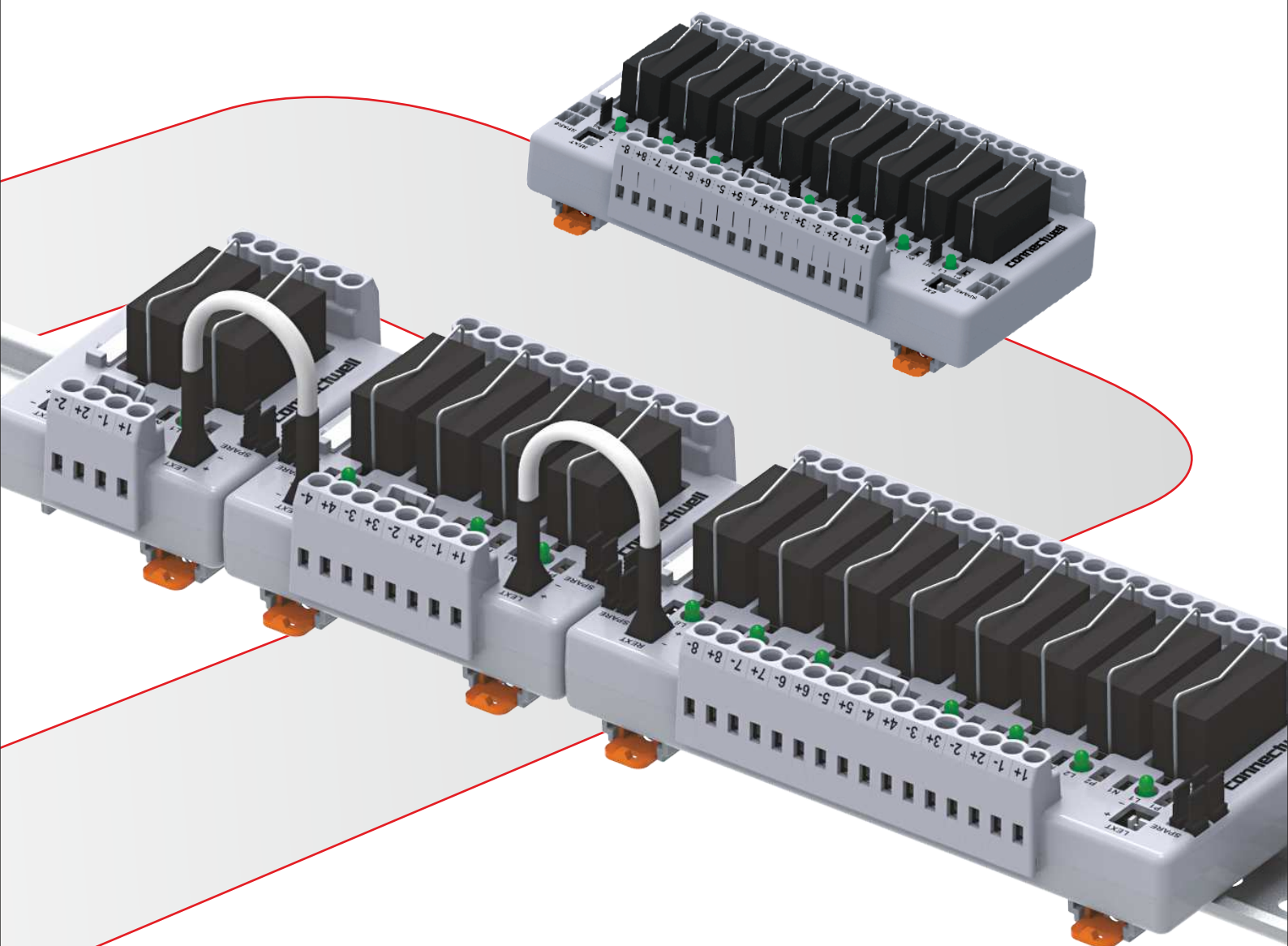


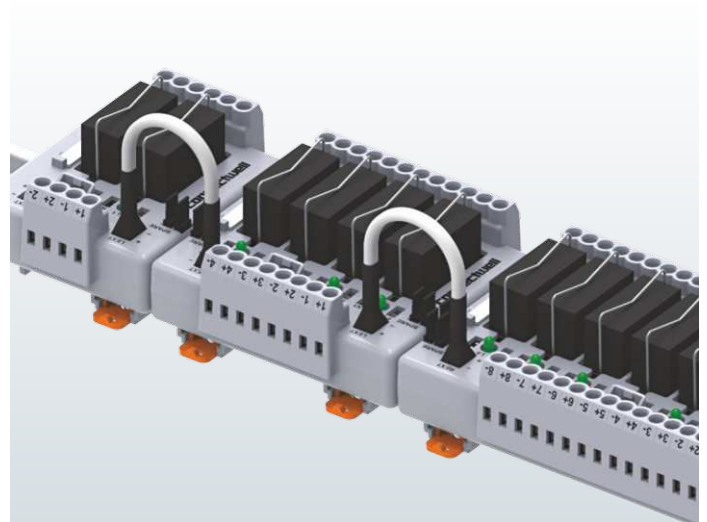
CIMRE SERIES

NEXT GENERATION RELAY BOARDS



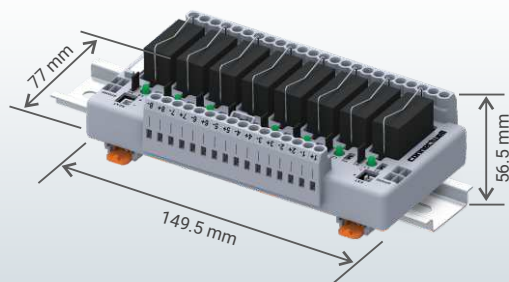
CIMRE RELAY BOARDS - EMR 1 CO

- 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
- Variety of operating voltage



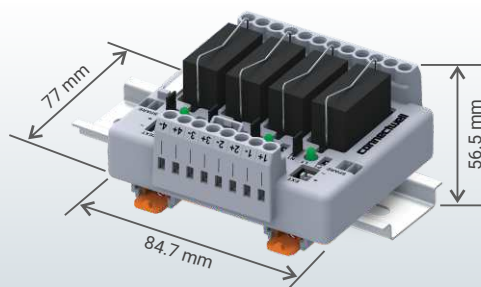
RoHS

8 Channel, 1 Changeover (SPDT)



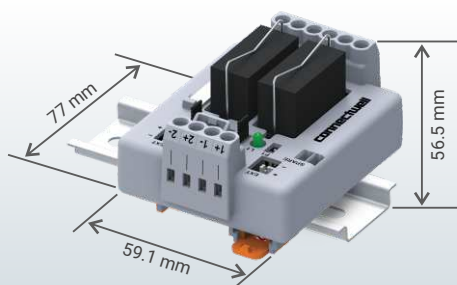
Operating Voltage	Part Number with Pluggable Relay	Part Number with Soldered Relay	Std. Pack
12 VDC	CIMRE1SS8/12/OM	CIMRE1S8/12/OM	1
24 VDC	CIMRE1SS8/24/OM	CIMRE1S8/24/OM	1
24 VAC	CIMRE1SS8/24A/OM	CIMRE1S8/24A/OM	1
110 VAC	CIMRE1SS8/110A/OM	CIMRE1S8/110A/OM	1
230 VAC	CIMRE1SS8/230A/OM	CIMRE1S8/230A/OM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

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

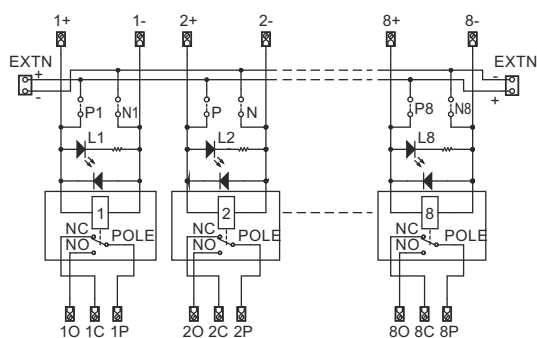
ACCESSORIES

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

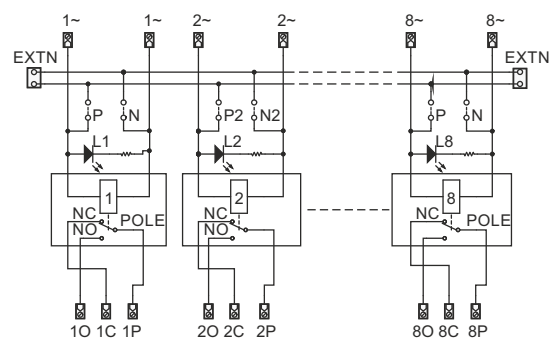
RELAYS

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

Circuit Diagram - For DC operating voltage Relay Modules



Circuit Diagram - For AC operating voltage Relay Modules



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

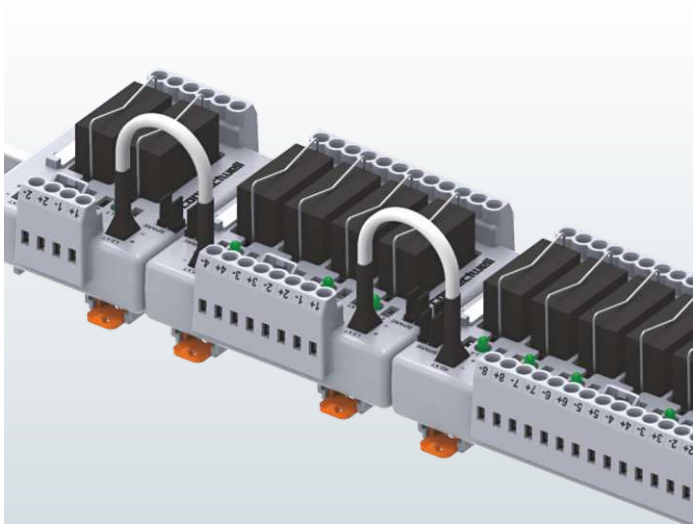
Contact Type	1CO (SPDT)	1CO (SPDT)	1CO (SPDT)	1CO (SPDT)	1CO (SPDT)
Contact Material	Ag-alloy (Cd free)	Ag-alloy (Cd free)	Ag-alloy (Cd free)	Ag-alloy (Cd free)	Ag-alloy (Cd free)
Rated Current(resistive)	10A@250VAC/24VDC	12A@250VAC/24VDC	10A@250VAC/24VDC	10A@250VAC/24VDC	10A@250VAC/24VDC
Max. Switching Voltage	380VAC,125VDC	440VAC,300VDC	380VAC,125VDC	380VAC,125VDC	380VAC,125VDC
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	  	   CQC	  	  	  

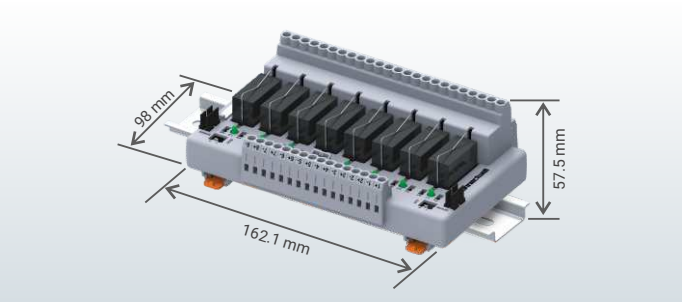
CIMRE RELAY BOARDS - EMR 2 CO

- 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



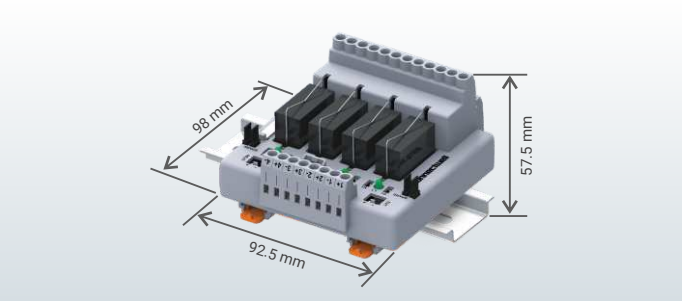
RoHS

8 Channel, 2 Changeover (DPDT)



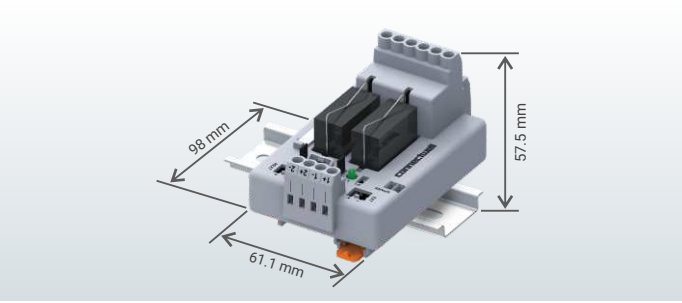
Operating Voltage	Part Number with Pluggable Relay	Part Number with Soldered Relay	Std. Pack
12VDC	CIMRE2SS8/12/OM	CIMRE2S8/12/OM	1
24VDC	CIMRE2SS8/24/OM	CIMRE2S8/24/OM	1
24VAC	CIMRE2SS8/24A/OM	CIMRE2S8/24A/OM	1
110VAC	CIMRE2SS8/110A/OM	CIMRE2S8/110A/OM	1
230VAC	CIMRE2SS8/230A/OM	CIMRE2S8/230A/OM	1

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
110VAC	CIMRE2SS4/110A/OM	CIMRE2S4/110A/OM	1
230VAC	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
110VAC	CIMRE2SS2/110A/OM	CIMRE2S2/110A/OM	1
230VAC	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

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

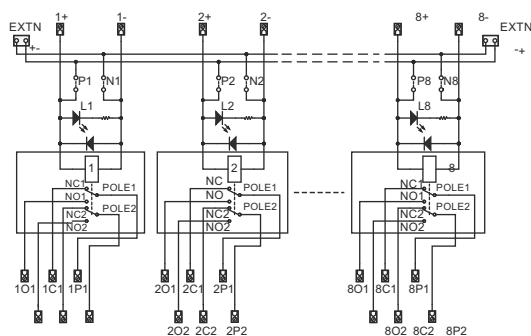
ACCESSORIES

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

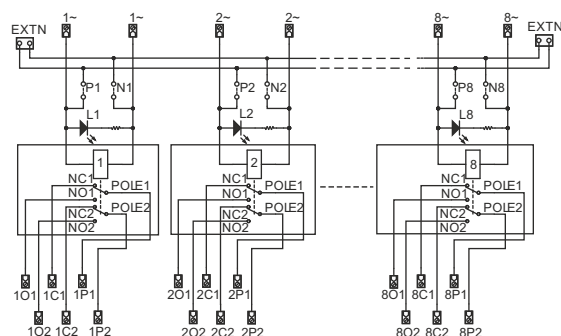
RELAYS

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

Circuit Diagram - For DC operating voltage Relay Modules



Circuit Diagram - For AC operating voltage Relay Modules



RELAY DATA

RELAY COIL DATA

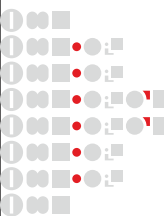
Rated Coil Voltage (V)	12 VDC	24 VDC	24 VAC	110 VAC	220 VAC
Coil Resistance (ohms)	275	1440	260	4600	20,200
Rated Coil Current (mA)	43.6	16.7	46.5	11	5.5
Must Operate / Must Release Voltage (V)	8.4 / 1.8	16.8 / 2.4	19.2 / 7.2	88 / 33	176 / 66
Max. Voltage	13.2	31.2	26.4	121	242
Nominal Input Power	530 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@250VAC/30VDC	8A@250VAC/30VDC	5A@250VAC/24VDC	5A@250VAC/30VDC	5A@250VAC/30VDC
Max. Switching Voltage	380VAC,125VDC	440VAC,300VDC	380VAC,125VDC	380VAC,125VDC	380VAC,125VDC
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

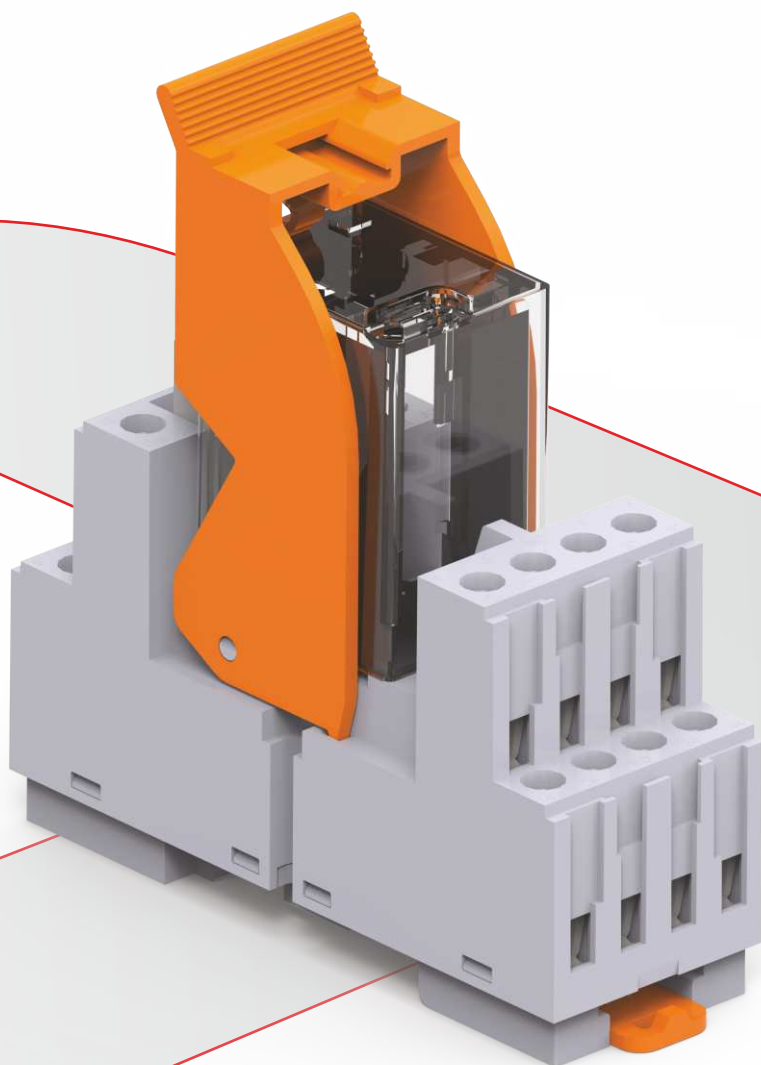
RELAY GENERAL DATA

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					



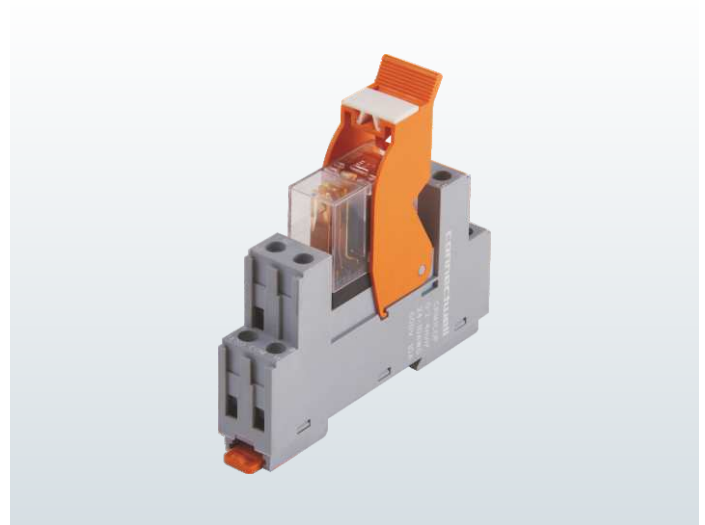
CRM SERIES

HIGH PERFORMANCE RELAY MODULES



MODULAR RELAYS - 1 CO

- Compact & Modular design with retainer clip
- Variety of operating voltages
- High switching current: up to 10A
- Low coil power consumption
- LED Indication on Coil activation
- Possibility of jumpering
- Long-life laser marking for circuit identification
- Pluggable Electromechanical Relays
- Integrated Input Protection (Freewheeling diode)



RoHS

OUTPUT DATA

Contact switching type	1CO
Contact resistance	100m ohm
Contact material	Ag Alloy
Limiting continuous current	10A
Switching Voltage	230 VAC / 30 VDC
Maximum Switching power	2300VA, 300W

INPUT DATA (COIL SIDE)

Coil Voltage	12VDC	24VDC	110VDC	24VAC	110VAC	230VAC
Maximum operating voltage	13.2VDC	26.4VDC	121VDC	26.4VAC	121VAC	253VAC
Nominal input current	43.6 mA	21.8 mA	5.5 mA	43.5 mA	9.5 mA	5.5 mA
Pickup voltage AC	9 VDC	18 VDC	82.5 VDC	19.2 VAC	88 VAC	184 VAC
Dropout Voltage AC	1.2 VDC	2.4 VDC	11 VDC	7.2 VAC	33 VAC	69 VAC
Typical response time	15 ms	15 ms	15 ms	15 ms	15 ms	15 ms
Typical release time	15 ms	15 ms	15 ms	15 ms	15 ms	15 ms
Coil Resistance	275 ohm	1.1 k ohm	20.5 k ohm	253 ohm	5.56 k ohm	20.2 k ohm
Operating Voltage Display	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED
Nominal input power	530 mW	530 mW	530 mW	1.2 VA	1.2 VA	1.2 VA

ORDERING INFORMATION

AG Alloy + Screw Termination	CRM1CO12DYE	CRM1CO24DYE	CRM1CO110DYE	CRM1CO24AYE	CRM1CO110AYE	CRM1CO230AYE
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ENVIROMENTAL AND REAL LIFE CONDITION

Degree of protection (Relay Base)	IP20
Ambient Operating Temperature	-40 to 55 deg C
Housing Material	PA 6,6
Flammability Rating	V-0
Ambient temperature storage	-40 to 85 deg C

CONNECTION SPECIFICATION

Type of Connection	Screw Connection
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)
Wire Stripping Length	8 mm
Wire Size-Solid/Stranded/Flexible With Ferrule(IEC) without Ferrule	0.2 - 4 mm ²
Wire Size-Stranded/Flexible With Ferrule(IEC)	0.2 - 4 mm ²
Wire Size-Solid With Ferrule(IEC)	0.2 - 4 mm ²
Wire Size-Stranded/Flexible With Ferrule(UL)	24 - 10 AWG
Wire Size-Solid With Ferrule(UL)	24 - 10 AWG
Wire Size-Solid/Stranded/Flexible With Ferrule(UL) without Ferrule	24 - 10 AWG
Wire Size- Solid With TWIN Ferrule(UL)	24 - 10 AWG
Wire Size- Stranded/Flexible With TWIN Ferrule(IEC)	0.2 - 2.5 mm ²

