



crydom[®]

New Product Guide



The Global Expert in **Solid State Switching** Technology

A brand of
CST
CUSTOM SENSORS & TECHNOLOGIES



About us

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

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

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

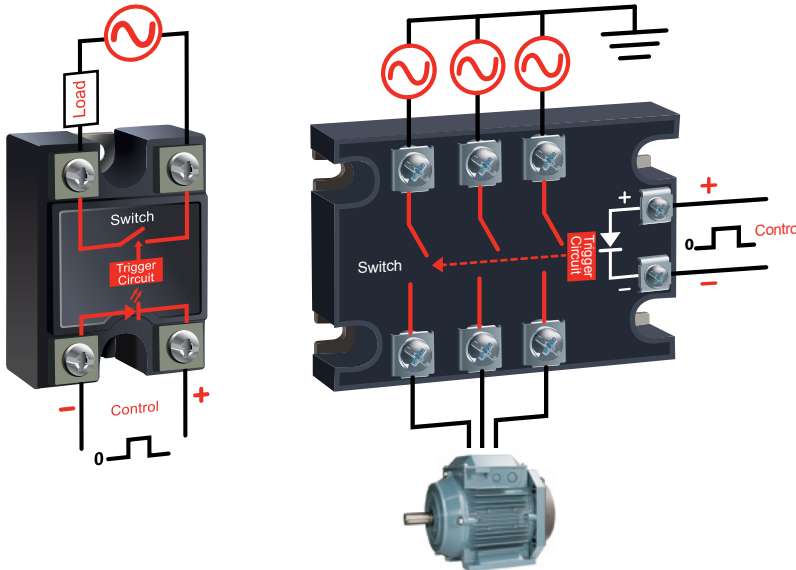
Crydom's modern purpose-built **100,000 square foot manufacturing facility** houses all aspects of its ISO certified operation including Design and Development Engineering, Manufacturing Operations and Quality Assurance, Customer Service, Finance, Marketing and General Management, permitting close coordination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

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

www.crydom.com

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).



Why Use Solid State Switching Technology?

- Long life
- Quiet operation
- Minimum electrical noise
- Low power consumption
- Shock & vibration resistant
- Ideal for harsh environments
- High compatibility with control systems
- Fast switching
- Position insensitive



Panel Mount

Relays

Power Plus DC Series

■ 10-100 Amps

Page 5

1-DC Series

D2D & D1D

■ 7-100 Amps

Page 6

Series H1

1600 Volt Blocking

■ 25-125 Amps

Page 7

CL Series

■ 5-10 Amps

Page 8

EL Series

■ 5-20 Amps

■ 5-10 Amps

Page 9

LVD Series

■ 40-100 Amps

Page 10

Evolution Duals

■ 25-50 Amps

Page 11

Contactors

53 Series

IP20, 53RV

■ 25-50 Amps

Page 12

DP Series

■ 20-60 Amps

Page 13

DIN Rail Mount

Relays

DRA Series

■ 2-8 Amps

■ 3-10 Amps

Page 14

SeriesOne DR

■ 6-12 Amps

■ 6-12 Amps

Page 15

CKM Series

■ 10-30 Amps

Page 16

Contactors

DRA Series Contactors

■ 2.4-4.2 Amps

■ 2.4-4.2 Amps

Page 17

CTR Series

■ 25 Amps

Page 18

PCB Mount

Relays

CMX Series

CMX100

■ 3-20 Amps

Page 19

UPD Series

w/Quick Connect

■ 15-25 Amps

Page 20

Accessories

Heat Sinks & Assemblies

HS Series

Thermal Resistance

0.5-5.0 °C/W

Page 23

For more information about these and other Crydom products see our Solid State Relays & Contactors Catalog or visit www.crydom.com

Plug-In Mount

Relays

CN Series

■ 2 Amps

■ 0.1-3.5 Amps

Page 21

LifePlus ED Series

■ 3-5 Amps

■ 5 Amps

Page 22

Output Type

■ AC ■ DC

PowerPlus DC Series
10-100 Amps DC



The PowerPlus DC Series of DC output Solid State Relays features traditional “Crydom Series 1” panel mounted style SSRs with ratings from 1 to 100 Amps, at 1 to 400 VDC in a 40°C ambient temperature. The PowerPlus DC Series has available Logic Compatible Control Inputs of either 4 to 32 VDC or the new 90 to 140 VAC, with optional IP20 “touch safe” clear plastic Cover and installed Thermal Interface Pad.

