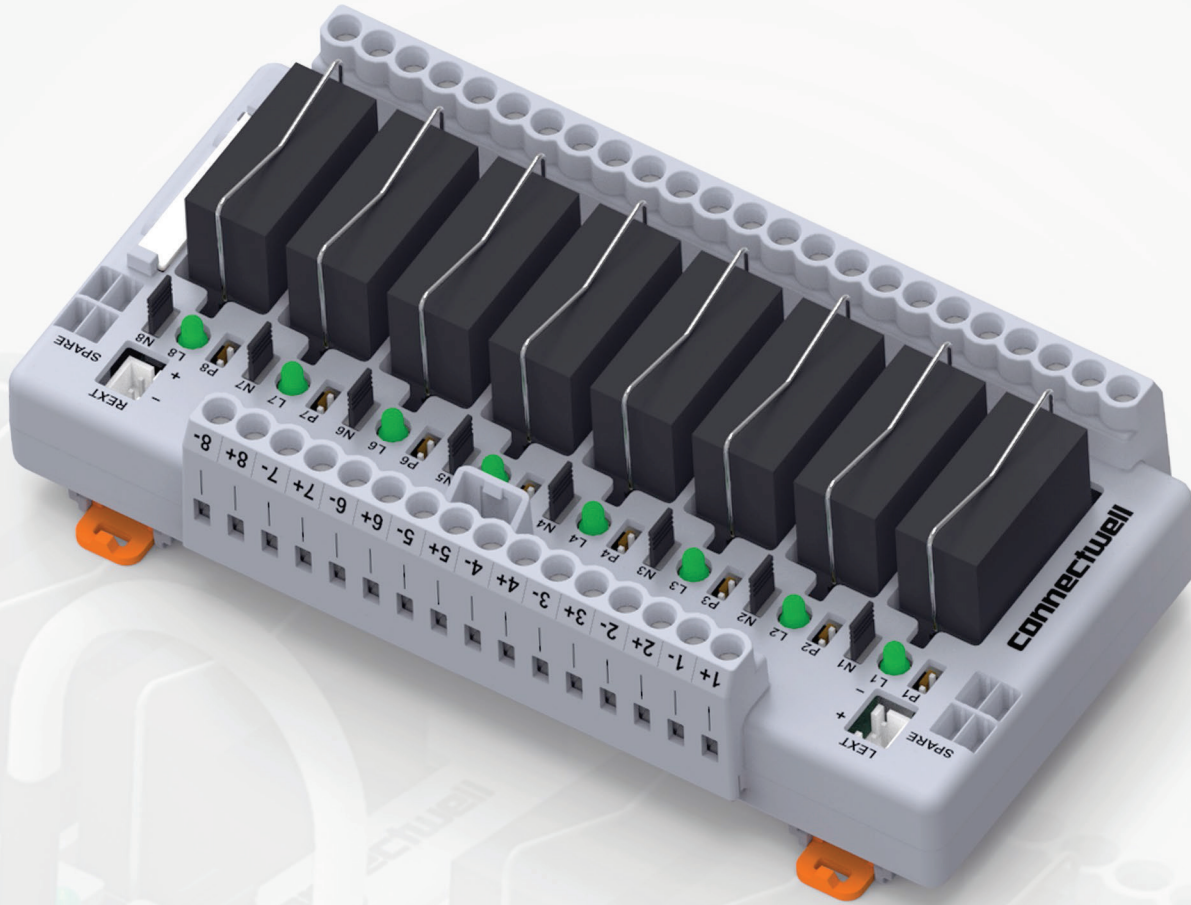


Altech Corp.[®]