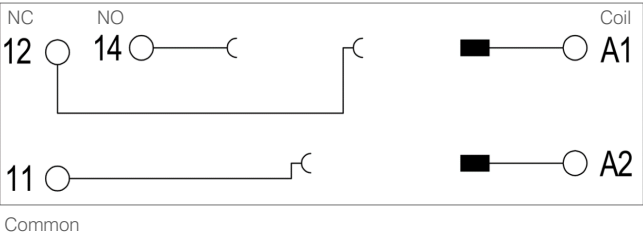
INSULATION

Insulation type	Class A (UL)
Insulation resistance	1000M ohm at 500 VDC
Insulation test voltage	5kV AC (1Min)
Over voltage category	III
Creepage Distance	8 mm
Pollution Degree	2
Dielectric strength:-	
1) Between Winding & Coil	5kV AC (50Hz 1min)
2) Between Contact Sets	3kV AC (50Hz 1min)
3) Between Open Contacts	1kV AC (50Hz 1min)
Service Life Electrical	NO-1,00,000 OPS, NC-1,00,000 OPS

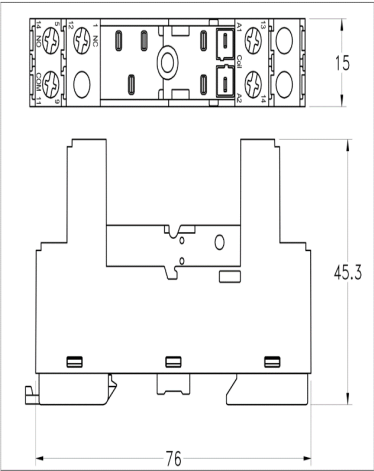
PROPERTIES

Product type	Electromechanical Relay
Product family	Modular Relay
Application	PLC, Power, Machine Building, Automation Panels
Mechanical Service Life	10,000,000 operations min.
Socket Dimensions in mm (W x H x D)	15 x 43.5 x 76
Relay Dimensions in mm (W x H x D)	13 x 29 x 25.5

ELECTRICAL CONNECTION DIAGRAM



MECHANICAL DIMENSIONS (mm)



ACCESSORIES

Mounting Rail (1 M Length)

- 35mm x 7.5mm DIN Rail - Un slotted
- 35mm x 7.5mm DIN Rail - Slotted
- 35mm x 15mm DIN Rail - Un slotted
- 35mm x 15mm DIN Rail - Slotted

CA701-1M

CA701-1M-S

CA701-15-1M

CA701-15-1M-S

End Clamp

CA702 (6 mm Pitch) / CA802 (10 mm Pitch)

Marking Tag

MT-CRM2CO

Group Marker

CA509/G4

Marker Card

MC6 (Blank) / MC6WP (Printed)

Screwdriver

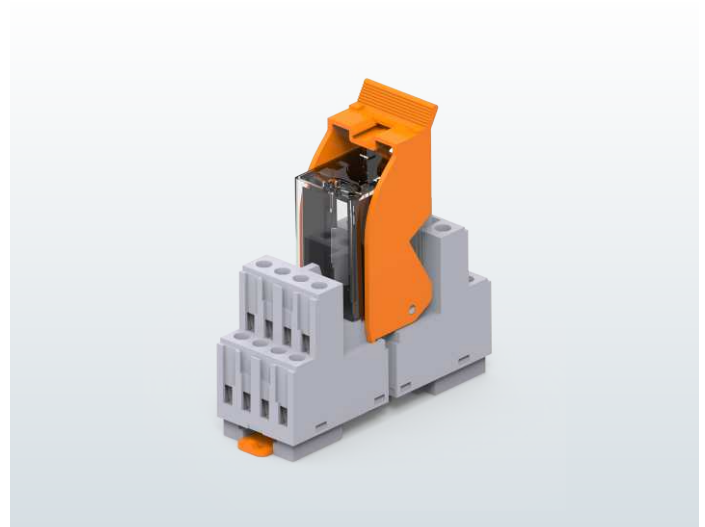
SCPH1

LED Plug

CRLD12-60V / CRLD110-230V

MODULAR RELAYS - 2 CO

- Compact & Modular design with retainer clip
- Variety of operating voltages
- High switching current: up to 10A
- Low coil power consumption
- LED Indication on Coil activation
- Possibility of jumpering
- Long-life laser marking for circuit identification
- Pluggable Electromechanical Relays
- Integrated Input Protection (Freewheeling diode)



RoHS

OUTPUT DATA

Contact switching type	2CO
Contact resistance	100m ohm
Contact material	Ag Alloy
Limiting continuous current	5A per CO
Switching Voltage	230 VAC / 30 VDC
Maximum Switching power	2300VA, 300W

INPUT DATA (COIL SIDE)

Coil Voltage	12VDC	24VDC	110VDC	24VAC	110VAC	230VAC
Maximum operating voltage	13.2VDC	26.4VDC	121VDC	26.4VAC	121VAC	253VAC
Nominal input current	43.6 mA	21.8 mA	5.5 mA	43.5 mA	9.5 mA	5.5 mA
Pickup voltage AC	9 VDC	18 VDC	82.5 VDC	19.2 VAC	88 VAC	184 VAC
Dropout Voltage AC	1.2 VDC	2.4 VDC	11 VDC	7.2 VAC	33 VAC	69 VAC
Typical response time	15 ms	15 ms	15 ms	15 ms	15 ms	15 ms
Typical release time	15 ms	15 ms	15 ms	15 ms	15 ms	15 ms
Coil Resistance	275 ohm	1.1 k ohm	20.5 k ohm	253 ohm	5.56 k ohm	20.2 k ohm
Operating Voltage Display	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED
Nominal input power	530 mW	530 mW	530 mW	1.2 VA	1.2 VA	1.2 VA

ORDERING INFORMATION

AG Alloy + Screw Termination	CRM2CO12DYE	CRM2CO24DYE	CRM2CO110DYE	CRM2CO24AYE	CRM2CO110AYE	CRM2CO230AYE
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ENVIROMENTAL AND REAL LIFE CONDITION

Degree of protection (Relay Base)	IP20
Ambient Operating Temperature	-40 to 55 deg C
Housing Material	PA 6,6
Flammability Rating	V-0
Ambient temperature storage	-40 to 85 deg C

CONNECTION SPECIFICATION

Type of Connection	Screw Connection
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)
Wire Stripping Length	8 mm
Wire Size-Solid/Stranded/Flexible With Ferrule(IEC) without Ferrule	0.2 - 4 mm ²
Wire Size-Stranded/Flexible With Ferrule(IEC)	0.2 - 4 mm ²
Wire Size-Solid With Ferrule(IEC)	0.2 - 4 mm ²
Wire Size-Stranded/Flexible With Ferrule(UL)	24 - 10 AWG
Wire Size-Solid With Ferrule(UL)	24 - 10 AWG
Wire Size-Solid/Stranded/Flexible With Ferrule(UL) without Ferrule	24 - 10 AWG
Wire Size- Solid With TWIN Ferrule(UL)	24 - 10 AWG
Wire Size- Stranded/Flexible With TWIN Ferrule(IEC)	0.2 - 2.5 mm ²

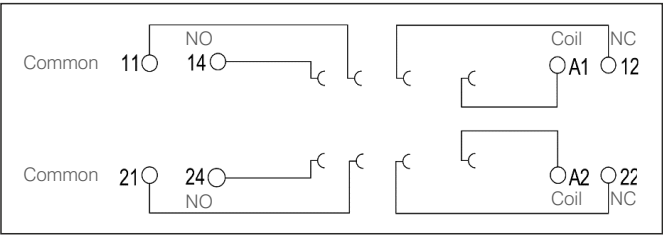
INSULATION

Insulation type	Class A (UL)
Insulation resistance	1000M ohm at 500 VDC
Insulation test voltage	5kV AC (1Min)
Over voltage category	III
Creepage Distance	8 mm
Pollution Degree	2
Dielectric strength:-	
1) Between Winding & Coil	5kV AC (50Hz 1min)
2) Between Contact Sets	3kV AC (50Hz 1min)
3) Between Open Contacts	1kV AC (50Hz 1min)
Service Life Electrical	NO-1,00,000 OPS, NC-1,00,000 OPS

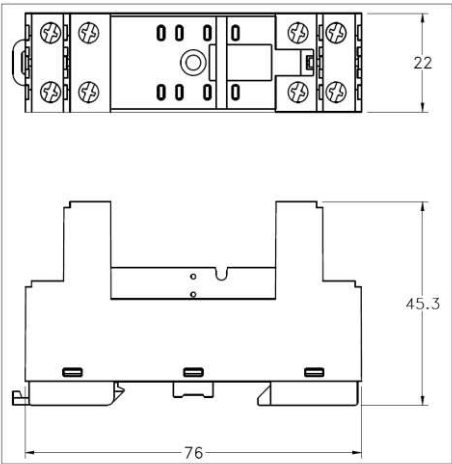
PROPERTIES

Product type	Electromechanical Relay
Product family	Modular Relay
Application	PLC, Power, Machine Building, Automation Panels
Mechanical Service Life	10,000,000 operations min.
Socket Dimensions in mm (W x H x D)	15 x 43.5 x 76
Relay Dimensions in mm (W x H x D)	13 x 29 x 25.5

ELECTRICAL CONNECTION DIAGRAM



MECHANICAL DIMENSIONS (mm)

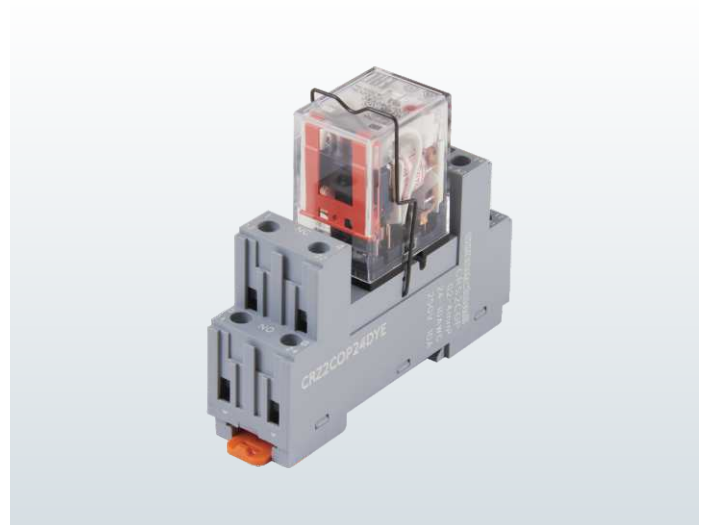


ACCESSORIES

Mounting Rail (1 M Length)	35mm x 7.5mm DIN Rail - Un slotted	CA701-1M
	35mm x 7.5mm DIN Rail - Slotted	CA701-1M-S
	35mm x 15mm DIN Rail - Un slotted	CA701-15-1M
	35mm x 15mm DIN Rail - Slotted	CA701-15-1M-S
End Clamp		CA702 (6 mm Pitch) / CA802 (10 mm Pitch)
Marking Tag		MT-CRM2CO
Group Marker		CA509/G4
Marker Card		MC6 (Blank) / MC6WP (Printed)
Screwdriver		SCPH1
LED Plug		CRLD12-60V / CRLD110-230V

MODULAR RELAYS - 2 CO POWER CONTACT

- Compact & Modular design with retainer clip
- Variety of operating voltages
- High switching current: up to 10A
- Low coil power consumption
- LED Indication on Coil activation
- Possibility of jumpering
- Long-life laser marking for circuit identification
- Pluggable Electromechanical Relays
- Integrated Input Protection (Freewheeling diode)



RoHS

OUTPUT DATA

Contact switching type	2CO
Contact resistance	100m ohm
Contact material	Ag Alloy
Limiting continuous current	10A per CO
Switching Voltage	230 VAC / 30 VDC
Maximum Switching power	2300VA, 300W

INPUT DATA (COIL SIDE)

Coil Voltage	12VDC	24VDC	110VDC	24VAC	110VAC	230VAC
Maximum operating voltage	13.2VDC	26.4VDC	121VDC	26.4VAC	121VAC	253VAC
Nominal input current	72.7 mA	36.3 mA	8.7 mA	53.8 mA	11.7 mA	5.5 mA
Pickup Voltage AC	9.6 VDC	19.2 VDC	88 VDC	19.2 VAC	88 VAC	184 VAC
Dropout Voltage AC	1.2 VDC	2.4 VDC	11 VDC	7.2 VAC	33 VAC	69 VAC
Typical response time	20 ms	20 ms	20 ms	20 ms	20 ms	20 ms
Typical release time	20 ms	20 ms	20 ms	20 ms	20 ms	20 ms
Coil Resistance	165 ohm	662 ohm	11.44 k ohm	180 ohm	3.75 k ohm	15.92 k ohm
Operating Voltage Display	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED
Nominal input power	1W	1W	1W	1.2 VA	1.2 VA	1.2 VA

ORDERING INFORMATION

AG Alloy + Screw Termination	CRM2COP12DYE	CRM2COP24DYE	CRM2COP110DYE	CRM2COP24AYE	CRM2COP110AYE	CRM2COP230AYE
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ENVIROMENTAL AND REAL LIFE CONDITION

Degree of protection (Relay Base)	IP20
Ambient Operating Temperature	-40 to 55 deg C
Housing Material	PA 6,6
Flammability Rating	V-0
Ambient temperature storage	-40 to 85 deg C

CONNECTION SPECIFICATION

Type of Connection	Screw Connection
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)
Wire Stripping Length	8 mm
Wire Size-Solid/Stranded/Flexible With Ferrule(IEC) without Ferrule	0.2 - 4 mm ²
Wire Size-Stranded/Flexible With Ferrule(IEC)	0.2 - 4 mm ²
Wire Size-Solid With Ferrule(IEC)	0.2 - 4 mm ²
Wire Size-Stranded/Flexible With Ferrule(UL)	24 - 10 AWG
Wire Size-Solid With Ferrule(UL)	24 - 10 AWG
Wire Size-Solid/Stranded/Flexible With Ferrule(UL) without Ferrule	24 - 10 AWG
Wire Size- Solid With TWIN Ferrule(UL)	24 - 10 AWG
Wire Size- Stranded/Flexible With TWIN Ferrule(IEC)	0.2 - 2.5 mm ²

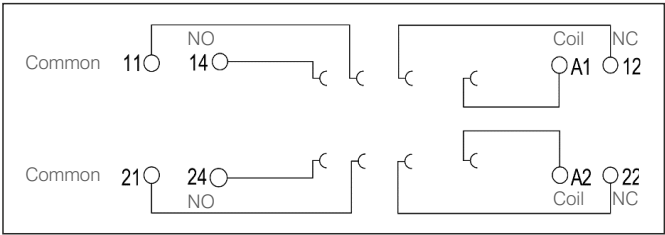
INSULATION

Insulation type	Class A (UL)
Insulation resistance	1000M ohm at 500 VDC
Insulation test voltage	5kV AC (1Min)
Over voltage category	III
Creepage Distance	8 mm
Pollution Degree	2
Dielectric strength:-	
1) Between Winding & Coil	5kV AC (50Hz 1min)
2) Between Contact Sets	3kV AC (50Hz 1min)
3) Between Open Contacts	1kV AC (50Hz 1min)
Service Life Electrical	NO-1,00,000 OPS, NC-1,00,000 OPS

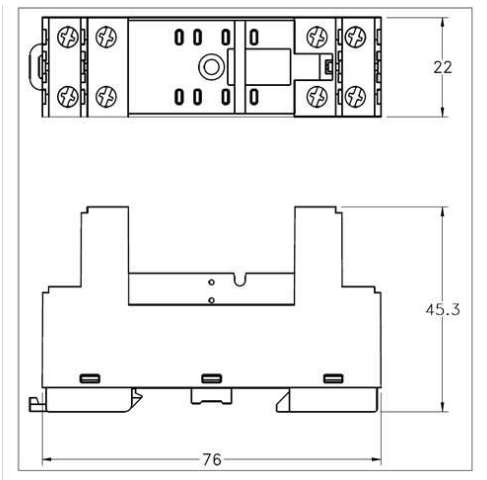
PROPERTIES

Product type	Electromechanical Relay
Product family	Modular Relay
Application	PLC, Power, Machine Building, Automation Panels
Mechanical Service Life	10,000,000 operations min.
Socket Dimensions in mm (W x H x D)	22 x 45.3 x 76
Relay Dimensions in mm (W x H x D)	13 x 29 x 25.5

ELECTRICAL CONNECTION DIAGRAM



MECHANICAL DIMENSIONS (mm)

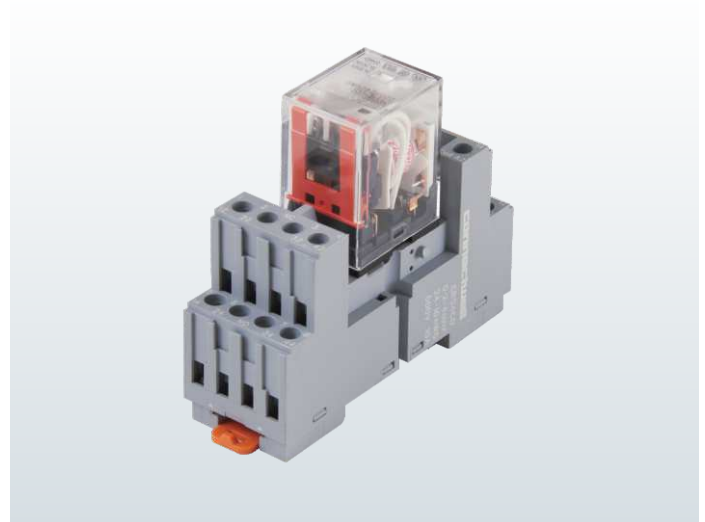


ACCESSORIES

Mounting Rail (1 M Length)	35mm x 7.5mm DIN Rail - Un slotted	CA701-1M
	35mm x 7.5mm DIN Rail - Slotted	CA701-1M-S
	35mm x 15mm DIN Rail - Un slotted	CA701-15-1M
	35mm x 15mm DIN Rail - Slotted	CA701-15-1M-S
End Clamp		CA702 (6 mm Pitch) / CA802 (10 mm Pitch)
Marking Tag		MT-CRM2CO
Group Marker		CA509/G4
Marker Card		MC6 (Blank) / MC6WP (Printed)
Screwdriver		SCPH1
LED Plug		CRLD12-60V / CRLD110-230V

MODULAR RELAYS - 4 CO

- Compact & Modular design with retainer clip
- Variety of operating voltages
- High switching current: up to 6A
- Low coil power consumption
- LED Indication on Coil activation
- Possibility of jumpering
- Long-life laser marking for circuit identification
- Pluggable Electromechanical Relays
- Integrated Input Protection (Freewheeling diode)



RoHS

OUTPUT DATA

Contact switching type	4CO
Contact resistance	100m ohm
Contact material	Ag Alloy
Limiting continuous current	6A per CO
Switching Voltage	230 VAC / 30 VDC
Maximum Switching power	2300VA, 300W

INPUT DATA (COIL SIDE)

Coil Voltage	12VDC	24VDC	110VDC	24VAC	110VAC	230VAC
Maximum operating voltage	13.2VDC	26.4VDC	121VDC	26.4VAC	121VAC	253VAC
Nominal input current	72.7 mA	36.3 mA	8.7 mA	53.8 mA	11.7 mA	5.5 mA
Pickup Voltage AC	9.6 VDC	19.2 VDC	88 VDC	19.2 VAC	88 VAC	184 VAC
Dropout Voltage AC	1.2 VDC	2.4 VDC	11 VDC	7.2 VAC	33 VAC	69 VAC
Typical response time	20 ms	20 ms	20 ms	20 ms	20 ms	20 ms
Typical release time	20 ms	20 ms	20 ms	20 ms	20 ms	20 ms
Coil Resistance	165 ohm	662 ohm	11.44 k ohm	180 ohm	3.75 k ohm	15.92 k ohm
Operating Voltage Display	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED	3mm Green LED
Nominal input power	1W	1W	1W	1.2 VA	1.2 VA	1.2 VA

ORDERING INFORMATION

AG Alloy + Screw Termination	CRM4CO12DYE	CRM4CO24DYE	CRM4CO110DYE	CRM4CO24AYE	CRM4CO110AYE	CRM4CO230AYE
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ENVIROMENTAL AND REAL LIFE CONDITION

Degree of protection (Relay Base)	IP20
Ambient Operating Temperature	-40 to 55 deg C
Housing Material	PA 6,6
Flammability Rating	V-0
Ambient temperature storage	-40 to 85 deg C

CONNECTION SPECIFICATION

Type of Connection	Screw Connection
Suitable wire / conductor	Copper wire (Temperature Range 60/75° C)
Wire Stripping Length	8 mm
Wire Size-Solid/Stranded/Flexible With Ferrule(IEC) without Ferrule	0.2 - 4 mm ²
Wire Size-Stranded/Flexible With Ferrule(IEC)	0.2 - 4 mm ²
Wire Size-Solid With Ferrule(IEC)	0.2 - 4 mm ²
Wire Size-Stranded/Flexible With Ferrule(UL)	24 - 10 AWG
Wire Size-Solid With Ferrule(UL)	24 - 10 AWG
Wire Size-Solid/Stranded/Flexible With Ferrule(UL) without Ferrule	24 - 10 AWG
Wire Size- Solid With TWIN Ferrule(UL)	24 - 10 AWG
Wire Size- Stranded/Flexible With TWIN Ferrule(IEC)	0.2 - 2.5 mm ²

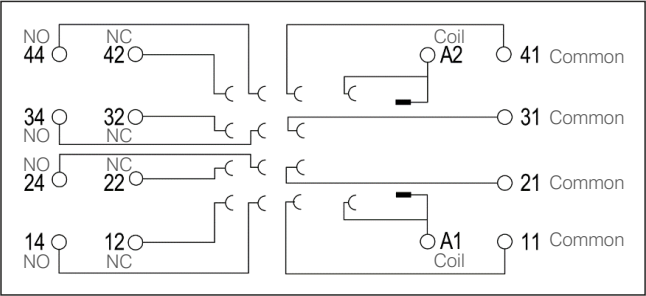
INSULATION

Insulation type	Class A (UL)
Insulation resistance	1000M ohm at 500 VDC
Insulation test voltage	5kV AC (1Min)
Over voltage category	III
Creepage Distance	8 mm
Pollution Degree	2
Dielectric strength:-	
1) Between Winding & Coil	5kV AC (50Hz 1min)
2) Between Contact Sets	3kV AC (50Hz 1min)
3) Between Open Contacts	1kV AC (50Hz 1min)
Service Life Electrical	NO-1,00,000 OPS, NC-1,00,000 OPS

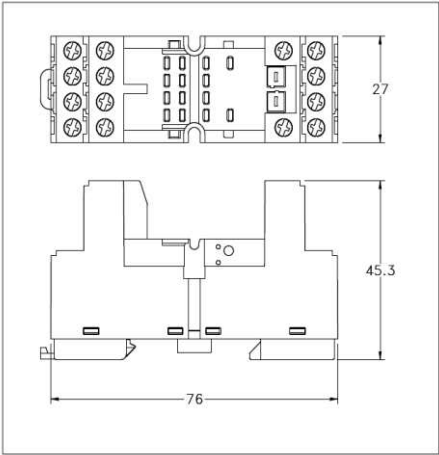
PROPERTIES

Product type	Electromechanical Relay
Product family	Modular Relay
Application	PLC, Power, Machine Building, Automation Panels
Mechanical Service Life	10,000,000 operations min.
Socket Dimensions in mm (W x H x D)	27 x 45.3 x 76
Relay Dimensions in mm (W x H x D)	12 x 29 x 15

