THE GLOBAL EXPERT IN SOLID STATE RELAY TECHNOLOGY

■ Single Channel Assemblies

■ Four Channel Assemblies

■ Sockets

crydom®

DRA & DRS Series

Crydom, a company of Custom Sensors and Technologies (CST) and global expert in Solid State Relay 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 products 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 4 decades of Solid State Relay operations experience, Crydom also specializes and encourages adapted and fully custom-designed SSR products for nearly any application where unique specifications and optimized performance are critical for success.

Crydom's modern air conditioned 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 best level of local support possible.

Following rigid design guidelines and standards, Crydom products have set the bench mark for SSR performance and reliability world wide. In addition to award winning designs, Crydom has acquired an impressive list of patents related to SSRs and Solid State Controls, while continuing to create new circuit and technology-related inventions as part of extensive R&D programs.

To learn more about Crydom SSR technology and products, or how an alliance with Crydom can contribute to the success of your project, visit www.crydom.com or contact your authorized Crydom distributor or Crydom Customer Service today.

DIN MOUNTED SOLID STATE RELAYS AND SOCKETS

Crydom DRA Series DIN mounted SSR Assemblies

The 35 mm DIN Rail has become a world standard for mounting various components in control cabinets, and now joining Crydom's already extensive line of high power DIN Rail mounted Solid State Relays is the new DRA Series of low and medium power SSRs.
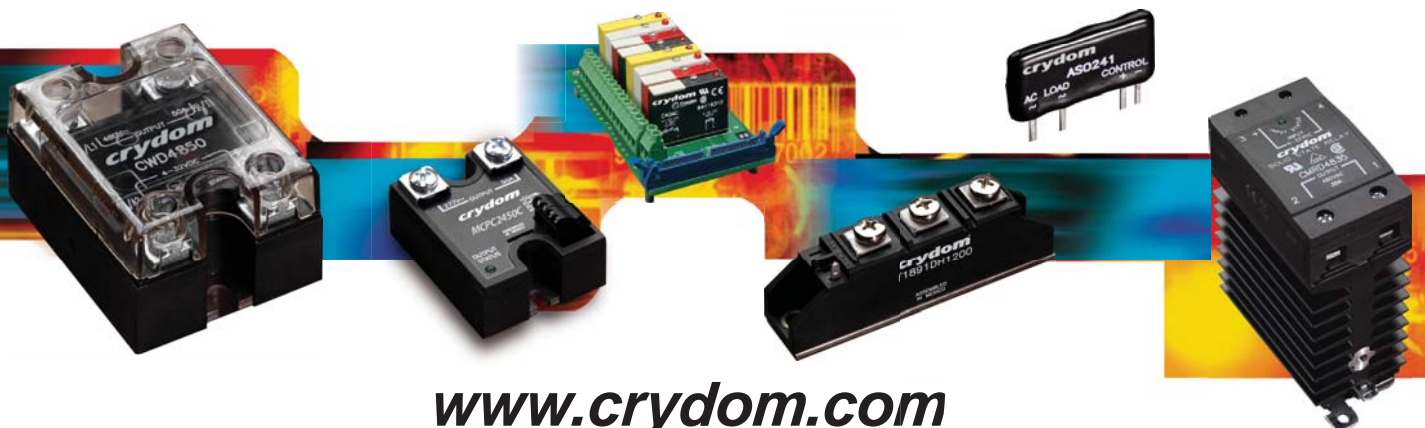
The **DRA Series** combines Crydom's world class AC and DC output PCB mounted Single-in-Line Solid State Relays with 10 and 54 mm wide DIN rail mounted sockets to create the **DRA Series** of SSR Assemblies. The **DRA series** offers a wide variety of ratings which are ideal for low to medium power control for heating, lighting or motion control applications. In addition to the models listed in the catalog, any standard Crydom SIP type SSR with similar pin centers can be offered as an assembly.

Crydom DRS Series DIN Rail Sockets

DRS Series DIN rail mounted socket kits are designed to accept either one or up to four individual Crydom SIP type PCB mounted SSRs with industry standard 1.1 inch/27.9 mm end to end pin spacing. Single channel sockets are 10 mm wide and 4 channel sockets are 54 mm wide.

Each DRS Series socket comes from the factory in kit form which allows the user to select and install the best SSR and input configuration for any particular application. Input status LED indicators and resistors for low range or high range DC inputs are also included in the kit along with instructions for assembly.