The PowerPlus DC product line features Crydom’s advanced DC switching technology utilizing low power dissipation power FETs coupled with 2.5 Kv optical coupling which provides reliable high power DC switching up to 100 Amps.

- Logic compatible control options of either 4 to 32 VDC or 90 to 140 VAC
- Optional IP20 “touch safe” Cover & Thermal Interface Pad
- Optically isolated Trigger Circuit for enhanced switching
- Low impedance MOSFET output minimizes total power consumption
- Industry standard panel mount package
- LED indicator for easy identification of control status
- UL general use (resistive) ratings

| Output | Description | Rating Amps |
|--------|-------------|------------------------------|
| DC | 1 - 500 V | 10 20 40 60 80 100 |

Markets

- Commercial & Industrial OEMs
- Energy & Infrastructure
- Medical
- Transportation

Compatible Accessories

- Cover (suffix “C”)
- Heat Sinks (HS Series)
- Lug Terminals (TRM1, TRM6)
- Thermal Pads (suffix “H”)



IP00



IP20

PowerPLUS
DC
 series



It’s always better when you have a Plus

NEW HIGH POWER D2D & D1Ds



**1-DC Series
7-100 Amps DC**

Crydom extended the 1-DC Series by introducing 4 High Power DC output models to the series of FET output DC Solid State Relays. The new high current SSRs are ideal for heating and lighting control as well as motion control in commercial, industrial, medical, aerospace, rail and automotive applications.

- 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)

| Output | Description | Rating Amps | | | | | | | |
|--------|-------------|-------------|----|----|----|----|----|----|-----|
| DC | 1-400 V | 7 | 10 | 12 | 20 | 40 | 60 | 80 | 100 |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Medical
- Transportation



DxD

Compatible Accessories

- Cover (KS100)
- Heat Sinks (HS Series)
- Lug Terminals (TRM1, TRM6)
- Thermal Pads (HSP-1, HSP-2)

HIGH POWER DC Output Solid State Relays



Series H1
25-125 Amps AC

The Series H1, formerly known as Series H12 or H12WD, now includes models with 1600 Volt Blocking in the traditional "Crydom Series 1" panel mounted package. With ratings up to 90 Amps at 660 VAC, the new models have available Control Voltage of 4 to 32 VDC. Crydom's Series H1 of high voltage AC output Solid State Relays now offers even higher levels of breakdown voltage and noise immunity (1600 Volts) for applications in installations where electrical transients are common and might otherwise damage less robust SSRs.

- Ratings from 25 to 90 Amps @ 48-660 VAC
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Low output off-state leakage current
- Available with Zero Voltage Turn-On (resistive loads) and Random Turn-On (phase control or inductive loads) output
- Elective internal TVS ("P" suffix) eliminates the need for external Overvoltage Protection
- A pre-attached Thermal Pad can be ordered to eliminate the need for thermal grease using the "H" suffix
- Optional LED indicator for easy identification of control status
- UL 508 overload endurance rated

| Output | Description | Rating Amps |
|--------|-------------|-----------------|
| AC | 660 V | 25 50 75 90 125 |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical

Compatible Accessories

- Cover (KS100)
- Heat Sinks (HS Series)
- Lug Terminals (TRM1, TRM6)
- Thermal Pads (suffix "H")



H1xxx



Suffix "G"
(with LED)

series
H1



Robust High Voltage
AC Output
Solid State Relays



CL Series 5-10 Amps AC

The CL Series panel mounted general purpose AC Solid State Relays join the Crydom offer as an excellent economical alternative for applications where panel mounting is desirable but traditional heavy duty SSRs are not required.