RELAY MODULES

NEXT GENERATION - COMPACT - FULLY ENCLOSED



Future-ready advantages



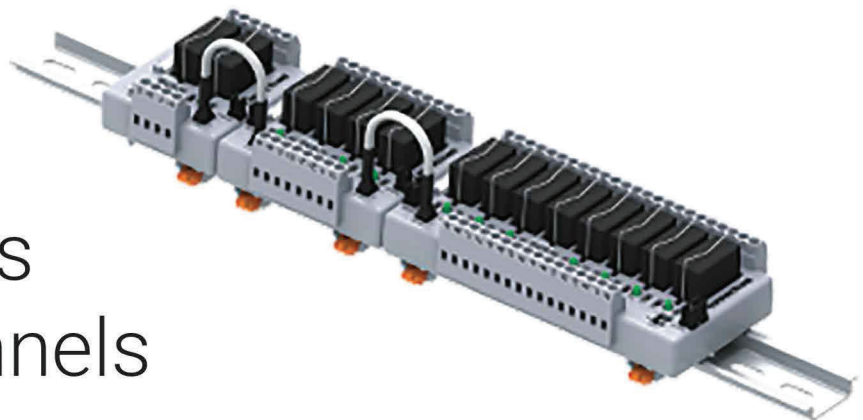
Assures no-shock, IP20 rated performance

Completely enclosed design assures no-shock hazards with an IP20 protection.

Ensures that critical components are not exposed to heat or dust deterioration, which can reduce the life of the module or cause untimely component failure.

Aesthetically enhanced look of the product is an ideal fit in modern control cabinets.

Custom configurations up to 32 channels



Accommodate last minute changes or circuit extensions without replacing the existing module.

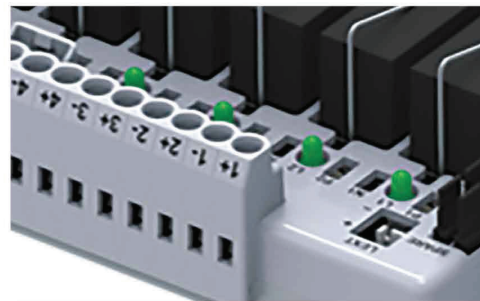
Achieve multiple configurations ($2 + 4 = 6$ or $8 + 4 + 2 = 14$) for up to 32 channels, with the unique 'extension cable' accessory.

True 10 Amperes performance



No more compromises. Unleash the complete potential of relays with 70micron PCB track and screw connection technology. Proven over a billion times, CIMRE modules are the only solution which can guarantee a load current of 10 amperes.

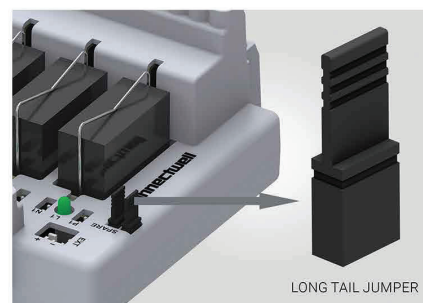
Highly ergonomic wire entry and status indicators



Large guided wire entry points ensure quick, easy and error-free wire insertion, with or without ferrules/lugs.

Individually assigned LEDs for relay status indication with clear, laser-marked channel identification.

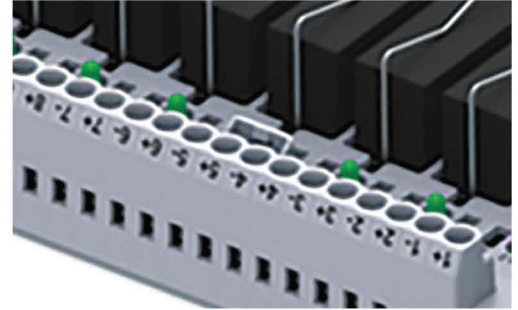
Pre-installed long tail jumpers



Easy-to-use, long tail jumpers enable quick and easy creation of common negative circuits.

Safe IP20 socket design to connect jumpers and easily accessible pockets for parking the jumpers, when not in use.

Industry first long-life laser marking for circuit identification



A small but important design detail is the use of high-visibility and long-lasting laser markings on the module. This replaces sticker marking, which often fades, peels or wears-off.

Compact and secure mounting



Compact enclosure gives 35% volumetric saving with a robust, spring-loaded latching mechanism that secures mounting on the DIN rail.

Additional all-axis marking provision



A large vertical, flush-mounted area for marking is built into the CIMRE module. With the GMH8 accessory, raised horizontal markings can also be achieved, providing for all round visibility.

High quality standards and approvals



The CIMRE Module complies with the IEC 60664 standards for insulation coordination and these Relay Module are assembled with UL approved components.