ELECTRICAL CONNECTION DIAGRAM



MECHANICAL DIMENSIONS (mm)



ACCESSORIES

Mounting Rail (1 M Length)

35mm x 7.5mm DIN Rail - Un slotted

CA701-1M

35mm x 7.5mm DIN Rail - Slotted

CA701-1M-S

35mm x 15mm DIN Rail - Un slotted

CA701-15-1M

35mm x 15mm DIN Rail - Slotted

CA701-15-1M-S

End Clamp

CA702 (6 mm Pitch) / CA802 (10 mm Pitch)

Marking Tag

MT-CRM2CO

Group Marker

CA509/G4

Marker Card

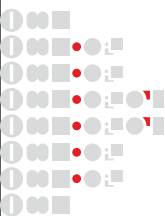
MC6 (Blank) / MC6WP (Printed)

Screwdriver

SCPH1

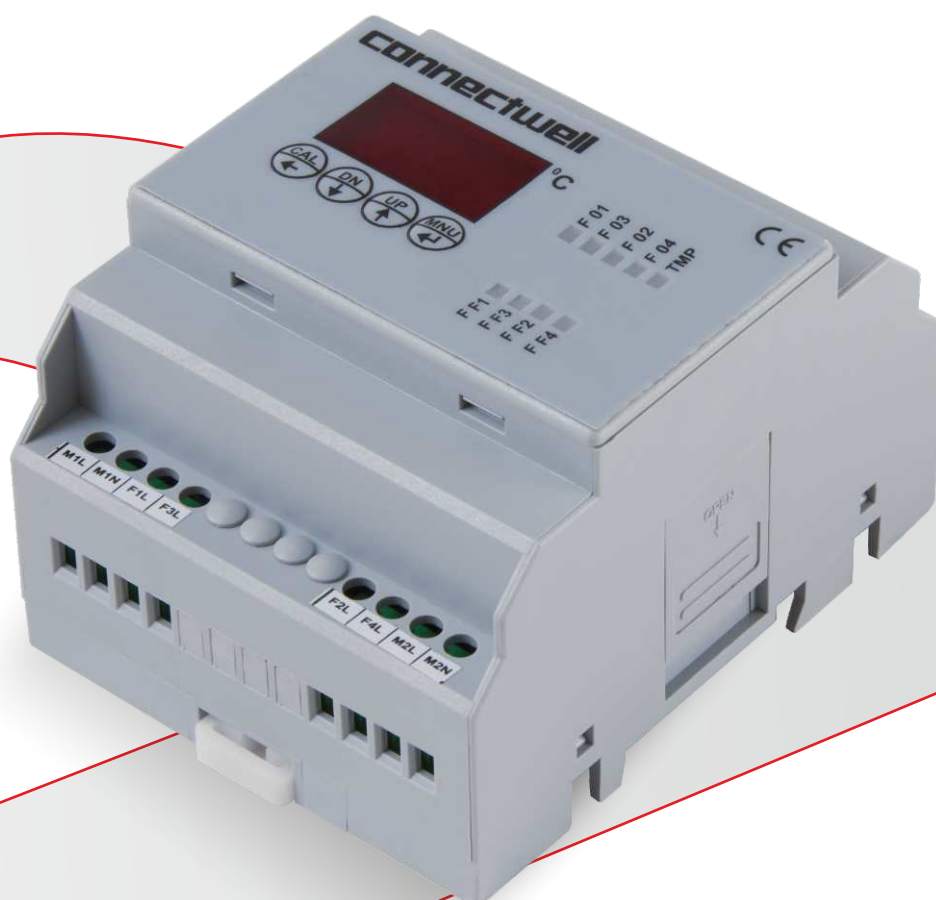
LED Plug

CRLD12-60V / CRLD110-230V



CFMD

FAN MONITORING & CONTROL DEVICE



CFMD - FAN MONITORING & CONTROL DEVICE WITH TEMPERATURE

- Automatic Fan calibration
- Manual programming of Individual Fans
- Fan Overload, Fault Identification
- Fan Redundancy
- Various fan modes
- 3-Wire RTD Interface along with device
- Live temperature display
- 4 - 20 mA analog temperature feedback
- Fan fault relay & Temp fault relay for remote monitoring
- Input Fuse protection
- Universal Input Voltage design (110 - 230VAC)
- Compact & Standard DIN Rail Mounting



CE RoHS

TECHNICAL DETAILS (CONTROLLER)

Ambient Operating Temperature	0 to +50 °C	
Rated Input voltage	100-240 VAC	
Rated Current/Channel	25 - 750mA	
Input Frequency	50/60Hz	
Power Input	9 VA*	
Fuse Fail Indication	Yes	
Fan Monitor Units	4	
Fan Failure Alarm contact	Yes	
Over Temperature Alarm contact	Yes	
Live Temperature Display	Yes	
Nominal input power	9VA	
Degree of protection	IP20	
Pollution Degree	2	
Fan Protection	Fuse	
Indications	Fan Calibration	Green (blinking)
	Fan OK	Green
	Fan Fail	Red
	Over Temp	Red
	Fuse Fail	Red

TEMPERATURE SENSOR

Sensor type	RTD Sensor
Sensor Category	PT100
Length of sensor	1mtr
Operating temperature range	0 to 99 deg C
Sensor Output	4 to 20 mA

ORDERING INFORMATION

CAT. NO.	CFTD4
DESCRIPTION	Fan Failure Module For 4 Fans with Temp Monitor
NO. OF CHN.	4
STD. PACK	1

TECHNICAL DETAILS (SENSOR)

Type of Connection	Screw Connection
Min. Wire Size	0.5 mm ²
Max. Wire Size	2.5 mm ²
Min. Wire Size(AWG)	20 AWG
Max. Wire Size(AWG)	14 AWG
Screw Size	M3
Wire Stripping Length	7 mm

FAN RATING

Fan 1	230VAC / 25-750mA, 110VAC / 25-750mA
Fan 2	230VAC / 25-750mA, 110VAC / 25-750mA
Fan 3	230VAC / 25-750mA, 110VAC / 25-750mA
Fan 4	230VAC / 25-750mA, 110VAC / 25-750mA

MODES

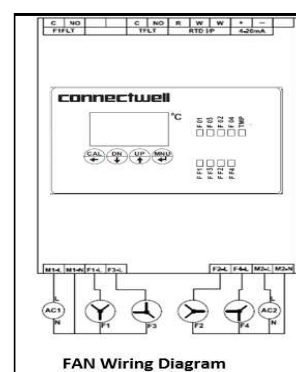
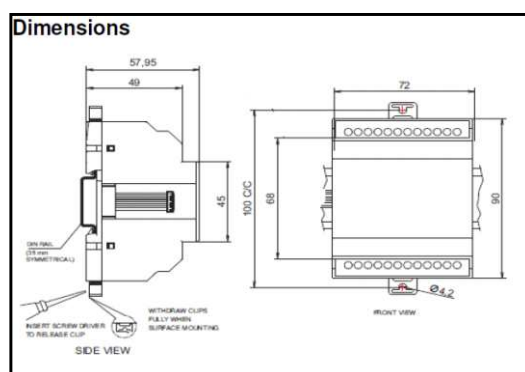
4 Fan	4 Fan Standard Mode
4 Fan Redundancy*	2 Standard + 2 Redundancy Mode
2 Fan	2 Fans Standard Mode
2 Fan Redundancy*	1 Standard + 1 Redundancy Mode
* Redundancy - Fan runs @ Temp fault or Fan fault	

DIMENSIONS (mm)

Width	72
Height	90
Depth	58
Standards	
Safety	IEC-61010-1
EMC	IEC-61326-1, IEC-61000-4-2, IEC-61000-4-3, IEC-61000-4-4 IEC-61000-4-5, IEC-61000-4-6 IEC-61000-4-8, IEC-61000-4-11, CISPR 11

ACCESSORIES

Mounting Rail (1 M Length)	35mm x 7.5mm DIN Rail - Un slotted 35mm x 7.5mm DIN Rail - Slotted 35mm x 15mm DIN Rail - Un slotted 35mm x 15mm DIN Rail - Slotted	CA701-1M CA701-1M-S CA701-15-1M CA701-15-1M-S
End Clamp		CA702

MECHANICAL & ELECTRICAL CONNECTION DIAGRAM

CFMD - FAN MONITORING & CONTROL DEVICE WITH TEMPERATURE & POWER REDUNDANCY

- Automatic Fan calibration
- Manual programming of Individual Fans
- Fan Overload, Fault Identification
- Fan Redundancy
- Various fan modes
- 3-Wire RTD Interface along with device
- Live temperature display
- 4 - 20 mA analog temperature feedback
- Fan fault relay & Temp fault relay for remote monitoring
- Input Fuse protection
- Universal Input Voltage design (110 - 230VAC)
- Compact & Standard DIN Rail Mounting
- Power Redundancy



CE RoHS

TECHNICAL DETAILS (CONTROLLER)

Ambient Operating Temperature		0 to +50 °C
Rated Input voltage		100-240 VAC
Rated Current/Channel		25 - 750mA
Input Frequency		50/60Hz
Power Input		9 VA*
Fuse Fail Indication		Yes
Fan Monitor Units		4
Fan Failure Alarm contact		Yes
Over Temperature Alarm contact		Yes
Live Temperature Display		Yes
Nominal input power		9VA
Degree of protection		IP20
Pollution Degree		2
Fan Protection		Fuse
Indications	Fan Calibration	Green (blinking)
	Fan OK	Green
	Fan Fail	Red
	Over Temp	Red
	Fuse Fail	Red

TEMPERATURE SENSOR

Sensor type	RTD Sensor
Sensor Category	PT100
Length of sensor	1mtr
Operating temperature range	0 to 99 deg C
Sensor Output	4 to 20 mA

ORDERING INFORMATION

CAT. NO.	CFTDPR4
DESCRIPTION	Fan Failure Module For 4 Fans with Temp Monitor with power redundancy
NO. OF CHN.	4
STD. PACK	1

TECHNICAL DETAILS (SENSOR)

Type of Connection	Screw Connection
Min. Wire Size	0.5 mm ²
Max. Wire Size	2.5 mm ²
Min. Wire Size(AWG)	20 AWG
Max. Wire Size(AWG)	14 AWG
Screw Size	M3
Wire Stripping Length	7 mm

FAN RATING

Fan 1	230VAC / 25-750mA, 110VAC / 25-750mA
Fan 2	230VAC / 25-750mA, 110VAC / 25-750mA
Fan 3	230VAC / 25-750mA, 110VAC / 25-750mA
Fan 4	230VAC / 25-750mA, 110VAC / 25-750mA

MODES

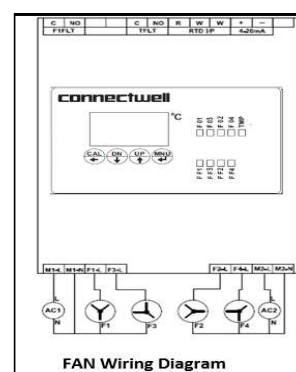
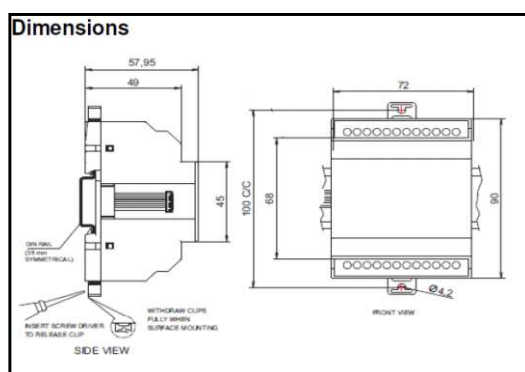
4 Fan	4 Fan Standard Mode
4 Fan Redundancy*	2 Standard + 2 Redundancy Mode
2 Fan	2 Fans Standard Mode
2 Fan Redundancy*	1 Standard + 1 Redundancy Mode
* Redundancy - Fan runs @ Temp fault or Fan fault	

DIMENSIONS (mm)

Width	72
Height	90
Depth	58
Standards	
Safety	IEC-61010-1
EMC	IEC-61326-1, IEC-61000-4-2, IEC-61000-4-3, IEC-61000-4-4 IEC-61000-4-5, IEC-61000-4-6 IEC-61000-4-8, IEC-61000-4-11, CISPR 11

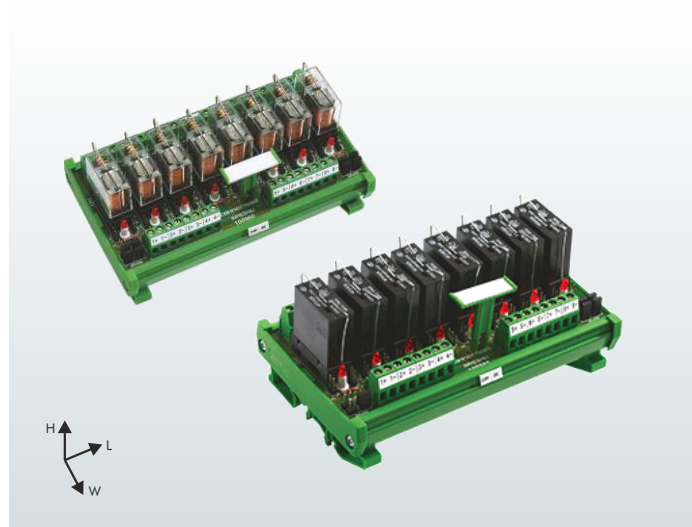
ACCESSORIES

Mounting Rail (1 M Length)	35mm x 7.5mm DIN Rail - Un slotted 35mm x 7.5mm DIN Rail - Slotted 35mm x 15mm DIN Rail - Un slotted 35mm x 15mm DIN Rail - Slotted	CA701-1M CA701-1M-S CA701-15-1M CA701-15-1M-S
End Clamp		CA702

MECHANICAL & ELECTRICAL CONNECTION DIAGRAM

1 CO RELAY MODULES

- Variety of Operating Voltages
- Switching Current upto 10 A at 230 VAC (or 30 VDC)
- Low Coil Drive Current (4.7 mA to 100 mA)
- Easy to replace pluggable relays
- Possibility of Bussing (Jumpering) relays in common negative or common positive configurations
- LED Indication to denote relay actuation
- Relay Coil Protection by means of a Freewheeling Diode
- Mounting Options available:
DIN Rail mounting & Panel mounting



RoHS

GENERAL DATA

Number of Channels	1	16
Width (mm)	88	88
Height (mm)	74	74
Length (mm)*	23	289
Positive Bussing Possibility	By using spare jumpers.	
Negative Bussing Possibility	By using spare jumpers.	
Power ON Indication	3 mm Red LED	
Relay Protection	Using 1N4007 Freewheeling Diode.	
Ambient Temperature (Operation)	-20° C ... 50° C	
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **	
Housing Insulation Material	PVC / V0 Grade	
Housing Colour	Green	

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

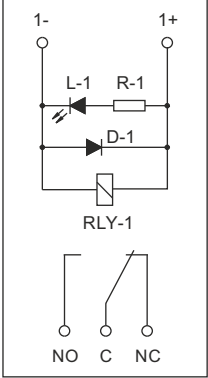
** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

RELAY CONTACT DATA	
Contact Type	1 CO
Type of Connection	Screw Connection
Contact Material	AgCdO
Rated Current	10A @230 VAC / 30 VDC
Max. Switching Voltage	380 VAC, 125 VDC
Timing Data	18,000 operations/hr
Mechanical Life expectancy	Min. 10 x 10 ⁶ operations
Electrical Life expectancy	Min. 100 x 10 ³ operations
Relay Approvals	   
Other Coil Voltages	Voltages like 6 VDC, 48 VDC, 24 VAC etc. are available on request.

RELAY COIL DATA				
Rated Coil Voltage	12 VDC	24 VDC	110 VAC	230 VAC
Coil Resistance (ohms)	270	1100	4600	26850
Rated Coil Current (mA)	44.5	21.8	11.0	4.7
Must Operate Voltage	8.4	16.8	88	184
Must Release Voltage	1.2	2.4	33	69
Max. Voltage	20.4	39.6	184	253

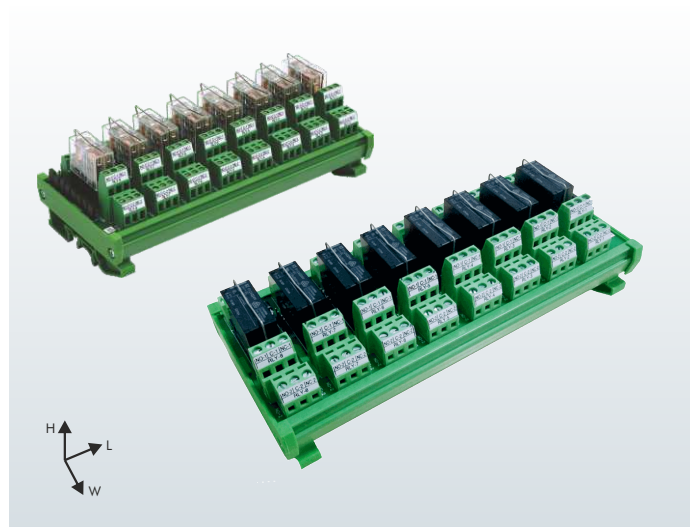
ORDERING INFORMATION				
1 Channel Module with Pluggable Relays	IMRE1SS1/12/OM	IMRE1SS1/24/OM	IMRE1SS1/110A/OM	IMRE1SS1/230A/OM
1 Channel Module with Soldered Relays	IMRE1S1/12/OM	IMRE1S1/24/OM	IMRE1S1/110A/OM	IMRE1S1/230A/OM
16 Channel Module with Pluggable Relays	IMRE1SS16/12/OM	IMRE1SS16/24/OM	IMRE1SS16/110A/OM	IMRE1SS16/230A/OM
16 Channel Module with Soldered Relays	IMRE1S16/12/OM	IMRE1S16/24/OM	IMRE1S16/110A/OM	IMRE1S16/230A/OM

CIRCUIT DIAGRAM



2 CO RELAY MODULES

- Variety of Operating Voltages
- Switching Current upto 5 A at 230 VAC (or 30 VDC)
- Low Coil Drive Current (4.7 mA to 100 mA)
- Easy to replace pluggable relays
- Possibility of Bussing (Jumpering) relays in common negative or common positive configurations
- LED Indication to denote relay actuation
- Relay Coil Protection by means of a Freewheeling Diode
- Mounting Options available:
DIN Rail mounting & Panel mounting



RoHS

GENERAL DATA

Number of Channels	1	16
Width (mm)	88	88
Height (mm)	74	74
Length (mm)*	29	377
Positive Bussing Possibility	By using spare jumpers.	
Negative Bussing Possibility	By using spare jumpers.	
Power ON Indication	3 mm Red LED	
Relay Protection	Using 1N4007 Freewheeling Diode.	
Ambient Temperature (Operation)	-20° C ... 50° C	
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **	
Housing Insulation Material	PVC / V0 Grade	
Housing Colour	Green	

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

RELAY CONTACT DATA

Contact Type	2 CO
Type of Connection	Screw Connection
Contact Material	Ag Alloy
Rated Current	5A @230 VAC / 30 VDC
Max. Switching Voltage	380 VAC, 125 VDC
Timing Data	18,000 operations/hr
Mechanical Life expectancy	Min. 10 x 10 ⁶ operations
Electrical Life expectancy	Min. 100 x 10 ³ operations
Relay Approvals	   
Other Coil Voltages	Voltages like 6 VDC, 48 VDC, 24 VAC etc. are available on request.

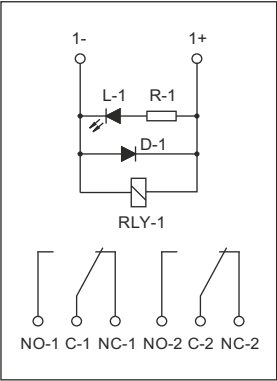
RELAY COIL DATA

Rated Coil Voltage	12 VDC	24 VDC	110 VAC	230 VAC
Coil Resistance (ohms)	270	1100	4600	26850
Rated Coil Current (mA)	44.5	21.8	11.0	4.7
Must Operate Voltage	8.4	16.8	88	184
Must Release Voltage	1.2	2.4	33	69
Max. Voltage	20.4	39.6	184	253

ORDERING INFORMATION

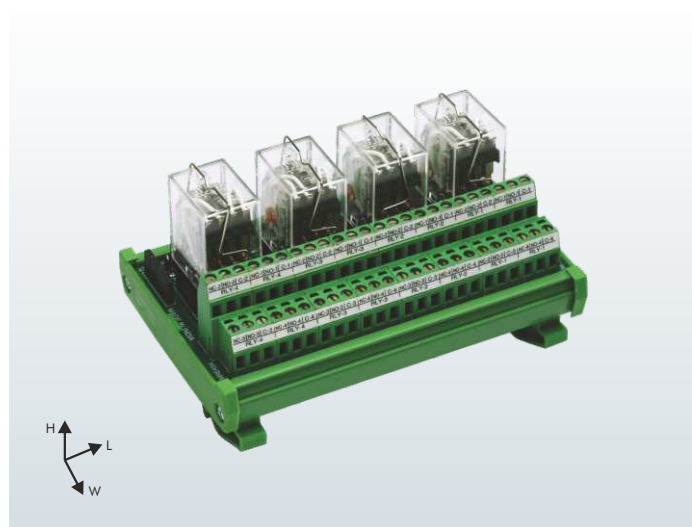
1 Channel Module with Pluggable Relays	IMRE2SS1/12/OM	IMRE2SS1/24/OM	IMRE2SS1/110A/OM	IMRE2SS1/230A/OM
1 Channel Module with Soldered Relays	IMRE2S1/12/OM	IMRE2S1/24/OM	IMRE2S1/110A/OM	IMRE2S1/230A/OM
16 Channel Module with Pluggable Relays	IMRE2SS16/12/OM	IMRE2SS16/24/OM	IMRE2SS16/110A/OM	IMRE2SS16/230A/OM
16 Channel Module with Soldered Relays	IMRE2S16/12/OM	IMRE2S16/24/OM	IMRE2S16/110A/OM	IMRE2S16/230A/OM

CIRCUIT DIAGRAM



4 CO RELAY MODULES

- Variety of Operating Voltages
- Switching Current upto 5 A at 230 VAC (or 30 VDC)
- Low Coil Drive Current (4.7 mA to 100 mA)
- Easy to replace pluggable relays
- Possibility of Bussing (Jumpering) relays in common negative or common positive configurations
- LED Indication to denote relay actuation
- Relay Coil Protection by means of a Freewheeling Diode
- Mounting Options available:
DIN Rail mounting & Panel mounting



RoHS

GENERAL DATA

Number of Channels	1	2	4	8
Width (mm)	88	88	88	88
Height (mm)	74	74	74	74
Length (mm)*	40	71	137	257
Positive Bussing Possibility	By using spare jumpers.			
Negative Bussing Possibility	By using spare jumpers.			
Power ON Indication	3 mm Red LED			
Relay Protection	Using 1N4007 Freewheeling Diode.			
Ambient Temperature (Operation)	-20° C ... 50° C			
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **			
Housing Insulation Material	PVC / V0 Grade			
Housing Colour	Green			