Rated at either 5 or 10 Amps output from 24 to 280 VAC, the CL Series features either 3 to 32 VDC or 90 to 250 VAC inputs and includes a LED input status indicator. The CL Series is offered in the industry standard panel mount SSR package and is available in either IP00 or IP20 “touch safe” screw terminal configurations.

- Ratings 5 & 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) and Random Turn-On (phase control or inductive loads) output

| Output | Description | Rating Amps |
|--------|-----------------------|-------------|
| AC | Economical SSR, 280 V | 5 10 |

Markets

- Commercial & Industrial OEMs
- Food & Beverage

Compatible Accessories

- Cover (suffix “C”)
- Heat Sinks (HS Series)
- Lug Terminals (TRM1 , TRM6)
- Thermal Pads (suffix “H”)



IP00



IP20

CL series

EL Series

5-20 Amps AC • 5-10 Amps DC

The EL Series of AC & DC output Solid State Relays features a small outline panel mount “Mini-Puck” package while contributes to maximize panel space. These 21 mm wide SSRs include embedded Quick Connect output terminals of 0.25” (6.35 mm) and control terminals of 0.187” (4.75 mm) for easy installation. Logic compatible control input versions include 5, 12 or 24 VDC. The EL Series Mini-Puck is ideal for space limited heating, lighting and motion control applications.

- Ratings of 5, 10 and 20 Amps @ 24-280 VAC
- Ratings of 5 & 10 Amps @ 3-100 VDC
- Back-to-back SCR output in AC output models provides added reliability in commercial and heavy industrial applications
- Low impedance MOSFET output in DC output models minimizes total power dissipation
- AC versions available with Zero Voltage Turn-On (resistive loads) and Random Turn-On (phase control or inductive loads) output
- 3.75k VAC optical isolation



AC Output



DC Output



| Output | Description | Rating Amps | | |
|--------|--------------------------|-------------|----|----|
| | | 5 | 10 | 20 |
| AC | Mini-Puck SSR, 280 V | ■ | ■ | ■ |
| DC | Mini-Puck SSR, 1 - 100 V | ■ | ■ | |

Markets

- Commercial & Industrial OEMs
- Food & Beverage

Compatible Accessories

- Heat Sinks (HS Series)
- Thermal Pad (HSP-6)

EL series



LVD series



**Rely on the best
to protect your battery**

www.crydom.com

PANEL MOUNT • Relays

crydom[®]



LVD Series 40-100 Amps DC

The LVD Series groups Crydom's Low Voltage Disconnect DC Solid State Switches offer. The LVD Series monitors and automatically disconnects 12 or 24 Volt battery systems from their loads when the battery voltage falls below a pre-selected DC voltage to prevent operational problems or damage resulting from deep cycle discharge. The LVD Series is offered in a rugged industry standard encapsulated panel mount package with screw terminals.

- Low Voltage Disconnect with ratings of 40, 60, 80 or 100 Amps @ 3-75 VDC
- Low impedance MOSFET output minimizes total power dissipation
- Six DC control ranges available for a variety of 12 VDC and 24 VDC battery systems



LVDxx

| Output | Description | Rating Amps |
|--------|------------------------|--------------------|
| DC | Low Voltage Disconnect | 40 60 80 100 |

Markets

- Commercial & Industrial OEMs
- Medical
- Energy & Infrastructure
- Transportation

Compatible Accessories

- Cover (KS100)
- LUG Terminals (TRM1, TRM6)
- Heat Sinks (HS Series)
- Thermal Pads (suffix "H")

Evolution Duals Series 25-50 Amps AC



Evolving from Crydom's successful "Series 1 Duals", Evolution Duals offer an improved mechanical and thermal design providing higher capacity outputs and significantly increased power density. The new independently controlled dual output Solid State Relays are available with an innovative optional clear IP20 "touch safe" Cover allowing a clear view of the power lead terminations while providing touch safe operation. Four different input termination options (pin, locking connector, detachable barriers w/screws, and direct wire) are available with three different input voltage ratings including a wide range 4 to 32 VDC current regulated version.