Industrial applications

Protection

Galvanic isolation between the input and output of relays, avoids the transfer of any surges from field devices to the PLC/DCS, thereby, protecting highly valuable assets from damage.

Efficient Switching

Facilitates switching of high power load output on PLC/DCS for equipment like contactors or motors.

Isolation

In some application areas, the field voltage and controlling voltages differ. In such cases, it is necessary to isolate the PLC/DCS from field voltages derived from devices such as solenoids and actuators.

Altech Corp.[®]

Industrial uses by sector



Power



Continuous Process Automation



Oil & Gas



Machinery and Factory Automation



Transportation



Building Infrastructure

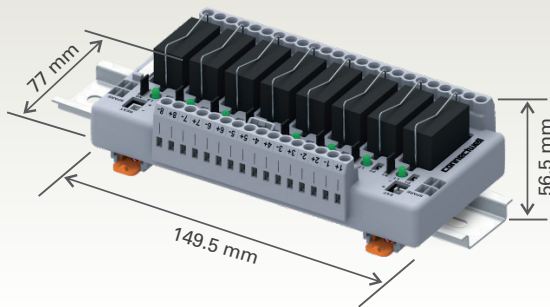
1 CHANGEOVER (SPDT) CIMRE SERIES RELAY MODULES - With OMRON Relay

FEATURES

- | Fully-enclosed IP20 rated design
- | Custom configurations up to 32 channels
- | True 10 Amperes performance
- | Ease of wire entry, clearly visible status indicators
- | Pre-installed long tail jumpers
- | Industry first long-life laser marking for circuit identification
- | Compact and secure mounting
- | Additional all-axis marking provision
- | High quality standards and approvals
- | Easy to replace pluggable relays
- | Freewheeling diode protection for DC coil
- | IP 20 protection Class
- | Variety of operating voltage

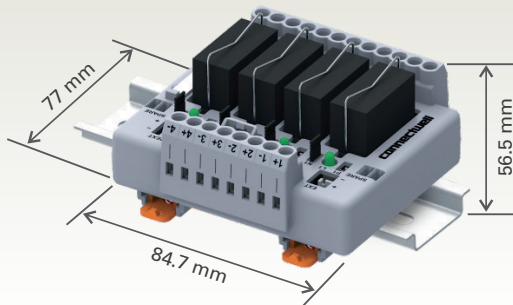


8 Channel, 1 Changeover (SPDT)



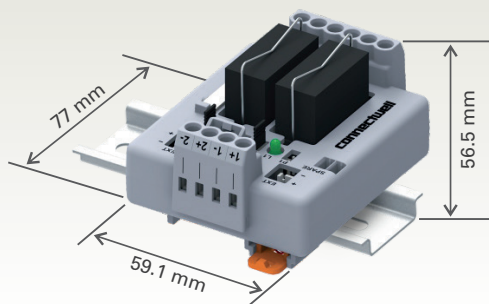
Operating Voltage	Part Number with Pluggable Relay	Part Number with Soldered Relay	Std. Pack
12 VDC	CIMRE1SS8/12/ OM	CIMRE1S8/12/ OM	1
24 VDC	CIMRE1SS8/24/ OM	CIMRE1S8/24/ OM	1
24 VAC	CIMRE1SS8/24A/ OM	CIMRE1S8/24A/ OM	1
110 VAC	CIMRE1SS8/110A/ OM	CIMRE1S8/110A/ OM	1
230 VAC	CIMRE1SS8/230A/ OM	CIMRE1S8/230A/ OM	1

4 Channel, 1 Changeover (SPDT)



Operating Voltage	Part Number with Pluggable Relay	Part Number with Soldered Relay	Std. Pack
12 VDC	CIMRE1SS4/12/ OM	CIMRE1S4/12/ OM	1
24 VDC	CIMRE1SS4/24/ OM	CIMRE1S4/24/ OM	1
24 VAC	CIMRE1SS4/24A/ OM	CIMRE1S4/24A/ OM	1
110 VAC	CIMRE1SS4/110A/ OM	CIMRE1S4/110A/ OM	1
230 VAC	CIMRE1SS4/230A/ OM	CIMRE1S4/230A/ OM	1

