

HIGH PERFORMANCE MODULAR RELAYS



BUILT TO **LAST**

Industrial applications can be quite demanding when it comes to their needs for switching and protection. Connectwell CRM Series High Performance Relay Modules are designed and built for such challenging applications which require a long operational life and when failure is not a choice.

The rugged design of the Relay Base along with the superior electrical and mechanical performance of the Relays make these modules the right choice for the most demanding applications.

Superior Choice of

V0 GRADE

Flammability
Rating Housing



True Modular
Design with



IP 20 SAFETY Rating

PLUGGABLE
ELECTROMECHANICAL
RELAYS



True Full
Contact Rating



CONTINUOUS
OPERATION

Superior **AESTHETICS**
with consistent Profile
for 1 CO, 2CO
& 4CO Contacts



SUPERIOR RELAYS

with Increased
Operational life



MODULAR RELAYS

1 Change Over (Miniature)

- 1 Change over Relay
- 3.5 mm Pitch PCB Pin Connection
- 10 Ampere current - 250 VAC, 30 VDC
- High Mechanical and Electrical Life
- Compact Size
- Flame Retardant Shell
- Widely used manufacturing and control systems for PLC, CNC and automatic assembly lines
- Input universal polarity



UL US CE RoHS

TECHNICAL DATA

Mechanical Life	≥ 1000 x 10 ⁴ cycles		
Electrical Life	≥ 10 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤10 ms		
Dielectric Strength	Between open contacts: 1000 VAC / 1 min	Between poles: 1000 VAC / 1 min	Between contacts & coil: 5000 VAC / 1 min
Insulation Resistance	≥ 1000 MΩ (500 VDC)		
Operating Temperature	-40 to +65°C		
Air Pressure	86 to 106 KPa		
Shock Resistance	Stability 10 G, Destructiveness 100 G		
Vibration Resistance	10 to 55 Hz Double-amplitude: 1.5 mm		
Degree of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	1CO (SPDT)
Rated Switching Voltage	250 VAC / 30 VDC
Max Switching Capacity	2500 VA / 300 W
Max Switching Current	10 A
Min Switching Current	10 mA @ 17 V
Contact Resistance	≤ 50 m Ω
Contact Material	Ag Alloy

COIL SPECIFICATION

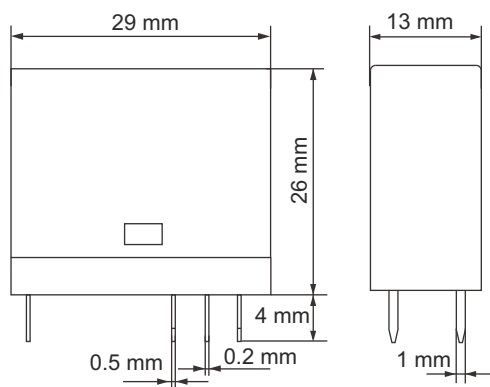
Voltage	12 VDC	24 VDC	48 VDC	110 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	26.4 VAC	126.5 VAC	253 VAC
Coil Resistance*	270 Ω	1100 Ω	4300 Ω	22800 Ω	240 Ω	6300 Ω	23000 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.53 W	0.53 W	0.53 W	0.53 W	1 VA	1 VA	1 VA

Note: *Coil resistance: Under coil voltage 110 V are measured with tolerance of $\pm 10\%$, above 110 V with tolerance of $\pm 15\%$.

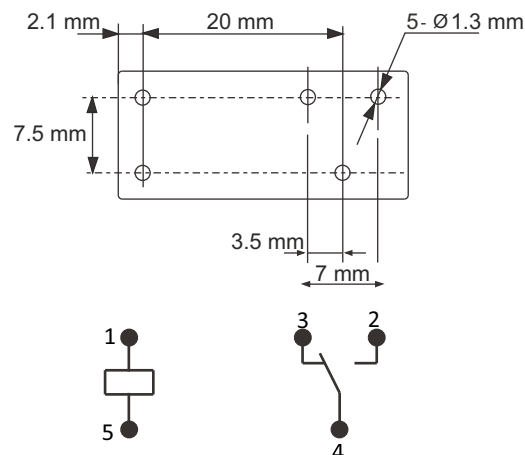
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRLA1S012D	CRLA1S024D	CRLA1S048D	CRLA1S110D	CRLA1S024A	CRLA1S115A	CRLA1S230A
Standard Pack	20	20	20	20	20	20	20

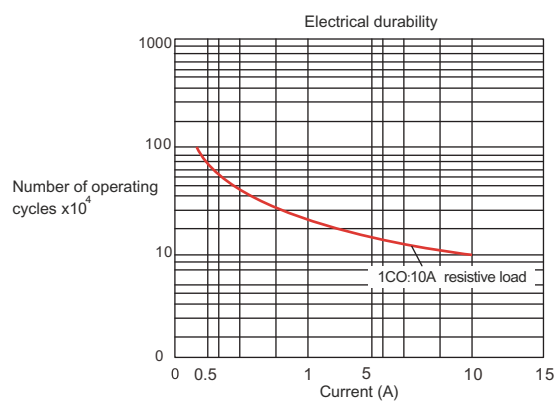
DIMENSIONS



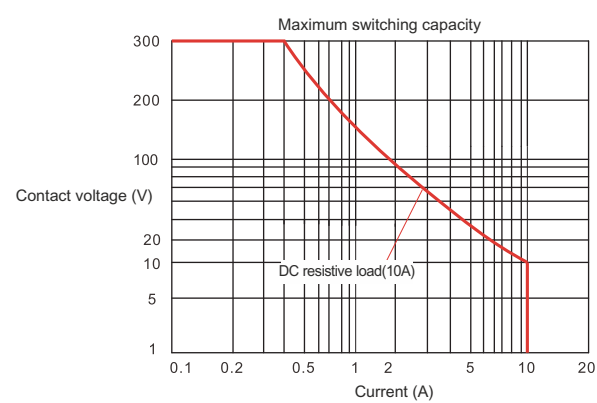
PIN CONFIGURATION



ELECTRICAL PERFORMANCE



CONTACT PERFORMANCE



ACCESSORIES

Socket



Type / Cat. No.	CRS1COY
Rated Current	10 A Per Contact
Connection Type	Screw Clamp
Mounting Type	DIN Rail / Panel
Additional information	Page No.: 19, 20
Standard Pack	10

Retainer Bracket



Type / Cat. No.	CRB1
Material	Polyamide
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB1M
Material	Metal
Standard Pack	20

Pluggable LED Module



Type / Cat. No.	
12-60V(AC/DC)	CRLD12-60V
110-230V(AC/DC)	CRLD110-230V
LED Type	Bi-Directional
Standard Pack	20

Markers



Type / Cat. No.	
Marker Tag	MT - CRM2CO
Group Marker	CA-509/G4
Standard Pack	100

Screwdriver



Type / Cat. No.	SCS0.5/3AC
Standard Pack	1

MODULAR RELAYS

2 Change Over (Miniature)

- General Purpose 2CO Relay
- 5mm Pitch PCB Pin Connection
- 5 Ampere current - 250 VAC, 30 VDC
- High Mechanical and Electrical Life
- Compact Size
- IEC61810-1 Standard Relay
- Flame Retardant Shell
- Widely used manufacturing and control systems for PLC, CNC and automatic assembly lines
- Input universal polarity



UL US CE RoHS

TECHNICAL DATA

Mechanical Life	≥ 1000 x 10 ⁴ cycles		
Electrical Life	≥ 10 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤10 ms		
Dielectric Strength	Between open contacts: 1000 VAC / 1 min	Between poles: 1000 VAC / 1 min	Between contacts & coil: 5000 VAC / 1 min
Insulation Resistance	≥ 1000 MΩ (500 VDC)		
Operating Temperature	-40to +65°C		
Air Pressure	86 to 106 KPa		
Shock Resistance	Stability 10 G, Destructiveness 100 G		
Vibration Resistance	10 to 55 Hz Double-amplitude: 1.5 mm		
Degree Of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	2CO (DPDT)
Rated Switching Voltage	250 VAC / 30VDC
Max Switching Capacity	1250 VA / 150 W
Max Switching Current	5 A
Min Switching Current	10 mA (@ 17 V)
Contact Resistance	≤ 50 m Ω
Contact Material	Ag Alloy

COIL SPECIFICATION

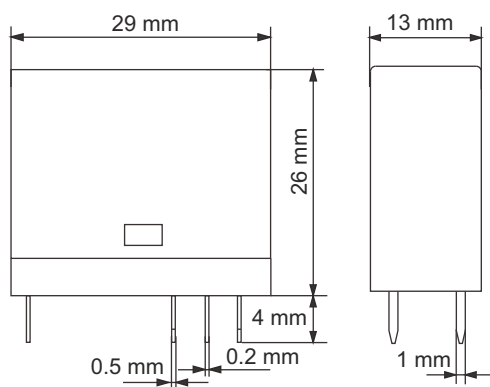
Voltage	12 VDC	24 VDC	48 VDC	110 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	26.4 VAC	126.5 VAC	253 VAC
Coil Resistance*	270 Ω	1100 Ω	4300 Ω	22800 Ω	240 Ω	6300 Ω	23000 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.53 W	0.53 W	0.53 W	0.53 W	1 VA	1 VA	1 VA

Note: *Coil resistance: Under coil voltage 110 V are measured with tolerance of $\pm 10\%$, above 110 V with tolerance of $\pm 15\%$.

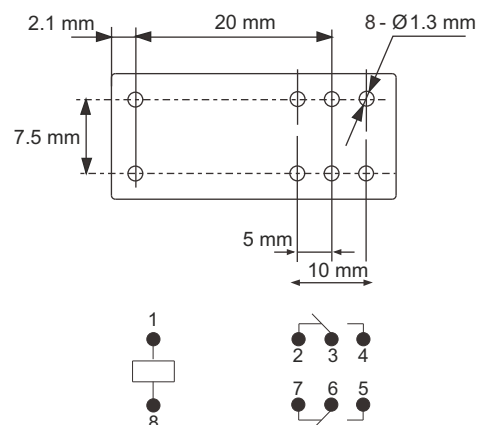
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRLA2S012D	CRLA2S024D	CRLA2S048D	CRLA2S110D	CRLA2S024A	CRLA2S115A	CRLA2S230A
Standard Pack	20	20	20	20	20	20	20

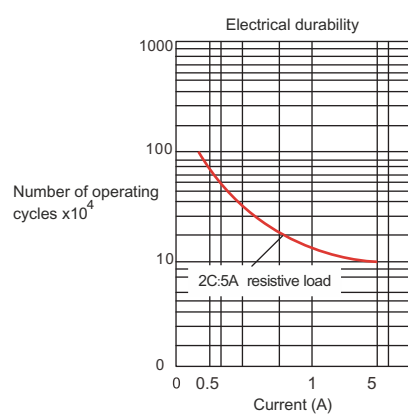
DIMENSIONS



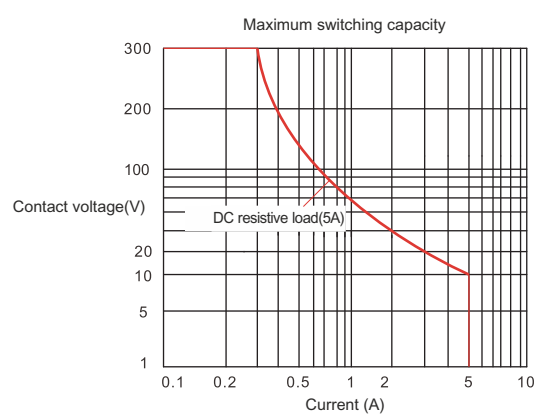
PIN CONFIGURATION



ELECTRICAL PERFORMANCE



CONTACT PERFORMANCE



ACCESSORIES

Socket



Type / Cat. No.	CRS2COY
Rated Current	10 A Per Contact
Connection Type	Screw Clamp
Mounting Type	DIN Rail / Panel
Additional Information	Page No.: 21, 22
Standard Pack	10