- Ratings of 25 & 50 Amps @ 24-280 VAC or 48-660 VAC
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- 4-15 VDC & 15-32 VDC & flexible 4-32 VDC Control Voltage
- Industry standard panel mount package
- Four input connector options for additional assembly flexibility
- LED indicator for each output channel for easy identification of control status
- Available with Zero Voltage Turn-On (resistive loads) and Random Turn-On (phase control or inductive loads) output

| Output | Description | Rating Amps |
|--------|--|-------------|
| AC | Screw Termination, 4 Connector options | 25 50 |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical

Compatible Accessories

- Cover (suffix "C")
- Heat Sinks (HS Series)
- Lug Terminals (for IP00 versions)
- Thermal Pads (suffix "H")



IP00



IP20



Option 1



Option 2



Option 3



Option 4



**EVOLUTION
DUALS**

The future of Duals
Today!!!

53 series



3 Phase & AC Motor Reversing Solid State Contactors

PANEL MOUNT • Contactors



53 Series 25-50 Amps AC

The expanded 53 Series offer now includes models featuring IP20 "touch safe" Cover with ratings of either 25 or 50 Amps per channel at 530 VAC. Four new 3 Phase Motor Reversing Solid State Contactors also rated at 25 and 50 Amps are also available. The reversing models include the same IP20 "touch safe" design, Class A emissions and level 3 noise immunity as the new 3 Phase models.

- 3 Phase & Motor Reversing Solid State Contactors 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
- R-C Snubber network for additional dv/dt attenuation
- Flexible 4-32 VDC, 18-36 VAC or 90-140 VAC / 180-280 VAC Control Voltage
- LED indicator for easy identification of control status
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- Internal TVS eliminates the need for external Overvoltage Protection
- UL 508 overload endurance rated

| Output | Description | Rating Amps |
|--------|---------------------------------------|-------------|
| AC | 3 Phase & Reversing SSCs, IP00 & IP20 | 25 50 |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical
- Transportation

Compatible Accessories

- Cover (suffix "C")
- Heat Sinks (HS103, HS053)
- Thermal Pads (suffix "H")



53TP
IP00



53TP
IP20



53RV

DP Series 20-60 Amps DC



The DP Series of DC Load Reversing Solid State Contactors (SSCs) include four optically isolated DC low dissipation FET outputs rated up to 60 Amps at 48 VDC, wired in an H-Bridge configuration with a common input control to provide a convenient method to both power on and off and reverse the polarity to a variety of DC loads.

The DP Series also offers options for a variety of combinations of Internal PWM Soft Start/Ramp Up, PWM Soft Stop/Ramp Down and Dynamic Brake functions. Available with a selection of set ramp times, the soft start and stop functions provide a convenient means to eliminate or reduce the mechanical shocks associated with starting and stopping DC electro-mechanical loads.

- 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
- 4.5 to 15 VDC & 18 to 32 VDC Control Voltage options
- Industry standard 75 x 105 mm panel mount package
- UL & IEC general use & Motor controller ratings
- LED indicators for easy identification of the Forward/Reverse control status



20 Amps



40 & 60 Amps

| Output | Description | Rating Amps |
|--------|---------------------|--------------|
| DC | Reversing SSC, IP00 | 20 40 60 |

Markets

- Commercial & Industrial OEMs
- Energy & Infrastructure
- Medical
- Transportation

Compatible Accessories

- Heat Sinks (HS103, HS053)
- Lug Terminals (TRM1, TRM6)
- Thermal Pads (suffix "H")



DP
series

simply more!

DRA Series



More Options!
Same reliability!

www.crydom.com

DIN RAIL MOUNT • Relays

crydom



DRA Series 2-8 Amps AC • 3-10 Amps DC

The DRA Series features 10 mm wide Single channel and 54 mm wide Four channel ready-to-use DIN Rail mounted SSR assemblies using standard AC & DC output Crydom SIP SSRs. The DRA Series offers a wide variety of ratings which are ideal for low to medium power control for heating, lighting or motion control applications. DRS Series Single channel and Four channel sockets are also offered accepting industry standard SIP type SSRs such as the Crydom CX and CMX series.