2 Channel, 1 Changeover (SPDT)



Operating Voltage	Part Number with Pluggable Relay	Part Number with Soldered Relay	Std. Pack
12 VDC	CIMRE1SS2/12/ OM	CIMRE1S2/12/ OM	1
24 VDC	CIMRE1SS2/24/ OM	CIMRE1S2/24/ OM	1
24 VAC	CIMRE1SS2/24A/ OM	CIMRE1S2/24A/ OM	1
110 VAC	CIMRE1SS2/110A/ OM	CIMRE1S2/110A/ OM	1
230 VAC	CIMRE1SS2/230A/ OM	CIMRE1S2/230A/ OM	1

Note - Product height shown is for pluggable relay (G2R) modules mounted on DIN 35 x 7.5 mm Rail.
 - For soldered module product height will be 13 mm less than pluggable relay modules.
 - Modules are preconfigured to common negative

ACCESSORY

Description	Part Number	Standard Pack
Extension Cable	IMACC/CIMRE/EXT	10
DIN Rail 35 - 1 meter	CA701-1M/ CA701-1M-S	50
DIN Rail 35 - 2 meter	CA701-2M/ CA701-2M-S	50
Group Marker	GMH8 / GMH8N	100
Screwdriver	SCS0.5/3	10

RELAYS

Operating Voltage	Part Number	Standard Pack
12 VDC / OMRON	IMACC/G2R1/12 DC	50
24 VDC / OMRON	IMACC/G2RL1/24 DC	50
24 VAC / OMRON	IMACC/G2R1/24 AC	50
110 VAC / OMRON	IMACC/G2R1/110 AC	50
230 VAC / OMRON	IMACC/G2R1/230 AC	50

GENERAL DATA

Supply Voltage Indication	3 mm Green LED
Ambient Operating Temperature	-20° to 50° C
Mounting Possibility	DIN 35 / DIN 35-15 Rail
Housing Material	Polycarbonate
Housing Colour	Grey
Relay Protection (DC Variant)	Using 1N4007 Free Wheeling Diode
Bussing Possibility	Yes, With long tail jumpers
Standard	IEC 60664

CONNECTION DATA

Type of Connection	Screw Connection
Min. Wire Size (mm ²)	0.2 mm ²
Max. Wire Size (mm ²)	2.5 mm ²
Min. Wire Size (AWG)	22 AWG
Max. Wire Size (AWG)	14 AWG
Wire Stripping Length	8 mm
Applicable Torque	0.4 Nm (3.5 lb.in)
Screw Size	M2.5

RELAY DATA

RELAY COIL DATA

Rated Coil Voltage (V)	12 VDC	24 VDC	24 VAC	110 VAC	220 VAC
Coil Resistance (ohms)	275	1440	260	4600	20,200
Rated Coil Current (mA)	43.6	16.7	46.5	11	5.5
Must Operate / Must Release Voltage (V)	8.4 / 1.8	16.8 / 2.4	19.2 / 7.2	88 / 33	176 / 66
Max. Voltage	13.2	31.2	26.4	121	242
Nominal Input Power	530 mW	400 mW	0.9 VA	0.9 VA	0.9 VA

