

Technologies

Solid State Relays & Contactors



The Global Expert in Solid State Switching Technology





Crydom, global expert in solid state switching technology, combines technology and innovation to provide customers a wide range of standard Solid State Relays and Solid State Contactors, and specializes in custom designed solid state switching solutions for any load control application. Crydom is a brand of Sensata Technologies.

www.crydom.com

Sensata Technologies is one of the world's leading suppliers of sensing, electrical protection, control and power management solutions with operations and business centers in 13 countries. Sensata's products improve safety, efficiency and comfort for millions of people every day in automotive, appliance, aircraft, industrial, military, heavy vehicle, heating, air-conditioning and ventilation, data, telecommunications, recreational vehicle and marine applications. For more information please visit Sensata's website at:

www.sensata.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.
- © 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 upon selected SSR. Heat sinks do not require safety agency approval.
- The standard Crydom SSR/Heat Sink Assemblies are either DIN Rail or Panel Mounted depending upon model selected and are available with either

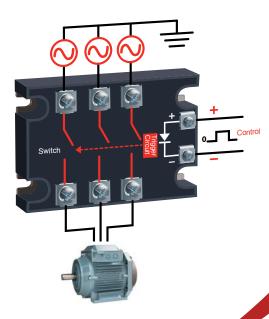
- one, two or three single or dual SSRs, or one three-phase SSR.
- Installing a CN Series SSR in a socket that does not have matching input/output specifications may result in non-operation or damage to either the SSR, socket or both. See socket-relay compatibility table available in CN Series SSR datasheet.
- II 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 determine agency approvals for a specific part number contact Crydom Technical Support.
- K Required external heat sink for all ratings.
- Heat sink includes the necessary hardware to mount the relay(s) onto the heat sink. The number of hardware kits (HK1 or HKM1) included depends upon the number and type of SSRs possible to install on each heat sink.



What is a Solid State Relay/Contactor?

A Solid State Relay or Contactor (SSR or SSC) is an electronic component that switches Power (AC or DC current) to a load circuit and provides electrical isolation between an application's control circuit and load circuit. It is a competitive technology to Electromechanical Relays (EMRs) and other switching technologies such as Mercury Displacement Relays (MDRs) and discrete component assemblies.





Why use Solid State Switching Technology?



Long life



Quiet operation



Minimum electrical noise



Low power consumption



Shock & vibration resistant



Ideal for harsh environments



Compatibility with control systems



Fast switching



Position insensitive



Reduced weight



Magnetic noise immunity



Reduced energy cost

Applications

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

Motion Control

Includes elevators, lifts, hoists, exercise equipment, conveyor systems, solar trackers, 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.

Heating Control

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

Benefits: Long life, no maintenance, safe product, easy to interface, as well as enabling temperature accuracy. Suitable for heater, fan, blower and valve control.

ower Control

Includes power supplies, transformers, regulators, inverters, converters, UPS systems, etc. as well as any load that is not specifically for heating, lighting or motion control.

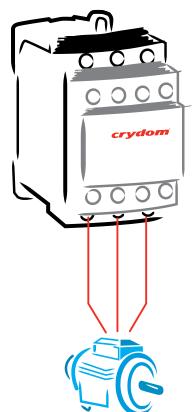
Benefits: Long life, silent operation, high speed switching, endurance, mechanical shock and vibration resistance, position insensitive, logic compatibility, arc and bounce free switching, and low electromagnetic emissions.

Lighting Control

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

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





Crydom has been well known for over 40 years as a supplier of Solid State Relays (SSRs). However, Crydom also designs, manufactures 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 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 because 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 "Contactor".

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 160 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 A 40 State	50		90	110	125
9	Series 1	530 V							 	 		ys 			
10	HA/HD	530 V													
11	Series H1	690 V													
12	CW	HD 660 V													
13	CSW	HD 280 V													
14	CL	Econ 280 V													
15	EL	Mini 280 V													
16	EZ	Low Pro 660 V													
17	MCBC	Burst Ctrl		1	1		= Co	ontro I	ol So ∣ ■	lid S	tate	Rela	ys =	1	
18	MCPC	Phase Ctrl							H				H		
19	PCV	V in Phase Ctrl							Ħ		-		H		
20	LPCV	Linear Ph Ctrl				Ē			F	Ħ		Ē	F		
21	SMR-6	Monitoring													
							_ 5	Solid	Sta	te Dı	ıal R	elay	s =		
22	Evolution Duals	Screw Term													
23	Series 1 Duals	Quick Connect					 •		I Cha	te Co					
24	53TP	3 Phase					_ ;	5011C	i Sta ■	le Ci	ontac _	ctors			_
25	53RV	Reversing													
DC Output Page Series		Description	3	5	7	10	12	20		ing A		80	100	120	160
rage	Series	Description			_	10	12			tate			100	120	100
26	DC60	1-60 V													
27	D06D	Econ 1 - 60 V													
28	PowerPlus DC	1-500 V													
29	Series 1 DC	1 - 400 V													
30	EL	Mini 1 - 100 V													
31	SSC	1 - 1000 V													
32	LVD	Disconnect					١.								
22	DD				1		_		i Sta	te Co		ctors	_	1	
33	DP	Reversing												_	_
34	HDC	High Current													

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Series 1 • 10-125 Amps





- · Crydom's Signature family of Solid State Relays
- Ratings from 10 to 125 Amps @ 24-280 VAC and from 25 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
- Elective "ultra-low" input current draw (2-4 mAmps DC typical, "T" suffix option)
- Optional output R-C Snubber for additional dv/dt attenuation
- Available with Zero Voltage Turn-On (resistive loads) or Instantaneous 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 compound using the "H" suffix
- Optional Normally Closed output ("-B" suffix option)
- UL 508 overload endurance rated and 100 kA Short Circuit Current Rating (SCCR)

Notes: A B C D J K



D: 3-32 VDC (4-32 VDC for 48 suffix)

AxxxxE: 18-36 VAC (12 & 24 suffixes only)















Blank: Screw

(Single pair

F: Quick Connect

[up to 25 Amp]

Double pair [50 Amp])

K: Installed standoffs for PC Board mounting





(12 & 24 suffixes only)

Blank: Not Included

G: Included





Thermal Pad

H: Included

Blank: Not Included





Output Frecuency Blank: 47-440 Hz 4: 400 Hz (12 & 24 suffixes only)

Operating Voltage 12: 24-140 VAC 24: 24-280 VAC

Rated Load Current 10: 10 Amp **25**: 25 Amp 48: 48-530 VAC

(12 & 24 suffixes only) 40: 40 Amp (12 suffix only) **50**: 50 Amp

(24 & 48 suffixes only) **75**: 75 Amp (24 & 48 suffixes only)

90: 90 Amp (24 & 48 suffixes only) 110: 110 Amp (24 suffix only) 125: 125 Amp (24 suffix only)

Overvoltage Protection (12 & 24 suffixes only) Blank: Not Included P: Included

Snubber Blank: Not Included S: Included (Not needed with T suffix. included as standard)

as standard)

T: Low Current

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





Output Type

Blank: Normally Open

(12 & 24 suffixes only.

Snubber included.