For more information, technical support or questions about adapted assemblies, contact your local Crydom Distributor or Regional Sales office.

www.crydom.com

DRA Series
AC/DC Output SSR Assemblies

- Ready-to-use SSR assemblies for either AC or DC output
- 10 mm Single channel and 54 mm Four channel DIN Rail mount assemblies available
- 3 to 15 or 15 to 32 VDC input versions include LED indicator
- 3 to 32 VDC, 18 to 36 and 90 to 140 AC input control versions do not include LED indicator
- AC output ratings up to 300 VAC @ 8 Amps (UL) and 380 VAC 8 amps (IEC)
- DC output ratings up to 200 VDC and 8 Amps
- Cage style screw terminals for easy and reliable wire connection
- Socket clip fits all standard 35 mm DIN rail profiles

Standard Assemblies (A)

1 channel DC output

	Output Voltage Range VDC	Output Current Range (B) ADC	Control Voltage Range VDC	Input Current @ 5/24 Vdc mA	Input Status Indicator	SSR Function	Isolation Voltage Vrms	Operating Temp. Range °C
DRA1-CMX100D10	1-100	0-8	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMX100D6	1-100	0-6	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMX200D3	1-200	0-3	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMX60D10	1-60	0-8	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMX60D5	1-60	0-5	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMXE100D10	1-100	0-8	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMXE100D6	1-100	0-6	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMXE200D3	1-200	0-3	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMXE60D10	1-60	0-8	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMXE60D5	1-60	0-5	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA1-MPDCD3	3-60	.02-3	3-32	3	No	SPST-NO	4000	-40 to 80
DRA1-MPDCD3-B	3-60	.02-3	3-32	3	No	SPST-NC	4000	-40 to 80

1 channel AC output

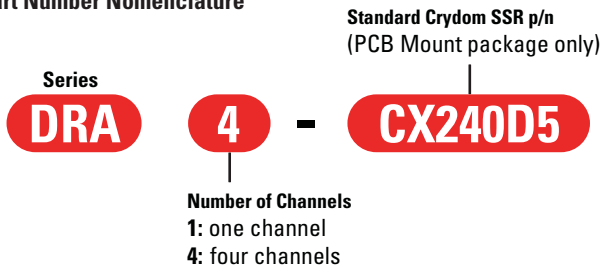|	Output Voltage Range VAC	Output Current Range (B) Arms	Control Voltage Range VDC	Input Current @ 5/24 Vdc mA	Input Status Indicator	SSR Function	Isolation Voltage Vrms	Operating Temp. Range °C
DRA1-CX240D5	12-280	.06-5	3-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-CX240D5-B	12-280	.06-5	4-28	15	No	SPST-NC, Zero Voltage Turn-On	4000	-30 to 80
DRA1-CX240D5R	12-280	.06-5	3-15	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80
DRA1-CX380D5	48-530	.06-5	4-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-CX380D5R	48-530	.06-5	4-15	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80
DRA1-CXE240D5	12-280	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-CXE240D5R	12-280	.06-5	15-32	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80
DRA1-CXE380D5	48-530	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-MCX240D5	12-280	.06-5	3-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MCX380D5	48-530	.06-5	4-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MCXE240D5	12-280	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MCXE380D5	48-530	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MP120D3	12-140	.02-3	3-32	3	No	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MP240D3	24-280	.02-3	3-32	3	No	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MP240D4	24-280	.02-4	3-32	3	No	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-SPF240A25	12-280	.06-8	90-140 VAC	10	No	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-SPF240D25	12-280	.06-8	3-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-SPF240D25R	12-280	.06-8	3-15	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80
DRA1-SPF380D25	48-530	.06-8	4-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-SPF380D25R	48-530	.06-8	4-15	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80
DRA1-SPFE240A25	12-280	.06-8	18-36 VAC	10	No	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-SPFE240D25	12-280	.06-8	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-SPFE240D25R	12-280	.06-8	15-32	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80

4 channel DC output

	Output Voltage Range VDC	Output Current Range (B) ADC	Control Voltage Range VDC	Input Current @ 5/24 Vdc mA	Input Status Indicator	SSR Function	Isolation Voltage Vrms	Operating Temp. Range °C
DRA4-CMX100D10	1-100	0-8	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA4-CMX200D3	1-200	0-3	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA4-CMXE100D10	1-100	0-8	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA4-CMXE200D3	1-200	0-3	20-28	15	Yes	SPST-NO	2500	-30 to 80