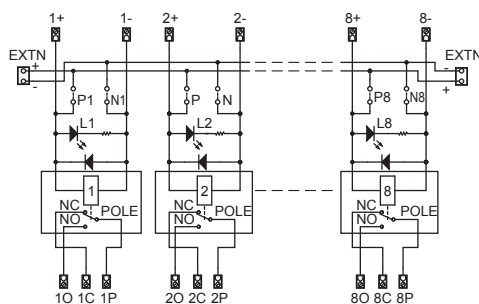
RELAY CONTACT DATA

Contact Type	1CO (SPDT)	1CO (SPDT)	1CO (SPDT)	1CO (SPDT)	1CO (SPDT)
Contact Material	Ag-alloy (Cd free)	Ag-alloy (Cd free)	Ag-alloy (Cd free)	Ag-alloy (Cd free)	Ag-alloy (Cd free)
Rated Current (resistive)	10A@250 VAC/24 VDC	12A@250 VAC/24 VDC	10A@250 VAC/24 VDC	10A@250 VAC/24 VDC	10A@250 VAC/24 VDC
Max. Switching Voltage	380 VAC, 125 VDC	440 VAC, 300 VDC	380 VAC, 125 VDC	380 VAC, 125 VDC	380 VAC, 125 VDC
Turn-Off Time / Turn-On Time	5 ms / 15 ms	5 ms / 15 ms	5 ms / 15 ms	10 ms / 15 ms	10 ms / 15 ms
Max. Mech Operating Freq. (At Rated Load)	18000 Opr./Hr	18000 Opr./Hr	18000 Opr./Hr	18000 Opr./Hr	18000 Opr./Hr
Max. Elect Operating Freq. (At Rated Load)	1,800 Opr./Hr	1,800 Opr./Hr	1,800 Opr./Hr	1,800 Opr./Hr	1,800 Opr./Hr
Mechanical Life expectancy	20 x 10 ⁶	20 x 10 ⁶	10 x 10 ⁶	10 x 10 ⁶	10 x 10 ⁶
Electrical Life expectancy	100 x 10 ³	50 x 10 ³	100 x 10 ³	100 x 10 ³	100 x 10 ³

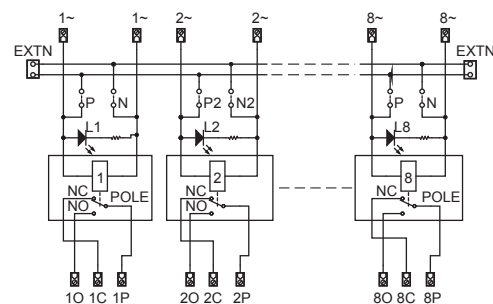
RELAY GENERAL DATA

Relay Make/Series	OMRON/G2R-1	OMRON/G2RL-1	OMRON/G2R-1	OMRON/G2R-1	OMRON/G2R-1
Dielectric Strength (Between coil & contacts)	5000 VAC	5000 VAC	5000 VAC	5000 VAC	5000 VAC
Dielectric Strength (Between contacts)	1000 VAC	1000 VAC	1000 VAC	1000 VAC	1000 VAC

Relay Approvals



Circuit Diagram - F or DC operating voltage Relay Modules



Circuit Diagram - F or AC operating voltage Relay Modules

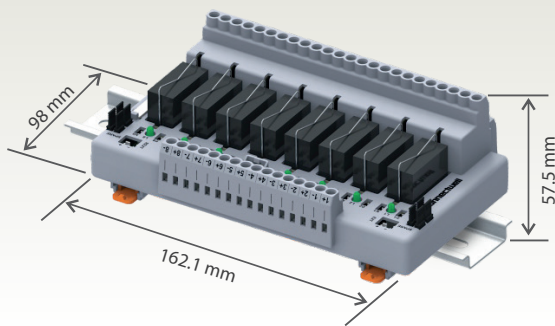
2 CHANGEOVER (DPDT) CIMRE SERIES RELAY MODULES - With OMRON Relay

FEATURES

- Fully-enclosed IP20 rated design
- Custom configurations up to 32 channels
- True 5 Amperes performance
- Ease of wire entry, clearly visible status indicators
- Pre-installed long tail jumpers
- Industry first long-life laser marking for circuit identification
- Compact and secure mounting
- Additional all-axis marking provision
- High quality standards and approvals
- Easy to replace pluggable relays
- Freewheeling diode protection for DC coil
- IP 20 protection Class
- Variety of operating voltage