-B: Normally Closed

THE CENTRAL CE MAN



Series









- 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

Overvoltage Protection

Input Status LED

G: Included

Blank: Not Included

Blank: Not Included

P: Included

- Flexible 4-32 VDC, 18-36 VAC or 90-280 VAC Control Voltage
- Elective "ultra-low" input current draw (2-4 mAmps DC typical, "T" suffix option)
- R-C Snubber network for additional dv/dt attenuation (for HA48/HD48 models only)
- Available with Zero Voltage Turn-On (resistive loads) or Instantaneous 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 compound using the "H" suffix
- UL 508 overload endurance rated and 100 kA Short Circuit Current Rating (SCCR)

Notes: A B C D J K



Snubber Blank: Not Included S: Included

(Hx48xx and Hx48xxT only Not needed with T suffix included as standard)

Trigger Circuit Blank: Phototriac

T: Low Current Phototransistor





AxxxxE: 18-36 VAC

Control Voltage

A: 90-280 VAC

D: 4-32 VDC

























(Single pair [up to 25 Amp] Double pair [50 Amp])

PC Board mounting

Thermal Pad Blank: Not Included H: Included

-10

Switching Type

Blank: Zero Voltage Turn-On -10: Instantaneous Turn-On

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Operating Voltage 48: 48-530 VAC

60: 48-660 VAC 50: 50 Amp

Rated Load Current 12: 12 Amp (48 suffix only) 25: 25 Amp

75: 75 Amp (48 suffix only) 90: 90 Amp

110: 110 Amp (48 suffix only)

125: 125 Amp

Blank: Screw

F: Quick Connect

K: Installed standoffs for

Series H1 • 25-125 Amps

















- Solid State Relay with ratings from 25 to 125 Amps @ 48-690 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 (2WD & 6WD suffixes only, snubberless)
- Available with Zero Voltage Turn-On (resistive loads) or Instantaneous Turn-On (phase control or inductive loads) output
- Elective Internal TVS ("P" suffix) eliminates the need for external Overvoltage Protection (2D & 2WD suffixes only)
- A pre-attached Thermal Pad can be ordered to eliminate the need for thermal compound using the "H" suffix
- UL 508 overload endurance rated and 100 kA Short Circuit Current Rating (SCCR)

Notes: A B



Rated Load Current 25: 25 Amp 50: 50 Amp

75: 75 Amp

90: 90 Amp

125: 125 Amp









Compatible

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Transient Overvoltage

Series

2D: 1200 Vpk (with Snubber)

2WD: 1200 Vpk (without Snubber)

6WD: 1600 Vpk (without Snubber)



(2D & 2WD suffixes only)





Blank: Not Included

P: Included

Overvoltage Protection

(2D & 2WD suffixes only) | Thermal Pad





Blank: Not Included

H: Included

48: 48-530 VAC (2D suffix only) 48-660 VAC (2WD suffix only) 60: 48-690 VAC (6WD suffix only)

Termination Blank: Screw

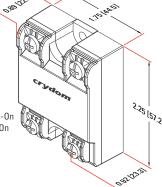
(Single pair [25 Amp] Double pair [50 Amp]) K: Installed standoffs for

PC Board mounting

Input Status LED Blank: Not Included G: Included

Switching Type

Blank: Zero Voltage Turn-On -10: Instantaneous Turn-On



Operating Voltage

F: Quick Connect



CW Series • 10-125 Amps

















- Heavy duty Solid State Relay with ratings from 10 to 125 Amps @ 24-280 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 and universal AC/DC control of 20-280 VAC and 20-48 VDC

- · LED indicator for easy identification of control status
- Available with Zero Voltage Turn-On (resistive loads) or Instantaneous 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 compound using the "H" suffix
- UL 508 overload endurance rated and 100 kA Short Circuit Current Rating (SCCR)

Thermal Pad Blank: Not Included

H: Included

Notes: A B C D J K











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Control Voltage

A: 90-280 VAC D: 3-32 VDC (4-32 VDC for 48 suffix) U: 20-48 VDC or 20-280 VAC

AxxxxF: 18-36 VAC











24: 24-280 VAC

Operating

Voltage







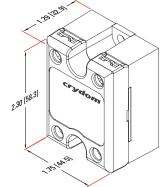






Overvoltage Protection Blank: Not Included P: Included

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



Series











10: 10 Amps 25: 25 Amps 48: 48-660 VAC | 50: 50 Amps

90: 90 Amps 125: 125 Amps

CSW Series • 10-90 Amps















- Heavy duty Solid State Relay with ratings from 10 to 90 Amps @ 24-280 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 (without option "S")
- Elective R-C Snubber network for additional dv/dt attenuation (option "S")
- Available with Zero Voltage Turn-On (resistive loads) or Instantaneous 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 compound using the "H" suffix
- UL 508 overload endurance rated and 100 kA Short Circuit Current Rating (SCCR)

Notes: A B C D J K





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Operating Voltage 24: 24-280 VAC









Termination Blank: Screw F: Quick Connect (Single pair [up to 25 Amp] Double pair [50 Amp])



K: Installed standoffs for

PC Board mounting





Blank: Not Included

Input Status LED

G: Included





Thermal Pad

H: Included

Blank: Not Included

Rated Load Current 10: 10 Amp

25: 25 Amp

50: 50 Amp

75: 75 Amp 90: 90 Amp

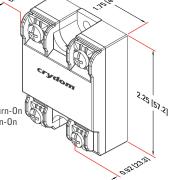
Overvoltage Protection

Blank: Not Included P: Included

Snubber

Blank: Not Included S: Included

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





CL Series • 5-10 Amps



Compatible

Accessories





- 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 Instantaneous Turn-On (phase control or inductive loads) output

Notes: A B C D J K



Series







Control Voltage

A: 90-250 VAC

D: 3-32 VDC







Turn-On

Switching Type Blank: Zero Voltage



Thermal Pad

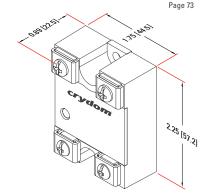
H: Included

Blank: Not Included

Load Voltage 240: 24-280 VAC

Rated Load Current 05: 5 Amps 10: 10 Amps

Cover Blank: Not Included (IP00) C: Included (IP20)



Assemblies

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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 Instantaneous 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







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Thermal Pad Page 83

Series



240A





Rated Load Current

5: 5 Amps

10: 10 Amps

20: 20 Amps

_



Control Voltage

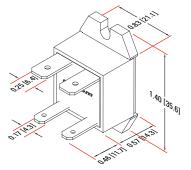
05: 4-8 VDC

12: 10-14 VDC

24: 21-27 VDC

Output Voltage 240 A: 24-280 VAC Switching Type

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



EZ Series • 5-18 Amps













crydom

- Low profile Solid State Relay
- Ratings from 5 to 18 Amps @ 24-280 VAC or 48-660 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 Instantaneous 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: 3-15 VDC (4-15 for 480 suffix) A: 90-140 VAC ExxxA: 18-36 VAC

Snubber

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

ExxxD: 15-32 VDC



Series



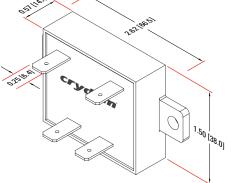
Rated Load Current 5: 5 Amps (EZ240D suffix only) 12: 12 Amps

Switching Type

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

Operating Voltage 240: 24-280 VAC 480: 48-660 VAC **18:** 18 Amps





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)
- Designed to provide proportional AC power to a wide range of resistive loads

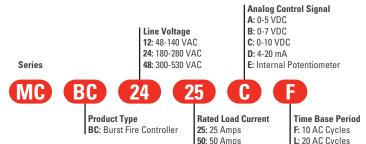
Notes: A B D J K



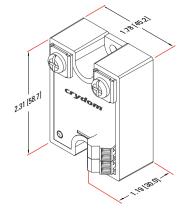


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90: 90 Amps



MCPC Series • 25-90 Amps







- Microprocessor based phase angle 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 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

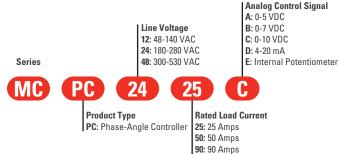
Notes: A B D J K

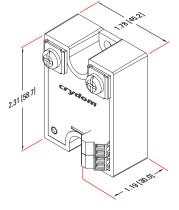




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Protective Cover Page 74





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



















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)