- Operating Voltage of 12-530 VAC with back-to-back SCR output for added reliability in commercial and heavy industrial applications
- Operating Voltage of 1-200 VDC with high efficiency FETs
- AC & DC Control Voltage versions available depending upon selected SSR
- AC output models available with Normally Closed output
- AC output models available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (inductive loads) output
- LED indicator for easy identification of control status

| Output | Description | Rating Amps | | | | | | | |
|--------|-------------|-------------|---|---|---|---|---|----|--|
| | | 2 | 3 | 4 | 5 | 6 | 8 | 10 | |
| AC | 10/54 mm | ■ | ■ | ■ | ■ | | ■ | | |
| DC | 10/54 mm | | ■ | | ■ | ■ | ■ | ■ | |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical

Compatible Accessories

- DRS Sockets (DRS1 , DRS4)



DRA1xx



DRS1



DRA4xx



DRS4

SeriesOne DR
6-12 Amps AC • 6-12 Amps DC



The SeriesOne DR is the next generation of DIN rail mounted “Ready to Use” Solid State Relays. This family of DIN rail mounted AC & DC output SSRs offer a cost effective combination of size and ratings by virtue of its design providing greater power density than any other DIN rail mounted SSR in the market!

Featuring a unique proprietary IP20 housing with integrated heat sink design with no exposed hot metal surfaces for safety, the SeriesOne DR family is UL & cUL approved including general purpose and Motor controller ratings.

- DIN rail mount 11 mm (6 Amps) and 18 mm (12 Amps) wide Single and Dual Solid State Relays
- Operating Voltage of 24-280 VAC, 48-600 VAC, 1-60 VDC & 1-100 VDC
- AC output models include back-to-back SCR output to provide added reliability in commercial and heavy industrial applications while DC output models use MOSFET output
- Flexible Control Voltage of 4-32 VDC, 18-36 VAC, 90-140 VAC, 208-265 VAC
- AC output models available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (inductive loads) output
- UL 508 overload endurance rated

| Output | Description | Rating Amps | |
|-------------------|---------------------------|-------------|----|
| | | 6 | 12 |
| AC Single channel | 11 mm | ■ | ■ |
| AC Dual channel | 18 mm, 6 Amps per channel | ■ | |
| DC | 11/18 mm | ■ | ■ |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical

Compatible Accessories

- ID Marker Strips (CNLB, CNLN, CNL2)



6 Amps



12 Amps & Dual

series
oneDR



The next generation
of SSRs

CKM



**Ready-to-use
DIN Rail Mountable
Solid State Relay**

www.crydom.com

CKM Series 10-30 Amps DC

The CKM Series includes 3 FET output DIN rail mounted SSRs. These 22.5 mm wide models expand Crydom's broad line of DIN rail mounted SSRs with ratings of 10, 20 or 30 Amps at 60 VDC making them ideal for heating, lighting and motion control applications.

Mounting on industry standard 35 mm DIN rail, the Crydom CKM Series SSRs with integral heat sinks offer 2500 VAC optical coupling and logic compatible current regulated 4 to 32 VDC inputs with LED status indicator in a 22.5 mm wide "ready to use" assembly.

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



CKMxx



| Output | Description | Rating Amps |
|--------|-------------|--------------|
| DC | 45 mm | 10 20 30 |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical

DRA Series Contactors

2.4-4.2 Amps AC • 2.4-4.2 Amps DC

The DRA Series offers compact DIN rail mounted AC & DC output Solid State Contactors which are ideal replacement of EMRs, specifically in motor applications. The models added to this series include 3 Phase UL approved AC output ratings of either 1 or 2 horse power at 480 VAC in both Contactor and Motor Reversing configurations, and UL approved DC output ratings of ¼ horse power at 90 or 180 VDC. Designed for easy mounting to standard 35 mm DIN rail, the new DRA Series of 3 Phase AC and DC output ready-to-use Solid State Contactors and Motor Reversers do not require heat sink and include cage style screw terminals for easy installation & reliable wire connection.