Retainer Bracket



Type / Cat. No.	CRB1
Material	Polyamide
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB1M
Material	Metal
Standard Pack	20

Pluggable LED Module



Type / Cat. No.	
12-60V(AC/DC)	CRLD12-60V
110-230V(AC/DC)	CRLD110-230V
LED Type	Bi-Directional
Standard Pack	20

Markers



Type / Cat. No.	
Marker Tag	MT - CRM2CO
Group Marker	CA-509/G4
Standard Pack	100

Screwdriver



Type / Cat. No.	SCS0.5/3AC
Standard Pack	1

MODULAR RELAYS

2 Change Over (Power)

- General Purpose 2CO Power Relay
- 250VAC, 30VDC / 7A Switching Contact
- High Mechanical and Electrical Life
- Flat Pin Connection
- Compact Size
- IEC61810-1 Standard Relay
- Flame Retardant Shell
- Integrated Freewheeling Diode protection
- LED for Coil Status Indication
- Red and Green LED for AC and DC Coil
- Mechanical Flag Indicators
- Input universal polarity



CE RoHS

TECHNICAL DATA

Mechanical Life	≥2000 x 10 ⁴ cycles		
Electrical Life	≥40 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤20 ms		
Dielectric Strength	Between open contacts: 1000 VAC / 1 min	Between poles: 2000 VAC / 1 min	Between contacts & coil: 2000 VAC / 1 min
Impulse Withstand Voltage	4000 V		
Insulation Resistance / Voltage	≥500 MΩ / 250 VAC		
Operating / Storage Temperature	-55 to +70°C / -55 to +85°C		
Over voltage Category	III	Pollution Degree	3
Air Pressure	86 to 106 KPa		
Shock / Vibration Resistance	Stability 10 G, Destructiveness 100 G / 10 to 55 Hz Double-amplitude: 1.5 mm		
Degree Of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	2CO (DPDT)		
Rated Switching Voltage	250 VAC / 30 VDC		
Max Switching Capacity	1750 VA / 210 W		
Max Switching Current	7 A		
Min Switching Current	10 mA (@ 17 V)		
Contact Resistance / Material	≤ 50 m Ω / Ag Alloy		
Status Indication	DC - Green LED	AC - Red LED	

COIL SPECIFICATION

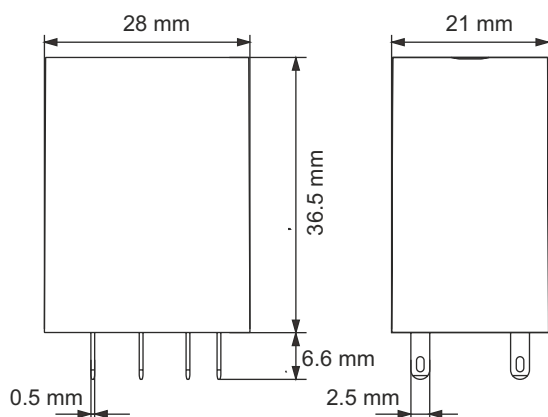
Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	242 VDC	26.4 VAC	126.5 VAC	253 VAC
Coil Resistance*	180 Ω	640 Ω	2600 Ω	13000 Ω	42000 Ω	180 Ω	4430 Ω	16500 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	165 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	22 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.9 W	0.9 W	0.9 W	0.9 W	0.9 W	1.2 VA	1.2 VA	1.2 VA

Note: *Coil resistance: Under coil voltage 110 V are measured with tolerance of $\pm 10\%$, above 110 V with tolerance of $\pm 15\%$.

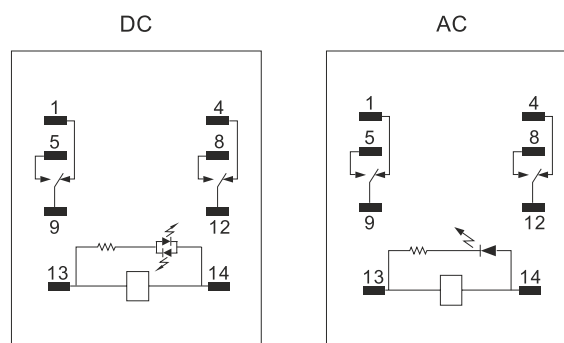
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRLA2PS012DL	CRLA2PS024DL	CRLA2PS048DL	CRLA2PS110DL	CRLA2PS220DL	CRLA2PS024AL	CRLA2PS115AL	CRLA2PS230AL
Standard Pack	20	20	20	20	20	20	20	20

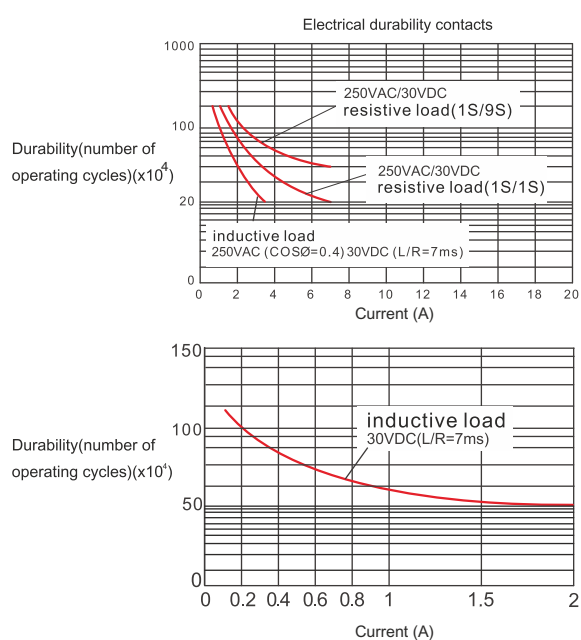
DIMENSIONS



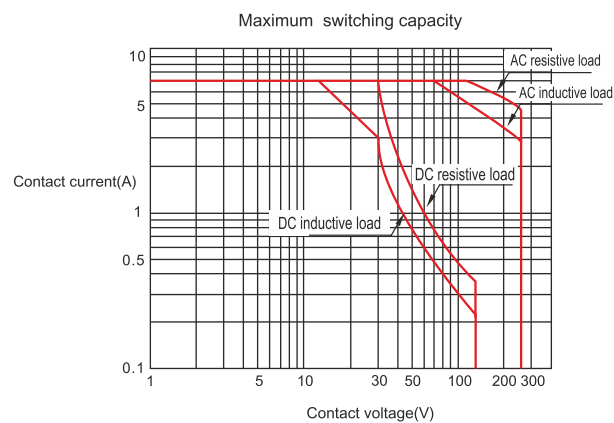
PIN CONFIGURATION



ELECTRICAL PERFORMANCE



CONTACT PERFORMANCE



ACCESSORIES

Socket



Type / Cat. No.	CRS2COPY
Rated Current	12 A Per Contact
Connection Type	Screw Clamp
Mounting Type	DIN Rail / Panel
Additional information	Page No.: 23, 24
Standard Pack	10

Retainer Bracket



Type / Cat. No.	CRB4M
Material	Metal
Standard Pack	20

Marker Tag



Type / Cat. No.	MT - CRM4CO
Marker Tag	MT - CRM4CO
Group Marker	CA-509/G3
Standard Pack	100

Screwdriver



Type / Cat. No.	CA-509/G3
Standard Pack	1

MODULAR RELAYS

2 Change Over (Power - Test Button)

- General Purpose 2CO High Power Relay
- 250VAC, 30VDC / 12A Switching Contact
- High Mechanical and Electrical Life
- Flat Pin Connection
- Compact Size
- IEC61810-1 Standard Relay
- Flame Retardant Shell
- Integrated Freewheeling Diode protection
- LED for Coil Status Indication
- Red and Green LED for AC and DC Coil
- Manual Override test button
- Input universal polarity



c  CE RoHS

TECHNICAL DATA

Mechanical Life	≥2000 x 10 ⁴ cycles		
Electrical Life	≥40 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤20 ms		
Dielectric Strength	Between open contacts: 1000 VAC / 1 min	Between poles: 2000 VAC / 1 min	Between contacts & coil: 2000 VAC / 1 min
Impulse Withstand Voltage	4000 V		
Insulation Voltage / Resistance	250 VAC / ≥1000 MΩ		
Operating / Storage Temperature	-55 to +70°C / -55 to +85°C		
Overvoltage Category	III	Pollution Degree	3
Air Pressure	86 to 106 KPa		
Shock / Vibration Resistance	10 G (half sine shock pulse: 11 ms) / 10 to 55Hz Double-amplitude: 1.5 mm		
Degree Of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	2CO (DPDT)		
Rated Switching Voltage	250 VAC / 30 VDC		
Max Switching Capacity	3000 VA / 360 W		
Max Switching Current	12 A		
Min Switching Current	10 mA (@ 17 V)		
Contact Resistance / Material	≤50 mΩ / Ag Alloy		
Status Indication	DC - Green LED	AC - Red LED	
Functionality Test	Manual Override button: DC - Blue / AC - Red		

COIL SPECIFICATION

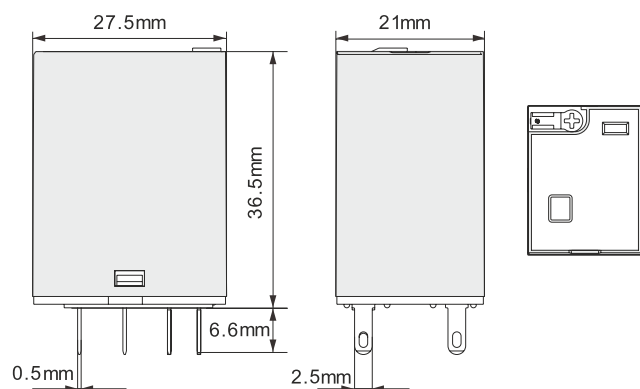
Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	242 VDC	26.4 VAC	126.5 VAC	253 VAC
Coil Resistance*	180 Ω	640 Ω	2600 Ω	13000 Ω	42000 Ω	180 Ω	4430 Ω	16500 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	165 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	22 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.9 W	0.9 W	0.9 W	0.9 W	0.9 W	1.2 VA	1.2 VA	1.2 VA

Note: *Coil resistance: Under coil voltage 110 V are measured with tolerance of $\pm 10\%$, above 110 V with tolerance of $\pm 15\%$.

