes: A B J







#### **HS151DR** includes

Ground Screw (10-32 x 3/8 in) DIN Rail Kit 1 (DRK1) Heat Sink (HS151) One Hardware Kit 1 (HK1)



#### **Heat Sinks • HS103**

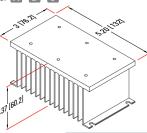






- 1.0°C/W Thermal resistance
- Suitable for 1, 2 or 3 single or dual SSRs; one 3 phase SSR
- Panel mountable or DIN Rail mountable version available as HS103DR
- Heat sink material is aluminum with black anodized finish

Notes: A B J



#### **HS103DR** includes

Heat Sink (HS103) Extruded DIN Rail Bracket Fasteners Three Hardware Kits 1 (HK1)

## **Heat Sinks • HS072**





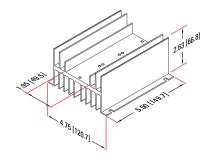


- 0.7°C/W Thermal resistance
- Suitable for 1 or 2 single or dual SSRs
- · Panel mountable
- · Heat sink material is aluminum with

natural finish

Notes: A B J





# Heat Sinks • HS053

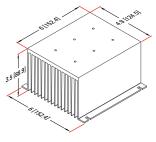






- 0.5°C/W Thermal resistance
  - Suitable for 1, 2 or 3 single or dual SSRs; one 3 phase SSR
  - Panel mountable
- · Heat sink material is aluminum with black anodized finish





# **ID Marker Strips**





Part no.: CNLB

A package of 10 plastic strips comprising 10 individual unprinted markers.

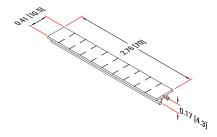
Part no.: CNLN

A package of 10 plastic strips comprising 10 markers printed individually from 1 to 10.

Part no.: CNL2

A package of 10 plastic strips comprising 10 markers printed individually from 11 to 20.

Notes: A B J



# **Lug Terminals**





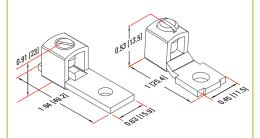
Part no.: TRM1

Copper wire lug for AWG 6 (13.3 mm²) to AWG 0 (53.5 mm²) wire size. Mounts with #8, #10, M4 or M5 screws. (Not compatible with IP20 covers)

Part no.: TRM6

Copper wire lug for AWG 14 (2.1 mm²) to AWG 6 (13.3 mm²) wire size. Mounts with #8, #10, M4 or M5 screws.

Notes: A B J



# **Sockets • DRS Socket**









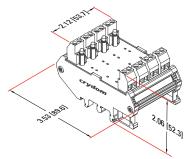
#### **DRS Series DIN Rail Mountable Sockets**

Part no.: DRS1 (shown above)
10 mm single channel DIN Rail mountable
socket to mount Crydom PCB mount

relays onto standard 35 mm DIN Rail profiles.

Part no.: DRS4 (shown below)

54 mm four channel DIN Rail mountable socket to mount Crydom PCB mount relays onto standard 35 mm DIN Rail profiles.





#### **Sockets • DRS-CN Sockets**





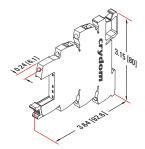


**CN Series DIN Rail Mountable Sockets** Part no.: DRSCN05, DRSCN24

DIN Rail mountable socket to mount CN Series relays onto standard 35 mm DIN

Rail profiles. Maximum output rating for DRSCN sockets is 250 V, 6 Amps regardless of selected SSR. DRS-CN sockets are 6 mm wide and include input status LED.

Notes: A B G J



#### Sockets • DRSED Socket





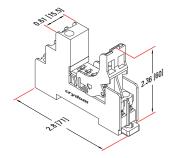


**ED Series DIN Rail Mountable Socket** Part no.: DRSED

Finger safe IP10 DIN Rail mountable socket to mount ED Series relays onto

standard 35 mm DIN Rail profiles. Rated at 250 V AC/DC, 12 Amps. The DRSED includes M3 Combo screws.

Notes: A B J



# **Sockets • PCBSED Socket**





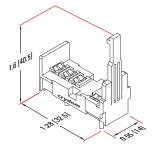


**ED Series PCB Mountable Socket** Part no.: PCBSED

PC Board mountable socket for ED

series relays. Rated at 250 V AC/DC, 12

Amps. Suggested Pin-out hole diameter: 1.0 mm



Assemblies

# Thermal Pads • Mini-Puck

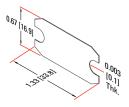




Part no.: HSP-6

Thermal pad for mini-puck panel mount SSRs. Includes adhesive on one side.

Notes: A B J



# Thermal Pads • Hockey Puck





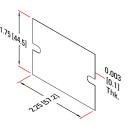
Part no.: HSP-1

25 pack of non-adhesive thermal pads for standard hockey puck package SSRs ( $2.25 \times 1.75$  in).

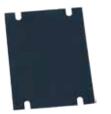
Part no.: HSP-2 (shown above)

Thermal pad for standard hockey puck package SSRs (2.25 x 1.75 in). Includes adhesive on one side.

Notes: A B J



# Thermal Pads • Large Puck





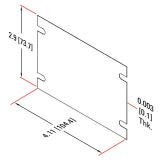
Part no.: HSP-3

Thermal pad for large puck panel mount SSRs (4 x 2.9 in).

Part no.: HSP-5 (shown above)

Thermal pad for large puck panel mount SSRs (4 x 2.9 in).

Includes adhesive on one side.





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