3 Phase AC Contactors & AC Motor Reversing Contactors

- 45 mm wide 3 Phase & 62 mm wide Motor Reversing Solid State Contactors
- Operating Voltage 48-510 VAC, 3 Phase
- Protective Forward/Reverse interlock built-in function in Motor Reversing versions
- 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
- Overvoltage Protection included
- HP & kW (IEC) rated
- UL 508 overload endurance rated

DC Motor Reversing Contactors

- 54 mm wide motor reversing DIN rail mountable contactor package
- Operating Voltage of 1-100 VDC & 1-250 VDC
- Protective Forward/Reverse interlock built-in function
- Convenient FET switches in H-Bridge configuration
- DC Control Voltage options
- HP & kW (IEC) rated

| Output | Description | Rating Amps | |
|--------|-------------------------|-------------|-----|
| | | 2.4 | 4.2 |
| AC | 3 Phase & Reversing SSC | ■ | ■ |
| DC | Reversing SSC | ■ | ■ |



DRA3P



DRA3R



DRA4D

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical

DRA Series Contactors

Get in Contact
with the expert!

CTR series



CTR Series
25 Amps AC

The CTR Series of 3 Phase AC output DIN rail mounted Solid State Contactors includes 90 mm wide models with 25 Amps per channel output at 600 VAC. It offers an IP20 “touch safe” construction with integral heat sink which eliminates the need for complex thermal calculations. The CTR Series has an epoxy-free design that minimizes internal component stress and it mounts easily to industry standard 35 mm DIN rail.

- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- Flexible Control Voltage of 4-32 VDC, 90-140 VAC, 180-280 VAC
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (inductive loads) output
- LED indicator for easy identification of control status
- Internal TVS eliminates the need for external Overvoltage Protection
- UL 508 overload endurance rated

| Output | Description | Rating Amps |
|--------|-------------|-------------|
| AC | 3 Phase SSC | 25 |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical



CTRxx



CMX Series 3-20 Amps DC

Crydom's classic CMX Series of printed circuit board mounted DC Solid State Relays recently added the CMX100D10 rated to 10 Amps at 100 VDC and 40°C ambient temperature. This high power PCB mounted DC output SSR complements the CMX Series that features outputs with low on-state resistance FETs for efficient DC load control, 2500 VAC optical isolation, logic compatible DC control input and industry standard PCB mounting footprint in an epoxy package designed for full output rated operation at 40°C ambient temperature.

- 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)



CMXxx

| Output | Description | Rating Amps | | | | | | | | | | | | |
|--------|-----------------|---|----|----|---|----|----|---|---|---|---|---|---|---|
| DC | SIP SSR, 60 VDC | <table border="0"> <tr> <td>3</td> <td>5</td> <td>6</td> <td>10</td> <td>20</td> <td>-</td> </tr> <tr> <td>■</td> <td>■</td> <td>■</td> <td>■</td> <td>■</td> <td>■</td> </tr> </table> | 3 | 5 | 6 | 10 | 20 | - | ■ | ■ | ■ | ■ | ■ | ■ |
| 3 | 5 | 6 | 10 | 20 | - | | | | | | | | | |
| ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical

Compatible Accessories

- DRS Sockets (DRS1 , DRS4)

CMX100



High power
PCB mount
DC output
Solid State Relay

UPD Series 15-25 Amps AC

The UPD Series feature panel or PCB mounted Single, Dual or 3 Phase Solid State Relays. UPD Series SSRs are available in Single-in-Line package configuration and in a unique compact low profile mount package with 0.25" (64 mm) male Quick Connects.

The UPD's unique design with metal base plate allows for attachment to an external heat sink to achieve full output ratings in a 40 °C ambient temperature for either the PCB mounted SIP versions or the low profile Panel mounted versions.