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

RELAY CONTACT DATA

Contact Type	4 CO
Type of Connection	Screw Connection
Contact Material	AgCdO
Rated Current	3A @230 VAC / 30 VDC
Max. Switching Voltage	250 VAC, 125 VDC
Timing Data	18,000 operations/hr
Mechanical Life expectancy	Min. 10 x 10 ⁶ operations
Electrical Life expectancy	Min. 100 x 10 ³ operations
Relay Approvals	   

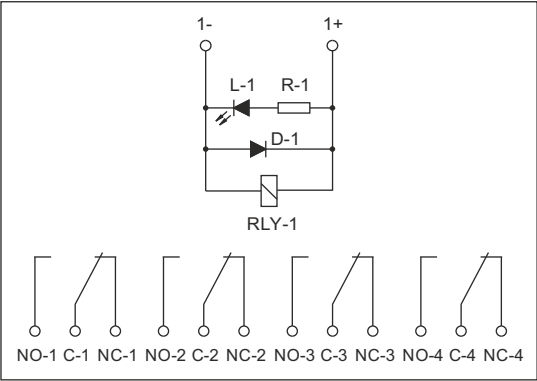
RELAY COIL DATA

Rated Coil Voltage	24 VDC	110 VAC	230 VAC
Coil Resistance (ohms)	1100	4600	26850
Rated Coil Current (mA)	21.8	11.0	4.7
Must Operate Voltage	16.8	88	184
Must Release Voltage	2.4	33	69
Max. Voltage	26.4	184	253

ORDERING INFORMATION

1 Channel Module with Pluggable Relays	IMRE4SS1/24/OM	IMRE4SS1/110/OM	IMRE4SS1/230A/OM
2 Channel Module with Pluggable Relays	IMRE4SS2/24/OM	IMRE4SS2/110/OM	IMRE4SS2/230A/OM
4 Channel Module with Pluggable Relays	IMRE4SS4/24/OM	IMRE4SS4/110/OM	IMRE4SS4/230A/OM
8 Channel Module with Pluggable Relays	IMRE4SS8/24/OM	IMRE4SS8/110/OM	IMRE4SS8/230A/OM

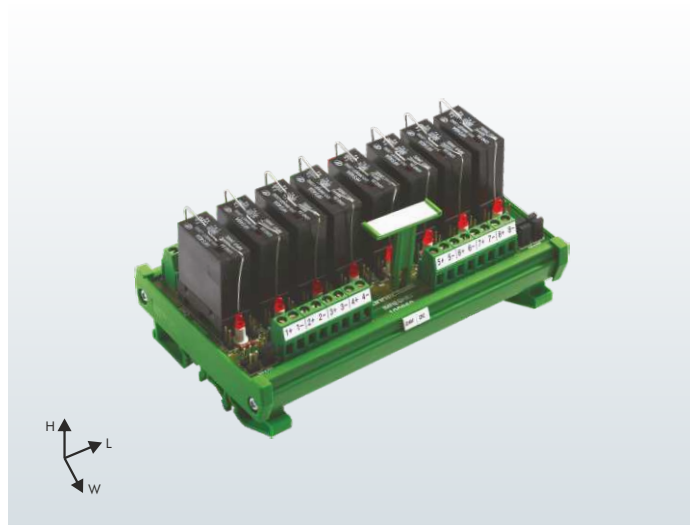
CIRCUIT DIAGRAM



SSR MODULES

DC INPUT - DC OUTPUT | DC INPUT - AC OUTPUT

- Variety of Operating Voltages.
- Low Drive Current (20 mA)
- 2500V Dielectric Strength
- LED Status Indicator
- Photo Isolation
- Built-In Snubber (AC Output)
- Zero Cross Turn-On (AC Output)
- Bipolar Transistor / MOSFET Output (DC Output)
- Mounting options available :
DIN Rail mounting & Panel mounting.
- Easy to replace pluggable SSR
- Replaceable fuses with simple to operate Horizontal fuse holders



RoHS

GENERAL DATA

Number of Channels	1	2	4	8	16
Width (mm)	88	88	88	88	88
Height (mm)	74	74	74	74	74
Length (mm)*	23	45	79	148	289
Positive Bussing Possibility	By using spare jumpers				
Negative Bussing Possibility	By using spare jumpers				
Power ON Indication	3 mm Red LED				
Relay Protection	Using 1N4007 Freewheeling Diode.				
Ambient Temperature (Operation)	-20° C ... 50° C				
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **				
Housing Insulation Material	PVC / V0 Grade				
Housing Colour	Green				

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

SSR OUTPUT DATA

Contact Type	1 NO (DC Output)	1 NO (AC Output)
Load Voltage Range	3-125 VDC	75-400 VAC
Load Current Range	0.1 - 2A	0.1 - 3A
Max. Surge Current	10 Times of rated current	10 Times of rated current
Max. Leakage Current	0.1 mA	1.5 mA
Max. On State Voltage Drop	1.5 VDC	1.5 VAC
Turn On Time (Zero Cross Turn on)	1 mS	1 / 2 cycle + 1 mS
Turn Off Time	1 mS	1 / 2 cycle + 1 mS
Max. Transient Voltage	125 Vpk	600 Vpk

SSR INPUT DATA

Control Voltage Input Range	5 VDC	12 VDC	24 VDC
Must Operate Voltage	4 VDC	9.6 VDC	19.2 VDC
Must Release Voltage	1 VDC	1 VDC	1 VDC
Max. Input Current	20 mA	20 mA	20 mA
Max. Reverse Voltage Protection	-6VDC	-14.4 VDC	-28.8 VDC

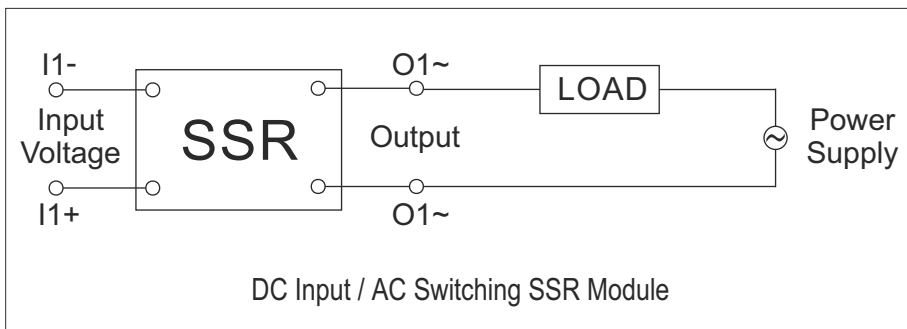
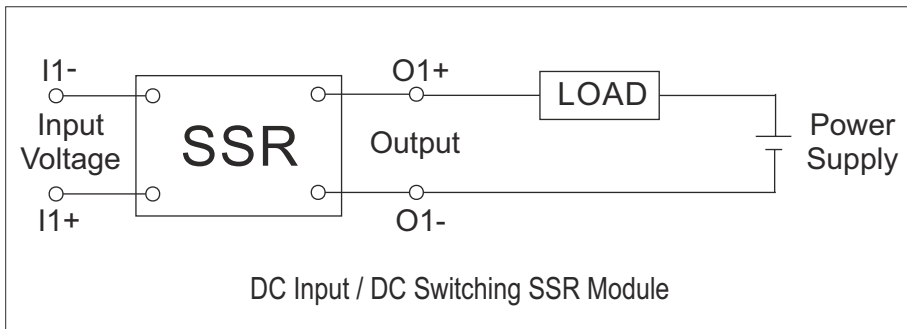
ORDERING INFORMATION - PLUGGABLE RELAYS

Rated Coil Voltage	5 VDC	12 VDC	24 VDC
DC Output 2A WITH FUSE			
1 Channel	IMERS1/5D125D2	IMERS1/12D125D2	IMERS1/24D125D2
2 Channel	IMERS2/5D125D2	IMERS2/12D125D2	IMERS2/24D125D2
4 Channel	IMERS4/5D125D2	IMERS4/12D125D2	IMERS4/24D125D2
8 Channel	IMERS8/5D125D2	IMERS8/12D125D2	IMERS8/24D125D2
16 Channel	IMERS16/5D125D2	IMERS16/12D125D2	IMERS16/24D125D2
AC Output 3A WITH FUSE			
1 Channel	IMERS1/5D400A3	IMERS1/12D400A3	IMERS1/24D400A3
2 Channel	IMERS2/5D400A3	IMERS2/12D400A3	IMERS2/24D400A3
4 Channel	IMERS4/5D400A3	IMERS4/12D400A3	IMERS4/24D400A3
8 Channel	IMERS8/5D400A3	IMERS8/12D400A3	IMERS8/24D400A3
16 Channel	IMERS16/5D400A3	IMERS16/12D400A3	IMERS16/24D400A3

ORDERING INFORMATION - SOLDERED RELAYS

Rated Coil Voltage	5 VDC	12 VDC	24 VDC
DC Output 2A WITH FUSE			
1 Channel	IMER1/5D125D2	IMER1/12D125D2	IMER1/24D125D2
2 Channel	IMER2/5D125D2	IMER2/12D125D2	IMER2/24D125D2
4 Channel	IMER4/5D125D2	IMER4/12D125D2	IMER4/24D125D2
8 Channel	IMER8/5D125D2	IMER8/12D125D2	IMER8/24D125D2
16 Channel	IMER16/5D125D2	IMER16/12D125D2	IMER16/24D125D2
AC Output 3A WITH FUSE			
1 Channel	IMER1/5D400A3	IMER1/12D400A3	IMER1/24D400A3
2 Channel	IMER2/5D400A3	IMER2/12D400A3	IMER2/24D400A3
4 Channel	IMER4/5D400A3	IMER4/12D400A3	IMER4/24D400A3
8 Channel	IMER8/5D400A3	IMER8/12D400A3	IMER8/24D400A3
16 Channel	IMER16/5D400A3	IMER16/12D400A3	IMER16/24D400A3

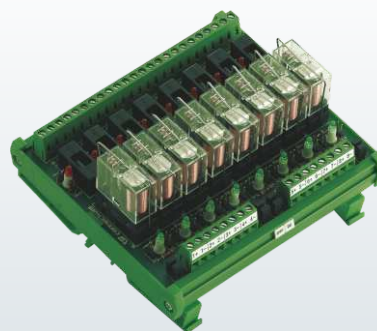
CIRCUIT DIAGRAM



1 CO RELAY MODULES WITH FUSE

FUSE AT OUTPUT | FUSE AT INPUT | FUSE FAIL INDICATION

- Replaceable fuses with simple to operate Horizontal fuse holders
- Fast Blow & Slow Blow fuses available as standard
- Fuse ratings from 0.1 A to 6.3 A available
- Variety of Operating Voltages
- Switching Current upto 10 A at 230 VAC (or 30 VDC)
- Low Coil Drive Current (4.7 mA to 100 mA)
- Easy to replace pluggable relays
- Possibility of Bussing (Jumpering) relays in common negative or common positive configurations
- Relay Coil Protection by means of a Freewheeling Diode
- Green LED Indication to denote relay actuation
- Red LED Indication to denote fuse fail indication
- Mounting Options available:
DIN Rail mounting & Panel mounting



RoHS

GENERAL DATA

Number of Channels	1	2	4	8	16
Width (mm)	120	120	120	120	120
Height (mm)	74	74	74	74	74
Length (mm)*	23	39	69	130	252
Positive Bussing Possibility	By using spare jumpers				
Negative Bussing Possibility	By using spare jumpers				
Power ON Indication	3 mm Red LED				
Fuse Fail Indication for Input Fuse	Green LED				
Fuse Fail Indication for Output Fuse	Red LED				
Relay Protection	Using 1N4007 Freewheeling Diode.				
Ambient Temperature (Operation)	-20° C ... 50° C				
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **				
Housing Insulation Material	PVC / V0 Grade				
Housing Colour	Green				

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

FUSE HOLDER DATA

Cap Design	Flat
Fuse Link Size	5 x 20 mm
Mounting Style	Horizontal
Rated Current	6.3 A

FUSE DATA

Fuse Size	5 x 20 mm
Fuse Type	Fast Blow / Slow Blow
Fuse Ratings (A)	0.1, 0.5, 0.6, 1, 2, 3, 4, 5, 6, 6.3

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

RELAY CONTACT DATA

Contact Type	1 CO
Type of Connection	Screw Connection
Contact Material	Ag Alloy
Rated Current	10A @250 VAC; 10A @24 VDC
Max. Switching Voltage	400 VAC, 250 VDC
Timing Data	18,000 operations/hr
Mechanical Life expectancy	Min. 20 x 10 ⁶ operations
Electrical Life expectancy	Min. 100 x 10 ³ operations
Relay Approvals	   
Other Coil Voltages	Voltages like 6 VDC, 48 VDC, 24 VAC etc. are available on request.

RELAY COIL DATA

Rated Coil Voltage	12 VDC	24 VDC	110 VAC	230 VAC
Coil Resistance (ohms)	270	1100	4600	26850
Rated Coil Current (mA)	44.5	21.8	11	4.7
Must Operate Voltage	8.4	16.8	88	184
Must Release Voltage	1.2	2.4	33	69
Max. Voltage	20.4	39.6	121	253

ORDERING INFORMATION - PLUGGABLE RELAYS

Rated Coil Voltage	12 VDC	24 VDC	110 VAC	230 VAC
With Fuse at Output				
1 Channel	IMRE1SSF1/12/OM	IMRE1SSF1/24/OM	IMRE1SSF1/110A/OM	IMRE1SSF1/230A/OM
2 Channel	IMRE1SSF2/12/OM	IMRE1SSF2/24/OM	IMRE1SSF2/110A/OM	IMRE1SSF2/230A/OM
4 Channel	IMRE1SSF4/12/OM	IMRE1SSF4/24/OM	IMRE1SSF4/110A/OM	IMRE1SSF4/230A/OM
8 Channel	IMRE1SSF8/12/OM	IMRE1SSF8/24/OM	IMRE1SSF8/110A/OM	IMRE1SSF8/230A/OM
16 Channel	IMRE1SSF16/12/OM	IMRE1SSF16/24/OM	IMRE1SSF16/110A/OM	IMRE1SSF16/230A/OM
With Fuse at Input				
1 Channel	IMREF1SSF1/12/OM	IMREF1SSF1/24/OM	IMREF1SSF1/110A/OM	IMREF1SSF1/230A/OM
2 Channel	IMREF1SSF2/12/OM	IMREF1SSF2/24/OM	IMREF1SSF2/110A/OM	IMREF1SSF2/230A/OM
4 Channel	IMREF1SSF4/12/OM	IMREF1SSF4/24/OM	IMREF1SSF4/110A/OM	IMREF1SSF4/230A/OM
8 Channel	IMREF1SSF8/12/OM	IMREF1SSF8/24/OM	IMREF1SSF8/110A/OM	IMREF1SSF8/230A/OM
16 Channel	IMREF1SSF16/12/OM	IMREF1SSF16/24/OM	IMREF1SSF16/110A/OM	IMREF1SSF16/230A/OM
With Fuse Fail Indication at Output *				
1 Channel	IMRE1SSFI1/12/OM/X	IMRE1SSFI1/24/OM/X	IMRE1SSFI1/110A/OM/X	IMRE1SSFI1/230A/OM/X
2 Channel	IMRE1SSFI2/12/OM/X	IMRE1SSFI2/24/OM/X	IMRE1SSFI2/110A/OM/X	IMRE1SSFI2/230A/OM/X
4 Channel	IMRE1SSFI4/12/OM/X	IMRE1SSFI4/24/OM/X	IMRE1SSFI4/110A/OM/X	IMRE1SSFI4/230A/OM/X
8 Channel	IMRE1SSFI8/12/OM/X	IMRE1SSFI8/24/OM/X	IMRE1SSFI8/110A/OM/X	IMRE1SSFI8/230A/OM/X
16 Channel	IMRE1SSFI16/12/OM/X	IMRE1SSFI16/24/OM/X	IMRE1SSFI16/110A/OM/X	IMRE1SSFI16/230A/OM/X

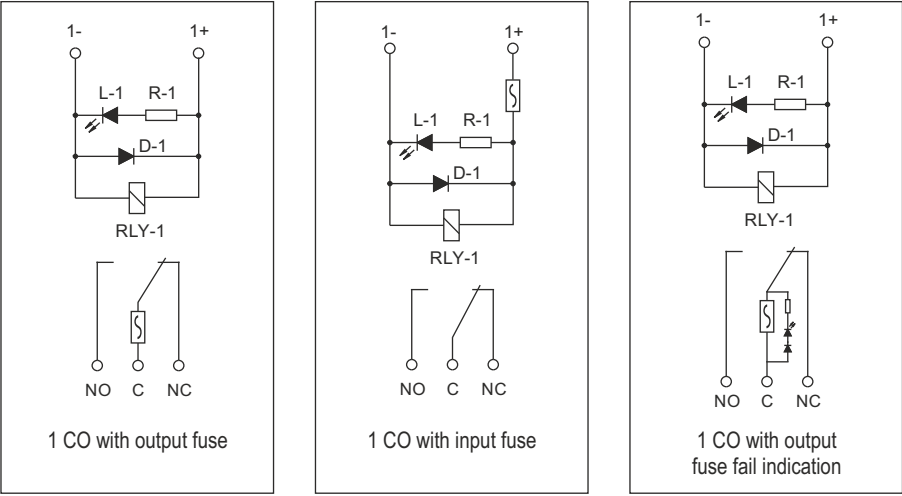
* X=1 (24V AC/DC Output) | X=2 (110V AC/DC Output) | X=3 (230V AC/DC Output)

ORDERING INFORMATION - SOLDERED RELAYS

Rated Coil Voltage	12 VDC	24 VDC	110 VAC	230 VAC
With Fuse at Output				
1 Channel	IMRE1SF1/12/OM	IMRE1SF1/24/OM	IMRE1SF1/110A/OM	IMRE1SF1/230A/OM
2 Channel	IMRE1SF2/12/OM	IMRE1SF2/24/OM	IMRE1SF2/110A/OM	IMRE1SF2/230A/OM
4 Channel	IMRE1SF4/12/OM	IMRE1SF4/24/OM	IMRE1SF4/110A/OM	IMRE1SF4/230A/OM
8 Channel	IMRE1SF8/12/OM	IMRE1SF8/24/OM	IMRE1SF8/110A/OM	IMRE1SF8/230A/OM
16 Channel	IMRE1SF16/12/OM	IMRE1SF16/24/OM	IMRE1SF16/110A/OM	IMRE1SF16/230A/OM
With Fuse at Input				
1 Channel	IMREF1SF1/12/OM	IMREF1SF1/24/OM	IMREF1SF1/110A/OM	IMREF1SF1/230A/OM
2 Channel	IMREF1SF2/12/OM	IMREF1SF2/24/OM	IMREF1SF2/110A/OM	IMREF1SF2/230A/OM
4 Channel	IMREF1SF4/12/OM	IMREF1SF4/24/OM	IMREF1SF4/110A/OM	IMREF1SF4/230A/OM
8 Channel	IMREF1SF8/12/OM	IMREF1SF8/24/OM	IMREF1SF8/110A/OM	IMREF1SF8/230A/OM
16 Channel	IMREF1SF16/12/OM	IMREF1SF16/24/OM	IMREF1SF16/110A/OM	IMREF1SF16/230A/OM
With Fuse Fail Indication at Output *				
1 Channel	IMRE1SFI1/12/OM/X	IMRE1SFI1/24/OM/X	IMRE1SFI1/110A/OM/X	IMRE1SFI1/230A/OM/X
2 Channel	IMRE1SFI2/12/OM/X	IMRE1SFI2/24/OM/X	IMRE1SFI2/110A/OM/X	IMRE1SFI2/230A/OM/X
4 Channel	IMRE1SFI4/12/OM/X	IMRE1SFI4/24/OM/X	IMRE1SFI4/110A/OM/X	IMRE1SFI4/230A/OM/X
8 Channel	IMRE1SFI8/12/OM/X	IMRE1SFI8/24/OM/X	IMRE1SFI8/110A/OM/X	IMRE1SFI8/230A/OM/X
16 Channel	IMRE1SFI16/12/OM/X	IMRE1SFI16/24/OM/X	IMRE1SFI16/110A/OM/X	IMRE1SFI16/230A/OM/X

* X=1 (24V AC/DC Output) | X=2 (110V AC/DC Output) | X=3 (230V AC/DC Output)

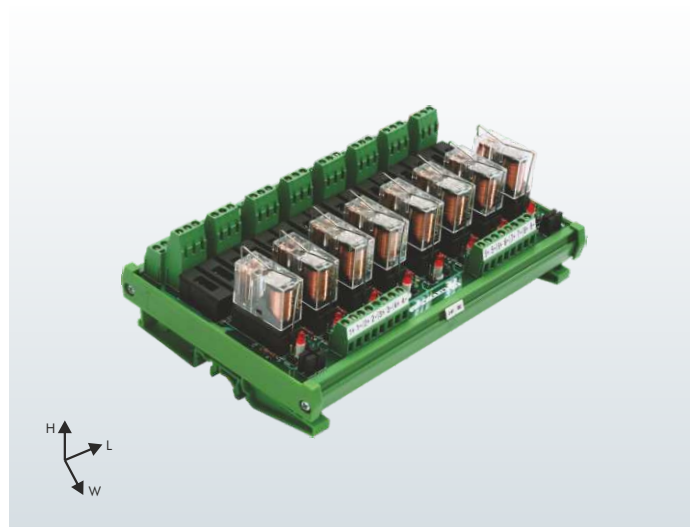
CIRCUIT DIAGRAM



2 CO RELAY MODULES WITH FUSE

FUSE AT OUTPUT | FUSE AT INPUT | FUSE FAIL INDICATION

- Replaceable fuses with simple to operate Horizontal fuse holders
- Fast Blow & Slow Blow fuses available as standard
- Fuse ratings from 0.1 A to 6.3 A available
- Variety of Operating Voltages
- Switching Current upto 5 A at 230 VAC (or 30 VDC)
- Low Coil Drive Current (4.7 mA to 100 mA)
- Easy to replace pluggable relays
- Possibility of Bussing (Jumpering) relays in common negative or common positive configurations
- Relay Coil Protection by means of a Freewheeling Diode
- Green LED Indication to denote relay actuation
- Red LED Indication to denote fuse fail indication
- Mounting Options available:
DIN Rail mounting & Panel mounting



RoHS

GENERAL DATA

Number of Channels	1	2	4	8	16
Width (mm)	120	120	120	120	120
Height (mm)	74	74	74	74	74
Length (mm) * Fuse at Output	32	52	102	192	373
Length (mm) * Fuse at Input	26	39	69	130	254
Positive Bussing Possibility	By using spare jumpers				
Negative Bussing Possibility	By using spare jumpers				
Power ON Indication	3 mm Red LED				
Fuse Fail Indication for Input Fuse	Green LED				
Fuse Fail Indication for Output Fuse	Red LED				
Relay Protection	Using 1N4007 Freewheeling Diode.				
Ambient Temperature (Operation)	-20° C ... 50° C				
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **				
Housing Insulation Material	PVC / V0 Grade				
Housing Colour	Green				

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

FUSE HOLDER DATA

Cap Design	Flat
Fuse Link Size	5 x 20 mm
Mounting Style	Horizontal
Rated Current	6.3 A

FUSE DATA

Fuse Size	5 x 20 mm
Fuse Type	Fast Blow / Slow Blow
Fuse Ratings (A)	0.1, 0.5, 0.6, 1, 2, 3, 4, 5, 6, 6.3

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

RELAY CONTACT DATA

Contact Type	2 CO
Type of Connection	Screw Connection
Contact Material	Ag Alloy
Rated Current	5A @250 VAC; 5A @24 VDC
Max. Switching Voltage	400 VAC, 250 VDC
Timing Data	18,000 operations/hr
Mechanical Life expectancy	Min. 20 x 10 ⁶ operations
Electrical Life expectancy	Min. 100 x 10 ³ operations
Relay Approvals	   
Other Coil Voltages	Voltages like 6 VDC, 48 VDC, 24 VAC etc. are available on request.