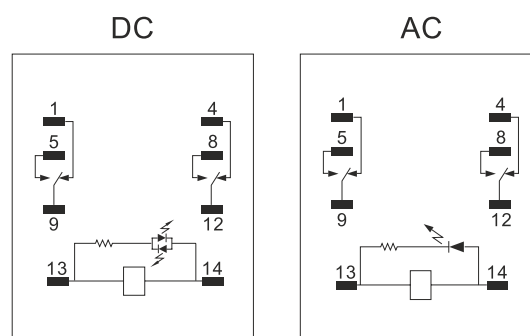
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRLA2PP012DLT	CRLA2PP024DLT	CRLA2PP048DLT	CRLA2PP110DLT	CRLA2PP220DLT	CRLA2PP024ALT	CRLA2PP115ALT	CRLA2PP230ALT
Standard Pack	20	20	20	20	20	20	20	20

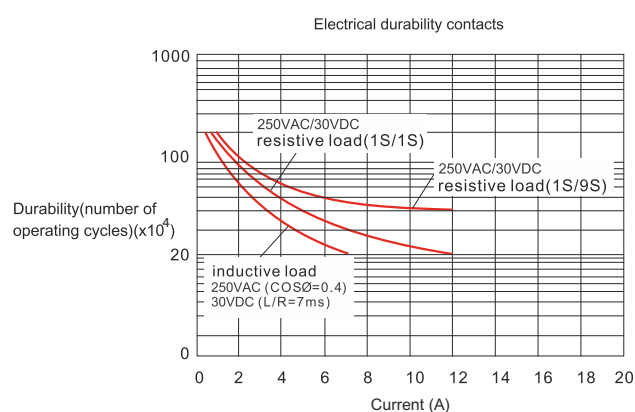
DIMENSIONS



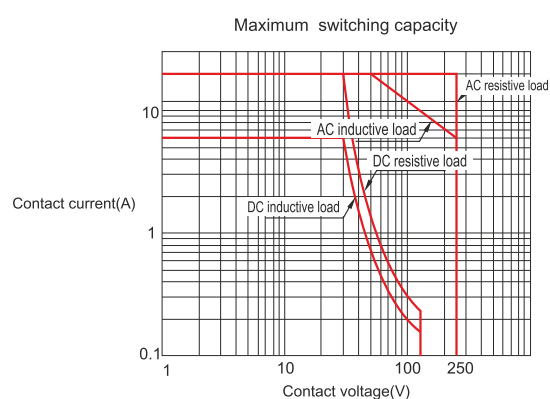
PIN CONFIGURATION



ELECTRICAL PERFORMANCE



CONTACT PERFORMANCE



ACCESSORIES

Socket



Type / Cat. No.	CRS2COPy
Rated Current	12 A Per Contact
Connection Type	Screw Clamp
Mounting Type	DIN Rail / Panel
Additional information	Page No.: 23, 24
Standard Pack	10

Retainer Bracket



Type / Cat. No.	CRB4M
Material	Metal
Standard Pack	20

Markers



Type / Cat. No.	MT - CRM4CO
Marker Tag	MT - CRM4CO
Group Marker	CA-509/G3
Standard Pack	100

Screwdriver



Type / Cat. No.	SCS0.5/3AC
Standard Pack	1

MODULAR RELAYS

4 Change Over (Power)

- General Purpose 4CO Relay
- 250VAC, 30VDC / 5A Switching Contact
- High Mechanical and Electrical Life
- Flat Pin Connection
- Compact Size
- IEC61810-1 Standard Relay
- Flame Retardant Shell
- Integrated Freewheeling Diode protection
- LED for Coil Status Indication
- Red and Green LED for AC and DC Coil
- Mechanical Flag Indicators
- Input universal polarity



c  US  RoHS

TECHNICAL DATA

Mechanical Life	≥2000 x 10 ⁴ cycles		
Electrical Life	≥40 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤20 ms		
Dielectric Strength	Between open contacts: 1000 VAC / 1 min	Between poles: 2000 VAC / 1 min	Between contacts & coil: 2000 VAC / 1 min
Impulse Withstand Voltage	4000 V		
Insulation Voltage / Resistance	250 VAC / ≥500 MΩ		
Operating / Storage Temperature	-55 to +70°C / -55 to +85°C		
Overvoltage Category	III	Pollution Degree	3
Air Pressure	86 to 106 KPa		
Shock / Vibration Resistance	Stability 10 G, Destructiveness 100 G / 10 to 55Hz Double-amplitude: 1.5 mm		
Degree Of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	4CO (QPDT)		
Rated Switching Voltage	250 VAC / 30 VDC		
Max Switching Capacity	1250 VA, 150 W		
Max Switching Current	5 A		
Min Switching Current	10 mA (@ 17 V)		
Contact Resistance	≤ 50 m Ω		
Contact Material	Ag Alloy		
Status Indication	DC - Green LED	AC - Red LED	

COIL SPECIFICATION

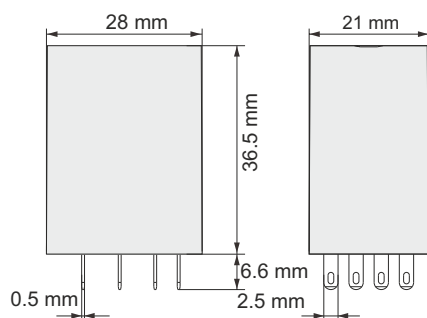
Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	242 VDC	26.4 VAC	126.5 VAC	253 VAC
Coil Resistance*	180 Ω	640 Ω	2600 Ω	13000 Ω	42000 Ω	370 Ω	4430 Ω	16500 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	165 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	22 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.9 W	0.9 W	0.9 W	0.9 W	0.9 W	1.2 VA	1.2 VA	1.2 VA

Note: *Coil resistance: Under coil voltage 110 V are measured with tolerance of $\pm 10\%$, above 110 V with tolerance of $\pm 15\%$.

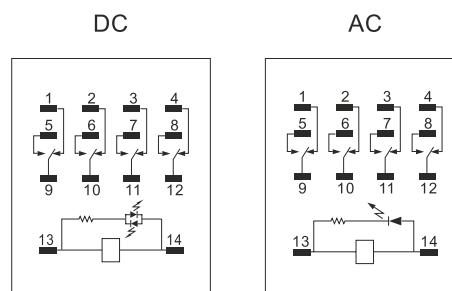
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRLA4S012DL	CRLA4S024DL	CRLA4S048DL	CRLA4S110DL	CRLA4S220DL	CRLA4S024AL	CRLA4S115AL	CRLA4S230AL
Standard Pack	20	20	20	20	20	20	20	20

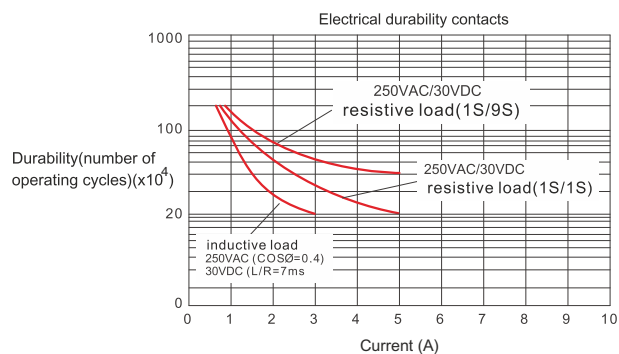
DIMENSIONS



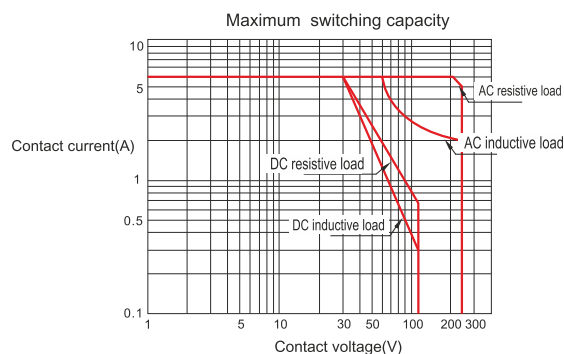
PIN CONFIGURATION



ELECTRICAL PERFORMANCE



CONTACT PERFORMANCE



ACCESSORIES

Socket



Type / Cat. No.	CRS4COY
Rated Current	10 A Per Contact
Connection Type	Screw Clamp
Mounting Type	DIN Rail / Panel
Additional information	Page No.: 25, 26
Standard Pack	10

Retainer Bracket



Type / Cat. No.	CRB4
Material	Polyamide
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB4M
Material	Metal
Standard Pack	20

Pluggable LED Module



Type / Cat. No.	
12-60V(AC/DC)	CRLD12-60V
110-230V(AC/DC)	CRLD110-230V
LED Type	Bi-Directional
Standard Pack	20

Markers



Type / Cat. No.	
Marker Tag	MT - CRM4CO
Group Marker	CA-509/G3
Standard Pack	100

Screwdriver



Type / Cat. No.	SCS0.5/3AC
Standard Pack	1

MODULAR RELAYS

4 Change Over (Power - Test Button)

- General Purpose 4CO High Power Relay
- 250VAC, 30VDC / 6A Switching Contact
- High Mechanical and Electrical Life
- Flat Pin Connection
- IEC61810-1 Standard Relay
- Flame Retardant Shell
- Integrated Freewheeling Diode protection
- LED for Coil Status Indication
- Red and Green LED for AC and DC Coil
- Manual Override test button for no load testing purpose
- Visual identification of Relay voltage type by colour of override test button
- Input universal polarity



UL US CE RoHS

TECHNICAL DATA

Mechanical Life	≥2000 x 10 ⁴ cycles		
Electrical Life	≥40 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤20 ms		
Dielectric Strength	Between open contacts:1000 VAC / 1 min	Between poles: 2000 VAC / 1 min	Between contacts & coil 2000 VAC / 1 min
Impulse Withstand Voltage	4000 V		
Insulation Voltage / Resistance	250 VAC / ≥1000 MΩ		
Operating Temperature / Storage	-55 to +70°C / -55 to +85°C		
Overvoltage Category	II	Pollution Degree	2
Air Pressure	86 to 106 KPa		
Shock / Vibration Resistance	10 G (half sine shock pulse: 11 ms) / 10 to 55 Hz Double-amplitude: 1.5 mm		
Degree Of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	4CO		
Rated Switching Voltage	250 VAC / 30 VDC		
Max Switching Capacity	1500 VA, 180 W		
Max Switching Current	6 A		
Min Switching Current	10 mA (@ 17 V)		
Contact / Material Resistance	≤50 mΩ / Ag Alloy		
Status Indication	DC - Green LED	AC - Red LED	
Functionality Test	Manual Override button: DC - Blue / AC - Red		

COIL SPECIFICATION

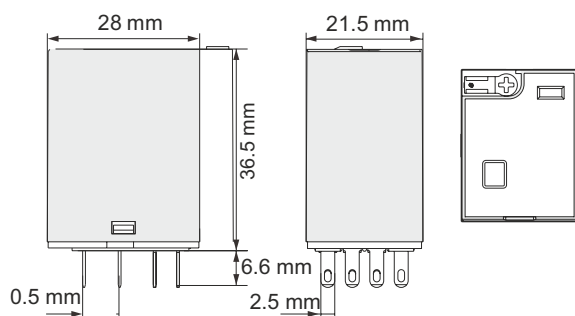
Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	242 VDC	26.4 VAC	126.5 VAC	253 VAC
Coil Resistance*	180 Ω	640 Ω	2600 Ω	13000 Ω	42000 Ω	180 Ω	4430 Ω	16500 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	165 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	22 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.9 W	0.9 W	0.9 W	0.9 W	0.9 W	1.2 VA	1.2 VA	1.2 VA

Note: *Coil resistance: Under coil voltage 110 V are measured with tolerance of $\pm 10\%$, above 110 V with tolerance of $\pm 15\%$.