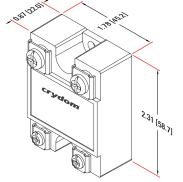
90: 90 Amps (10 prefix only)



Compatible

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Accessories

LPCV Series • 15-110 Amps







- · 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 internal logic circuit
- Designed to provide proportional AC power to a wide range of resistive loads

Notes: A B D J K







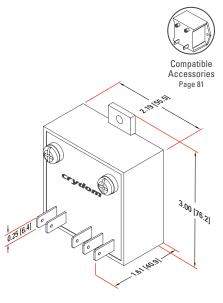
Series

Operating Voltage 24: 20-300 VAC

Rated Load Current

Control Voltage 5: 0-5 VDC 10: 0-10 VDC 20: 4-20 mAmps

15: 15 Amps 25: 25 Amps 40: 40 Amps 75: 75 Amps 110: 110 Amps











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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Protective Cover Page 74



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

Series







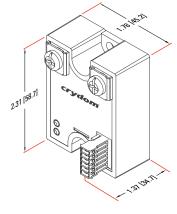




Features

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
- Flexible 4-32 VDC Control Voltage
- Three Input Connector options for additional assembly flexibility
- LED indicator for each output channel for easy identification of control status
- Zero Voltage Turn-On (resistive loads) output

Notes: A B C D J K







Input Connector options







0.98 [25.1]

Connector 4 Connector 3

Series

Cover

C: Included

D: Not Included

Operating Voltage

24: 24-280 VAC

48: 48-660 VAC

Control Voltage

W: 4-32 VDC



B channel bottom

B channel on right

V: A channel on left,

Output Terminal Orientation U: A channel top,

Rated Load Current Input Connector 25: 25 Amps

2: Key Locking Connector **50**: 50 Amps 3: 4 Pin Connector

Thermal Pad Blank: Not Included H: Included

accepting Screw Terminals

4: 4 Pin Spring Terminal *



^{*} Drawing shown on the right

Accessories

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 Instantaneous Turn-On (phase control or inductive loads) output
- Quick Connect termination; 120/240 V models (D24) include pin control termination
- UL 508 overload endurance rated

Notes: A B C D J K









(D24)









Heat Sinks & other Accessories Page 75

Series

Rated Load Current 25: 25 Amps 40: 40 Amps

Thermal Pad

Blank: Not Included H: Included

H12D48



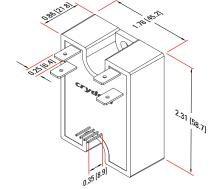




Operating Voltage D24: 24-280 VAC H12D48: 48-530 VAC

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

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



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 Instantaneous 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 compound using the "H" suffix
- III 508 overload endurance rated



Thermal Pad

H: Included









Assemblies

Page 71

Heat Sinks & other Accessories Page 78

Series

25: 25 Amps

50: 50 Amps



Rated Load Current



D: Not Included (IP00)

C: Included (IP20)



Blank: Not Included

Control Voltage

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

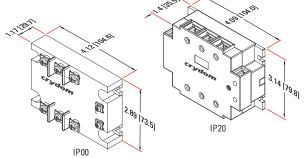
C: 180-280 VAC (with IP20 cover)

D: 4-32 VDC

E: 18-36 VAC (with IP20 cover)

Switching Type Cover

Blank: Zero Voltage Turn-On -10: Instantaneous 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 compound using the "H" suffix
- UI 508 overload endurance rated





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Cover







Series









RV: 3 Phase Motor

Reversing SSR

Type





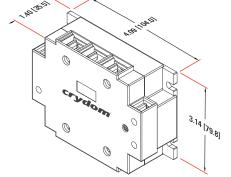


C: Included



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

Blank: Not Included H: Included



Control Voltage D: 4-32 VDC



Assemblies

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











Assemblies Page 71



Accessories Page 73

Series

Control Voltage S: 3.5-32 VDC SA: 90-280 VAC/DC

Output Type

Blank: Normally Open -B: Normally Closed

DC60



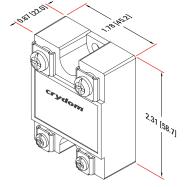






Rated Load Current

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



PCB Mount

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











Compatible Page 71 Accessories Page 73

Series

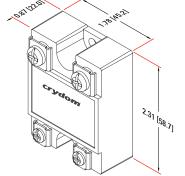
Operating Voltage 06D: 0-60 VDC







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



PowerPlus DC Series • 10-100 Amps

















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

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

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

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
- Flexible 4-32 VDC or 90-140 VAC Control Voltage
- Optional IP20 "touch safe" Cover for additional user protection (option "C") & thermal interface pad (option "H")
- Optically isolated high speed trigger circuit for enhanced switching
- Easily paralleled for high current applications
- Low impedance MOSFET output minimizes total power dissipation

Thermal Pad

H: Included

Blank: Not Included

- 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



RI CE MAHS

Assemblies Page 71

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Series





Control Voltage

A: 90-140 VAC

D: 4-32 VDC





Cover

Blank: Not

C: Included

Included



Operating Voltage 60: 7-48 VDC

100: 7-72 VDC 200: 7-150 VDC

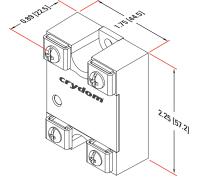
400: 7-300 VDC

Rated Load Current

10: 10 Amps

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

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



PCB Mount

Series 1 DC • 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)

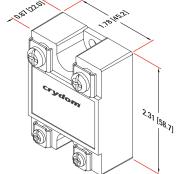
80: 80 Amps (100 VDC only)

100: 100 Amps (100 VDC only)



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Accessories

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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Thermal Pad Page 83

Series

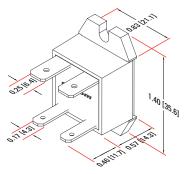


Rated Load Current

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
- 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











Compatible Accessories

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Series

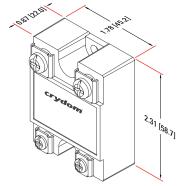


Rated Load Current 25: 25 Amps

Operating Voltage 1000: 0-1000 VDC

Control Voltage 12: 8-16 VDC

24: 20-28 VDC 36: 32-40 VDC



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











40: 40 Amps

60: 60 Amps 80: 80 Amps

I Thermal Pad Blank: Not Included

100:100 Amps | H: Included





75: 3-75 VDC

Operating Voltage







Control Voltage Code

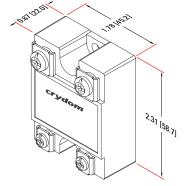
A: 36 VDC max., Hysteresis 11.0-11.5 VDC B: 36 VDC max., Hysteresis 11.5-12.0 VDC C: 36 VDC max., Hysteresis 12.0-12.5 VDC D: 36 VDC max., Hysteresis 23.0-24.0 VDC E: 36 VDC max., Hysteresis 24.0-25.0 VDC F: 36 VDC max., Hysteresis 25.6-26.6 VDC



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PCB Mount

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 C D J K













40 & 60 Amps Model



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Compatible Accessories Page 73

Start Mode

Blank: Instant Start

SA: Soft Start/Ramp Up, 0.2 sec

D: 4.5-15 VDC

| Control Voltage

SB: Soft Start/Ramp Up. 0.5 sec SC: Soft Start/Ramp Up. 1 sec

E: 18-32 VDC





B5: Dynamic Brake, 0.5 sec

B8: Dynamic Brake, 0.8 sec

B: Dynamic Brake, Continuous

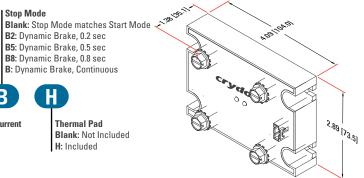


Operating Voltage 60: 48 VDC

Load Rated Current 20: 20 Amps

40: 40 Amps





























Accessories

HDC Series • 120-160 Amps









- High current solid state contactor with rating up to 160 Amps @ 150 VDC
- Single Pole Single Throw Normally Open Operation (SPST/N.O.)
- Flexible 4.5-32 VDC or 90-140 VAC Control Voltage
- Low impedance MOSFET output minimizes total power dissipation
- · LED Input Status indicator standard
- 5/16 inch diameter output terminal studs for large diameter wires and lugs
- Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)
- A pre-attached Thermal Pad can be ordered to eliminate the need for thermal compound using the "H" suffix
- UL 508 overload endurance rated