RELAY COIL DATA

Rated Coil Voltage	12 VDC	24 VDC	110 VAC	230 VAC
Coil Resistance (ohms)	270	1100	4600	26850
Rated Coil Current (mA)	44.5	21.8	11	4.7
Must Operate Voltage	8.4	16.8	88	184
Must Release Voltage	1.2	2.4	33	69
Max. Voltage	20.4	39.6	121	253

ORDERING INFORMATION - PLUGGABLE RELAYS

Rated Coil Voltage	12 VDC	24 VDC	110 VAC	230 VAC
With Fuse at Output				
1 Channel	IMRE2SSF1/12/OM	IMRE2SSF1/24/OM	IMRE2SSF1/110A/OM	IMRE2SSF1/230A/OM
2 Channel	IMRE2SSF2/12/OM	IMRE2SSF2/24/OM	IMRE2SSF2/110A/OM	IMRE2SSF2/230A/OM
4 Channel	IMRE2SSF4/12/OM	IMRE2SSF4/24/OM	IMRE2SSF4/110A/OM	IMRE2SSF4/230A/OM
8 Channel	IMRE2SSF8/12/OM	IMRE2SSF8/24/OM	IMRE2SSF8/110A/OM	IMRE2SSF8/230A/OM
16 Channel	IMRE2SSF16/12/OM	IMRE2SSF16/24/OM	IMRE2SSF16/110A/OM	IMRE2SSF16/230A/OM
With Fuse at Input				
1 Channel	IMREF2SSF1/12/OM	IMREF2SSF1/24/OM	IMREF2SSF1/110A/OM	IMREF2SSF1/230A/OM
2 Channel	IMREF2SSF2/12/OM	IMREF2SSF2/24/OM	IMREF2SSF2/110A/OM	IMREF2SSF2/230A/OM
4 Channel	IMREF2SSF4/12/OM	IMREF2SSF4/24/OM	IMREF2SSF4/110A/OM	IMREF2SSF4/230A/OM
8 Channel	IMREF2SSF8/12/OM	IMREF2SSF8/24/OM	IMREF2SSF8/110A/OM	IMREF2SSF8/230A/OM
16 Channel	IMREF2SSF16/12/OM	IMREF2SSF16/24/OM	IMREF2SSF16/110A/OM	IMREF2SSF16/230A/OM
With Fuse Fail Indication at Output *				
1 Channel	IMRE2SSFI1/12/OM/X	IMRE2SSFI1/24/OM/X	IMRE2SSFI1/110A/OM/X	IMRE2SSFI1/230A/OM/X
2 Channel	IMRE2SSFI2/12/OM/X	IMRE2SSFI2/24/OM/X	IMRE2SSFI2/110A/OM/X	IMRE2SSFI2/230A/OM/X
4 Channel	IMRE2SSFI4/12/OM/X	IMRE2SSFI4/24/OM/X	IMRE2SSFI4/110A/OM/X	IMRE2SSFI4/230A/OM/X
8 Channel	IMRE2SSFI8/12/OM/X	IMRE2SSFI8/24/OM/X	IMRE2SSFI8/110A/OM/X	IMRE2SSFI8/230A/OM/X
16 Channel	IMRE2SSFI16/12/OM/X	IMRE2SSFI16/24/OM/X	IMRE2SSFI16/110A/OM/X	IMRE2SSFI16/230A/OM/X

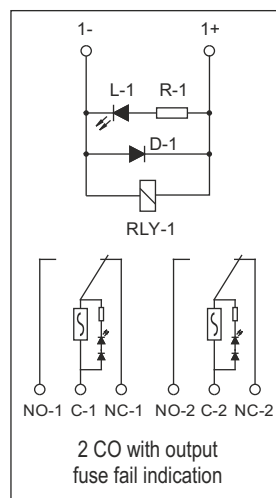
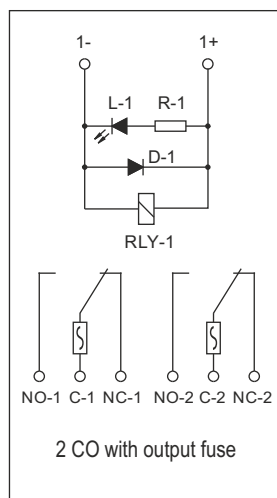
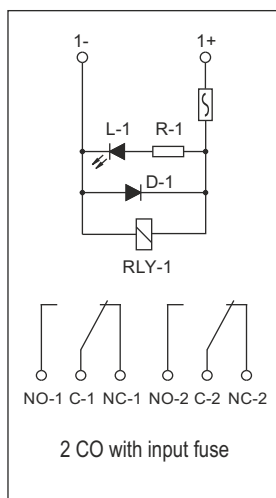
* X=1 (24V AC/DC Output) | X=2 (110V AC/DC Output) | X=3 (230V AC/DC Output)

ORDERING INFORMATION - SOLDERED RELAYS

Rated Coil Voltage	12 VDC	24 VDC	110 VAC	230 VAC
With Fuse at Output				
1 Channel	IMRE2SF1/12/OM	IMRE2SF1/24/OM	IMRE2SF1/110A/OM	IMRE2SF1/230A/OM
2 Channel	IMRE2SF2/12/OM	IMRE2SF2/24/OM	IMRE2SF2/110A/OM	IMRE2SF2/230A/OM
4 Channel	IMRE2SF4/12/OM	IMRE2SF4/24/OM	IMRE2SF4/110A/OM	IMRE2SF4/230A/OM
8 Channel	IMRE2SF8/12/OM	IMRE2SF8/24/OM	IMRE2SF8/110A/OM	IMRE2SF8/230A/OM
16 Channel	IMRE2SF16/12/OM	IMRE2SF16/24/OM	IMRE2SF16/110A/OM	IMRE2SF16/230A/OM
With Fuse at Input				
1 Channel	IMREF2SF1/12/OM	IMREF2SF1/24/OM	IMREF2SF1/110A/OM	IMREF2SF1/230A/OM
2 Channel	IMREF2SF2/12/OM	IMREF2SF2/24/OM	IMREF2SF2/110A/OM	IMREF2SF2/230A/OM
4 Channel	IMREF2SF4/12/OM	IMREF2SF4/24/OM	IMREF2SF4/110A/OM	IMREF2SF4/230A/OM
8 Channel	IMREF2SF8/12/OM	IMREF2SF8/24/OM	IMREF2SF8/110A/OM	IMREF2SF8/230A/OM
16 Channel	IMREF2SF16/12/OM	IMREF2SF16/24/OM	IMREF2SF16/110A/OM	IMREF2SF16/230A/OM
With Fuse Fail Indication at Output *				
1 Channel	IMRE2SFI1/12/OM/X	IMRE2SFI1/24/OM/X	IMRE2SFI1/110A/OM/X	IMRE2SFI1/230A/OM/X
2 Channel	IMRE2SFI2/12/OM/X	IMRE2SFI2/24/OM/X	IMRE2SFI2/110A/OM/X	IMRE2SFI2/230A/OM/X
4 Channel	IMRE2SFI4/12/OM/X	IMRE2SFI4/24/OM/X	IMRE2SFI4/110A/OM/X	IMRE2SFI4/230A/OM/X
8 Channel	IMRE2SFI8/12/OM/X	IMRE2SFI8/24/OM/X	IMRE2SFI8/110A/OM/X	IMRE2SFI8/230A/OM/X
16 Channel	IMRE2SFI16/12/OM/X	IMRE2SFI16/24/OM/X	IMRE2SFI16/110A/OM/X	IMRE2SFI16/230A/OM/X

* X=1 (24V AC/DC Output) | X=2 (110V AC/DC Output) | X=3 (230V AC/DC Output)

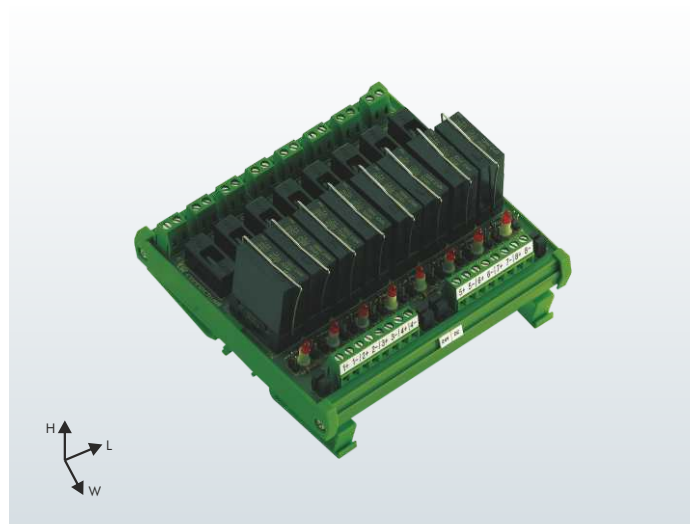
CIRCUIT DIAGRAM



SSR MODULES WITH FUSE

DC INPUT - DC OUTPUT | DC INPUT - AC OUTPUT

- Variety of Operating Voltages.
- Low Drive Current (20 mA)
- 2500V Dielectric Strength
- LED Status Indicator
- Photo Isolation
- Built-In Snubber (AC Output)
- Zero Cross Turn-On (AC Output)
- Bipolar Transistor / MOSFET Output (DC Output)
- Mounting options available :
DIN Rail mounting & Panel mounting.
- Easy to replace pluggable SSR.
- Replaceable fuses with simple to
operate Horizontal fuse holders
- Fast Blow & Slow Blow fuses available as standard
- Fuse ratings from 0.1 A to 6.3 A available.



RoHS

GENERAL DATA

Number of Channels	1	2	4	8	16
Width (mm)	88	88	88	88	88
Height (mm)	74	74	74	74	74
Length (mm)*	23	45	79	148	289
Positive Bussing Possibility	By using spare jumpers				
Negative Bussing Possibility	By using spare jumpers				
Power ON Indication	3 mm Red LED				
Relay Protection	Using 1N4007 Freewheeling Diode.				
Ambient Temperature (Operation)	-20° C ... 50° C				
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL**				
Housing Insulation Material	PVC / V0 Grade				
Housing Colour	Green				

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

FUSE HOLDER DATA

Cap Design	Flat
Fuse Link Size	5 x 20 mm
Mounting Style	Horizontal
Rated Current	6.3 A

FUSE DATA

Fuse Size	5 x 20 mm
Fuse Type	Fast Blow / Slow Blow
Fuse Ratings (A)	0.1, 0.5, 0.6, 1, 2, 3, 4, 5, 6, 6.3

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

SSR OUTPUT DATA

Contact Type	1 NO (DC Output)	1 NO (AC Output)
Load Voltage Range	3-125 VDC	75-400 VAC
Load Current Range	0.1 - 2A	0.1 - 3A
Max. Surge Current	10 Times of rated current	10 Times of rated current
Max. Leakage Current	0.1 mA	1.5 mA
Max. On State Voltage Drop	1.5 VDC	1.5 VAC
Turn On Time (Zero Cross Turn on)	1 mS	1 / 2 cycle + 1 mS
Turn Off Time	1 mS	1 / 2 cycle + 1 mS
Max. Transient Voltage	125 Vpk	600 Vpk

SSR INPUT DATA

Control Voltage Input Range	5 VDC	12 VDC	24 VDC
Must Operate Voltage	4 VDC	9.6 VDC	19.2 VDC
Must Release Voltage	1 VDC	1 VDC	1 VDC
Max. Input Current	20 mA	20 mA	20 mA
Max. Reverse Voltage Protection	-6VDC	-14.4 VDC	-28.8 VDC

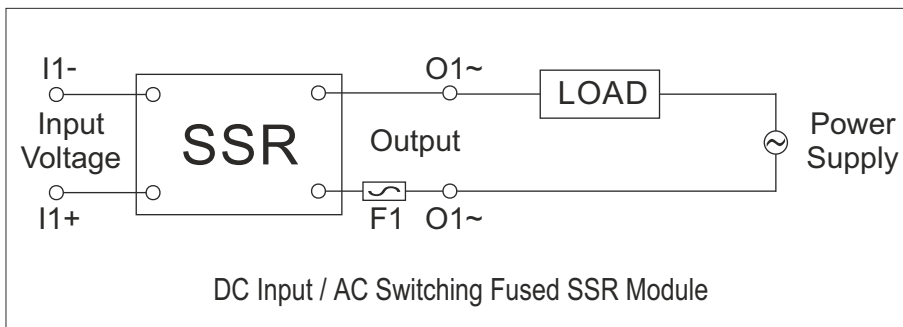
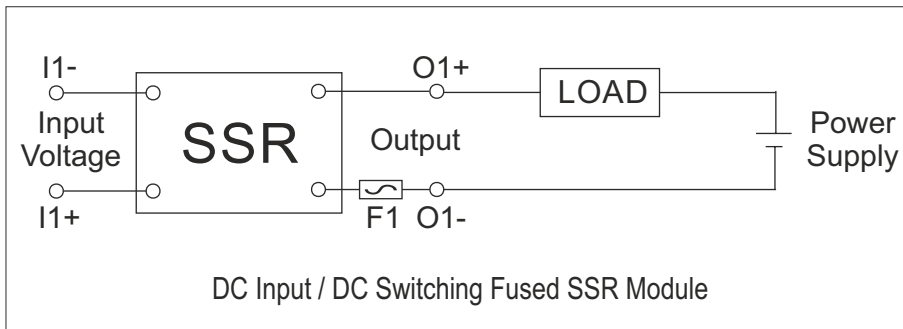
ORDERING INFORMATION - PLUGGABLE RELAYS

Rated Coil Voltage	5 VDC	12 VDC	24 VDC
DC Output 2A WITH FUSE			
1 Channel	IMERSF1/5D125D2	IMERSF1/12D125D2	IMERSF1/24D125D2
2 Channel	IMERSF2/5D125D2	IMERSF2/12D125D2	IMERSF2/24D125D2
4 Channel	IMERSF4/5D125D2	IMERSF4/12D125D2	IMERSF4/24D125D2
8 Channel	IMERSF8/5D125D2	IMERSF8/12D125D2	IMERSF8/24D125D2
16 Channel	IMERSF16/5D125D2	IMERSF16/12D125D2	IMERSF16/24D125D2
AC Output 3A WITH FUSE			
1 Channel	IMERSF1/5D400A3	IMERSF1/12D400A3	IMERSF1/24D400A3
2 Channel	IMERSF2/5D400A3	IMERSF2/12D400A3	IMERSF2/24D400A3
4 Channel	IMERSF4/5D400A3	IMERSF4/12D400A3	IMERSF4/24D400A3
8 Channel	IMERSF8/5D400A3	IMERSF8/12D400A3	IMERSF8/24D400A3
16 Channel	IMERSF16/5D400A3	IMERSF16/12D400A3	IMERSF16/24D400A3

ORDERING INFORMATION - SOLDERED RELAYS

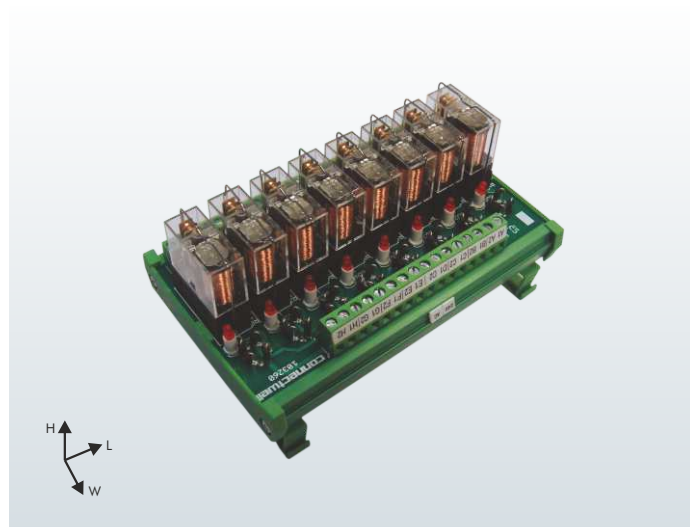
Rated Coil Voltage	5 VDC	12 VDC	24 VDC
DC Output 2A WITH FUSE			
1 Channel	IMERF1/5D125D2	IMERF1/12D125D2	IMERF1/24D125D2
2 Channel	IMERF2/5D125D2	IMERF2/12D125D2	IMERF2/24D125D2
4 Channel	IMERF4/5D125D2	IMERF4/12D125D2	IMERF4/24D125D2
8 Channel	IMERF8/5D125D2	IMERF8/12D125D2	IMERF8/24D125D2
16 Channel	IMERF16/5D125D2	IMERF16/12D125D2	IMERF16/24D125D2
AC Output 3A WITH FUSE			
1 Channel	IMERF1/5D400A3	IMERF1/12D400A3	IMERF1/24D400A3
2 Channel	IMERF2/5D400A3	IMERF2/12D400A3	IMERF2/24D400A3
4 Channel	IMERF4/5D400A3	IMERF4/12D400A3	IMERF4/24D400A3
8 Channel	IMERF8/5D400A3	IMERF8/12D400A3	IMERF8/24D400A3
16 Channel	IMERF16/5D400A3	IMERF16/12D400A3	IMERF16/24D400A3

CIRCUIT DIAGRAM



1 CO RELAY RECTIFIER BASED MODULES (24 VUC)

- Works with universal input 24 VAC & 24 VDC
- Switching Current upto 10 A at 230 VAC (or 30 VDC)
- Low Coil Drive Current (4.7 mA to 100 mA)
- Easy to replace pluggable relays
- LED Indication to denote relay actuation
- Relay Coil Protection by means of a Freewheeling Diode
- Mounting Options available:
DIN Rail mounting & Panel mounting



RoHS

GENERAL DATA

Number of Channels	1	2	4	8	16
Width (mm)	88	88	88	88	88
Height (mm)	74	74	74	74	74
Length (mm)*	38	45	81	160	315
Power ON Indication	3 mm Red LED				
Relay Protection	Using 1N4007 Freewheeling Diode.				
Ambient Temperature (Operation)	-20° C ... 50° C				
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **				
Housing Insulation Material	PVC / V0 Grade				
Housing Colour	Green				

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

RELAY CONTACT DATA

Contact Type	1 CO
Type of Connection	Screw Connection
Contact Material	Ag Alloy
Rated Current	10A @230 VAC / 30 VDC
Max. Switching Voltage	400 VAC, 300 VDC
Timing Data	18,000 operations/hr
Mechanical Life expectancy	Min. 10 x 10 ⁶ operations
Electrical Life expectancy	Min. 100 x 10 ³ operations
Relay Approvals	   
Other Coil Voltages	Voltages like 6 VDC, 48 VDC, 24 VAC etc. are available on request.

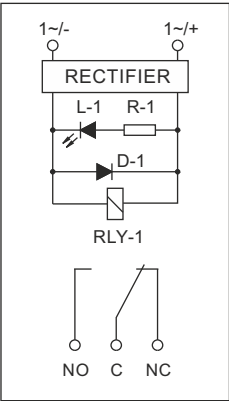
RELAY COIL DATA

Rated Coil Voltage	24 VUC
Coil Resistance (ohms)	1100
Rated Coil Current (mA)	21.8
Must Operate Voltage	16.8
Must Release Voltage	2.4
Max. Voltage	39.6

ORDERING INFORMATION

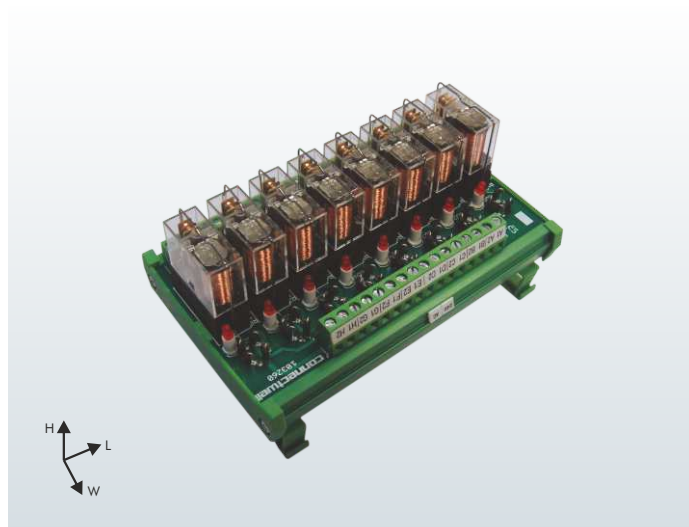
1 Channel Module with Pluggable Relays	IMRE1SS1/24A/OMRE
2 Channel Module with Pluggable Relays	IMRE1SS2/24A/OMRE
4 Channel Module with Pluggable Relays	IMRE1SS4/24A/OMRE
8 Channel Module with Pluggable Relays	IMRE1SS8/24A/OMRE
16 Channel Module with Pluggable Relays	IMRE1SS16/24A/OMRE

CIRCUIT DIAGRAM



2 CO RELAY RECTIFIER BASED MODULES (24 VUC)

- Works with universal input 24 VAC & 24 VDC
- Switching Current upto 5 A at 230 VAC (or 30 VDC)
- Low Coil Drive Current (4.7 mA to 100 mA)
- Easy to replace pluggable relays
- LED Indication to denote relay actuation
- Relay Coil Protection by means of a Freewheeling Diode
- Mounting Options available:
DIN Rail mounting & Panel mounting



RoHS

GENERAL DATA

Number of Channels	1	2	4	8	16
Width (mm)	88	88	88	88	88
Height (mm)	74	74	74	74	74
Length (mm)*	38	45	81	160	315
Power ON Indication	3 mm Red LED				
Relay Protection	Using 1N4007 Freewheeling Diode.				
Ambient Temperature (Operation)	-20° C ... 50° C				
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **				
Housing Insulation Material	PVC / V0 Grade				
Housing Colour	Green				

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

RELAY CONTACT DATA

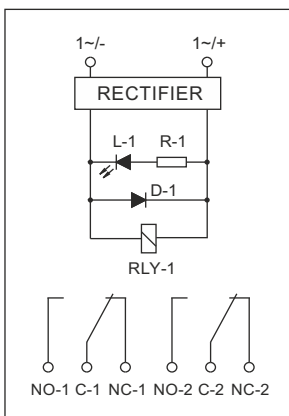
Contact Type	2 CO
Type of Connection	Screw Connection
Contact Material	Ag Alloy
Rated Current	5A @230 VAC / 30 VDC
Max. Switching Voltage	400 VAC, 300 VDC
Timing Data	18,000 operations/hr
Mechanical Life expectancy	Min. 20 x 10 ⁶ operations
Electrical Life expectancy	Min. 100 x 10 ³ operations
Relay Approvals	   
Other Coil Voltages	Voltages like 6 VDC, 48 VDC, 24 VAC etc. are available on request.