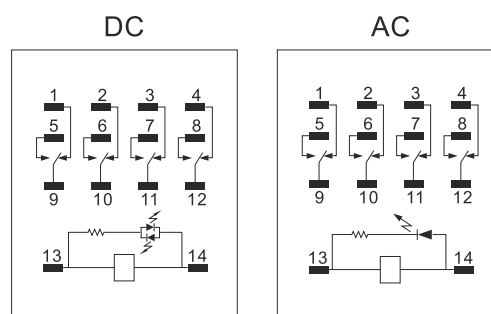
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRLA4P012DLT	CRLA4P024DLT	CRLA4P048DLT	CRLA4P110DLT	CRLA4P220DLT	CRLA4P024ALT	CRLA4P115ALT	CRLA4P230ALT
Standard Pack	20	20	20	20	20	20	20	20

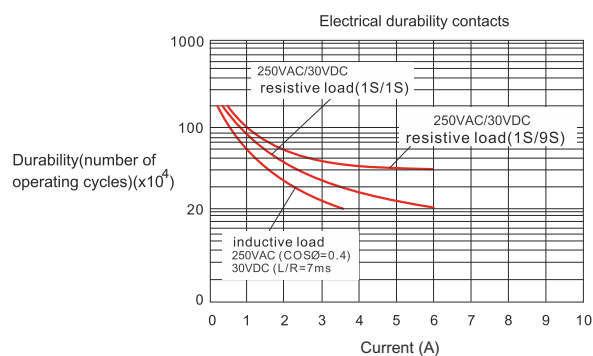
DIMENSIONS



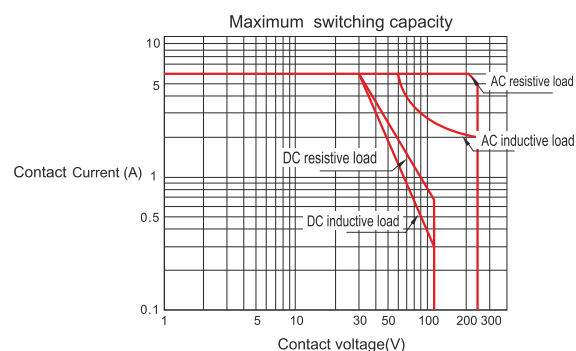
PIN CONFIGURATION



ELECTRICAL PERFORMANCE

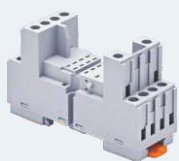


CONTACT PERFORMANCE



ACCESSORIES

Socket



Type / Cat. No.	CRS4COY
Rated Current	10 A Per Contact
Connection Type	Screw Clamp
Mounting Type	DIN Rail / Panel
Additional information	Page No.: 25, 26
Standard Pack	10

Retainer Bracket



Type / Cat. No.	CRB4
Material	Polyamide
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB4M
Material	Metal
Standard Pack	20

Pluggable LED Module



Type / Cat. No.	
12-60V(AC/DC)	CRLD12-60V
110-230V(AC/DC)	CRLD110-230V
LED Type	Bi-Directional
Standard Pack	20

Markers



Type / Cat. No.	
Marker Tag	MT - CRM4CO
Group Marker	CA-509/G3
Standard Pack	100

Screwdriver

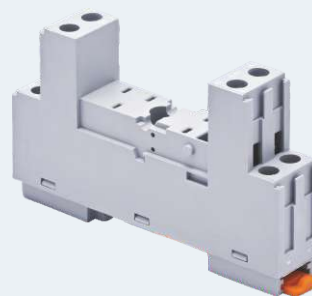


Type / Cat. No.	SCS0.5/3AC
Standard Pack	1

RELAY SOCKET

1 Change Over

- 1CO Relay Base
- 10 A Rated Current
- Universal DIN Rail & Panel Mountable
- Laser etched Marking
- Guided Wire Entry
- V0 Flame Retardant
- Spring Loaded Snap Lock



c  US  RoHS

TECHNICAL DATA

Rated Voltage	250 V
Rated Current / Channel	10 A
Housing Material	Polyamide 6, 6
Flammability Grade	V0
Rated Impulse voltage	4 kV
Operating Temperature	- 40 to + 55°C
Storage Temperature	- 40 to + 85°C
Degree of Protection	IP20
Over voltage Category	III
Pollution Degree	2

ORDERING INFORMATION

PartCode	CRS1COY
Contact Configuration	1CO (SPDT)
Compatible Relay Series	CRLA1XXX
Additional information	Page No. 3, 4
Standard Pack	10

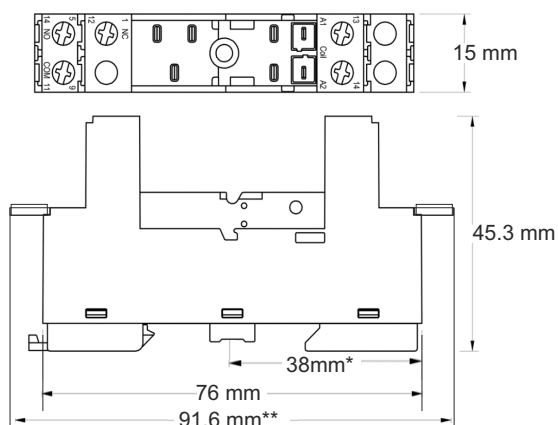
CONNECTION SPECIFICATION

Screw Size	M3
Connection type	Screw
Wire Size-Solid	0.2 mm ² - 4 mm ²
Wire Size-Stranded/Flexible	0.2 mm ² - 4 mm ²
Wire Size-Solid	24 AWG - 10 AWG
Wire Size-Stranded/Flexible	24 AWG - 10 AWG
Wire Stripping Length	8 mm
Torque	0.4 Nm / 4.5 lb-in
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)

MECHANICAL DATA

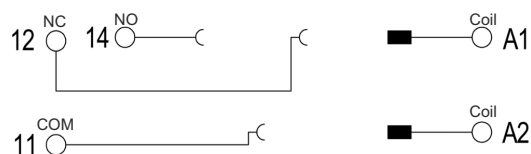
Width	15 mm
Height	45.3 mm
Depth	76 mm

DIMENSIONS



Note: *Panel mount position
 ** Dimension along with Marker Card

PIN CONFIGURATION



ACCESSORIES

Relay



Type / Cat. No.	CRLA1S Series
Dimensions (HxWxD)	29 x 13 x 26 mm
Rated Current	10 A
Additional information	Page No.: 7, 8
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB1
Material	Polyamide
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB1M
Material	Metal
Standard Pack	20

Pluggable LED Module



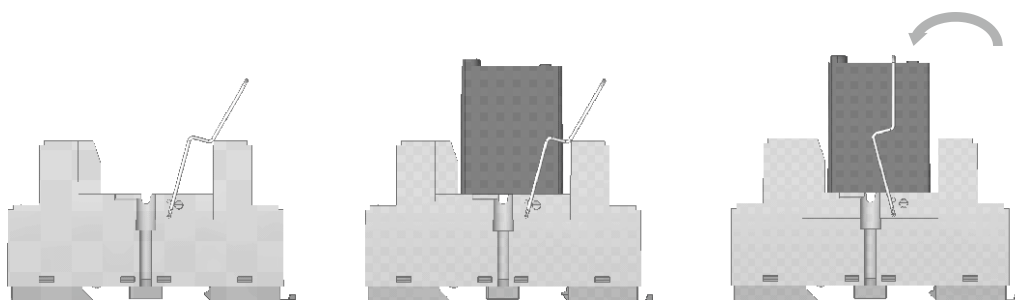
Type / Cat. No.	
12-60V(AC/DC)	CRLD12-60V
110-230V(AC/DC)	CRLD110-230V
LED Type	Bi-Directional
Standard Pack	20

Markers



Type / Cat. No.	
Marker Tag	MT - CRM2CO
Group Marker	CA-509/G4
Std. Pack(Pcs)	100

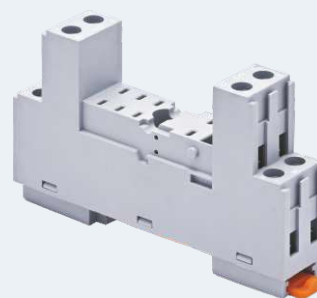
CLIP MOUNTING



RELAY SOCKET

2 Change Over

- 2CO Relay Base
- 10 A Rated Current
- Universal DIN Rail & Panel Mountable
- Laser etched Marking
- Guided Wire Entry
- V0 Flame Retardant
- Spring Loaded Snap Lock



c  US  RoHS

TECHNICAL DATA

Rated Voltage	250 V
Rated Current / Channel	10 A
Insulation Type	Class A
Housing Material	Polyamide 6, 6
Flammability Grade	V0
Rated Impulse voltage	4 kV
Operating Temperature	- 40 to + 55°C
Storage Temperature	- 40 to + 85°C
Degree of Protection	IP20
Over voltage Category	III
Pollution Degree	2

ORDERING INFORMATION

Cat. No.	CRS2COY
Contact Configuration	2 CO
Compatible Relay Series	CRLA2XXX
Additional information	Page No. 5, 6
Standard Pack	10

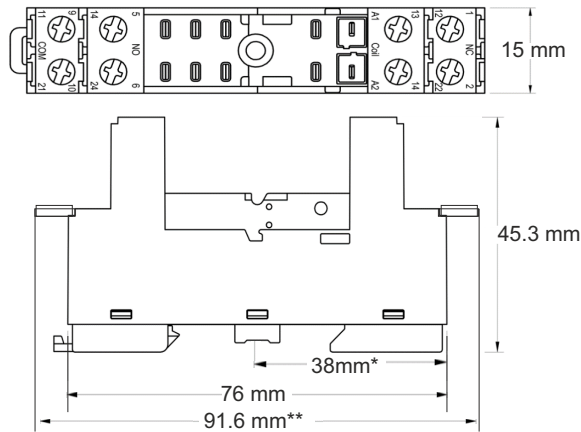
CONNECTION SPECIFICATION

Screw Size	M3
Connection type	Screw
Wire Size-Solid	0.2 mm ² - 4 mm ²
Wire Size-Stranded/Flexible	0.2 mm ² - 4 mm ²
Wire Size-Solid	24 AWG - 10 AWG
Wire Size-Stranded/Flexible	24 AWG - 10 AWG
Wire Stripping Length	8 mm
Torque	0.4 Nm / 4.5 lb-in
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)

MECHANICAL DATA

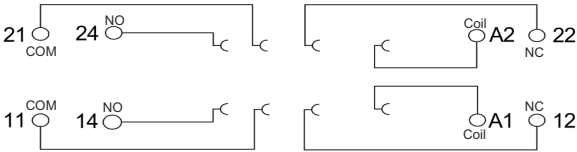
Width	15 mm
Height	45.3 mm
Depth	76 mm

DIMENSIONS



Note: *Panel mount position
** Dimension along with Marker Card

PIN CONFIGURATION



ACCESSORIES

Relay



Type / Cat. No.	CRLA2S Series
Dimensions (HxWxD)	29 x 13 x 26 mm
Rated Current	5 A
Additional information	Page No.: 9, 10
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB1
Material	Polyamide
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB1M
Material	Metal
Standard Pack	20

Pluggable LED Module



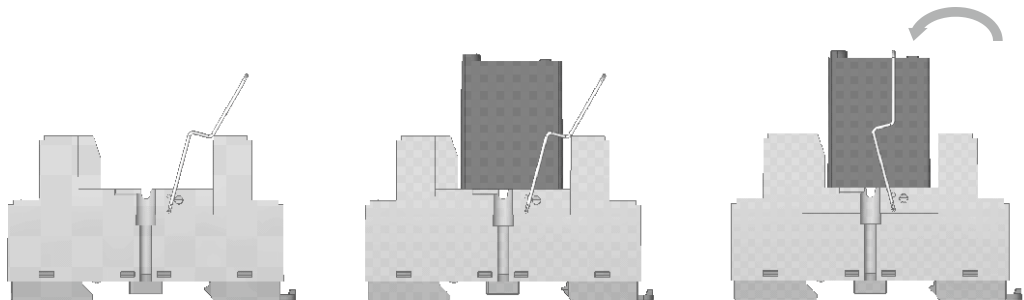
Type / Cat. No.	
12-60V(AC/DC)	CRLD12-60V
110-230V(AC/DC)	CRLD110-230V
LED Type	Bi-Directional
Standard Pack	20