Notes: A B C D J K











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Series

Control Voltage A: 90-140 VAC D: 4.5-32 VDC

Thermal Pad Blank: Not Included H: Included





Operating Voltage

60: 7-48 VDC

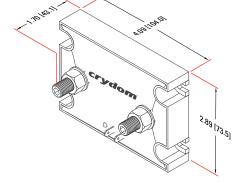
100: 7-72 VDC

200: 7-150 VDC



Rated Load Current

120: 120 Amps 160: 160 Amps



PCB Mount

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	3	4	5	8	12	25	
						_	Solid	Stat	te Re	elays	_	
36	ASO	Mini SIP										
37	MP	SIP										
38	CX	SIP										
39	MCX	SIP										
40	LS	SIP										
41	PF	SIP										
42	DPA	DIP										
43	SDV	DIP										
DC O	utput					Ra	ting	Amr	s			

DC Output			Rating Amps								
Page	Series	Description	-	5	-						
			Soli	d Sta	te Re	lays	_				
44	DMO	Mini SIP									
45	CMX	SIP									
46	MP	SIP									



ASO Series • 1.5-2 Amps









- Compact design Solid State Relay ideally suited for high density PCB applications crydom
 - 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 Instantaneous Turn-On (phase control or inductive loads) output
 - Solderable 0.015" x 0.030" [0.4 mm x 0.8 mm] pins can also plug fit SIP type IC socket









Series

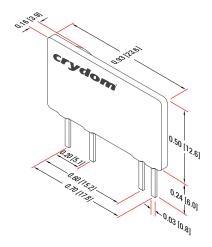
Rated Load Current 241: 1.5 Amps 242: 2 Amps







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



MP Series • 3-4 Amps













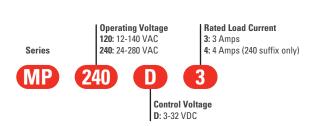
- SIP Solid State Relay ideally suited for high density PCB applications
- Ratings up to 4 Amps @ 24-280 VAC
- Control Voltage of 3-32 VDC
- 10 mm plastic housing allows for operation at -40°C

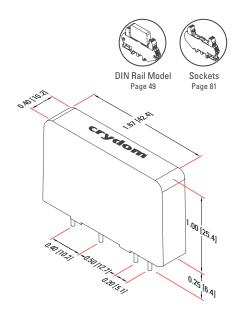
Notes: A B D J











Plug-In Mount Assemblies

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 Instantaneous Turn-On (phase control or inductive loads) output
- AC or DC Control Voltage options
- UL 508 overload endurance rated

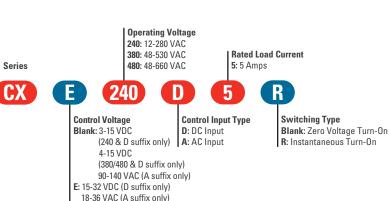
Notes: A B C D J

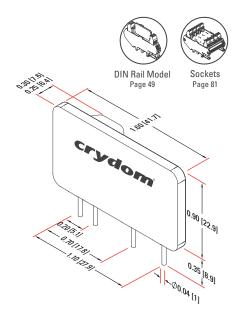












Accessories

MCX Series • 5 Amps

crydom

Series













- 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 Instantaneous Turn-On (phase control or inductive loads) output
- AC or DC Control Voltage options
- 10 mm plastic housing allows for operation at -40°C

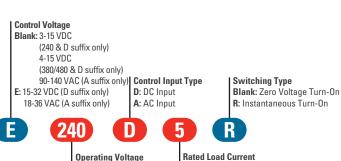




5: 5 Amps



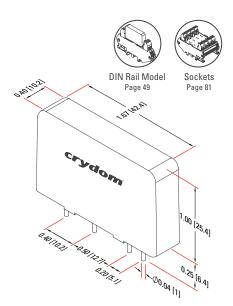




240: 12-280 VAC

380: 48-530 VAC

480: 48-660 VAC





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 Instantaneous Turn-On (phase control or inductive

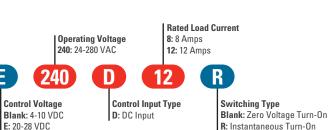
loads) output

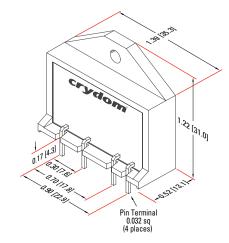
Notes: A B C D J











Series

Accessories

DIN Rail Mount

PF Series • 25 Amps













- SIP Solid State Relay ideally suited for high density PCB applications
- Ratings up to 10 Amps (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 Instantaneous Turn-On (phase control or inductive loads) output
- AC or DC Control Voltage options











Rated Load Current 25: 25 Amps



Series











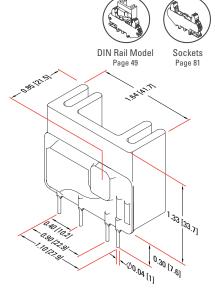
Control Voltage Blank: 3-15 VDC

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: Instantaneous Turn-On



Accessories

DPA Series • 1 Amp













- DIP Solid State Relay ideally suited for high density PCB applications crydom
 - Ratings to 1 Amp @ 280 VAC
 - 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
- Solderable Pin layout fits IC grid pattern and pluggable IC DIP type sockets

Notes: A B D J



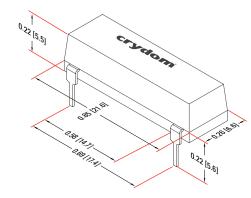




41: 20-140 VAC Series 61: 20-280 VAC **Control Voltage** 11: 10-35 mA DC

Operating Voltage

19: 3.5-10 VDC



crydom

SDV Series • 1.5 Amps













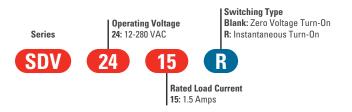
- DIP Solid State Relay ideally suited for high density PCB applications crydom
 - Ratings to 1.5 Amps @ 280 VAC
 - Control Voltage of 3.5-10 VDC
 - · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Available with Zero Voltage Turn-On (resistive loads)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

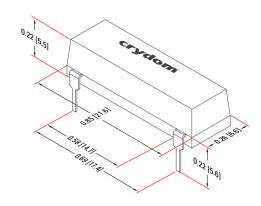
Notes: A B C D J











Plug-In Mount Assemblies

Accessories

DMO Series • 3 Amps





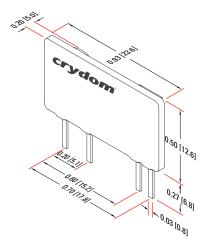
- Compact design Solid State Relay ideally suited for high density PCB applications
- Ratings up to 3 Amps @ 60 VDC
- 3-10 VDC Control Voltage
 - Low impedance MOSFET output minimizes total power dissipation
- · Ideally suited for both resistive and inductive loads (inductive loads such as motors and EMR/solenoid coils must be diode suppressed)
- Solderable 0.015" x 0.030" [0.4 mm x 0.8 mm] pins can also plug fit SIP type IC socket
- Easily paralleled for high current applications

Notes: A B D J









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)