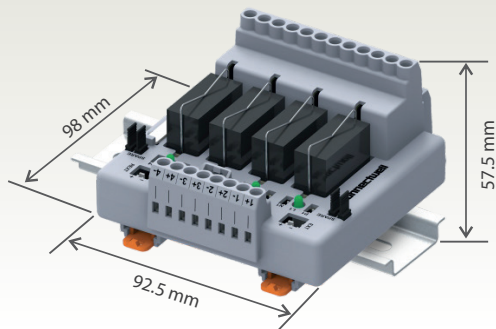
CE RoHS

8 Channel, 2 Changeover (DPDT)



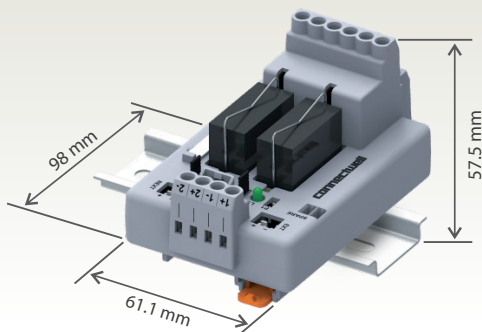
Operating Voltage	Part Number with Pluggable Relay	Part Number with Soldered Relay	Std. Pack
12VDC	CIMRE2SS8/12/ OM	CIMRE2S8/12/ OM	1
24VDC	CIMRE2SS8/24/ OM	CIMRE2S8/24/ OM	1
24VAC	CIMRE2SS8/24A/ OM	CIMRE2S8/24A/ OM	1
110 VAC	CIMRE2SS8/110A/ OM	CIMRE2S8/110A/ OM	1
230 VAC	CIMRE2SS8/230A/ OM	CIMRE2S8/230A/ OM	1

4 Channel, 2 Changeover (DPDT)



Operating Voltage	Part Number with Pluggable Relay	Part Number with Soldered Relay	Std. Pack
12VDC	CIMRE2SS4/12/ OM	CIMRE2S4/12/ OM	1
24VDC	CIMRE2SS4/24/ OM	CIMRE2S4/24/ OM	1
24VAC	CIMRE2SS4/24A/ OM	CIMRE2S4/24A/ OM	1
110 VAC	CIMRE2SS4/110A/ OM	CIMRE2S4/110A/ OM	1
230 VAC	CIMRE2SS4/230A/ OM	CIMRE2S4/230A/ OM	1

2 Channel, 2 Changeover (DPDT)



Operating Voltage	Part Number with Pluggable Relay	Part Number with Soldered Relay	Std. Pack
12VDC	CIMRE2SS2/12/ OM	CIMRE2S2/12/ OM	1
24VDC	CIMRE2SS2/24/ OM	CIMRE2S2/24/ OM	1
24VAC	CIMRE2SS2/24A/ OM	CIMRE2S2/24A/ OM	1
110 VAC	CIMRE2SS2/110A/ OM	CIMRE2S2/110A/ OM	1
230 VAC	CIMRE2SS2/230A/ OM	CIMRE2S2/230A/ OM	1

Note - Product height shown is for pluggable relay modules mounted on DIN 35 x 7.5 mm Rail.
- Modules are pre-configured to common negative

ACCESSORY

Description	Part Number	Standard Pack
Extension Cable	IMACC/CIMRE/EXT	10
DIN Rail 35 - 1 meter	CA701-1M / CA701-1M-S	50
DIN Rail 35 - 2 meter	CA701-2M / CA701-2M-S	50
Group Marker	GMH8 / GMH8N	100
Screwdriver	SCS0.5/3	10

RELAYS

Operating Voltage	Part Number	Standard Pack
12 VDC / OMRON	IMACC/G2R2/12 DC	50
24 VDC / OMRON	IMACC/G2RL2/24 DC	50
24 VAC / OMRON	IMACC/G2R2/24 AC	50
110 VAC / OMRON	IMACC/G2R2/110 AC	50
230 VAC / OMRON	IMACC/G2R2/230 AC	50

GENERAL DATA

Supply Voltage Indication	3 mm Green LED
Ambient Operating Temperature	-20° to 50° C
Mounting Possibility	DIN 35 / DIN 35-15 Rail
Housing Material	Polycarbonate
Housing Colour	Grey
Relay Protection (DC Variant)	Using 1N4007 Free Wheeling Diode
Bussing Possibility	Yes, With long tail jumpers
Standard	IEC 60664