Markers



Type / Cat. No.	
Marker Tag	MT - CRM2CO
Group Marker	CA-509/G4
Standard Pack	100

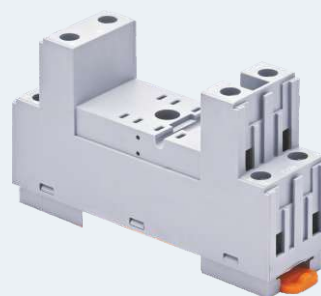
CLIP MOUNTING



RELAY SOCKET

2 Change Over (Power)

- 2COP Relay Base
- 12 A Rated Current
- Universal DIN Rail Mountable
- Laser etched Marking
- Guided Wire Entry
- V0 Flame Retardant
- Spring Loaded Snap Lock



cW⁺ US CE RoHS

TECHNICAL DATA

Rated Voltage	250 V
Rated Current / Channel	12 A
Insulation Type	Class A
Housing Material	Polyamide 6, 6
Flamability Grade	V0
Rated Impulse voltage	4 kV
Operating Temperature	- 40 to + 55°C
Storage Temperature	- 40 to + 85°C
Degree of Protection	IP20
Overvoltage Category	III
Pollution Degree	2

ORDERING INFORMATION

Cat. No.	CRS2COPY
Contact Configuration	2CO
Compatible Relay Series	CRLA2PXXX
Additional information	Page No. 7, 8
Standard Pack	10

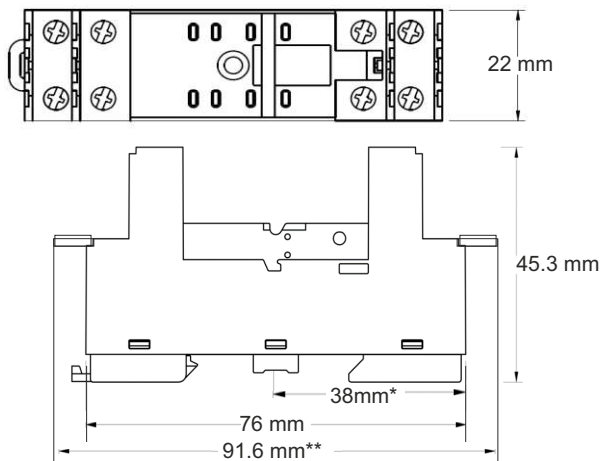
CONNECTION SPECIFICATION

Screw Size	M3
Connection type	Screw
Wire Size-Solid	0.2 mm ² - 4 mm ²
Wire Size-Stranded/Flexible	0.2 mm ² - 4 mm ²
Wire Size-Solid	24 AWG - 10 AWG
Wire Size-Stranded/Flexible	24 AWG - 10 AWG
Wire Stripping Length	8 mm
Torque	0.4 Nm / 4.5 lb-in
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)

MECHANICAL DATA

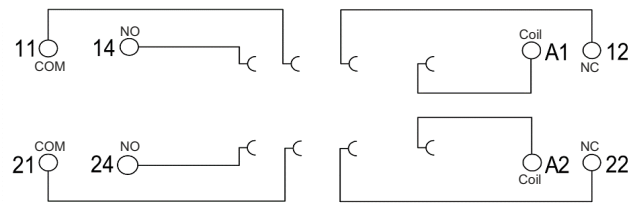
Width	22 mm
Height	45.3 mm
Depth	76 mm

DIMENSIONS



Note: *Panel mount position
** Dimension along with Marker Card

PIN CONFIGURATION



ACCESSORIES

Relay



Type / Cat. No.	CRLA2P Series
Dimensions (HxWxD)	36.5 x 21 x 27.5 mm
Rated Current	7 A / 12 A
Additional information	Page No.: 11 - 14
Standard Pack	20

Retainer Bracket



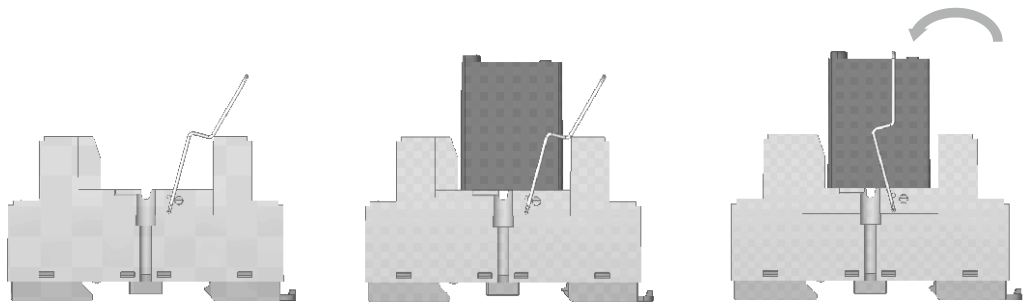
Type / Cat. No.	CRB4M
Material	Metal
Standard Pack	20

Marker Tag



Type / Cat. No.	
Marker Tag	MT - CRM4CO
Group Marker	CA-509/G3
Standard Pack	100

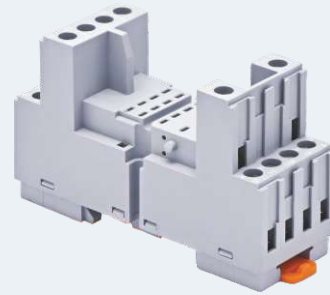
CLIP MOUNTING



RELAY SOCKET

4 Change Over (Power)

- 4CO Relay Base
- 10A Rated Current
- Universal DIN Rail Mountable
- Laser etched Marking
- Guided Wire Entry
- V0 Flame Retardant
- Spring Loaded Snap Lock



c  US  RoHS

TECHNICAL DATA

Rated Voltage	250 V
Rated Current / Channel	10 A
Insulation Type	Class A
Housing Material	Polyamide 6, 6
Flamability Grade	V0
Rated Impulse voltage	4 kV
Operating Temperature	- 40 to + 55°C
Storage Temperature	- 40 to + 85°C
Degree of Protection	IP20
Overvoltage Category	III
Pollution Degree	2

ORDERING INFORMATION

Cat. No.	CRS4COY
Contact Configuration	4CO
Compatible Relay Series	CRLA4XXX
Additional information	Page No. 11, 12
Standard Pack	10

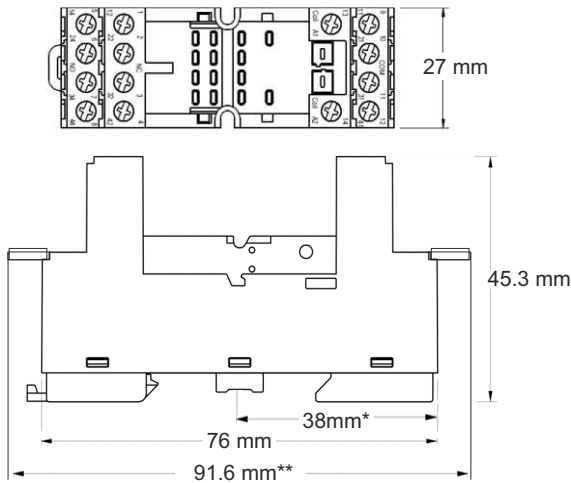
CONNECTION SPECIFICATION

Screw Size	M3
Connection type	Screw
Wire Size-Solid	0.2 mm ² - 4 mm ²
Wire Size-Stranded/Flexible	0.2 mm ² - 4 mm ²
Wire Size-Solid	24 AWG - 10 AWG
Wire Size-Stranded/Flexible	24 AWG - 10 AWG
Wire Stripping Length	8 mm
Torque	0.4 Nm / 4.5 lb-in
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)

MECHANICAL DATA

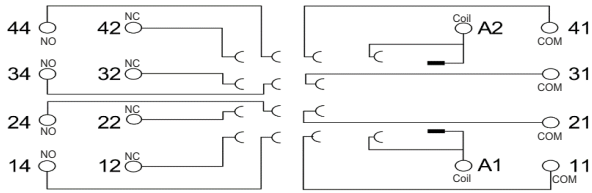
Width	27 mm
Height	45.3 mm
Depth	76 mm

DIMENSIONS



Note: *Panel mount position
** Dimension along with Marker Card

PIN CONFIGURATION



ACCESSORIES

Relay



Type / Cat. No.	CRLA4 Series
Dimensions (HxWxD)	36.5 x 21 x 27.5 mm
Rated Current	5 A / 6 A
Additional information	Page No.: 15 - 18
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB4
Material	Polyamide
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB4M
Material	Metal
Standard Pack	20

Pluggable LED Module



Type / Cat. No.	
12-60V(AC/DC)	CRLD12-60V
110-230V(AC/DC)	CRLD110-230V
LED Type	Bi-Directional
Standard Pack	20

Marker Tag

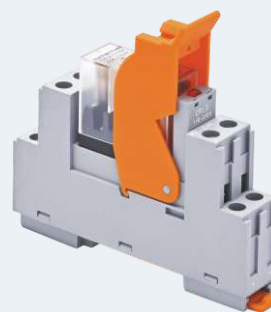


Type / Cat. No.	
Marker Tag	MT - CRM4CO
Group Marker	CA-509/G3
Standard Pack	100

RELAY + SOCKET

1 Change Over

- Compact & Modular design with retainer clip
- Variety of operating voltages
- 250VAC/10A switching capacity.
- Low coil power consumption
- LED Indication on Coil activation
- Widely used in the output signal and safety drive of PLC, CNC system, robot, intelligent manufacturing and other control systems.
- Long-life laser marking for circuit identification
- High Mechanical and Electrical Life
- IEC 61810-1 Standard
- Input universal polarity



TECHNICAL DATA

Mechanical Life	≥ 1000 x 10 ⁴ cycles		
Electrical Life	≥ 10 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤10 ms		
Dielectric Strength	Between open contacts: 1000 VAC / 1 min	Between poles: 1000 VAC / 1 min	Between contacts & coil: 5000 VAC / 1 min
Insulation Resistance	≥1000 MΩ (500 V)		
Operating Temperature	-40 to +65°C		
Air Pressure	86 to 106 KPa		
Shock Resistance	Stability 10 G, Destructiveness 100 G		
Vibration Resistance	10 to 55 Hz Double-amplitude: 1.5 mm		
Degree of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	1CO (SPDT)
Rated Switching Voltage	250 VAC / 30VDC
Max Switching Capacity	2500 VA / 300 W
Max Switching Current	10 A
Min Switching Current	10 mA @ 17 V
Contact Resistance	≤ 50 m Ω
Contact Material	Ag Alloy

COIL SPECIFICATION

Voltage	12 VDC	24 VDC	48 VDC	110 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	26.4 VAC	126.5 VAC	253 VAC
*Coil Resistance	270 Ω	1100 Ω	4300 Ω	22800 Ω	240 Ω	6300 Ω	23000 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.53 W	0.53 W	0.53 W	0.53 W	1 VA	1 VA	1 VA

Note: *Coil resistance: under coil voltage 110 V are measured with tolerance of $\pm 10\%$, above 110 V with tolerance of $\pm 15\%$.