RELAY COIL DATA

Rated Coil Voltage	24 VUC
Coil Resistance (ohms)	1100
Rated Coil Current (mA)	21.8
Must Operate Voltage	16.8
Must Release Voltage	2.4
Max. Voltage	39.6

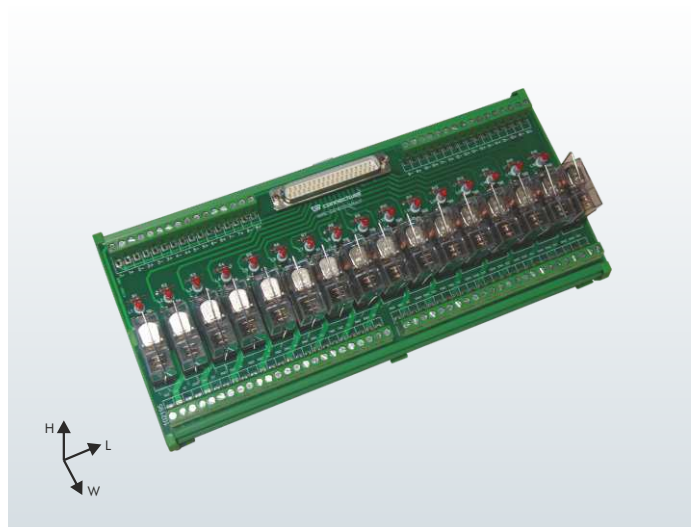
ORDERING INFORMATION

1 Channel Module with Pluggable Relays	IMRE2SS1/24A/OMRE
2 Channel Module with Pluggable Relays	IMRE2SS2/24A/OMRE
4 Channel Module with Pluggable Relays	IMRE2SS4/24A/OMRE
8 Channel Module with Pluggable Relays	IMRE2SS8/24A/OMRE
16 Channel Module with Pluggable Relays	IMRE2SS16/24A/OMRE

CIRCUIT DIAGRAM

1 CO RELAY MODULES WITH DSUB INPUT

- Option to give switching signal through male DSUB 37 connector or through screw terminals
- Switching Current upto 10 A at 250 VAC (or 30 VDC)
- Low Coil Drive Current (4.7 mA to 100 mA)
- Easy to replace pluggable relays
- LED Indication to denote relay actuation
- Relay Coil Protection by means of a Freewheeling Diode
- I Mounting Options available:
DIN Rail mounting & Panel mounting



RoHS

GENERAL DATA

Number of Channels	16
Width W (mm)	120
Height H (mm)	74
Length L (mm)*	261
Power ON Indication	3 mm Red LED
Relay Protection	Using 1N4007 Freewheeling Diode.
Ambient Temperature (Operation)	-20° C ... 60° C
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **
Housing Insulation Material	PVC / V0 Grade
Housing Colour	Green

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

DSUB CONNECTOR ELECTRICAL RATINGS

Contact Resistance	15 m ohm maximum at 500 VDC
Current Rating	10A Max
Operation Voltage	250 VAC
Dielectric Withstanding Voltage	1000 VAC for one minute
Number of Contacts	37 (This varies based on no. of channels)

DSUB CONNECTOR MATERIALS

Insulator	PBT, Rated UL94V-0
Contacts	Brass
Shell	Steel
Rivet, Boardlock	Copper Alloy

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

RELAY CONTACT DATA

Contact Type	1 CO
Type of Connection	Screw Connection
Contact Material	Ag Alloy
Rated Current	10A @250 VAC; 10A @24 VDC
Max. Switching Voltage	400 VAC, 250 VDC
Timing Data	18,000 operations/hr
Mechanical Life expectancy	Min. 20 x 10 ⁶ operations
Electrical Life expectancy	Min. 100 x 10 ³ operations
Relay Approvals	   
Other Coil Voltages	Voltages like 6 VDC, 48 VDC, 24 VAC etc. are available on request.

RELAY COIL DATA

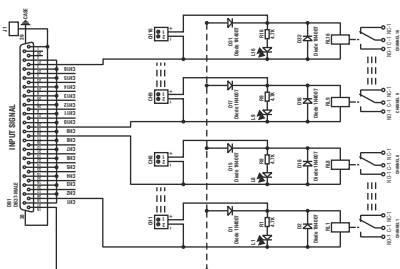
Rated Coil Voltage	24 VDC
Coil Resistance (ohms)	1100
Rated Coil Current (mA)	21.8
Must Operate Voltage	16.8
Must Release Voltage	2.4
Max. Voltage	39.6

ORDERING INFORMATION

16 Channel Module with Pluggable Relays	IMRE1SS16/24/DM37
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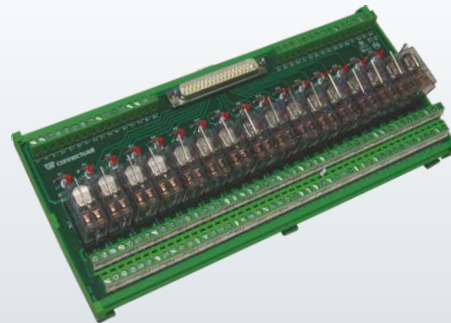
D-SUB PIN ASSIGNMENT

Channel	DB1	1 CO FIELD TERMINAL
CH1	18	1NO 1NC 1C
CH2	17	2NO 2NC 2C
CH3	16	3NO 3NC 3C
CH4	15	4NO 4NC 4C
CH5	14	5NO 5NC 5C
CH6	13	6NO 6NC 6C
CH7	12	7NO 7NC 7C
CH8	11	8NO 8NC 8C
CH9	10	9NO 9NC 9C
CH10	9	10NO 10NC 10C
CH11	8	11NO 11NC 11C
CH12	7	12NO 12NC 12C
CH13	6	13NO 13NC 13C
CH14	5	14NO 14NC 14C
CH15	4	15NO 15NC 15C
CH16	3	16NO 16NC 16C

CIRCUIT DIAGRAM

2 CO RELAY MODULES WITH DSUB INPUT

- Option to give switching signal through male DSUB 37 connector or through screw terminals
- Switching Current upto 5 A at 250 VAC (or 30 VDC)
- Low Coil Drive Current (4.7 mA to 100 mA)
- Easy to replace pluggable relays
- LED Indication to denote relay actuation
- Relay Coil Protection by means of a Freewheeling Diode
- I Mounting Options available:
DIN Rail mounting & Panel mounting



RoHS

GENERAL DATA

Number of Channels	16
Width W (mm)	120
Height H (mm)	74
Length L (mm)*	261
Power ON Indication	3 mm Red LED
Relay Protection	Using 1N4007 Freewheeling Diode.
Ambient Temperature (Operation)	-20° C ... 60° C
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **
Housing Insulation Material	PVC / V0 Grade
Housing Colour	Green

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

DSUB CONNECTOR ELECTRICAL RATINGS

Contact Resistance	15 m ohm maximum at 500 VDC
Current Rating	5A Max
Operation Voltage	250 VAC
Dielectric Withstanding Voltage	1000 VAC for one minute
Number of Contacts	37 (This varies based on no. of channels)

DSUB CONNECTOR MATERIALS

Insulator	PBT, Rated UL94V-0
Contacts	Brass
Shell	Steel
Rivet, Boardlock	Copper Alloy

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

RELAY CONTACT DATA

Contact Type	2 CO
Type of Connection	Screw Connection
Contact Material	Ag Alloy
Rated Current	5A @250 VAC; 5A @24 VDC
Max. Switching Voltage	400 VAC, 250 VDC
Timing Data	18,000 operations/hr
Mechanical Life expectancy	Min. 20 x 10 ⁶ operations
Electrical Life expectancy	Min. 100 x 10 ³ operations
Relay Approvals	   
Other Coil Voltages	Voltages like 6 VDC, 48 VDC, 24 VAC etc. are available on request.

RELAY COIL DATA

Rated Coil Voltage	24 VDC
Coil Resistance (ohms)	1100
Rated Coil Current (mA)	21.8
Must Operate Voltage	16.8
Must Release Voltage	2.4
Max. Voltage	39.6

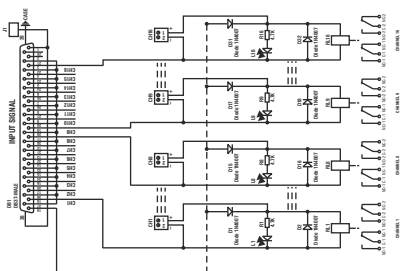
ORDERING INFORMATION

16 Channel Module with Pluggable Relays	IMRE2SS16/24/DM37
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D-SUB PIN ASSIGNMENT

Channel	DB1	2 CO FIELD TERMINAL
CH1	18	1NO-1 1NC-1 1C-1 1NO-2 1NC-2 1C-2
CH2	17	2NO-1 2NC-1 2C-1 2NO-2 2NC-2 2C-2
CH3	16	3NO-1 3NC-1 3C-1 3NO-2 3NC-2 3C-2
CH4	15	4NO-1 4NC-1 4C-1 4NO-2 4NC-2 4C-2
CH5	14	5NO-1 5NC-1 5C-1 5NO-2 5NC-2 5C-2
CH6	13	6NO-1 6NC-1 6C-1 6NO-2 6NC-2 6C-2
CH7	12	7NO-1 7NC-1 7C-1 7NO-2 7NC-2 7C-2
CH8	11	8NO-1 8NC-1 8C-1 8NO-2 8NC-2 8C-2
CH9	10	9NO-1 9NC-1 9C-1 9NO-2 9NC-2 9C-2
CH10	9	10NO-1 10NC-1 10C-1 10NO-2 10NC-2 10C-2
CH11	8	11NO-1 11NC-1 11C-1 11NO-2 11NC-2 11C-2
CH12	7	12NO-1 12NC-1 12C-1 12NO-2 12NC-2 12C-2
CH13	6	13NO-1 13NC-1 13C-1 13NO-2 13NC-2 13C-2
CH14	5	14NO-1 14NC-1 14C-1 14NO-2 14NC-2 14C-2
CH15	4	15NO-1 15NC-1 15C-1 15NO-2 15NC-2 15C-2
CH16	3	16NO-1 16NC-1 16C-1 16NO-2 16NC-2 16C-2

CIRCUIT DIAGRAM

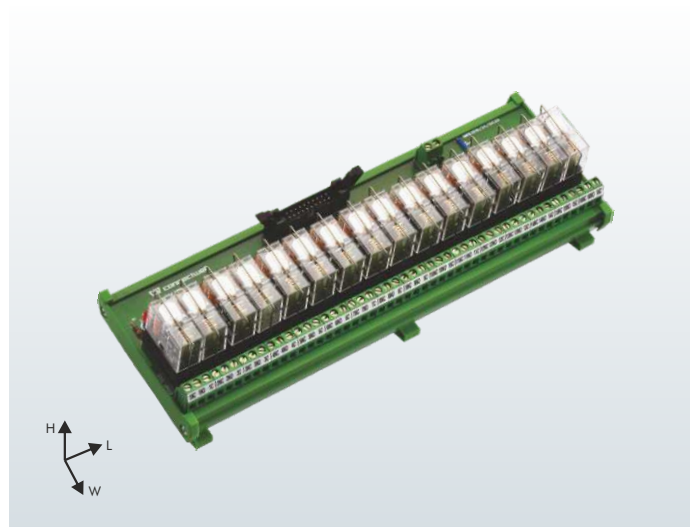


16 I/O INTERFACE MODULES FOR SCHNEIDER PLC

This module simplifies wiring by accommodating 16 channel signals through a Flat Ribbon Cable Connector. The module is best suited for interfacing Schneider PLC.

The Module can also be used with other PLCs which meets the pin configuration.

1 NO Relay Output is also available as standard product.



RoHS

GENERAL DATA

Supply Voltage Indication	3 mm Green LED
Relay ON Indication	3 mm Red LED
Relay Protection	Using 1N4007 Freewheeling Diode.
Ambient Temperature (Operation)	-20° C ... 50° C
Mounting Types	DIN32 / DIN35 / DIN35-15 / PANEL
Housing Insulation Material	PVC / V0 Grade
Housing Colour	Green

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

RELAY DATA

Contact Type	1CO (SPDT)
Standard Coil Voltage	24VDC (Relay coil voltage like 6 VDC, 12 VDC, 48 DC, 24 VAC, 110 VAC & 230 VAC etc. are available on request.)
Contact Material	AgSnO ₂
Rated Current	10A @230 VAC / 30 VDC

IDC / FRC CONNECTOR DATA

Insulation Material	PBT, glass reinforced
Contact Material	Brass
Rated Current	2A
Contact Resistance	30m ohms maximum
Insulation Resistance	3000M ohms minimum
Dielectric withstanding Voltage	500VAC for 1 minute

ORDERING INFORMATION

Module Type

16 CH 1 CO

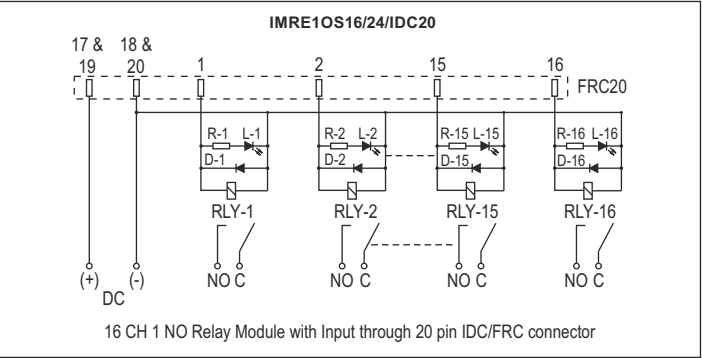
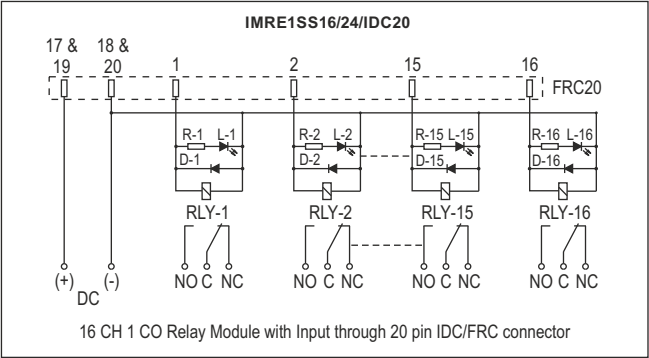
With Pluggable Relays

IMRE1SS16/24/IDC20

With Soldered Relays

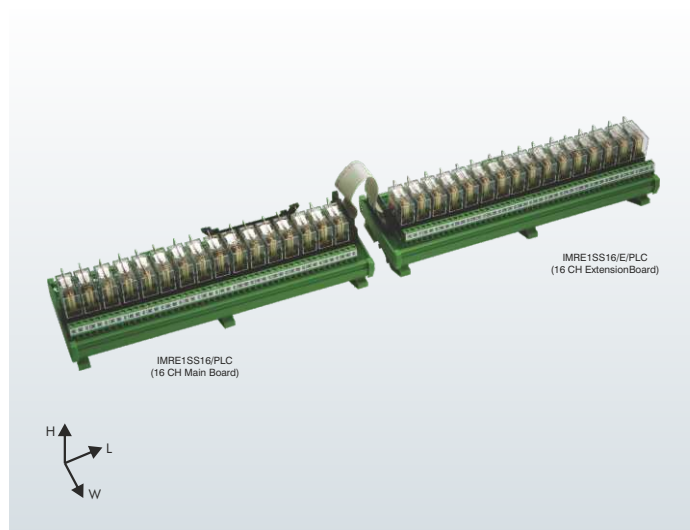
IMRE1S16/24/IDC20

CIRCUIT DIAGRAM



32 I/O INTERFACE MODULES FOR SIEMENS SIMATIC S7-300 / ET200MPLC

This module simplifies wiring by accommodating 32 channel signals through a Flat Ribbon Cable Connector. The module is supplied in two parts, as the main module (IMRE1SS16/PLC) and it's extension module (IMRE1SS16/E/PLC) along with a 20 core FRC cable to connect them. The module is best suited for interfacing Siemens SIMATIC S7-300 / ET200M PLC.



RoHS

GENERAL DATA

Supply Voltage Indication	3 mm Green LED
Relay ON Indication	3 mm Red LED
Relay Protection	Using 1N4007 Freewheeling Diode.
Ambient Temperature (Operation)	-20° C ... 50° C
Mounting Types	DIN32 / DIN35 / DIN35-15 / PANEL
Housing Insulation Material	PVC / V0 Grade
Housing Colour	Green

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

RELAY DATA

Contact Type	1CO (SPDT)
Standard Coil Voltage	24VDC (Relay coil voltage like 6 VDC, 12 VDC, 48 DC, 24 VAC, 110 VAC & 230 VAC etc. are available on request.)
Contact Material	AgSnO ₂
Rated Current	10A @230 VAC / 30 VDC

IDC / FRC CONNECTOR DATA

Insulation Material	PBT, glass reinforced
Contact Material	Brass
Rated Current	2A
Contact Resistance	30m ohms maximum
Insulation Resistance	3000M ohms minimum
Dielectric withstanding Voltage	500VAC for 1 minute

ORDERING INFORMATION

Module Type

16 CH Main Board

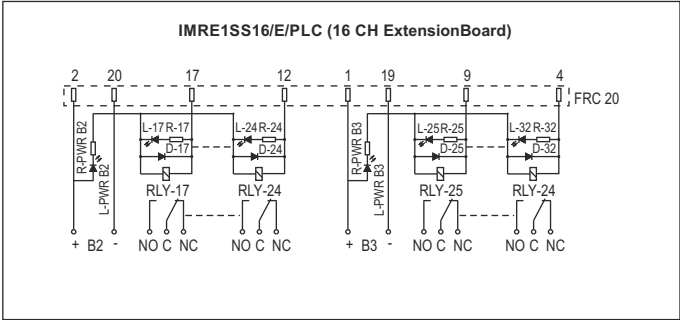
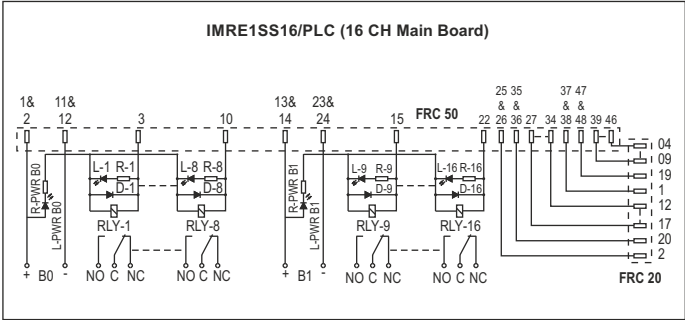
With Pluggable Relays

IMRE1SS16/PLC

With Soldered Relays

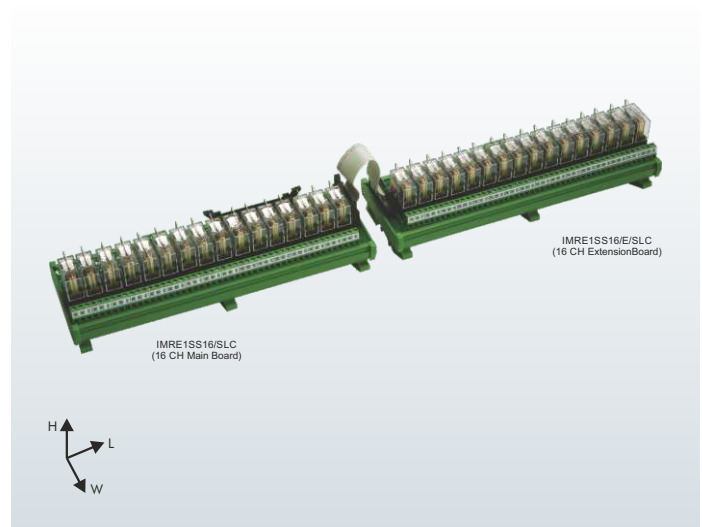
IMRE1S16/PLC

CIRCUIT DIAGRAM



32 I/O INTERFACE MODULES FOR ALLEN BRADLEY SLC 500 PLC

This module simplifies wiring by accommodating 32 channel signals through a Flat Ribbon Cable Connector. The module is supplied in two parts, as the main module (IMRE1SS16/SLC) and it's extension module (IMRE1SS16/E/SLC) along with a 20 core FRC cable to connect them. The module is best suited for interfacing ALLEN BRADLEY SLC 500 PLCs.



RoHS

GENERAL DATA

Supply Voltage Indication	3 mm Green LED
Relay ON Indication	3 mm Red LED
Relay Protection	Using 1N4007 Freewheeling Diode.
Ambient Temperature (Operation)	-20° C ... 50° C
Mounting Types	DIN32 / DIN35 / DIN35-15 / PANEL
Housing Insulation Material	PVC / V0 Grade
Housing Colour	Green

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

RELAY DATA

Contact Type	1CO (SPDT)
Standard Coil Voltage	24VDC (Relay coil voltage like 6 VDC, 12 VDC, 48 DC, 24 VAC, 110 VAC & 230 VAC etc. are available on request.)
Contact Material	AgSnO ₂
Rated Current	10A @230 VAC / 30 VDC

IDC / FRC CONNECTOR DATA

Insulation Material	PBT, glass reinforced
Contact Material	Brass
Rated Current	2A
Contact Resistance	30m ohms maximum
Insulation Resistance	3000M ohms minimum
Dielectric withstanding Voltage	500VAC for 1 minute

ORDERING INFORMATION

Module Type

16 CH Main Board

16 CH Extension Board

With Pluggable Relays

IMRE1SS16/SLC

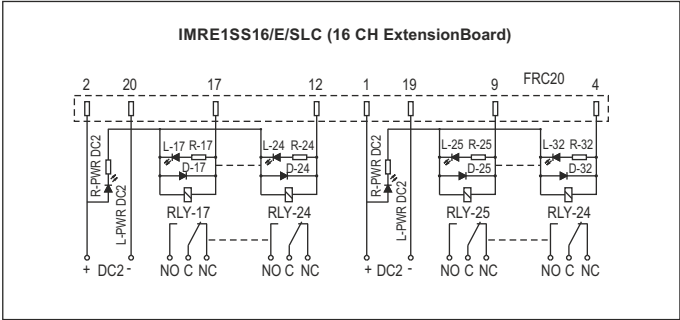
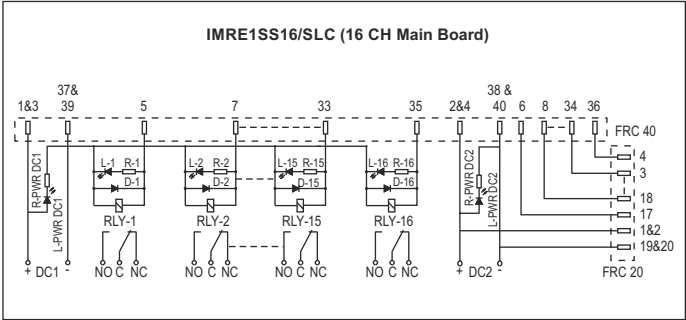
IMRE1SS16/E/SLC

With Soldered Relays

IMRE1S16/SLC

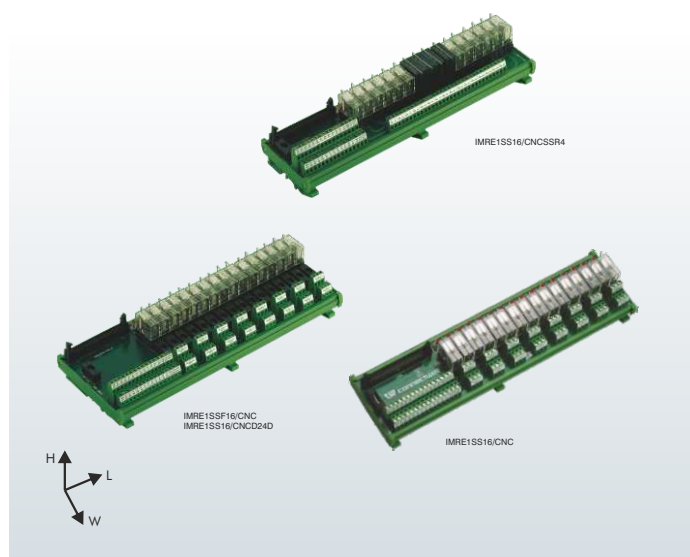
IMRE1S16/E/SLC

CIRCUIT DIAGRAM



CNC INTERFACE MODULES

IMRE1SS16/CNC and IMRE1SS16/CNCSSRx Interface Modules from Connectwell ease PLC wiring in CNC machines. These modules provide connection possibility for both the input and output side of a PLC in a single module and are compatible with various PLCs from Fanuc, GE, Mitsubishi, Schneider & Siemens.