CONNECTION DATA

Type of Connection	Screw Connection
Min. Wire Size (mm ²)	0.2 mm ²
Max. Wire Size (mm ²)	2.5 mm ²
Min. Wire Size (AWG)	22 AWG
Max. Wire Size (AWG)	14 AWG
Wire Stripping Length	8 mm
Applicable Torque	0.4 Nm (3.5 lb.in)
Screw Size	M2.5

RELAY DATA

RELAY COIL DATA

Rated Coil Voltage (V)	12 VDC	24 VDC	24 VAC	110 VAC	220 VAC
Coil Resistance (ohms)	275	1440	260	4600	20,200
Rated Coil Current (mA)	43.6	16.7	46.5	11	5.5
Must Operate / Must Release Voltage (V)	8.4 / 1.8	16.8 / 2.4	19.2 / 7.2	88 / 33	176 / 66
Max. Voltage	13.2	31.2	26.4	121	242
Nominal Input Power	530 mW	400 mW	0.9 VA	0.9 VA	0.9 VA

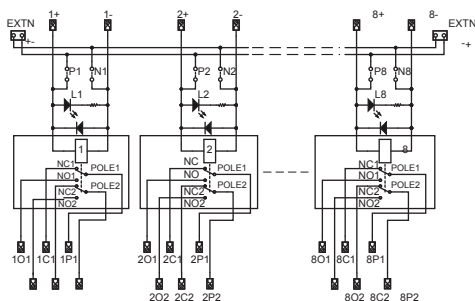
RELAY CONTACT DATA

Contact Type	2CO (DPDT)	2CO (DPDT)	2CO (DPDT)	2CO (DPDT)	2CO (DPDT)
Contact Material	Ag-alloy (Cd free)	Ag-alloy (Cd free)	Ag-alloy (Cd free)	Ag-alloy (Cd free)	Ag-alloy (Cd free)
Rated Current (resistive)	5A@250 VAC/30 VDC	8A@250 VAC/30 VDC	5A@250 VAC/24 VDC	5A@250 VAC/30 VDC	5A@250 VAC/30 VDC
Max. Switching Voltage	380 VAC, 125 VDC	440 VAC, 300 VDC	380 VAC, 125 VDC	380 VAC, 125 VDC	380 VAC, 125 VDC
Turn-Off Time / Turn-On Time	5 ms / 15 ms	5 ms / 15 ms	5 ms / 15 ms	10 ms / 15 ms	10 ms / 15 ms
Max. Mech. Operating Freq. (At Rated Load)	18000 Opr./Hr	18000 Opr./Hr	18000 Opr./Hr	18000 Opr./Hr	18000 Opr./Hr
Max. Elect. Operating Freq. (At Rated Load)	1,800 Opr./Hr	1,800 Opr./Hr	1,800 Opr./Hr	1,800 Opr./Hr	1,800 Opr./Hr
Mechanical Life expectancy	20 x 10 ⁶	20 x 10 ⁶	10 x 10 ⁶	10 x 10 ⁶	10 x 10 ⁶
Electrical Life expectancy	100 x 10 ³	30 x 10 ³	100 x 10 ³	100 x 10 ³	100 x 10 ³

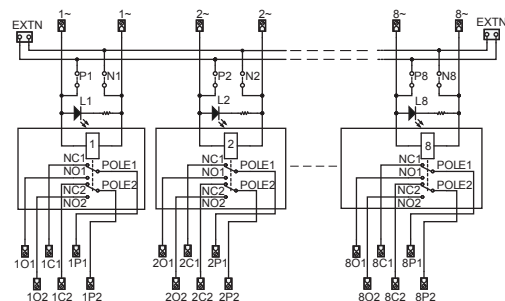
RELAY GENERAL DATA

Relay Make/Series	OMRON/G2R-2	OMRON/G2RL-2	OMRON/G2R-2	OMRON/G2R-2	OMRON/G2R-2
Dielectric Strength (Between coil & contacts)	5000 VAC	5000 VAC	5000 VAC	5000 VAC	5000 VAC
Dielectric Strength (Between contacts)	1000 VAC	1000 VAC	1000 VAC	1000 VAC	1000 VAC

Relay Approvals



Circuit Diagram - F or DC operating voltage Relay Modules



Circuit Diagram - F or AC operating voltage Relay Modules