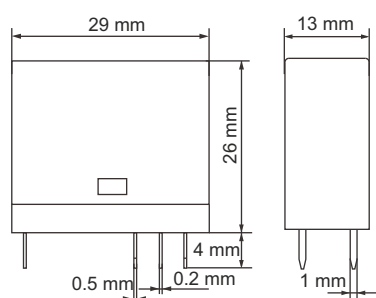
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRMA1S012DYL	CRMA1S024DYL	CRMA1S048DYL	CRMA1S110DYL	CRMA1S024AYL	CRMA1S115AYL	CRMA1S230AYL
Standard Pack	10	10	10	10	10	10	10

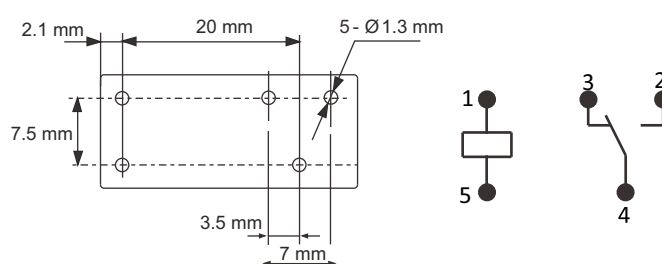
CONNECTION SPECIFICATION

Screw Size	M3
Connection type	Screw
Wire Size-Solid	0.2 mm ² - 4 mm ²
Wire Size-Stranded/Flexible	0.2 mm ² - 4 mm ²
Wire Size-Solid	24 AWG - 10 AWG
Wire Size-Stranded/Flexible	24 AWG - 10 AWG
Wire Stripping Length	8 mm
Torque	0.4 Nm / 4.5 lb-in
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)

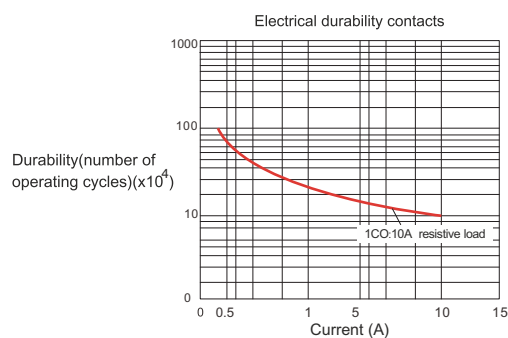
RELAYS DIMENSIONS



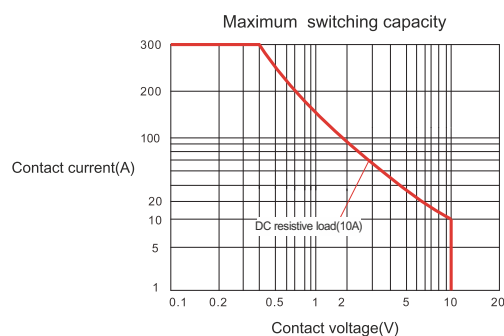
PIN CONFIGURATION



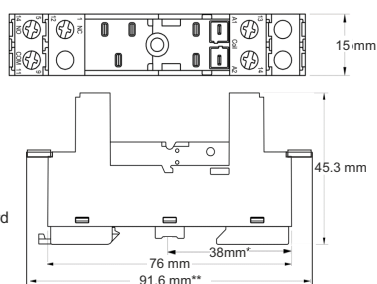
ELECTRICAL PERFORMANCE



CONTACT PERFORMANCE

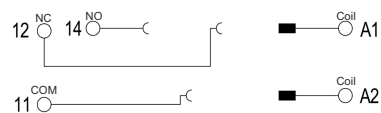


SOCKET DIMENSIONS



Note: *Panel mount position
** Dimension along with Marker Card

ELECTRICAL CONNECTION DIAGRAM



ACCESSORIES

Marker Tag



Type / Cat. No.

Marker Tag	MT - CRM2CO
Group Marker	CA-509/G4
Standard Pack	100

Screwdriver

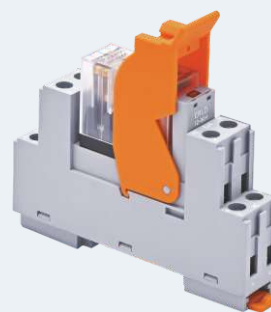


Type / Cat. No.	SCS0.5/3AC
Standard Pack	1

RELAY + SOCKET

2 Change Over

- Compact & Modular design with retainer clip
- Variety of operating voltages
- Low coil power consumption
- LED Indication on Coil activation
- Long-life laser marking for circuit identification
- Integrated Input Protection (Freewheeling diode)
- 250VAC / 5A high power switching capacity.
- High Mechanical and Electrical Life
- IEC 61810-1 Standard
- Input universal polarity



UL LISTED CE RoHS

TECHNICAL DATA

Mechanical Life	≥ 1000 x 10 ⁴ cycles		
Electrical Life	≥ 10 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤10 ms		
Dielectric Strength	Between open contacts: 1000 VAC / 1 min	Between poles: 1000 VAC / 1 min	Between contacts & coil: 5000 VAC / 1 min
Insulation Resistance	≥ 1000 MΩ (500 V)		
Operating Temperature	-40 to +65°C		
Air Pressure	86 to 106 Kpa		
Shock Resistance	Stability 10 G, Destructiveness 100 G		
Vibration Resistance	10 to 55 Hz Double-amplitude: 1.5 mm		
Degree Of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	2CO (DPDT)
Rated Switching Voltage	250 VAC / 30VDC
Max Switching Capacity	1250 VA / 150 W
Max Switching Current	5 A
Min Switching Current	10 mA (@ 17 V)
Contact Resistance	≤ 50 m Ω
Contact Material	Ag Alloy

COIL SPECIFICATION

Voltage	12 VDC	24 VDC	48 VDC	110 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	26.4 VAC	126.5 VAC	253 VAC
*Coil Resistance	270 Ω	1100 Ω	4300 Ω	22800 Ω	240 Ω	6300 Ω	23000 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.53 W	0.53 W	0.53 W	0.53 W	1 VA	1 VA	1 VA

Note: *Coil resistance: under coil voltage 110V are measured with tolerance of $\pm 10\%$, above 110V with tolerance of $\pm 15\%$.

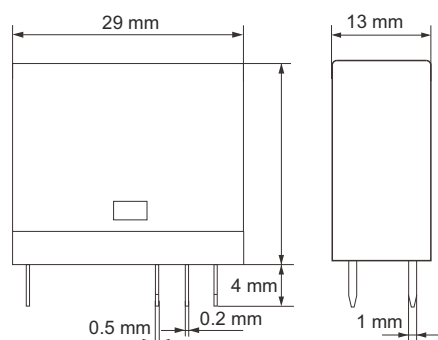
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRMA2S012DYL	CRMA2S024DYL	CRMA2S048DYL	CRMA2S110DYL	CRMA2S024AYL	CRMA2S115AYL	CRMA2S230AYL
Standard Pack	10	10	10	10	10	10	10

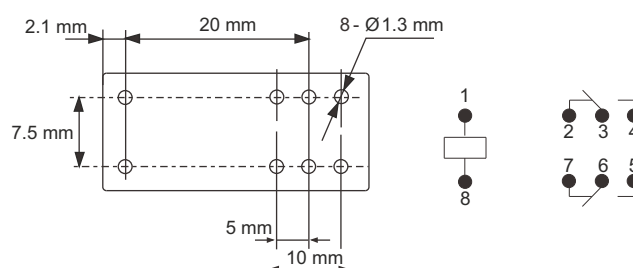
CONNECTION SPECIFICATION

Screw Size	M3
Connection type	Screw
Wire Size-Solid	0.2 mm ² - 4 mm ²
Wire Size-Stranded/Flexible	0.2 mm ² - 4 mm ²
Wire Size-Solid	24 AWG - 10 AWG
Wire Size-Stranded/Flexible	24 AWG - 10 AWG
Wire Stripping Length	8 mm
Torque	0.4 Nm / 4.5 lb-in
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)

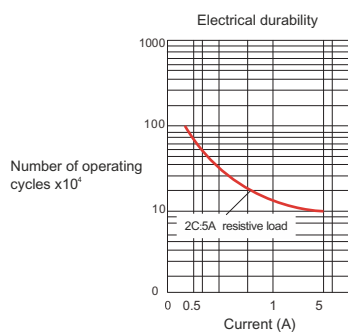
RELAYS DIMENSIONS



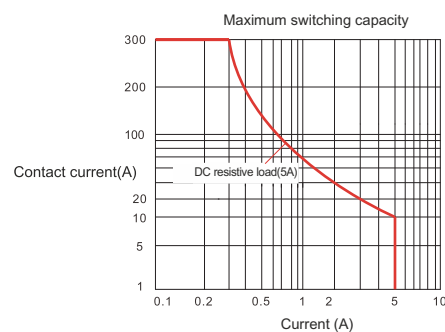
PIN CONFIGURATION



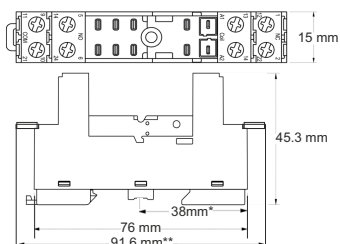
ELECTRICAL PERFORMANCE



CONTACT PERFORMANCE

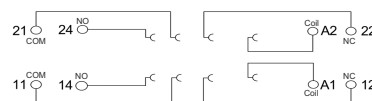


SOCKET DIMENSIONS



Note: *Panel mount position
** Dimension along with Marker Card

ELECTRICAL CONNECTION DIAGRAM



ACCESSORIES

Marker Tag



Type / Cat. No.	
Marker Tag	MT - CRM2CO
Group Marker	CA-509/G4
Standard Pack	100

Screwdriver

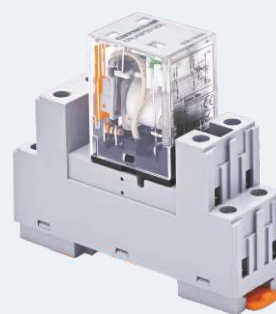


Type / Cat. No.	SCS0.5/3AC
Standard Pack	1

RELAY + SOCKET

2 Change Over (Power)

- Compact & Modular design with retainer clip
- Variety of operating voltages
- High switching current: up to 7A
- Low coil power consumption
- LED Indication on Coil activation
- Output mechanical flag indicator
- Long-life laser marking for circuit identification
- Integrated Input Protection (Freewheeling diode)
- High Mechanical and Electrical Life
- IEC 61810-1 Standard
- Input universal polarity



TECHNICAL DATA

Mechanical Life	≥2000 x 10 ⁴ cycles		
Electrical Life	≥40 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤20 ms		
Dielectric Strength	Between open contacts: 1000 VAC / 1min	Between poles: 2000 VAC / 1min	Between contacts & coil: 2000 VAC / 1min
Impulse Withstand Voltage	4000 V		
Insulation Resistance	≥500 MΩ		
Operating Temperature	-55 to +70°C		
Storage Temperature	-55 to +85°C		
Insulation Voltage	250 VAC		
Over voltage Category	III		
Pollution Degree	3		
Air Pressure	86 to 106 KPa		
Shock Resistance	Stability 10 G, Destructiveness 100 G		
Vibration Resistance	10 to 55 Hz Double-amplitude: 1.5 mm		
Degree Of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	2CO (DPDT)		
Rated Switching Voltage	250 VAC / 30 VDC		
Max Switching Capacity	1750 VA / 210 W		
Max Switching Current	7 A		
Min Switching Current	10 mA (@ 17 V)		
Contact Resistance	≤ 50 m Ω		
Contact Material	Ag Alloy		
Status Indication	DC - Green LED	AC - Red LED	

COIL SPECIFICATION

Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	242 VDC	26.4 VAC	126.5 VAC	253 VAC
*Coil Resistance	180 Ω	640 Ω	2600 Ω	13000 Ω	42000 Ω	180 Ω	4430 Ω	16500 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	165 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	22 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.9 W	0.9 W	0.9 W	0.9 W	0.9 W	1.2 VA	1.2 VA	1.2 VA

Note: *Coil resistance: under coil voltage 110 V are measured with tolerance of $\pm 10\%$, above 110 V with tolerance of $\pm 15\%$.