Operating Voltage 60: 0-60 VDC 100: 0-100 VDC 200: 0-200 VDC

Rated Load Current

- 3: 3 Amps (200 VDC only)
- 5: 5 Amps (60 VDC only) 6: 6 Amps (100 VDC only)
- **10**: 10 Amps (60 & 100 VDC only)
- 20: 20 Amps (60 VDC only)





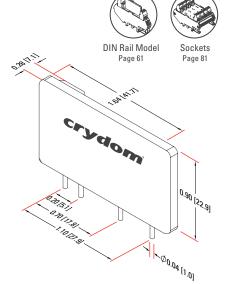






Control Voltage Blank: 3-10 VDC E: 20-28 VDC

Control Input Type D: DC Input





MP Series • 3 Amps











INPUT



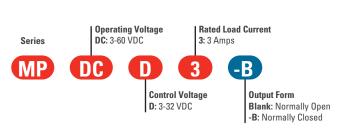
- SIP Solid State Relay ideally suited for high density PCB applications
- Ratings up to 3 Amps @ 60 VDC
- 10 mm plastic housing allows for operation at -40°C
 - Normally Closed version available ("-B" suffix option)
- Ideally suited for both resistive and inductive loads (inductive loads such as motors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

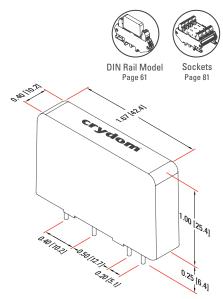
Notes: A B C D J











Accessories

DIN Rail Mount

Crydom DIN Rail Mounted Solid State Relays and Contactors are available with single, dual and 3 phase outputs. Industry standard 22.5 mm and 45 mm single phase packages are available from **10 to 65 Amps**. Slim 6 to 18 mm high power density packages are available from **0.1 to 12 Amps** for space restricted panels. Inputs cover the range of **24 to 280 VAC or 3 to 32 VDC** and feature LED input status indicator.

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.





AC O	utput															Ratir	ng A	mps			
Page	Series	Description	2	2.4	3	4	4.2	4.8	5	6	7.6	8	10	12				35			65
									_						Sol	id St	ate	Rela	ys =		_
48	DRA-CN	6 mm																			
49	DRA	10/54 mm																			
50	SeriesOne DR	11 mm																			
51	CKR	22.5 mm																			
52	CMR	45 mm																			П
53	SeriesOne DR Dual	18 mm																			
														= Sc	olid S	tate	Rel	ay Ti	mer	s =	_
54	SeriesOne DR Timer	Timer																			
														<u> </u>	olid	Stat	e Co	ntac	tors	_	_
55	DRA3P	3 Phase																			
56	DRA3R	Reversing																			
57	CTR	3 Phase																			
58	DRC3P	3 Phase																			
59	DRC3R	Reversing																			
DC O	utput															Ratir	ng A	mps			
	Series	Description										0.1	3	3.5		6	8		12	20	30
			-												Sol	id St	ate	Rela	ys =		_
60	DRA-CN	6 mm																			
61	DRA	10/54 mm																			Г
62	SeriesOne DR	11/18 mm																			П
63	CKM	22.5 mm																			
			_											• Sc	olid S	tate	Rel	ay Ti	mer	5 =	
64	SeriesOne DR Timer	Timer																			
														– S	olid	Stat	e Co	ntac	tors		
65	DRA4D	Reversing																			

DRA-CN Series • 2 Amps







- . Thin 6.2 mm DIN Rail mount Solid State Relay
 - Replaceable CN Series SSR with ratings of 2 Amps @ 240 VAC
 - LED indicator for easy identification of control status
- Available with Zero Voltage Turn-On (resistive loads) or Instantaneous Turn-On (phase control or inductive loads) output

Notes: A B C D J













Plug-In Mount ID Marker Strips Relays Page 67

Page 80

Series

Operating Voltage 240A: 24-250 VAC. 2 Amps Switching Type

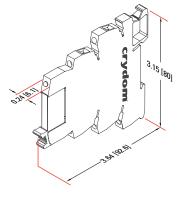
Blank: Zero Voltage Turn-On R: Instantaneous Turn-On

DRA-CN



Assembly Input Voltage 05: 3-12 VDC

24: 15-30 VDC



Accessories •

DIN RAIL MOUNT • AC Output • Relays

DRA Series • 3-10 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 10 Amps
- Operating Voltage of 12-380 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 Instantaneous Turn-On (inductive loads) output
- LED indicator for easy identification of control status

Notes: A B D H J









PCB Mount Relays Page 35

Series

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





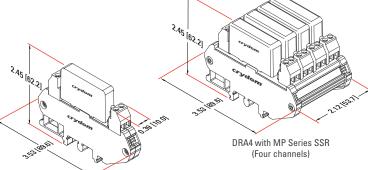


CXE240D5

Standard Crydom SSR p/n

including the following series: CX/CXE MCX/MCXE MP (One Channel only)

PF (One Channel only)



DRA1 with MP Series SSR (One channel)



SeriesOne DR • 3-12 Amps







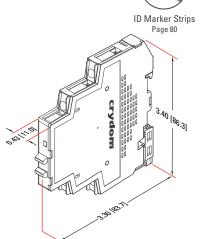
- DIN Rail mount 11 mm (3 & 6 Amps) or 18 mm (12 Amps) wide Solid State Relay
- Operating Voltage of 24-280 VAC and 48-600 VAC
- Fits standard 35 mm DIN Rail profiles
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Flexible Control Voltage of 4-32 VDC, 18-36 VAC, 90-140 VAC, 200-265 VAC
- Available with Zero Voltage Turn-On (resistive loads) or Instantaneous Turn-On (inductive loads) output
- IP20 housing for greater safety
- · LED indicator for easy identification of control status
- III & cIII listed
- UL 508 overload endurance rated

Notes: A B C D J













Rated Load Current

03: 3 Amps*

06: 6 Amps*

12: 12 Amps









Control Voltage A: 200-265 VAC

B: 90-140 VAC D: 4-32 VDC E: 18-36 VAC

Switching Type

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



^{*} Drawing shown on the right

DIN Rail Mount

Accessories

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, 90-140 VAC, 110-280 VAC
- Available with Zero Voltage Turn-On (resistive loads) or Instantaneous 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









Control Voltage D: 4-32 VDC B: 90-140 VAC A: 110-280 VAC AxxxxE: 18-36 VAC

Series















Voltage 10: 10 Amps 24: 24-280 VAC 20: 20 Amps 48: 48-530 VAC 30: 30 Amps

60: 48-660 VAC

Operating

Overvoltage Protection

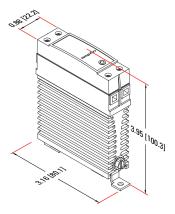
Blank: Not Included P: Included





Switching Type

Blank: Zero Voltage Turn-On -10: Instantaneous Turn-On





CMR Series • 35-65 Amps













- Solid State Relay with ratings from 35 to 65 Amps
 - Operating Voltage of 24-660 VAC
- classics 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 Instantaneous 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













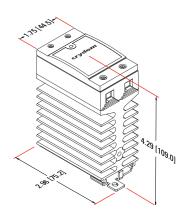
P: Included

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

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



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 Instantaneous Turn-On (inductive loads) output
- IP20 housing for greater safety
- · LED indicator for easy identification of control status
- UL & cUL listed
- UL 508 overload endurance rated