4 channel AC output

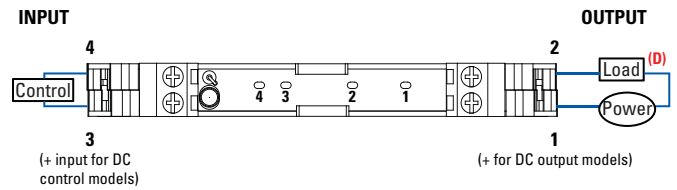|	Output Voltage Range VAC	Output Current Range (B) Arms	Control Voltage Range VDC	Input Current @ 5/24 Vdc mA	Input Status Indicator	SSR Function	Isolation Voltage Vrms	Operating Temp. Range °C
DRA4-CX240D5	12-280	.06-5	3-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA4-CXE240D5	12-280	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA4-MCX240D5	12-280	.06-5	3-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA4-MCXE240D5	12-280	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80

(A) For full SSR specifications see product datasheet at www.crydom.com
(B) Maximum output current rating of any assembly is 8 amps per channel @ 40°C ambient, derating from full output to 0 amps @ 80°C ambient.

Other Crydom products and competitive part number cross-reference available at: **www.crydom.com**

Part Number Nomenclature

Standard Crydom SSR p/n
(PCB Mount package only)

Series

DRA **4** - **CX240D5**

Number of Channels
1: one channel
4: four channels

Wiring Diagram (C)

INPUT **OUTPUT**

4 2

Control Load (D)

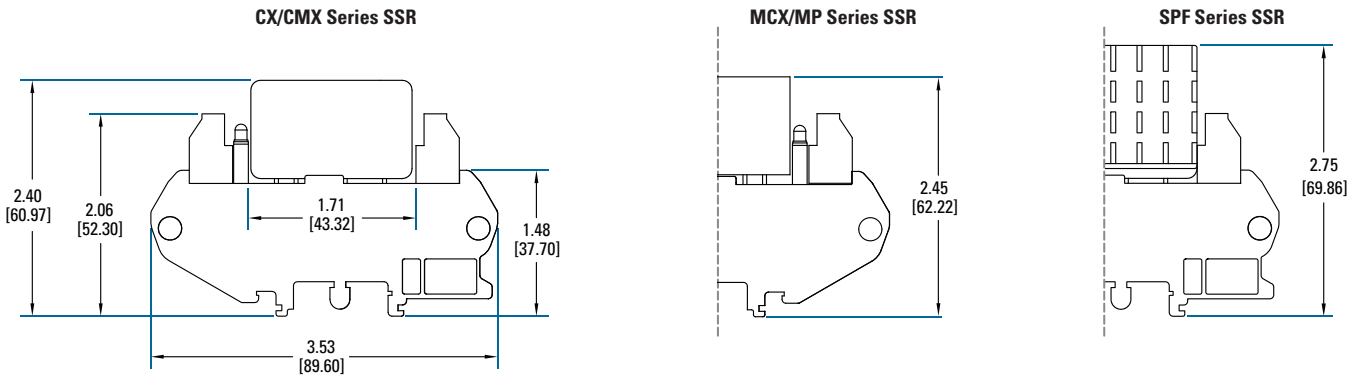4 3 2 1 Power

3 1
(+ input for DC (+ for DC output models)
control models)

(C) Wiring diagram is identical for each individual section whether it is a single or four channel assembly.

(D) For AC loads, the AC line can be wired to either SSR/socket terminal 1 or terminal 2. The AC load may also be wired on either the line or neutral side of the SSR. For DC loads, the proper polarity must be observed for the power supply, load and SSR/socket with terminal 1 being positive with respect to terminal 2.
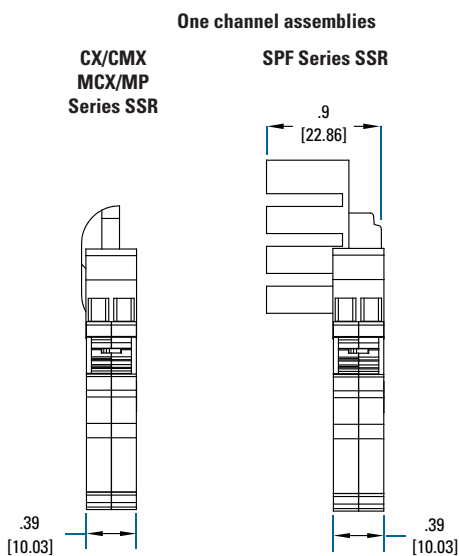
Mechanical Dimensions

Tolerances: ± 0.02 in / 0.5 m
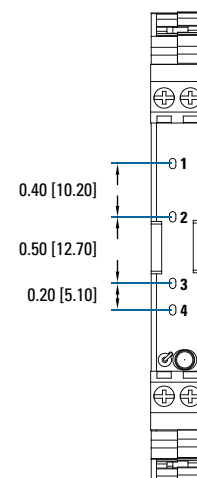All dimensions are in: inches [millimeters]

FRONT VIEW

CX/CMX Series SSR

2.40 [60.97]
2.06 [52.30]
1.71 [43.32]
1.48 [37.70]
3.53 [89.60]

MCX/MP Series SSR

2.45 [62.22]

SPF Series SSR

2.75 [69.86]

Note: Front view drawings apply to single and four channel assemblies.