- Single channel, Dual & 3 Phase ratings of 15 & 25 Amps @ 280 VAC
- Flexible Control Voltage 3-32 VDC
- PCB mount or panel mountable package with Quick Connect terminals ("F" suffix)
- Back-to-back SCR output to provide added reliability in commercial and heavy industrial applications
- Available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output

| Output | Description | Rating Amps | |
|-------------------|----------------|-------------|----|
| | | 15 | 25 |
| AC Single channel | SIP SSR, 280 V | ■ | ■ |
| AC Dual channel | SIP SSR, 280 V | ■ | |
| AC 3 Phase | SIP SSR, 280 V | ■ | |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical

Single-in-Line



Single



Dual



3 Phase

Quick Connect



Single



Dual



3 Phase

UPD

CN Series

2 Amps AC • 0.1-3.5 Amps DC

CN Series are 5 mm wide AC & DC output SSRs that can be either soldered onto a printed circuit board or plugged into a DRSCN DIN rail mountable socket. Available control options include 2.5 to 12 VDC, 15 to 30 VDC and 38 to 72 VDC.

DRSCN sockets allow for easy installation and removal of CN Series SSRs and any other control component offered in the 5 mm industry standard package. Mounting on standard 35 mm DIN rail, the DRSCN sockets are 6.2 mm wide and include convenient wire termination for field wiring and a LED input status indicator. SSR & socket assemblies are also available offering all the benefits of CN Series SSRs & DRSCN Series sockets in a ready to use configuration simplifying both the selection and assembly processes.

- Thin Solid State Relay ideally suited for high density PCB applications
- AC output models include back-to-back SCR output for added reliability in commercial and heavy industrial applications
- AC output models available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- R-C Snubber network for additional dv/dt attenuation
- UL 508 overload endurance rated
- UL pilot duty rated



CNxx



DRSCNxx



DRACNxx



| Output | Description | Rating Amps |
|--------|----------------------|---------------|
| AC | Thin SSR, 24 - 280 V | 0.1 2 3.5 |
| DC | Thin SSR, 1 - 60 V | ■ ■ ■ |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical

Compatible Accessories

- DRSCN Sockets (DRSCN05, DRSCN24)
- ID Marker Strips (CNLB, CNLN, CNL2)



CN series

AS THIN AS IT GETS!

Replacing EMRs has never been easier!



LifePlus
series ED

www.crydom.com

PLUG-IN MOUNT • Relays

crydom[®]



LifePlus ED Series 3-5 Amps AC • 5 Amps DC

The LifePlus ED Series of AC & DC output pluggable Solid State Relays offers Electromechanical Relay users the opportunity to replace traditional 12 x 29 mm EMRs with a solid state solution which provides them with substantial performance advantages including significantly greater life expectancy (>100 million operations), contactless high speed switching eliminating contact bounce and resulting electrical noise, precise logic compatible control inputs, acoustically silent operation and high vibration resistance, among many others.

- Operating Voltage of 24-280 VAC
- Back-to-back SCR output provides added reliability in commercial and heavy industrial applications
- AC output models available with Zero Voltage Turn-On (resistive loads) or Random Turn-On (phase control or inductive loads) output
- LED indicator for easy identification of control status
- Wide range of AC or DC Control Voltage options
- Quick Connect termination for easy installation in sockets or on boards
- DIN rail & PCB mountable sockets available
- UL & IEC general use & Motor Controller Ratings available

| Output | Description | Rating Amps |
|--------|-------------|-------------|
| AC | 24 - 280 V | 3 5 |
| DC | 1 - 100 V | 5 |

Markets

- Building Equipment
- Commercial & Industrial OEMs
- Energy & Infrastructure
- Food & Beverage
- Medical

Compatible Accessories

- DRSED Socket
- PCBSED Socket



AC: 5 Amps
DC: EDxxBx, EDxxEx



AC: 3 Amps
DC: EDxxCx, EDxxDx, EDxxFx



DRSED



PCBSED



HS Series

Heat Sinks • SSR/ Heat Sink Assemblies

Crydom's HS Series offers optimized thermal performance with 13 panel mounted or DIN rail mounted heat sink versions when combined with an optional DIN Rail bracket kit. Designed to accept one, two or three industry standard SSRs, the HS series includes heat sinks with ratings from 5 °C per watt to 0.5 °C per watt which are suitable for combined loads from 10 to 100 Amps.