Notes: A B C D J









ID Marker Strips Page 80

Series

Operating Voltage 24: 24-280 VAC 48: 48-600 VAC

Rated Load Current

06: 6 Amps per channel













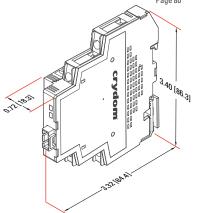




Control Voltage D: 4-32 VDC

Switching Type

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



SeriesOne DR Timer • 6 Amps













- DIN Rail mount 11 mm (6 Amps) Solid State Relay Timer
- · Operating Voltage of 24-280 VAC
- Fits standard 35 mm DIN Rail
- · Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Universal Control Voltage of 12-24, 90-140 & 180-240 VAC/DC
- · Available with Zero Voltage Turn-On (resistive loads) or Instantaneous Turn-On (inductive loads) output
- IP20 housing for greater safety
- · LED indicator for easy identification of control status
- UL listed & cUL recognized
- UL 508 overload endurance rated

Notes: A B C D J







Series











24: 24-280 VAC

Operating Voltage









Rated Load Current

06: 6 Amps

Timing Function A: A/At. Delay on Make

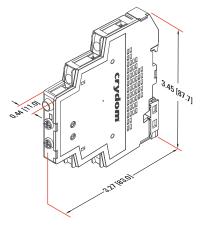
B: Single Shot C: Delay on Break H: H/Ht, Interval

L: L/Li, Repeat Cycle U: Multifunction (A/At, H/Ht, D/Di, B. C. Ac & Bw)

Control Voltage A: 180-240 VAC/DC B: 90-140 VAC/DC D: 12-24 VAC/DC

Switching Type

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



Accessories

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
- contactors 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 Instantaneous 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

Notes: A B C D J





Series











Operating Voltage

48: 48-510 VAC





2HP @ 480 VAC

Rated Load Current 2: 2.4 Amp/ 1HP @ 480 VAC

4: 4.2 Amp/



Function 3P: 3 Phase

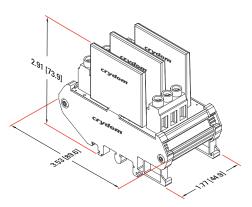
Control Voltage D: 4-6 VDC E: 18-28 VDC A: 200-265 VAC B: 90-140 VAC C: 36-60 VAC

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

Controlled Leas

Blank: 3 Legs

2: 2 Legs



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
- contactors 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







Rated Load Current 2: 2.4 Amps/1HP @ 480 VAC

4: 4.2 Amps/2HP @ 480 VAC

Series

DRA

Operating Voltage

40: 48-415 VAC

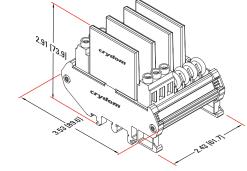
48: 48-510 VAC

Function 3R: Motor Reverser

D: 4-6 VDC E: 18-28 VDC A: 200-265 VAC

B: 90-140 VAC C: 36-60 VAC

Control Voltage



DIN Rail Mount

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 Instantaneous Turn-On (inductive loads) output
- · LED indicator for easy identification of control status
- Internal TVS eliminates the need for external Overvoltage Protection
- III 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





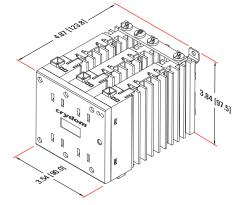






Operating Voltage 60: 48-600 VAC

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





SOLICON DRC3P Series • 7.6 Amps















- 3 Phase Solid State Contactor with ratings of 4.8 & 7.6 Amps per phase @ 480 VAC
- Up to 5 HP / 3.7 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
- Ultra-efficient thermal management design (Patented)
- Flexible 18-30 VAC/DC, 36-55 VAC/DC, 90-140 VAC or 208-265 VAC Control Voltage
- · LED indicator for easy identification of control status
- Available with Zero Voltage Turn-On (resistive loads) or Instantaneous Turn-On (phase control or inductive loads)
- Internal TVS eliminates the need for external Overvoltage Protection

Notes: A B C D J







Load Current per Phase / HP Ratings



ID Marker Strips Page 80

Series

48: 480 VAC

Operating Voltage





4: 7.6 Amp FLA (x2 Controlled Leas):

4.8 Amp FLA

(x3 Controlled Leas)





Blank: Zero Voltage Turn-On

Controlled Legs

Blank: 3 Controlled Leas

R: Instantaneous Turn-On

Switching Mode

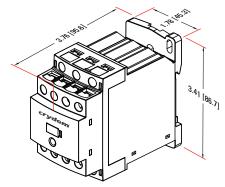
DRC

Function 3P: Contactor

Control Voltage A: 208-265 VAC B: 90-140 VAC C: 36-55 VAC/DC D: 18-30 VAC/DC **Auxiliary Contacts,** N.O. - N.C. 00: Not included

2: 2 Controlled Leas 11: 1 Solid State Auxiliary Contact, Normally Open; 1 Solid State Auxiliary Contact, Normally Closed

20: 2 Solid State Auxiliary Contacts, Normally Open



SOLICON DRC3R Series • 7.6 Amps















- Motor Reversing Contactor with rating of 7.6 Amps per phase @ 400-480 VAC
- Up to 5 HP / 3.7 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
- Ultra-efficient thermal management design (Patented)
- Flexible 18-30 VAC/DC, 36-55 VAC/DC, 90-140 VAC or 208-265 VAC Control Voltage
- LED indicator for easy identification of control status and direction (2 colors)

Notes: A B D J



ID Marker Strips Page 80

Series

DRC







48: 480 VAC



Operating Voltage 40: 400 VAC





4: 7.6 Amp FLA

Load Current per Phase

Function 3R: Reversing Contactor **Control Voltage** A: 208-265 VAC B: 90-140 VAC C: 36-55 VAC/DC

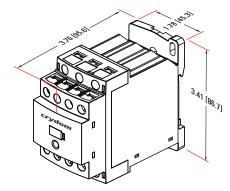
D: 18-30 VAC/DC

Auxiliary Contacts, N.O. - N.C.

00: Not included

20: 2 Solid State Auxiliary Contacts, Normally Open

(1 contact for each direction)



DRA-CN Series • 0.1-3.5 Amps







- . Thin 6.2 mm DIN Rail mount Solid State Relay
- Replaceable CN Series SSR with ratings of 3.5 Amps @ 24 VDC or 100 mAmps @ 48 VDC available
- 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





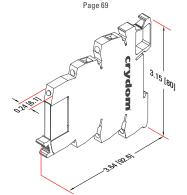


Series

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



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



Relays

Plug-In Mount ID Marker Strips

Page 80

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 per channel
- 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



Page 35



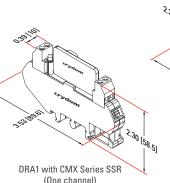
Number of Channels 1: One N.O. Channel 4: Four N.O. Channels

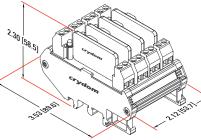






Standard Crydom SSR p/n including the following series: CMX/CMXE MP (One Channel only)





DRA4 with CMX Series SSR (Four channels)

SeriesOne DR • 3-12 Amps





ID Marker Strips







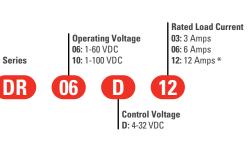
- DIN Rail mount 11 mm (3 & 6 Amps) or 18 mm (12 Amps) wide Solid State Relay
- 3, 6 & 12 Amps Rated Load Current
- Operating Voltage of 1-60 VDC and 1-100 VDC
- Fits standard 35 mm DIN Rail profiles
- MOSFET output provides added reliability in commercial and heavy industrial applications
- Flexible Control Voltage 4-32 VDC
- IP20 housing for greater safety
- · 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 listed including General Purpose & Motor Controller ratings
- UL 508 overload endurance rated

Notes: A B D J

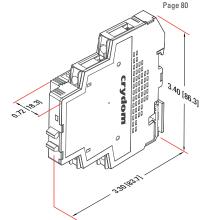








^{*} Drawing shown on the right



CKM Series • 10-30 Amps







- Solid State Relay with ratings from 10 to 30 Amps @ 60 VDC
- Fits standard 35 mm DIN Rail profiles
- classics 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