SIDE VIEW

One channel assemblies

CX/CMX MCX/MP Series SSR

SPF Series SSR

.9 [22.86]

.39 [10.03]

.39 [10.03]

Four channel assemblies

1.72 [43.74]
2.12 [53.74]

TOP VIEW

0.40 [10.20] 1
0.50 [12.70] 2
0.20 [5.10] 3
4

Questions? Call or e-mail

Americas +1 (877) 502 5500 **sales@crydom.com**
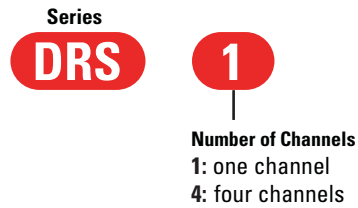**Europe** +44 (0) 1202 606030 **sales-europe@crydom.com**
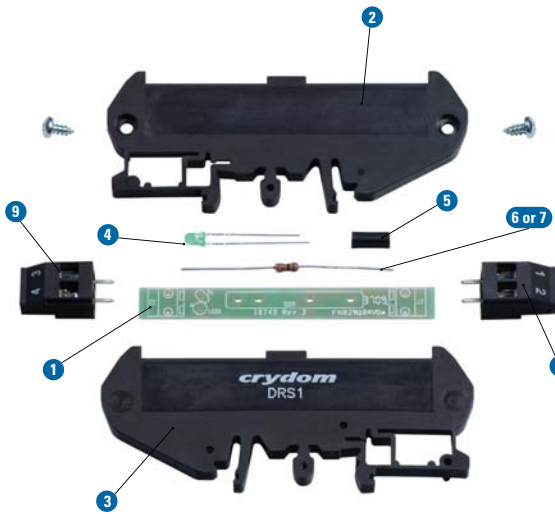
DRS Series
Sockets

- 10 mm Single channel and 54 mm Four channel DIN Rail mount sockets available.
- Input status LED for either 3 to 15 or 15 to 32 VDC control applications.
- Cage style screw terminals for easy and reliable wire connection.
- Socket clip fits all standard 35 mm DIN rail profiles.
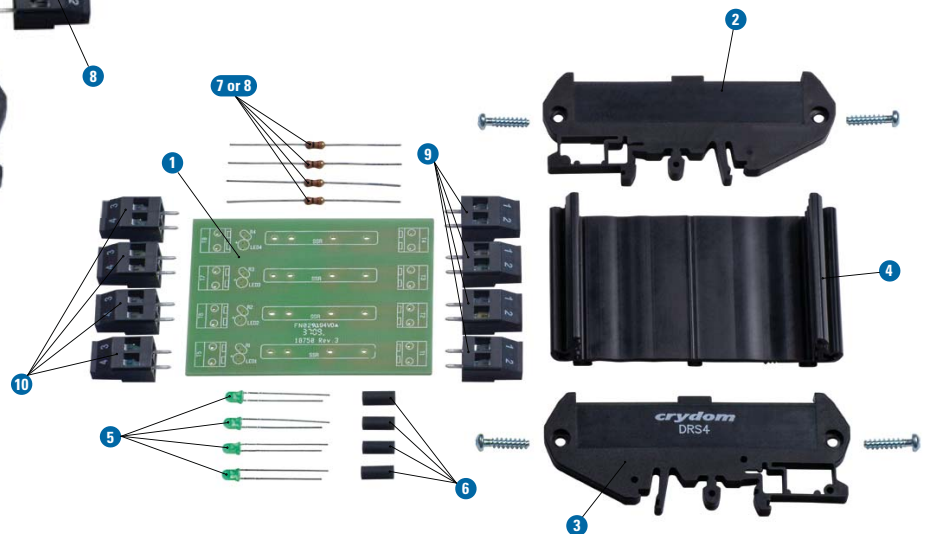
Part Number Nomenclature

Series

DRS **1**

Number of Channels
1: one channel
4: four channels

SINGLE CHANNEL SOCKET

List of parts included in the kit (E)	Quantity
❶ Printed circuit board	1
❷ Housing - right side (includes 2 screws)	1
❸ Housing - left side	1
❹ Green LED (F)	1
❺ LED standoff	1
❻ Resistor 1K Ω, 0.25W (brown-black-red) (G)	1
❼ Resistor 4.7K Ω, 0.25W (yellow-violet-red) (G)	1
❽ Output terminal block	1
❾ Input terminal block	1