RoHS

GENERAL DATA

Relay ON Indication	3 mm Red LED
Relay Protection	Using 1N4007 Freewheeling Diode.
Ambient Temperature (Operation)	-20° C ... 50° C
Mounting Types	DIN32 / DIN35 / DIN35-15 / PANEL
Housing Insulation Material	PVC / V0 Grade
Housing Colour	Green

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

IDC / FRC CONNECTOR DATA

Insulation Material	PBT, glass reinforced
Contact Material	Brass
Rated Current	2A
Contact Resistance	30m ohms maximum
Insulation Resistance	3000M ohms minimum
Dielectric withstanding Voltage	500VAC for 1 minute
Contact Type	1CO (SPDT) 24 VDC
Standard Coil Voltage	(Relay coil voltages like 6 VDC, 12 VDC, 48 VDC, 24 VAC, 110 VAC & 230 VAC etc. are available on request.)
Contact Material	AgCdO
Rated Current	10A @230 VAC; 10 @30 VDC

FUSE HOLDER DATA

Cap Design	Flat
Fuse Link Size	5 x 20 mm
Mounting Style	Horizontal
Rated Current	6.3 A

FUSE DATA

Fuse Size	5 x 20 mm
Fuse Type	Fast Blow / Slow Blow
Fuse Ratings (A)	0.1, 0.5, 0.6, 1, 2, 3, 4, 5, 6, 6.3

SSR INPUT DATA (Voltages other than specified below are available on request)

Control Voltage Range	5 VDC	12 VDC	24 VDC
Must Operate Voltage	4 VDC	9.6 VDC	19.2 VDC
Must Release Voltage	1 VDC	1 VDC	1 VDC
Max. Reverse Protection	-6 VDC	-14.4 VDC	-28.8 VDC
Max. Input Current	20 mA	20 mA	20 mA

SSR OUTPUT DATA

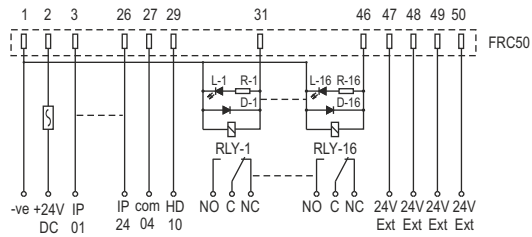
	DC Output	AC Output
Contact Type	1NO (SPST)	1NO (SPST)
Load Voltage Range	3 to 125 VDC	75 to 400 VAC
Load Current Range	0.1 to 2A	0.1 to 3A
Max. Surge Current	10 times of rated current	10 times of rated current
Max. Leakage Current	0.1 mA	1.5 mA
Max. On State Voltage Drop	1.5 VDC	1.5 VAC
Turn-on Time (Zero Cross turn on)	1 ms	1/2 Cycle + 1 ms
Turn-off Time	1 ms	1/2 Cycle + 1 ms
Max. Transient Voltage	125 Vpk	600 Vpk

ORDERING INFORMATION

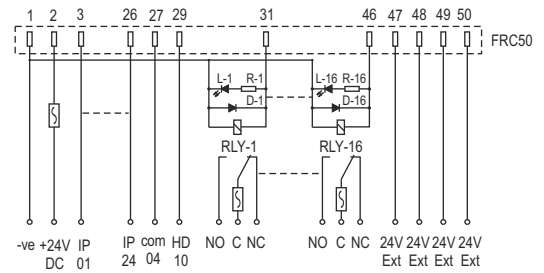
Module Type	CNC Module	CNC SSR Module	CNC with Fuse Module	CNC SSR with Fuse Module
With Pluggable Relays	IMRE1SS16/OM/CNC	IMRE1SS16/CNCSSRx	IMRE1SSF16/OM/CNC	IMRE1SSF16/CNCD24D
With Soldered Relays	IMRE1S16/OM/CNC	IMRE1S16/CNCSSRx	IMRE1SF16/OM/CNC	IMRE1SF16/CNCD24D
x - no. of SSR				

CIRCUIT DIAGRAM

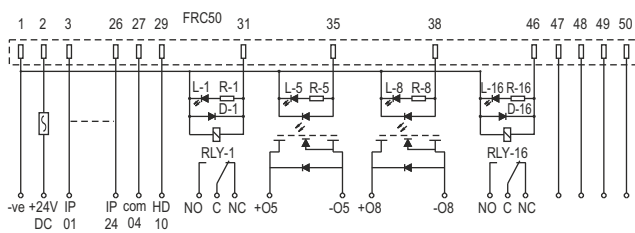
IMRE1SS16/CNC



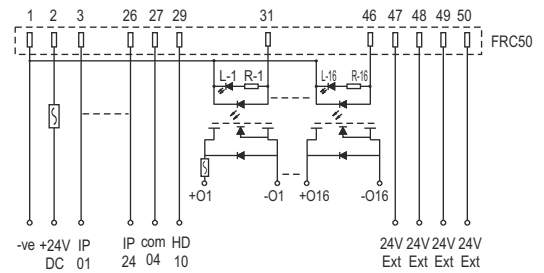
IMRE1SSF16/CNC



IMRE1SS16/CNCSSRx



IMRE1SSF16/CNCD24D



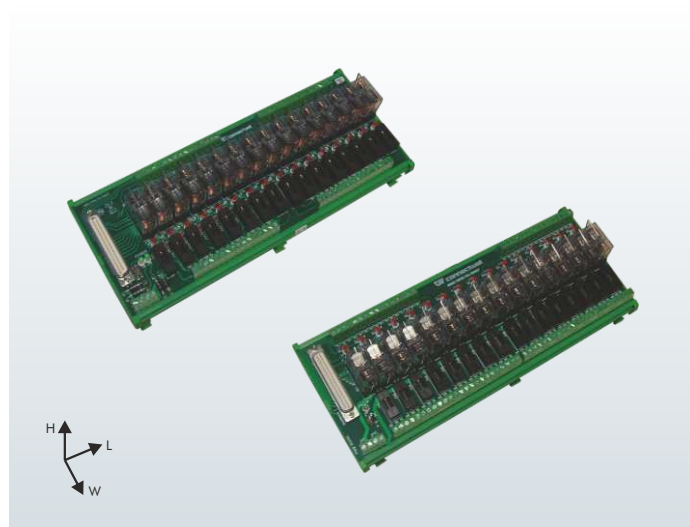
DIGITAL INPUT & DIGITAL OUTPUT RELAY MODULES

These modules act as input or output modules for PLCs or other digital controllers. The digital output (DO) modules have the added convenience of providing trigger / switching signal to the relays from the PLC by use of a DSUB Connector.

The digital input (DI) modules provide isolation between two wire field sensors and the input of controllers like PLC. In addition the connection between the digital input module and the PLC is through a convenient DSUB Connector.

Both of these modules have an added safety feature of glass fuses. The power terminals on the modules help provide power signal to either the load (DO) or the sensors (DI).

In addition to the DSUB Connector, standard PCB Terminal Blocks are also provided for connecting the input signals.



RoHS

GENERAL DATA

Number of Channels	16
Width W (mm)	120
Height H (mm)	74
Length L (mm)*	261
Power ON Indication	3 mm Red LED
Relay Protection	Using 1N4007 Freewheeling Diode.
Ambient Temperature (Operation)	-20° C ... 50° C
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **
Housing Insulation Material	PVC / V0 Grade
Housing Colour	Green

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

DSUB CONNECTOR ELECTRICAL RATINGS

Contact Resistance	15 m ohm maximum at 500 VDC
Current Rating	3A Max
Operation Voltage	250 VAC
Dielectric Withstanding Voltage	1000 VAC for one minute
Number of Contacts	37 (This varies based on no. of channels)

DSUB CONNECTOR MATERIALS

Insulator	PBT, Rated UL94V-0
Contacts	Brass
Shell	Steel
Rivet, Boardlock	Copper Alloy

* Module Lengths mentioned are for RAIL Mounting option only.
The lengths may vary for PANEL Mounting

RELAY CONTACT DATA

Contact Type	1 CO	2 CO
Contact Material	Ag Alloy	Ag Alloy
Rated Current	10A @250 VAC; 10A @30 VDC	5A @250 VAC; 5A @24 VDC
Max. Switching Voltage	400 VAC, 250 VDC	400 VAC, 250 VDC
Timing Data	18,000 operations/hr	18,000 operations/hr
Mechanical Life expectancy	Min. 20 x 10 ⁶ operations	Min. 20 x 10 ⁶ operations
Electrical Life expectancy	Min. 100 x 10 ³ operations	Min. 100 x 10 ³ operations
Relay Approvals	   	

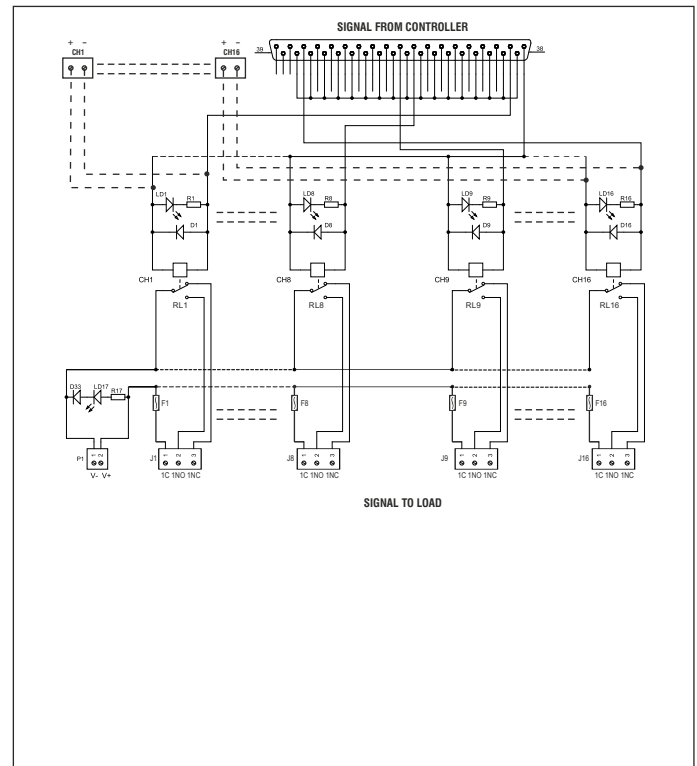
RELAY COIL DATA

Rated Coil Voltage	24 VDC
Coil Resistance (ohms)	1100
Rated Coil Current (mA)	21.8
Must Operate Voltage	16.8 V
Must Release Voltage	2.4 V
Max. Voltage	39.6 V

** PANEL Mounting relay modules are available on request.
Please use the suffix -P with the cat. no. for ordering.

ORDERING INFORMATION

Type of Module	With Pluggable Relays
16 Channel DI Module	IMRE/DI16/24/DM37
16 Channel DO Module	IMRE/DO16/24/DM37



D-SUB PIN ASSIGNMENT (DO MODULE)

CHANNEL	DB1	FIELD TERMINAL
CH1	18	1A 1B 1C
CH2	17	2A 2B 2C
CH3	16	3A 3B 3C
CH4	15	4A 4B 4C
CH5	14	5A 5B 5C
CH6	13	6A 6B 6C
CH7	12	7A 7B 7C
CH8	11	8A 8B 8C
CH9	10	9A 9B 9C
CH10	9	10A 10B 10C
CH11	8	11A 11B 11C
CH12	7	12A 12B 12C
CH13	6	13A 13B 13C
CH14	5	14A 14B 14C
CH15	4	15A 15B 15C
CH16	3	16A 16B 16C

DB1_PIN 1, 38 & 39: GND, PIN 19, 37, 2 & 20: NULL

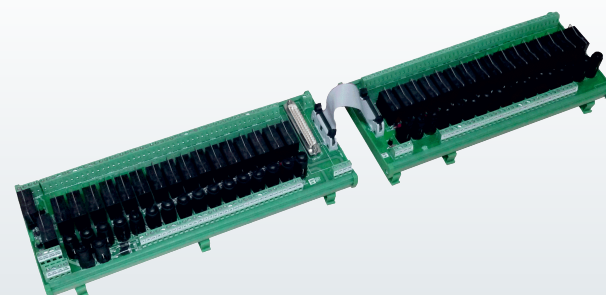
32 CHANNEL DIGITAL INPUT MODULE

These modules act as input or output modules for PLCs or other digital controllers. The digital output (DO) modules have the added convenience of providing trigger / switching signal to the relays from the PLC by use of a DSUB Connector.

The digital input (DI) modules provide isolation between two wire field sensors and the input of controllers like PLC. In addition the connection between the digital input module and the PLC is through a convenient DSUB Connector.

Both of these modules have an added safety feature of glass fuses. The power terminals on the modules help provide power signal to either the load (DO) or the sensors (DI).

In addition to the DSUB Connector, standard PCB Terminal Blocks are also provided for connecting the input signals.



RoHS

GENERAL DATA

Cat. No.	IMRE/DI32/24/DM37	IMRE/DI32/24/DM37E
Number of Channels	16	16
Width W (mm)	123	123
Height H (mm)	74	74
Length L (mm)*	310	270
Power ON Indication	3 mm Red LED	
Relay Protection	Using 1N4007 Freewheeling Diode.	
Ambient Temperature (Operation)	-20° C ... 50° C	
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **	
Housing Insulation Material	PVC / V0 Grade	
Housing Colour	Green	

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

DSUB CONNECTOR ELECTRICAL RATINGS

Contact Resistance	15 m ohm maximum at 500 VDC
Current Rating	3A Max
Dielectric Withstanding Voltage	1000 VRMS
Number of Contacts	37

IDC/FRC CONNECTOR DATA

Contact Resistance	30 m ohm maximum at 500 VDC
Current Rating	1.5 A
Dielectric Withstanding Voltage	500 VRMS
Number of Contacts	20

RELAY CONTACT DATA

Contact Type	1 CO	2 CO
Contact Material	Ag Alloy	Ag Alloy
Rated Current	10A @250 VAC; 10A @30 VDC	5A @250 VAC; 5A @24 VDC
Max. Switching Voltage	400 VAC, 250 VDC	400 VAC, 250 VDC
Timing Data	18,000 operations/hr	18,000 operations/hr
Mechanical Life expectancy	Min. 20 x 10 ⁶ operations	Min. 20 x 10 ⁶ operations
Electrical Life expectancy	Min. 100 x 10 ³ operations	Min. 100 x 10 ³ operations
Relay Approvals	   	

RELAY COIL DATA

Rated Coil Voltage	24 VDC
Coil Resistance (ohms)	1100
Rated Coil Current (mA)	21.8
Must Operate Voltage	16.8 V
Must Release Voltage	2.4 V
Max. Voltage	31.2 V

ORDERING INFORMATION

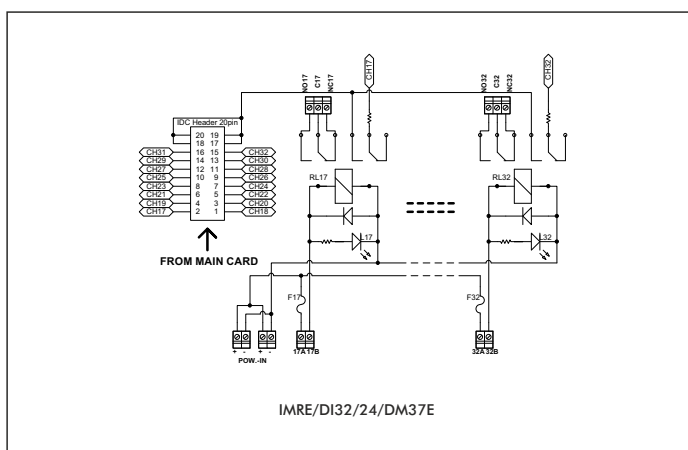
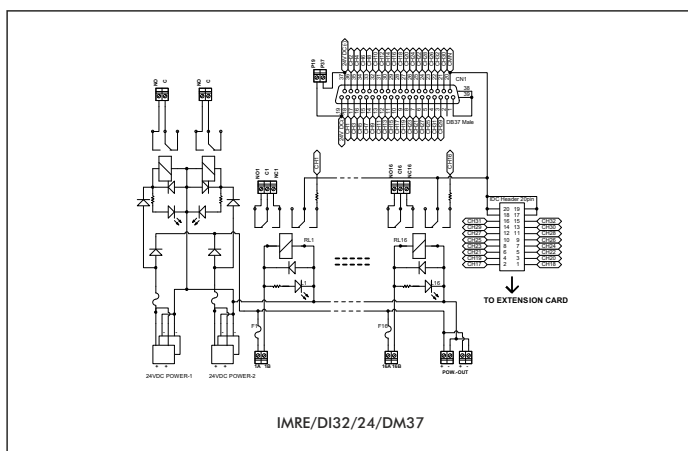
Cat. No.	Description
IMRE/DI32/24/DM37	2CO 32(MAIN16CH)24DC BASE DI DB37-FBM217
IMRE/DI32/24/DM37E	2CO 32(EXTN16CH)24DC BASEDI+CBLE-FBM217

D-SUB PIN ASSIGNMENT (DO MODULE)

CHANNEL	DB1	FIELD TERMINAL
CH1	18	1A 1B
CH2	36	2A 2B
CH3	17	3A 3B
CH4	35	4A 4B
CH5	16	5A 5B
CH6	34	6A 6B
CH7	15	7A 7B
CH8	33	8A 8B
CH9	14	9A 9B
CH10	32	10A 10B
CH11	13	11A 11B
CH12	31	12A 12B
CH13	12	13A 13B
CH14	30	14A 14B
CH15	11	15A 15B
CH16	29	16A 16B
CH17	10	17A 17B
CH18	28	18A 18B
CH19	9	19A 19B
CH20	27	20A 20B
CH21	7	21A 21B
CH22	25	22A 22B
CH23	8	23A 23B
CH24	26	24A 24B
CH25	5	25A 25B
CH26	23	26A 26B
CH27	6	27A 27B
CH28	24	28A 28B
CH29	3	29A 29B
CH30	21	30A 30B
CH31	4	31A 31B
CH32	22	32A 32B

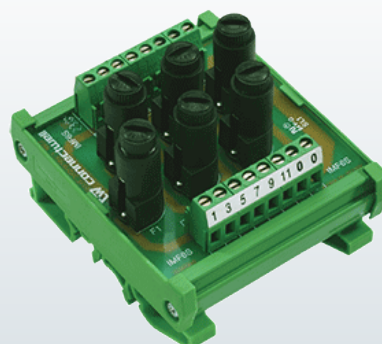
COMMON FOR CH1 to CH3220
SHORTED TO SHIELD1
NOT CONNECTED2
TERMINATED ON PCB TB19
TERMINATED ON PCB TB37

CIRCUIT DIAGRAM



STANDARD FUSE MODULES

- Suitable for fuse range from 0.1 A to 6.3 A
- Replaceable fuses with simple to operate vertical fuse holders
- Fast Blow and Slow Blow fuses available as standard
- Ease of connection with the use of standard screw connection Terminal Blocks
- Mounting option available:
DIN Rail mounting & Panel mounting
- Housed in V0 fire retardant grade PVC mounting track
- LED warning possible for fuse blow indication



RoHS

OUTPUT DATA

Number of Channels	2	4	8	16
Width W (mm)	120	120	120	120
Height H (mm)	74	74	74	74
Length L (mm)	26	48	93	183
Ambient Temperature (Operation)	-20° C ... 50° C			
Mounting Types	DIN32 / DIN35 / DIN35-15 / PANEL			
Housing Insulation Material	PVC / V0 Grade			
Housing Colour	Green			

CONNECTION SPECIFICATIONS

Type of Connection	Screw Connection
Min. Wire Size	0.5 sq.mm
Max. Wire Size	2.5 sq.mm
Min. Wire Size(AWG)	30 AWG
Max. Wire Size(AWG)	14 AWG
Wire Stripping Length	8.3 mm
Torque	4.5 lb-in
Torque	0.5 Nm

FUSE SPECIFICATIONS

Fuse Type	Fast Blow / Slow Blow
Fuse Rating Available	0.1, 0.5, 0.63, 1, 2, 3, 4, 5, 6, 6.3 A
Fuse Size	5 x 20 mm

FUSE HOLDER SPECIFICATIONS

Mounting Type	PCB-type Horizontal / Vertical
Terminals Type	Solder-type
Cap Design	Flat / Screw in with Coin slot
Fuse Size	5 x 20 mm
Contact Material	Brass Tin Plated
Insulation	Polymide G.F
Rated Current	6.3 A
Contact	10 m ohms max.

ORDERING INFORMATION

of Channels

Cat. No.