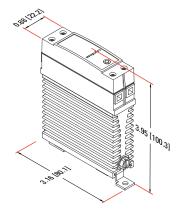




10: 10 Amps

20: 20 Amps

30: 30 Amps





SeriesOne DR Timer • 6 Amps













- DIN Rail mount 11 mm (6 Amps) Solid State Relay Timer
- Operating Voltage of 1-60 VDC
- Fits standard 35 mm DIN Rail
- Power FET output provides added reliability in commercial and heavy industrial applications
- Universal Control Voltage of 12-24 VAC/DC
- IP20 housing for greater safety
- · LED indicator for easy identification of control status
- · UL listed & cUL recognized
- UL 508 overload endurance rated

Notes: A B C D J



Rated Load Current

06: 6 Amps





Series

DRT







06: 60 VDC





Timing Function

Control Voltage A: A/At, Delay on Make D: 12-24 VAC/DC

Operating Voltage

B: Single Shot

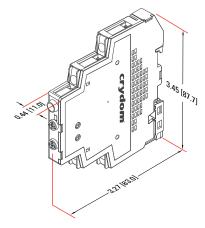
C: Delay on Break

H: H/Ht, Interval

L: L/Li, Repeat Cycle U: Multifunction

(A/At, H/Ht, D/Di,

B, C, Ac & Bw)



DRA4D Series • 6-12 Amps









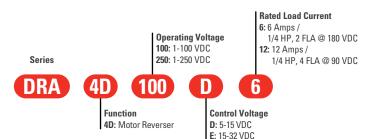


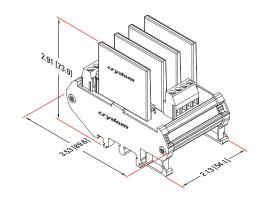


- DC Motor/Polarity Reversing Solid State Contactor
- 6 & 12 Amps ratings
- Operating Voltage of 1-100 VDC & 1-250 VDC
- Protective Forward/Reverse interlock built-in function
- Fits standard 35 mm DIN Rail profiles
- No heat sink required & cage style screw terminals for easy installation & reliable 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







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.

AC Output Page Series	Description	Rating Amps 2 3 5 Solid State Relays						
67 CN	280 V / 2 A							
68 ED	280 V / 5 A							
DC Output		Rating Amps						
Page Series	Description	0.1 3.5 5						
		Solid State Relays						
69 CN	1-60 V							
70 ED	1 - 100 V							







CN Series • 2 Amps

Crydom" CN240A24









- Thin (5 mm) 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 Instantaneous 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

















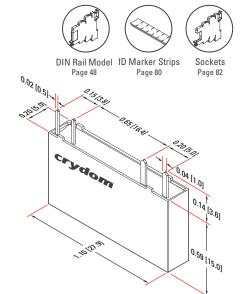






Control Voltage 05: 3-12 VDC 24: 15-30 VDC 60: 38-72 VDC





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 rated electromechanical relays and contactors
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Available with Zero Voltage Turn-On (resistive loads) or Instantaneous 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













DIN Rail Sockets Page 82

Page 82

Rated Load Current

3: 3 Amps (not available with B & E suffixes) 5: 5 Amps *







Operating Voltage

24: 24-280 VAC







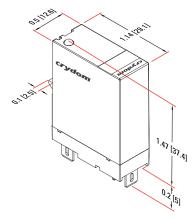
Control Voltage

B: 100-140 VAC C: 18-32 VDC

D: 3-15 VDC E: 18-36 VAC F: 48-72 VDC

Switching Type

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



^{*} Drawing shown on the right

CN Series • 0.1-3.5 Amps











- . Thin (5 mm) 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

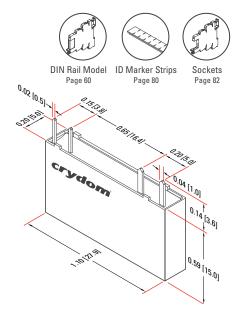






Operating Voltage 024D: 0-24 VDC, 3.5 Amps Series 048D: 0-48 VDC, 0.1 Amps

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



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



Page 82



Notes: A B D J







DIN Rail Sockets

Page 82

Series

Operating Voltage 06: 1-48 VDC

Rated Load Current 5: 5 Amps





10: 1-80 VDC



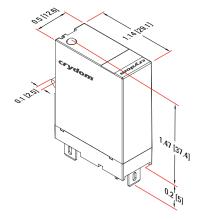


Control Voltage B: 90-140 VAC *

C: 18-32 VDC

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

F: 48-72 VDC



^{*} 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 0.25°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











Panel Mount Relays Page 8

Heat Sinks & other Accessories Page 75

Series

HS







& 02 suffix only)



1: 1 SSR (50, 30, 25, 20, 15 & 10 suffix only)

2: 1 or 2 SSRs (20, 17, 12 & 07 suffix only) 3: 1-3 SSRs or one 3phase (10, 07, 05, 03





Standard Crydom SSR p/n

Thermal Resistance

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

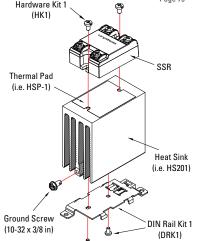
03: 0.36 °C/W 02: 0.25 °C/W

DIN Rail Bracket Blank: Not included Blank: 1 DR: Included

(50, 30, 20, 15, 12 & 10 suffix only)

Number of Mounted SSRs

2: 2 **3**: 3



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	HKM1	HSP-1 HSP-2	HSP-3 HSP-5	KS100	KS101	KS300	DRK1
		1114						~		
75	HS501DR			2	\Diamond		\$	13		
76	HS301	1	۵		\Diamond		\$	100		19
76	HS251	1			\Diamond		\$	183		
76	HS202	1	2		\Diamond		\$	18		(3)
77	HS201	1	1		\Diamond		\$	183		(3)
77	HS172	1	1		\Diamond		\$	8		
77	HS151	1	a		\Diamond		\$	18		(3)
78	HS122	1	۵		\Diamond	\Diamond	\$>	18		(3)
78	HS103	1			\Diamond	\Diamond	\$	18		
78	HS101			a	\Diamond	\Diamond	\$	83		
79	HS073	1			\Diamond	\Diamond	\$	8		
79	HS072	1			\Diamond		\$	18		
79	HS053	1			\Diamond	\Diamond	\$	18		
80	HS033	1			\Diamond	\Diamond	\$	183		
80	HS023	2			\Diamond	\Diamond	\$	100	Spiral Sp	



Covers • Hockey Puck

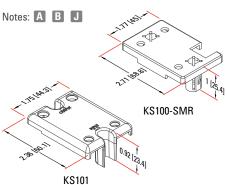


Part no.: KS100, KS100-SMR

Clear plastic cover for Generation 3 standard hockey puck package SSRs (2.25 x 1.75 in). Clear plastic cover with cut out window for SMR-6 and MC Series.

Part no.: KS101

Clear plastic cover for Generation 4 standard hockey puck package SSRs (2.25 x 1.75 in). Safety covers provide added protection from electric shock when installing or checking equipment.



Covers • Large Puck

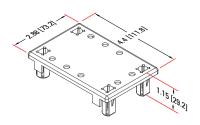




Part no.: KS300

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



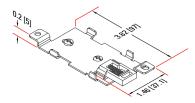


DIN Rail Kit 1

Part no.: DRK1

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





Filters • AC Filters





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

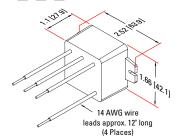
systems

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

 $\ensuremath{\mathsf{EMI}}$ noise suppression filters with neutral for SSR in

three phase systems

Notes: A B J



Hardware Kits





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

Part no.: HK2

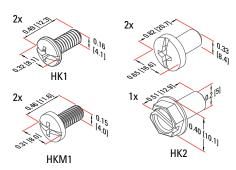
Bag with 1 ground screw 10-32 x 3/8 in and 2 bracket

screws 6-32 x 1/4 in.