FOUR CHANNEL SOCKET

List of parts included in the kit (E)	Quantity
❶ Printed circuit board	1
❷ Housing - right side (includes 2 screws)	1
❸ Housing - left side (includes 2 screws)	1
❹ Profile extrusion	1
❺ Green LED (F)	4
❻ LED standoff	4
❼ Resistor 1K Ω, 0.25W (brown-black-red) (G)	4
❽ Resistor 4.7K Ω, 0.25W (yellow-violet-red) (G)	4
❾ Output terminal block	4
❿ Input terminal block	4

(E) SSR(s) purchased separately.
(F) LED status indicator is not required for proper function of the SSR and may be omitted. No resistors are needed when LED is not installed. For AC input SSR control applications LED status indicator and resistor must not be used.
(G) Each kit includes two different value resistors (1K Ω & 4.7K Ω) to choose from. Use 1K Ω (brown-black-red) resistor for applications with control voltage range between 3-15 VDC and 4.7K Ω (yellow-violet-red) resistor for applications with control voltage range between 15-32 VDC.

Other Crydom products and competitive part number cross-reference available at: **www.crydom.com**

crydom ®

crydom ®
Across the Globe

🌐 AMERICAS

USA & CANADA
Crydom Inc
2320 Paseo de las Americas,
Suite 201
San Diego CA 92154
Sales Support
Tel.: +1 (877) 502 5500
Fax: +1 (619) 710 8540
sales@crydom.com
Tech Support
Tel.: +1 (877) 702 7700
support@crydom.com

MEXICO
**Automatismo Crouzet
S.A. de C.V.**
Calzada Zavaleta 2505 - C
Col Sta Cruz Buenavista
C.P. 72150 - Puebla
MEXICO
Tel.: +52 (222) 409 7000
Fax: +52 (222) 409 7810
01 800 087 6333
sales-mx@crydom.com

🌐 SOUTHERN AND CENTRAL AMERICAN COUNTRIES

CST Latinoamerica
Alameda Rio Negro, 1.084-cj.A31
Centro Empresarial de Alphaville
CEP: 06454-000
Barueri - SP
BRASIL
Tel.: +55 (11) 4191 9797
Fax: +55 (11) 4191 9136
info@cst-latinoamerica.com

🌐 EUROPE MIDDLE EAST AFRICA

UNITED KINGDOM
Crydom SSR Ltd
Arena Business Centre
Holyrood, Close
Poole, Dorset BH17 7FJ
Sales Support
Tel.: +44 (0) 1202 606030
Fax: +44 (0) 1202 606035
sales-europe@crydom.com
Tech Support
tech-europe@crydom.com

AUSTRIA & SWITZERLAND
Tel.: +44 (0) 1202 606030
Fax: +44 (0) 1202 606035
vertrieb@crydom.com

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

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

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

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

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

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

🌐 MIDDLE EAST, AFRICA AND OTHER EUROPEAN COUNTRIES

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

🌐 ASIA PACIFIC

CHINA & HONG KONG
**Custom Sensors &
Technologies Asia
(Shanghai) Ltd.**
2 Floor, Innovation Building,
No.1009, Yi Shan Road,
Shanghai, 200233
Tel.:+86 (21) 2401 7766
Fax:+86 (21) 6249 0701
sales-cn@crydom.com

TAIWAN
**Custom Sensors &
Technologies**
3F, No. 39, Ji-Hu Road
Nei-Hu Dist.
Taipei 114, Taiwan
Tel.: +886 2 8751 6388
Fax: +886 2 2657 8725
taiwan@cstsensors.com

SOUTH KOREA
**Custom Sensors &
Technologies**
5F, Jeil Bldg.,
94-46 Youngdeungpo-dong 7-ga
Youngdeungpo-gu,
Seoul, 150-037
South Korea
Tel.: +82 2 2629 8312
Fax: +82 2 2629 8310
korea@cstsensors.com

INDIA
CST Sensors India Pvt Ltd
Unit 1301 and 1302 Prestige
Meridian II
30 M.G.Road,
Bangalore - 560001
INDIA
Tel.:+91 (80) 4113 2204/05
Fax:+91 (80) 4113 2206
india@cstsensors.com

🌐 OTHER ASIAN AND PACIFIC COUNTRIES

**Custom Sensors &
Technologies**
3F, No. 39, Ji-Hu Road
Nei-Hu Dist.
Taipei 114, Taiwan
Tel.:+886 2 8751 6388
Fax:+886 2 2657 8725
eap@cstsensors.com

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