The HS Series also includes a variety of ready-to-use assemblies using standard off-the-shelf Single, Dual and 3 Phase Solid State Relays mounted on Crydom Heat Sinks. Our expertise in both SSR design and thermal management enables us to offer optimized pre-assembled solutions for SSR applications from 5 to 80+ Amps.

Assemblies

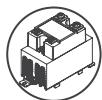


Heat Sinks



Compatible Accessories

- Covers (KS100, KS100-SMR, KS300)
- Hardware Kits (HK1, HK2)
- Thermal Pads (HSP-1, HSP-2, HSP3, HSP-4, HSP-6)
- DIN Rail Kit (DRK1)
- Lug Terminals (TRM1, TRM6)



SSR/Heat sink Assemblies Available



HS501DR



HS351/
HS351DR



HS301/
HS301DR



HS271/
HS271DR



HS251



HS202/
HS202DR



HS201/
HS201DR



HS172



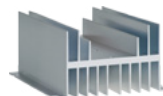
HS151/
HS151DR



HS122/
HS122DR



HS103/
HS103DR



HS072



HS053

HS Series



AMERICA



United States & Canada

Sales Support:
Tel.: +1 (877) 502 5500
Fax: +1 (619) 210 1590
sales@crydom.com

Technical Support:
Tel.: +1 (877) 702 7700
support@crydom.com

Mexico

Tel.: +52 (222) 409 7000
Fax: +52 (222) 409 7810
sales-mx@crydom.com

Southern & Central

Tel.: +55 (11) 2505 7500
Fax: +55 (11) 2505 7507

EUROPE, MIDDLE EAST & AFRICA



Regional Sales & Technical Support

United Kingdom

Tel.: +44 (0) 1202 606030
Fax: +44 (0) 1202 606035
sales-europe@crydom.com
support-europe@crydom.com

Austria & Switzerland

Tel.: +44 (0) 1202 606030
Fax: +44 (0) 1202 606035
vertrieb@crydom.com
support-europe@crydom.com

Belgium

Tel.: +32 (0) 2 460 4413
Fax: +32 (0) 2 461 2614
sales-europe@crydom.com
support-europe@crydom.com

France

Tel.: +33 (0) 810 123 963
Fax: +33 (0) 810 057 605
sales-europe@crydom.com
support-europe@crydom.com

Germany

Tel.: +49 (0) 180 3000 506
Fax: +49 (0) 180 3205 227
vertrieb@crydom.com
support-europe@crydom.com

Italy

Tel.: +39 (0) 2 665 99 260
Fax: +39 (0) 2 665 99 268
sales-europe@crydom.com
support-europe@crydom.com

Spain

Tel.: +34 902 876 217
Fax: +34 902 876 219
sales-europe@crydom.com
support-europe@crydom.com

Netherlands

Tel.: +31 (0) 71 582 0068
Fax: +31 (0) 71 542 1648
sales-europe@crydom.com
support-europe@crydom.com

Middle East, Africa & Other European Countries

Tel.: +44 (0) 1202 606030
Fax: +44 (0) 1202 606035
sales-europe@crydom.com
support-europe@crydom.com

ASIA PACIFIC



China & Hong Kong

Sales Support
Tel.: +86 (0) 21 6065 7725
Fax: +86 (0) 21 6065 7749
sales-cn@crydom.com

Technical Support
support-cn@crydom.com

Taiwan & Japan

Tel.: +886 2 8751 6388
Fax: +886 2 2657 8725
taiwan@cstsensors.com

South Korea

Tel.: +82 2 2629 8312
Fax: +82 2 2629 8310
korea@cstsensors.com

India

Tel.: +91 (80) 4113 2204 /05
Fax: +91 (80) 4113 2206
india@cstsensors.com

South East Asian & Pacific Countries

Tel.: +886 2 8751 6388 ext.131
Fax: +886 2 2657 8725
eap@cstsensors.com

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