Part no.: HKM1

Bag with 2 SSR mounting screws M4 x 9mm.

Notes: A B J



Heat Sinks • HS501DR



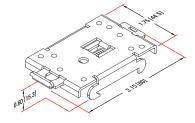




- 5.0°C/W Thermal resistance
- Suitable for 1 single or dual SSR
- DIN Rail mountable
- Heat sink material is steel with clear

zinc plating surface finish

Notes: A B J L



HS501DR includes

DIN Rail Mounting Bracket M4 Mounting Screws Latch Release



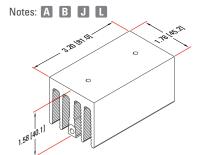
Heat Sinks • HS301







- 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



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

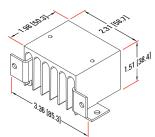
natural finish

Notes: A B J L









Heat Sinks • HS202







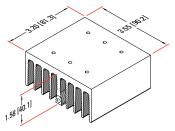
- 2.0°C/W Thermal resistance
- Suitable for 1 or 2 single or dual SSR
- Panel mountable or DIN Rail mountable version available as HS202DR
- Heat sink material is aluminum with black anodized finish

Notes: A B J L









HS202DR includes

Ground Screw (10-32 x 3/8 in) DIN Rail Kit 1 (DRK1) Heat Sink (HS202) One Hardware Kit 1 (HK1)

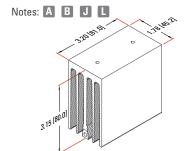
Heat Sinks • HS201







- 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







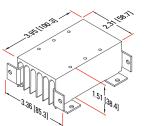
- 1.7°C/W Thermal resistance
- Suitable for 1 or 2 single or dual SSRs
- Panel mountable
- · Heat sink material is aluminum with

natural finish

Notes: A B J L







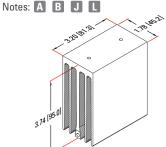
Heat Sinks • HS151







- 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



HS151DR includes

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



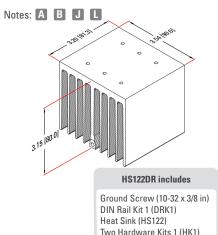
Heat Sinks • HS122







- 1.2°C/W Thermal resistance
- Suitable for 1 or 2 single or dual SSRs
- Panel mountable or DIN Rail mountable version available as HS122DR
- Heat sink material is aluminum with black anodized finish



Heat Sinks • HS103

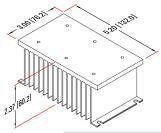






- 1.0°C/W Thermal resistance
- Suitable for 1, 2 or 3 single or dual SSRs; one 3 phase SSR
- Panel mountable or DIN Rail mountable version available as HS103DR
- Heat sink material is aluminum with black anodized finish

Notes: A B J L



HS103DR includes

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

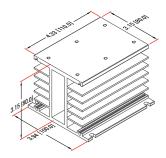
Heat Sinks • HS101







- 1.0°C/W Thermal resistance
- Suitable for 1 single or dual SSRs; one 3 phase SSR
- Panel mountable
- Heat sink material is aluminum with black anodized finish





Heat Sinks • HS073

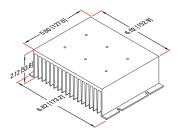






- 0.7°C/W Thermal resistance
- Suitable for 1, 2 or 3 single or dual SSRs; one 3 phase SSR
- Panel mountable
- Heat sink material is aluminum with black anodized finish

Notes: A B J L



Heat Sinks • HS072







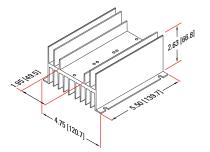
- 0.7°C/W Thermal resistance
- Suitable for 1 or 2 single or dual SSRs
- Panel mountable
- · Heat sink material is aluminum with

natural finish









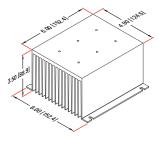
Heat Sinks • HS053







- 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



Heat Sinks • HS033

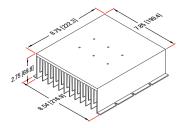






- 0.36°C/W Thermal resistance
- Suitable for 1, 2 or 3 single or dual SSRs; one 3 phase SSR
- Panel mountable
- Heat sink material is aluminum with black anodized finish

Notes: A B J L



Heat Sinks • HS023

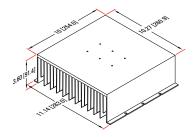






- 0.25°C/W Thermal resistance
- Suitable for 1, 2 or 3 single or dual SSRs; one 3 phase SSR
- Panel mountable
- Heat sink material is aluminum with black anodized finish

Notes: A B J L



ID Marker Strips





Part no.: CNLB

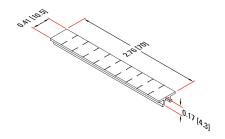
A package of 10 plastic strips comprising 10 individual unprinted markers.

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.



Lug Terminals



Part no.: TRM3/0

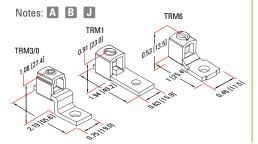
Copper wire lug for AWG 4 (21.2 mm²) to AWG 3/0 (85 mm2) wire size. Mounts with 3/8" bolt/stud.

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.



Power Supply • 20 VAC



CE VROHS

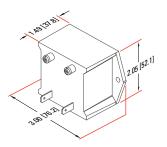




Part no.: PS120, PS240

The PS120 and PS240 power supplies are specifically designed to supply the 20 VAC supply voltage used by the Crydom LPCV series linear proportional controls, from a 120 or 240 VAC 50/60 Hz nominal AC voltage main supply.

Notes: A B J



Sockets • DRS Socket



DRS4









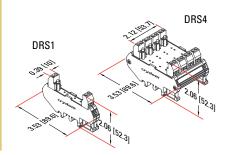
DRS Series DIN Rail Mountable Sockets Part no.: DRS1

10 mm single channel DIN Rail mountable socket to mount 1 Crydom PCB mount

relay onto standard 35 mm DIN Rail profiles.

Part no.: DRS4

54 mm four channel DIN Rail mountable socket to mount up to 4 Crydom PCB mount relays onto standard 35 mm DIN Rail profiles.





Sockets • DRS-CN Sockets





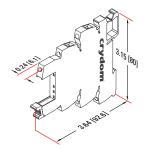


CN Series DIN Rail Mountable Sockets Part no.: DRSCN05, DRSCN24

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





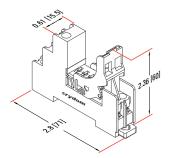


ED Series DIN Rail Mountable Socket Part no.: DRSED

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



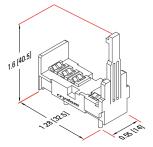




ED Series PCB Mountable Socket Part no.: PCBSED

PC Board mountable socket for ED series relays. Rated at 250 V AC/DC, 12

Amps. Suggested Pin-out hole diameter: 1.0 mm





Accessories

Thermal Pads • Mini-Puck

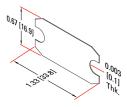




Part no.: HSP-6

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

Notes: A B J



Thermal Pads • Hockey Puck





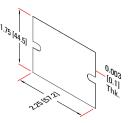
Part no.: HSP-1

25 pack of non-adhesive thermal pads for standard hockey puck package SSRs (2.25 x 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





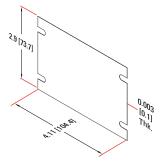
Part no.: HSP-3

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.







AMERICAS



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06/2014 Rev. 040317



Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«**FORSTAR**» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

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