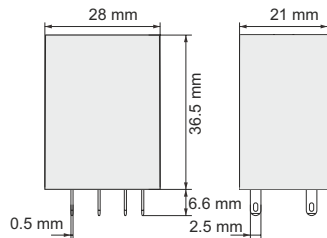
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRMA2PS012DYL	CRMA2PS024DYL	CRMA2PS048DYL	CRMA2PS110DYL	CRMA2PS220DYL	CRMA2PS024AYL	CRMA2PS115AYL	CRMA2PS230AYL
Standard Pack	10	10	10	10	10	10	10	10

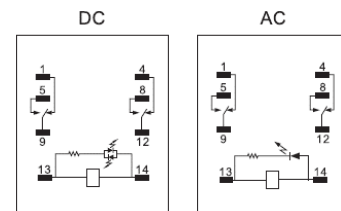
CONNECTION SPECIFICATION

Screw Size	M3
Connection type	Screw
Wire Size-Solid	0.2 mm ² - 4 mm ²
Wire Size-Stranded/Flexible	0.2 mm ² - 4 mm ²
Wire Size-Solid	24 AWG - 10 AWG
Wire Size-Stranded/Flexible	24 AWG - 10 AWG
Wire Stripping Length	8 mm
Torque	0.4 Nm / 4.5 lb-in
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)

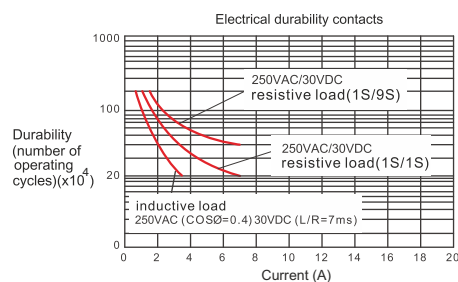
RELAYS DIMENSIONS



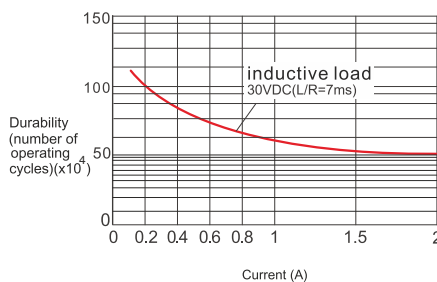
PIN CONFIGURATION



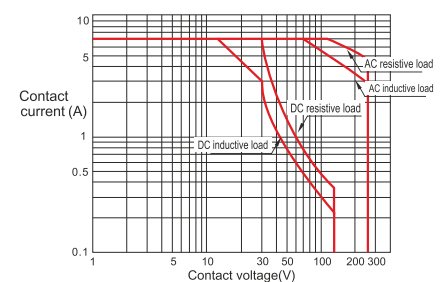
ELECTRICAL LIFE (RESISTIVE LOAD)



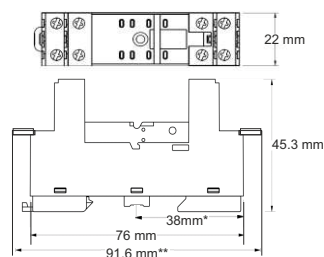
ELECTRICAL LIFE (INDUCTIVE LOAD)



MAXIMUM SWITCHING CAPACITY

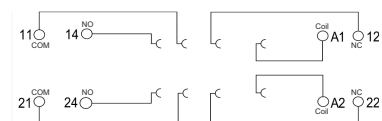


SOCKET DIMENSIONS



Note: *Panel mount position
** Dimension along with Marker Card

ELECTRICAL CONNECTION DIAGRAM



ACCESSORIES

Retainer Bracket



Type / Cat. No.	CRB4M
Material	Metal
Standard Pack	20

Marker Tag



Type / Cat. No.	MT - CRM4CO
Marker Tag	CA-509/G3
Standard Pack	100

Screwdriver

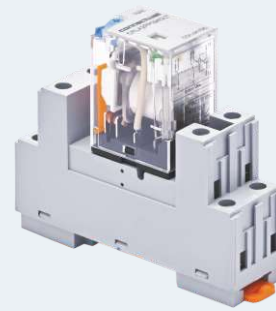


Type / Cat. No.	SCS0.5/3AC
Standard Pack	1

RELAY + SOCKET

2 Change Over (Power - Test Button)

- Compact & Modular design with retainer clip
- Variety of operating voltages
- High switching current: up to 12A
- Low coil power consumption
- LED Indication on Coil activation
- Output mechanical flag indicator
- Long-life laser marking for circuit identification
- Integrated Input Protection (Freewheeling diode)
- High Mechanical and Electrical Life
- IEC 61810-1 Standard
- Manual Over-ride test button for no load testing purpose
- Visual identification of Relay voltage type by colour of override test button
- Input universal polarity



CE RoHS

TECHNICAL DATA

Mechanical Life	≥2000 x 10 ⁴ cycles		
Electrical Life	≥40 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤20 ms		
Dielectric Strength	Between open contacts: 1000 VAC / 1min	Between poles: 2000 VAC / 1min	Between contacts & coil: 2000 VAC / 1min
Impulse Withstand Voltage	4000 V		
Insulation Voltage	250 VAC		
Insulation Resistance	≥1000 MΩ		
Operating Temperature	-55 to +70°C		
Storage Temperature	-55 to +85°C		
Overvoltage Category	III		
Pollution Degree	3		
Air Pressure	86 to 106 KPa		
Shock Resistance	10 G (half sine shock pulse: 11 ms)		
Vibration Resistance	10 to 55 Hz Double-amplitude: 1.5 mm		
Degree Of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	2CO (DPDT)		
Rated Switching Voltage	250 VAC / 30VDC		
Max Switching Capacity	3000VA / 360W		
Max Switching Current	12 A		
Min Switching Current	10 mA (@ 17 V)		
Contact Resistance	≤50 mΩ		
Contact Material	Ag Alloy		
Status Indication	DC - Green LED	AC - Red LED	
Functionality Test	Manual Override button: DC - Blue / AC - Red		

COIL SPECIFICATION

Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	242 VDC	26.4 VAC	126.5 VAC	253 VAC
*Coil Resistance	180 Ω	640 Ω	2600 Ω	13000 Ω	42000 Ω	180 Ω	4430 Ω	16500 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	165 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	22 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.9 W	0.9 W	0.9 W	0.9 W	0.9 W	1.2 VA	1.2 VA	1.2 VA

Note: *Coil resistance: under coil voltage 110 V are measured with tolerance of $\pm 10\%$, above 110 V with tolerance of $\pm 15\%$.

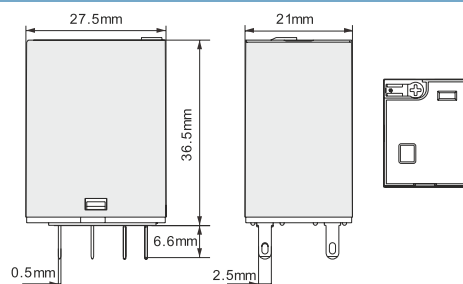
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRMA2PP012DYL	CRMA2PP024DYL	CRMA2PP048DYL	CRMA2PP110DYL	CRMA2PP220DYL	CRMA2PP024AYL	CRMA2PP115AYL	CRMA2PP230AYL
Standard Pack	10	10	10	10	10	10	10	10

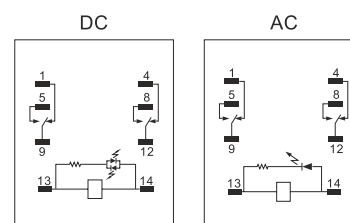
CONNECTION SPECIFICATION

Screw Size	M3
Connection type	Screw
Wire Size-Solid	0.2 mm ² - 4 mm ²
Wire Size-Stranded/Flexible	0.2 mm ² - 4 mm ²
Wire Size-Solid	24 AWG - 10 AWG
Wire Size-Stranded/Flexible	24 AWG - 10 AWG
Wire Stripping Length	8 mm
Torque	0.4 Nm / 4.5 lb-in
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)

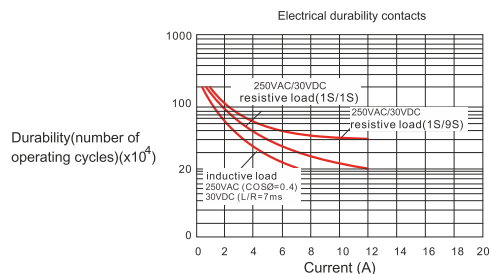
RELAYS DIMENSIONS



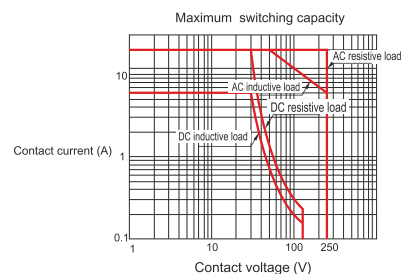
PIN CONFIGURATION



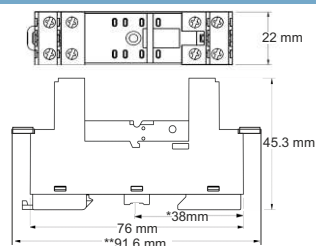
ELECTRICAL LIFE



CONTACT PERFORMANCE

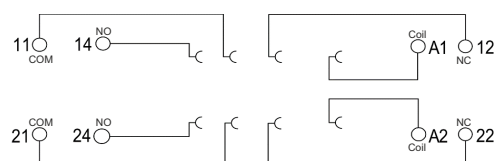


SOCKET DIMENSIONS



Note: *Panel mount position
** Dimension along with Marker Card

ELECTRICAL CONNECTION DIAGRAM



ACCESSORIES

Retainer Bracket



Type / Cat. No.	CRB4M
Material	Metal
Standard Pack	20

Marker Tag



Type / Cat. No.	MT - CRM4CO
Marker Tag	CA-509/G3
Standard Pack	100

Screwdriver

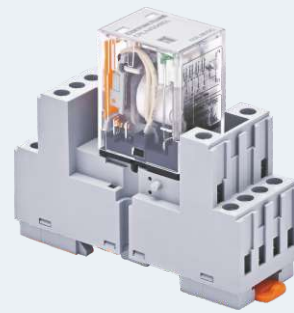


Type / Cat. No.	SCS0.5/3AC
Standard Pack	1

RELAY + SOCKET

4 Change Over (Power)

- Compact & Modular design with retainer clip
- Variety of operating voltages
- Low coil power consumption
- LED Indication on Coil activation
- Output mechanical flag indicator
- Long-life laser marking for circuit identification
- Integrated Input Protection (Freewheeling diode)
- 250VAC/5A high power switching capacity.
- High Mechanical and Electrical Life
- IEC 61810-1 Standard
- Input universal polarity



UL LISTED CE RoHS

TECHNICAL DATA

Mechanical Life	≥2000 x 10 ⁴ cycles		
Electrical Life	≥40 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤20 ms		
Dielectric Strength	Between open contacts: 1000 VAC / 1 min	Between poles: 2000 VAC / 1min	Between contacts & coil: 2000 VAC / 1min
Impulse Withstand Voltage	4000 V		
Insulation Voltage	250 VAC		
Insulation Resistance	≥500 MΩ		
Operating Temperature	-55 to +70°C		
Storage Temperature	-55 to +85°C		
Overvoltage Category	III		
Pollution Degree	3		
Air Pressure	86 to 106 KPa		
Shock Resistance	Stability 10 G, Destructiveness 100 G		
Vibration Resistance	10 to 55Hz Double-amplitude: 1.5 mm		
Degree Of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	4CO		
Rated Switching Voltage	250 VAC / 30 VDC		
Max Switching Capacity	1250 VA, 150 W		
Max Switching Current	5 A		
Min Switching Current	10 mA (@ 17 V)		
Contact Resistance	≤ 50 m Ω		
Contact Material	Ag Alloy		
Status Indication	DC - Green LED	AC - Red LED	

COIL SPECIFICATION

Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	242 VDC	26.4 VAC	126.5 VAC	253 VAC
*Coil Resistance	180 Ω	640 Ω	2600 Ω	13000 Ω	42000 Ω	370 Ω	4430 Ω	16500 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	165 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	22 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.9 W	0.9 W	0.9 W	0.9 W	0.9 W	1.2 VA	1.2 VA	1.2 VA

Note: *Coil resistance: under coil voltage 110V are measured with tolerance of $\pm 10\%$, above 110V with tolerance of $\pm 15\%$.

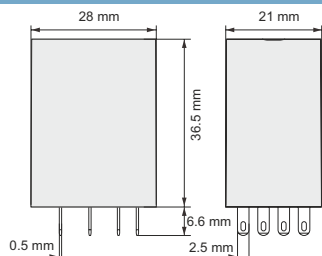
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRMA4S012DYL	CRMA4S024DYL	CRMA4S048DYL	CRMA4S110DYL	CRMA4S220DYL	CRMA4S024AYL	CRMA4S115AYL	CRMA4S230AYL
Std. Pack	10	10	10	10	10	10	10	10

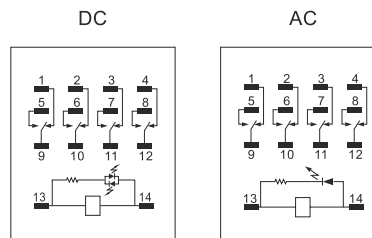
CONNECTION SPECIFICATION

Screw Size	M3
Connection type	Screw
Wire Size-Solid	0.2 mm ² - 4 mm ²
Wire Size-Stranded/Flexible	0.2 mm ² - 4 mm ²
Wire Size-Solid	24 AWG - 10 AWG
Wire Size-Stranded/Flexible	24 AWG - 10 AWG
Wire Stripping Length	8 mm
Torque	0.4 Nm / 4.5 lb-in
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)

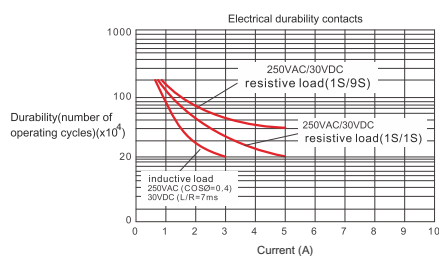
RELAYS DIMENSIONS



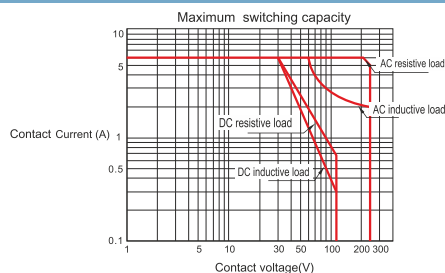
PIN CONFIGURATION



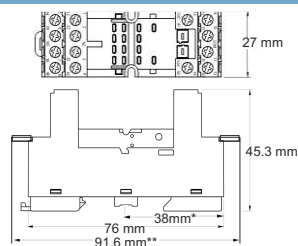
ELECTRICAL LIFE



CONTACT PERFORMANCE

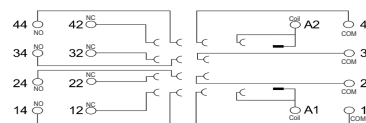


SOCKET DIMENSIONS



Note: *Panel mount position
** Dimension along with Marker Card

ELECTRICAL CONNECTION DIAGRAM



ACCESSORIES

Retainer Bracket



Type / Cat. No.	CRB4
Material	Polyamide
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB4M
Material	Metal
Standard Pack	20

Pluggable LED Module



Type / Cat. No.	
12-60V(AC/DC)	CRLD12-60V
110-230V(AC/DC)	CRLD110-230V
LED Type	Bi-Directional
Standard Pack	20

Marker Tag

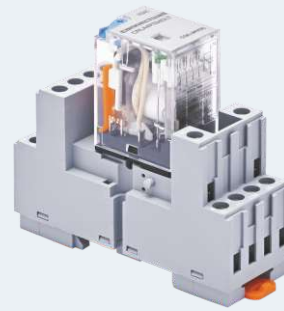


Type / Cat. No.	
Marker Tag	MT - CRM4CO
Group Marker	CA-509/G3
Standard Pack	100

RELAY + SOCKET

4 Change Over (Power - Test Button)

- Compact & Modular design with retainer clip
- Variety of operating voltages
- Low coil power consumption
- LED Indication on Coil activation
- Output mechanical flag indicator
- Long-life laser marking for circuit identification
- Integrated Input Protection (Freewheeling diode)
- 250VAC/6A high power switching capacity.
- High Mechanical and Electrical Life
- IEC 61810-1 Standard
- Manual Over-ride test button for no load testing purpose
- Visual identification of Relay voltage type by colour of override test button
- Input universal polarity



UL LISTED CE RoHS

TECHNICAL DATA

Mechanical Life	≥2000 x 10 ⁴ cycles		
Electrical Life	≥40 x 10 ⁴ cycles		
Switching Frequency	No Load: 18000 Operations / Hour	Full Load: 1800 Operations / Hour	
Operate Time / Release Time	≤20 ms / ≤20 ms		
Dielectric Strength	Between open contacts: 1000 VAC / 1 min	Between poles: 2000 VAC / 1 min	Between contacts & coil 2000 VAC / 1min
Impulse Withstand Voltage	4000 V		
Insulation Voltage	250 VAC		
Insulation Resistance	≥ 1000 MΩ		
Operating Temperature	-55 to +70°C		
Storage Temperature	-55 to +85°C		
Overvoltage Category	II		
Pollution Degree	2		
Air Pressure	86 to 106 KPa		
Shock Resistance	10 G (half sine shock pulse: 11 ms)		
Vibration Resistance	10 to 55 Hz Double-amplitude:1.5 mm		
Degree Of Protection	IP20		

CONTACT SPECIFICATION

Contact Configuration	4 CO		
Rated Switching Voltage	250 VAC / 30VDC		
Max Switching Capacity	1500 VA, 180 W		
Max Switching Current	6 A		
Min Switching Current	10 mA (@ 17 V)		
Contact Resistance	≤50 mΩ		
Contact Material	Ag Alloy		
Status Indication	DC - Green LED	AC - Red LED	
Functionality Test	Manual Override button: DC - Blue / AC - Red		

COIL SPECIFICATION

Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Maximum Coil Voltage	13.2 VDC	26.4 VDC	52.8 VDC	121 VDC	242 VDC	26.4 VAC	126.5 VAC	253 VAC
*Coil Resistance	180 Ω	640 Ω	2600 Ω	13000 Ω	42000 Ω	180 Ω	4430 Ω	16500 Ω
Pickup Voltage	9 VDC	18 VDC	36 VDC	82.5 VDC	165 VDC	19.2 VAC	92 VAC	184 VAC
Dropout Voltage	1.2 VDC	2.4 VDC	4.8 VDC	11 VDC	22 VDC	7.2 VAC	34.5 VAC	69 VAC
Coil Power Consumption	0.9 W	0.9 W	0.9 W	0.9 W	0.9 W	1.2 VA	1.2 VA	1.2 VA

Note: *Coil resistance: under coil voltage 110 V are measured with tolerance of $\pm 10\%$, above 110V with tolerance of $\pm 15\%$.

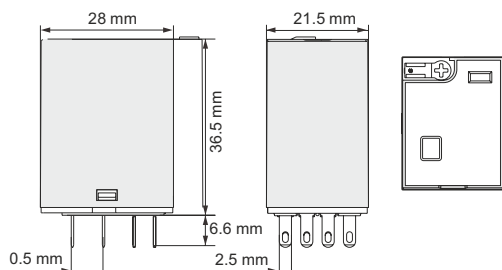
ORDERING INFORMATION

Coil Voltage	12 VDC	24 VDC	48 VDC	110 VDC	220 VDC	24 VAC	115 VAC	230 VAC
Cat. No.	CRMA4P012DYL	CRMA4P024DYL	CRMA4P048DYL	CRMA4P110DYL	CRMA4P220DYL	CRMA4P024AYL	CRMA4P115AYL	CRMA4P230AYL
Standard Pack	10	10	10	10	10	10	10	10

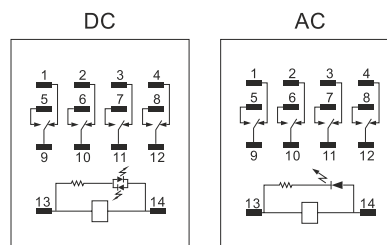
CONNECTION SPECIFICATION

Screw Size	M3
Connection type	Screw
Wire Size-Solid	0.2 mm ² - 4 mm ²
Wire Size-Stranded/Flexible	0.2 mm ² - 4 mm ²
Wire Size-Solid	24 AWG - 10 AWG
Wire Size-Stranded/Flexible	24 AWG - 10 AWG
Wire Stripping Length	8 mm
Torque	0.4 Nm / 4.5 lb-in
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)

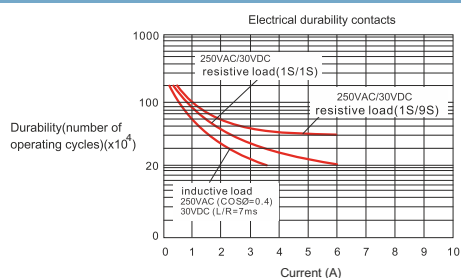
RELAYS DIMENSIONS



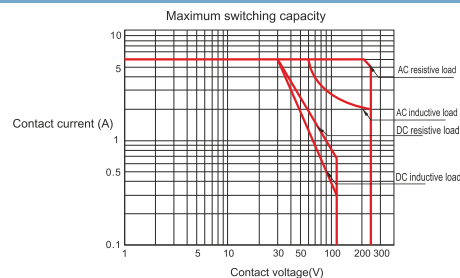
PIN CONFIGURATION



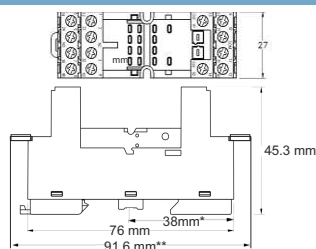
ELECTRICAL LIFE



CONTACT PERFORMANCE

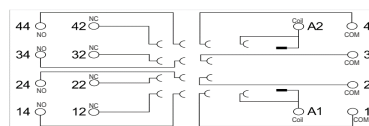


SOCKET DIMENSIONS



Note: *Panel mount position
** Dimension along with Marker Card

ELECTRICAL CONNECTION DIAGRAM



ACCESSORIES

Retainer Bracket



Type / Cat. No.	CRB4
Material	Polyamide
Standard Pack	20

Retainer Bracket



Type / Cat. No.	CRB4M
Material	Metal
Standard Pack	20

Pluggable LED Module



Type / Cat. No.	CRLD12-60V
12-60 V(AC/DC)	CRLD110-230V
LED Type	Bi-Directional
Standard Pack	20

Marker Tag



Type / Cat. No.	MT - CRM4CO
Marker Tag	CA-509/G3
Group Marker	20