2

IMF/2/S

4

IMF/4/S

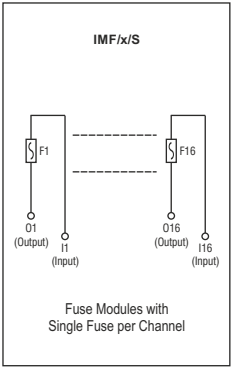
8

IMF/8/S

16

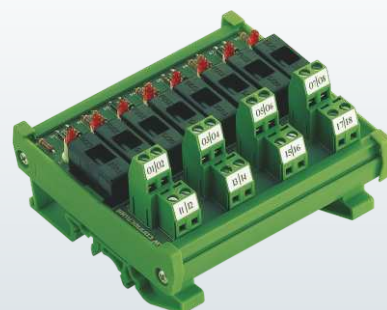
IMF/16/S

CIRCUIT DIAGRAM



FUSE MODULES WITH FUSE FAIL INDICATION

- Suitable for fuse range from 0.1 A to 6.3 A
- Replaceable fuses with simple to operate vertical fuse holders
- Fast Blow and Slow Blow fuses available as standard
- Ease of connection with the use of standard screw connection Terminal Blocks
- Mounting option available:
DIN Rail mounting & Panel mounting
- Housed in V0 fire retardant grade PVC mounting track
- LED warning possible for fuse blow indication



RoHS

OUTPUT DATA

Number of Channels	2	4	8	16
Width W (mm)	88	88	88	88
Height H (mm)	74	74	74	74
Length L (mm)	26	50	93	183
Ambient Temperature (Operation)	-20° C ... 50° C			
Mounting Types	DIN32 / DIN35 / DIN35-15 / PANEL			
Housing Insulation Material	PVC / V0 Grade			
Housing Colour	Green			

CONNECTION SPECIFICATIONS

Type of Connection	Screw Connection
Min. Wire Size	0.5 sq.mm
Max. Wire Size	2.5 sq.mm
Min. Wire Size(AWG)	30 AWG
Max. Wire Size(AWG)	14 AWG
Wire Stripping Length	8.3 mm
Torque	4.5 lb-in
Torque	0.5 Nm

FUSE SPECIFICATIONS

Fuse Type	Fast Blow / Slow Blow
Fuse Rating Available	0.1, 0.5, 0.63, 1, 2, 3, 4, 5, 6, 6.3 A
Fuse Size	5 x 20 mm

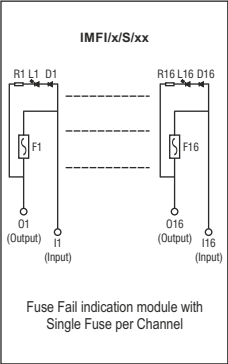
FUSE HOLDER SPECIFICATIONS

Mounting Type	PCB-type Horizontal / Vertical
Terminals Type	Solder-type
Cap Design	Flat / Screw in with Coin slot
Fuse Size	5 x 20 mm
Contact Material	Brass Tin Plated
Insulation	Polymide G.F
Rated Current	6.3 A
Contact	10 m ohms max.

ORDERING INFORMATION

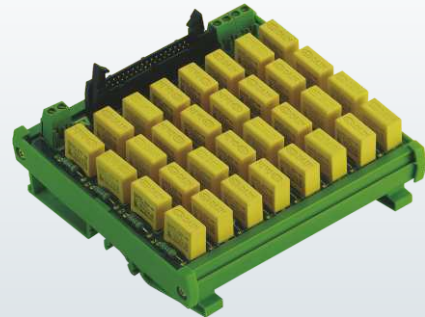
# of Channels		Cat. No.
2	24 V AC/DC	IMFI/2/S/24
4	24 V AC/DC	IMFI/4/S/24
8	24 V AC/DC	IMFI/8/S/24
16	24 V AC/DC	IMFI/16/S/24
2	110 V AC/DC	IMFI/2/S/110
4	110 V AC/DC	IMFI/4/S/110
8	110 V AC/DC	IMFI/8/S/110
16	110 V AC/DC	IMFI/16/S/110
2	230 V AC/DC	IMFI/2/S/230
4	230 V AC/DC	IMFI/4/S/230
8	230 V AC/DC	IMFI/8/S/230
16	230 V AC/DC	IMFI/16/S/230

CIRCUIT DIAGRAM



32 CHANNEL RC MODULE

- 16/ 32 Channel resistor - capacitor (RC) circuit built-in
- Highly compact in size
- Other capacitor values are also available on request
- Din rail & Panel mounting option available



RoHS

OUTPUT DATA

Number of Channels	32
Description	(0.22 μ F 275VAC, 47 Ω ½ Watt) Resistor-Capacitor(RC) Module Rail Mount (0.22 μ F 275VAC, 470 Ω 2 Watt) Resistor-Capacitor(RC) Module Rail Mount (0.22 μ F 275VAC, 1K Ω 2Watt) Resistor-Capacitor(RC) Module Rail Mount
Width	128
Height	120
Depth	74
Ambient Operating Temperature	-20 to 50 °C
Mounting Possibility	DIN32 / DIN35 / DIN35-15 / PANEL
Housing Material	PVC / V0 Grade
Housing Colour	Green

CONNECTION SPECIFICATIONS

Type of Connection	Screw Connection
Min. Wire Size	0.5 sq.mm
Max. Wire Size	2.5 sq.mm
Min. Wire Size(AWG)	30 AWG
Max. Wire Size(AWG)	14 AWG
Wire Stripping Length	8.3 mm
Torque	4.5 lb-in
Torque	0.5 Nm

RC SPECIFICATIONS

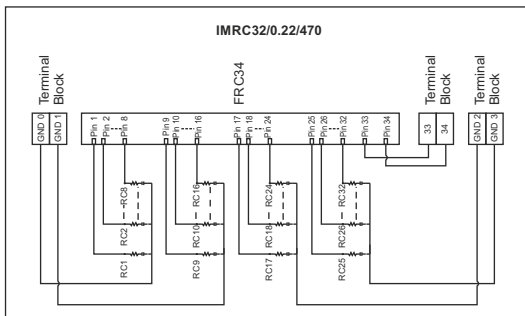
Capacitor Type	MPX(Class-X2)
Capacitance Value	0.22 microFarad ,275 V
Capacitance Tolerance	+/- 20%
Resistance Value	470 ohm 2 Watt / 1k ohm 2 watt

IDC/RFC CONNECTOR SPECIFICATION

Housing Material	PBT,glass reinforced
Housing Colour	Black/Gray
Contact Material	Brass
Rated Current / Pin	2A
Contact Resistance	30m ohms maximum
Dielectric Withstanding Voltage	500VAC for 1 minute
Insulation Resistance	3000M ohms minimum
IDC / FRC Connector Approvals	

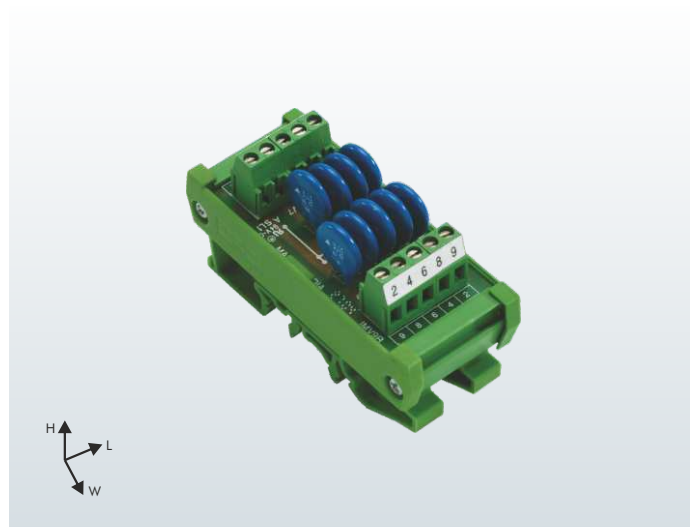
ORDERING INFORMATION

Module Specifications		Cat. No.
0.22 μ F 275 VAC, 470 Ω ½ W	16 Channel	IMRC16/0.22/470
0.22 μ F 275 VAC, 470 Ω 2 W	16 Channel	IMRC16/0.22/470/2W
0.22 μ F 275 VAC, 1K Ω 2 W	16 Channel	IMRC16/0.22/1k/2W
0.22 μ F 275 VAC, 470 Ω ½ W	32 Channel	IMRC32/0.22/470
0.22 μ F 275 VAC, 470 Ω 2 W	32 Channel	IMRC32/0.22/470/2W
0.22 μ F 275 VAC, 1K Ω 2 W	32 Channel	IMRC32/0.22/1k/2W

CIRCUIT DIAGRAM

VARISTOR MODULES

- Connectwell Varistor module is used to protect the device from line surges and over voltages
- Ease of connection with the use of standard screw connection Terminal Blocks
- Available with individual and common anode standard configurations
- Available with various varistor voltage ratings
- Housed in V0 fire retardant grade PVC mounting track



RoHS

OUTPUT DATA

Number of channels	3	5	8	9	14
Width W (mm)	88	88	88	88	88
Height H (mm)	65	65	65	65	65
Length L (mm) *	31	27	53	37	53
Ambient Temperature (Operation)	-20° C ... 50° C				
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **				
Housing insulation material	PVC / V0 Grade				
Housing Colour	Green				

VARISTOR DATA

Number of channels	3	5	8914
Varistor Type	14mm Diameter		
Varistor Rating ***	50V	130V	275V
Maximum Allowable Voltage AC	50	130	275
Maximum Allowable Voltage DC	65	170	350
Varistor Voltage	59~71	153~187	315~385
Clamping Voltage _{ev}	135	340	710
Rated Wattage (Max.)W	0.6		
Maximum Energy (2 μs)joule	15	34	71
Surge Current (8/20 μs) A	4500		
Response Time	< 25 ns		
CONFIGURATIONS			
Varistor Modules with Single Varistor per Channel : IMV/x/S/xx			
Varistor Modules with Common anode configuration : IMV/x/R/xx			

CONNECTION DATA

Type of connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

ORDERING INFORMATION

Single Varistor Configuration

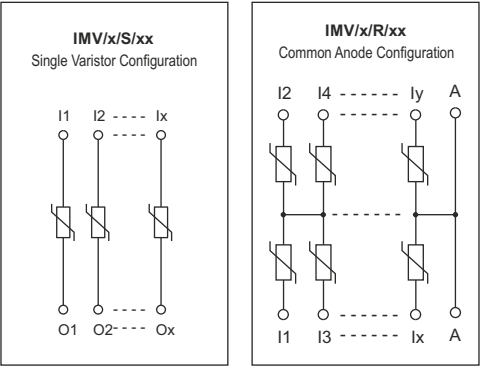
# of Channels	50 V	130 V	275 V
3	IMV/3/S/50	IMV/3/S/130	IMV/3/S/275
8	IMV/8/S/50	IMV/8/S/130	IMV/8/S/275

Common Anode Configuration

# of Channels	50 V	130 V	275 V
5	IMV/5/R/50	IMV/5/R/130	IMV/5/R/275
9	IMV/9/R/50	IMV/9/R/130	IMV/9/R/275
14	IMV/14/R/50	IMV/14/R/130	IMV/14/R/275

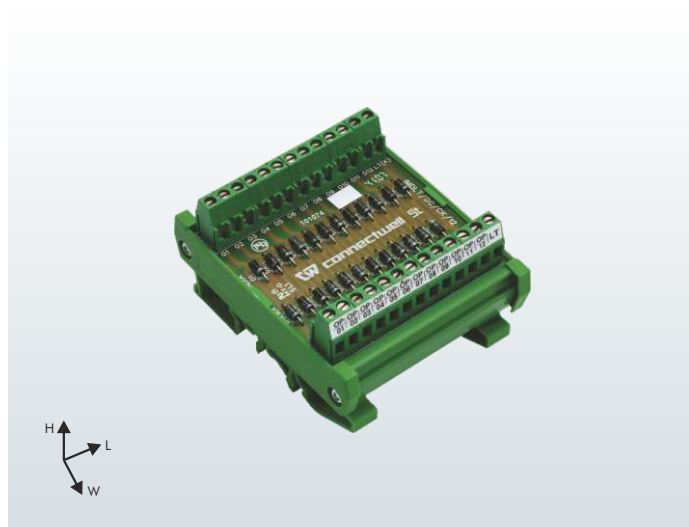
- * Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting.
- ** PANEL mounting modules are available on request. Please use the suffix -P with the above cat. no. for ordering.
- *** Varistor voltages are indicative of the range available. All other varistor voltages for 14 mm & 20 mm varistors are available on request.

CIRCUIT DIAGRAM



DIODE & LAMP TEST MODULES

- Connectwell Diode & Lamp Test modules is used for testing of indicating lamps in cabinet at a glance or an individual
- Housed in V0 fire retardant grade mounting track
- Ease of connection with the use of standard screw connection PCB Terminal Blocks
- Available with individual, common anode and common cathode standard diode configurations
- Lamp test configurations for DC and AC applications available as standard
- Mounting options available:
DIN Rail mounting & Panel mounting



RoHS

GENERAL DATA

Ambient Temperature (Operation)	-20° C ... 50° C
Mounting Types *	DIN32 / DIN35 / DIN35-15 / PANEL *
Housing Insulation Material	PVC / V0 Grade
Housing Colour	Green

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

DIODE DATA

Diode Type	1N4007
Maximum Recurrent Peak Reverse Voltage(VRRM)	1000V
Maximum DC Blocking Voltage(VDC)	1000V
Maximum Average Forward Rectified Current at TA = 75°C	1A
Maximum Instantaneous Forward Voltage at 1.0A DC	1.1V
Maximum DC reverse current at rated DC blocking voltage	500 μ A @ TA = 25°C and 30 μ A @ TA = 100°C

DIMENSIONAL DATA

Number of Channels	4	5	6	8	10	12	14	16	20	22	24
Width W (mm)	88	88	88	88	88	88	88	88	88	88	88
Height H (mm)	51	51	51	51	51	51	51	51	51	51	51
Length L (mm) **											
Individual Diode Modules	32	-	-	53	63	73	-	95	113	-	133
Common Anode Diode Modules	-	-	32	-	-	-	53	58	73	73	-
Common Cathode Diode Modules	-	-	32	-	-	-	53	-	-	73	-
Individual Lamp Test Modules	-	63	76	-	113	-	-	-	-	-	-
Common Anode Lamp Test Modules	-	38	-	-	63	73	-	90	-	-	138
Common Cathode Lamp Test Modules	-	38	-	57	63	73	-	-	-	-	-
AC Lamp Test Modules	-	40	-	-	63	-	-	-	-	-	-

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

ORDERING INFORMATION

Diode Modules

# of Channels	Individual Diode Modules	Common Anode Diode Modules	Common Cathode Diode Modules
4	IMD/S/4	-	-
6	-	IMD/CA/6	IMD/CK/6
8	IMD/S/8	-	-
10	IMD/S/10	-	-
12	IMD/S/12	-	-
14	-	IMD/CA/14	IMD/CK/14
16	IMD/S/16	IMD/CA/16	-
20	IMD/S/20	IMD/CA/20	-
22	-	IMD/CA/22	IMD/CK/22
24	IMD/S/24	-	-

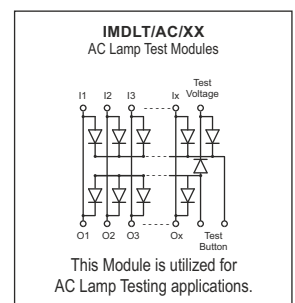
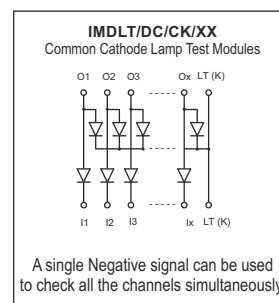
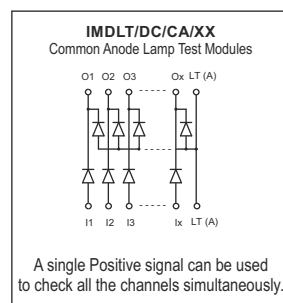
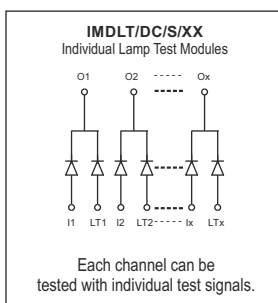
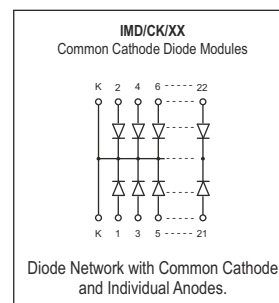
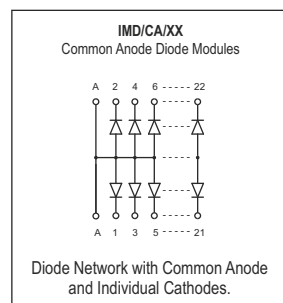
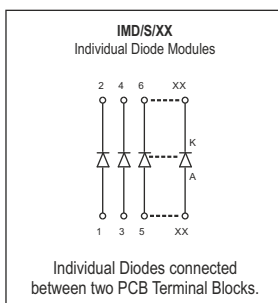
DC Lamp Test Modules

# of Channels	Individual Lamp Test Modules	Common Anode Lamp Test Modules	Common Cathode Lamp Test Modules
5	IMDLT/DC/S/5	IMDLT/DC/CA/5	IMDLT/DC/CK/5
6	IMDLT/DC/S/6	-	-
8	IMDLT/DC/S/6	-	IMDLT/DC/CK/8
10	IMDLT/DC/S/10	IMDLT/DC/CA/10	IMDLT/DC/CK/10
12	-	IMDLT/DC/CA/12	IMDLT/DC/CK/12
16	-	IMDLT/DC/CA/16	-
24	-	IMDLT/DC/CA/24	-

AC Lamp Test Modules

# of Channels	Cat. No.
5	IMDLT/AC/5
10	IMDLT/AC/10
22	IMDLT/AC/22

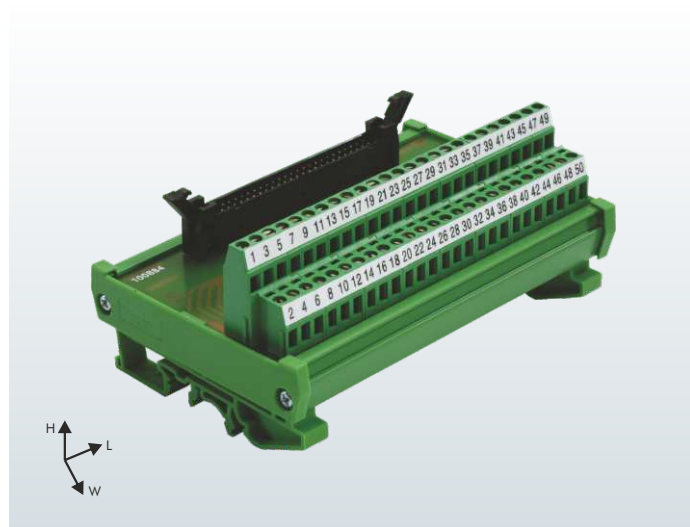
CIRCUIT DIAGRAM



IDC / FRC MODULES

- Housed in V0 fire retardant grade PVC mounting track
- Ease of connection with the use of standard screw connection PCB Terminal Blocks or Screwless Terminal Blocks
- Maximum current rating of 2 A per pin
- Available with all standard pin configurations from 10 to 64
- Available with LED indication
- Possibility of mounting circuit components between the pins of IDC connectors
- Mounting options available: DIN Rail mounting & Panel mounting

Connectwell IDC / FRC modules facilitate quick connections of initiators, actuators and sensors to PLC I/O modules with the aid of pre assembled cable harness.



RoHS

GENERAL DATA

Ambient Temperature (Operation)	-20° C ... 50° C
Mounting Types *	DIN32 / DIN35 / DIN35-15 / PANEL *
Housing Insulation Material	PVC / V0 Grade
Housing Colour	Green
Component Mounting Hole Ømm (optional)	1 mm

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

DIMENSIONAL DATA

Number of Channels / Pins	10	14	16	20	26	34	40	50	60	64
Width W (mm)	88	88	88	88	88	88	88	88	88	88
Height H (mm)	65	65	65	65	65	65	65	65	65	65
Length L (mm) ***	41	47	52	62	77	97	113	137	163	173

IDC / FRC CONNECTOR DATA**

Insulation Material	PBT, glass reinforced
Contact Material	Brass
Rated Current	2A
Contact Resistance	30m ohms maximum
Insulation Resistance	3000M ohms minimum
Dielectric Withstanding Voltage	500VAC for 1 minute
Pin Configurations Available	10,14,16,20,26,34,40,50,60 & 64
Approvals	

* PANEL mounting modules are available on request. Please use the suffix -P with the above cat. no. for ordering.

** Standard IDC Modules available with Long Latch IDC Connectors, Short Latch IDC Connectors available on request.

*** Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for Panel Mounting.

CONFIGURATIONS **

IDC Modules with 1: 1 Screw Connections: IMIDC/xx/S/L

IDC Modules with 1: 1 Spring Connections: IMIDC/xx/SC/L

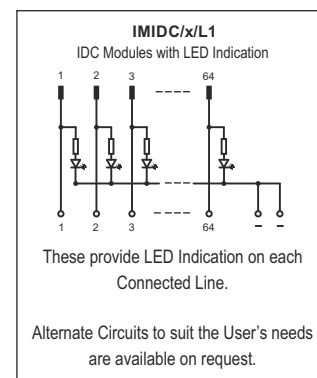
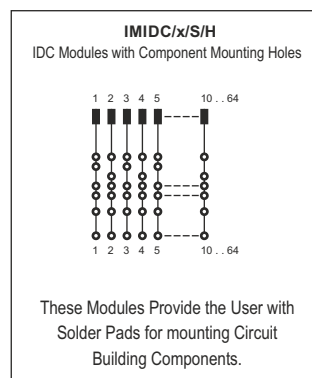
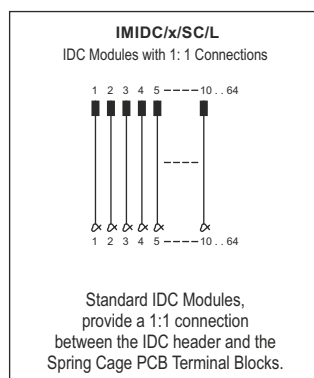
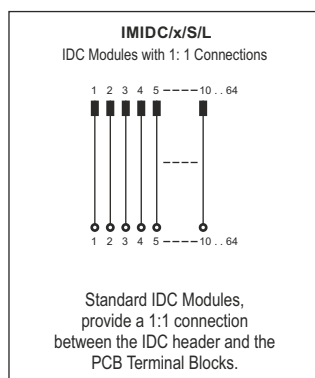
IDC Modules with Component Mounting Holes: IMIDC/xx/H/L

(with 5 component mounting holes / channel)

IDC Modules with LED Indication: IMIDC/xx/L1/L

ORDERING INFORMATION

# of Pins	With 1:1 connections (Standard)	With 1:1 connections (Spring Cage)	With Component Mounting Holes	With LED Indication
10	IMIDC/10/S/L	IMIDC/10/SC/L	IMIDC/10/H/L	IMIDC/10/L1/L
14	IMIDC/14/S/L	IMIDC/14/SC/L	IMIDC/14/H/L	IMIDC/14/L1/L
16	IMIDC/16/S/L	IMIDC/16/SC/L	IMIDC/16/H/L	IMIDC/16/L1/L
20	IMIDC/20/S/L	IMIDC/20/SC/L	IMIDC/20/H/L	IMIDC/20/L1/L
26	IMIDC/26/S/L	IMIDC/26/SC/L	IMIDC/26/H/L	IMIDC/26/L1/L
34	IMIDC/34/S/L	IMIDC/34/SC/L	IMIDC/34/H/L	IMIDC/34/L1/L
40	IMIDC/40/S/L	IMIDC/40/SC/L	IMIDC/40/H/L	IMIDC/40/L1/L
50	IMIDC/50/S/L	IMIDC/50/SC/L	IMIDC/50/H/L	IMIDC/50/L1/L
60	IMIDC/60/S/L	IMIDC/60/SC/L	IMIDC/60/H/L	IMIDC/60/L1/L
64	IMIDC/64/S/L	IMIDC/64/SC/L	IMIDC/64/H/L	IMIDC/64/L1/L

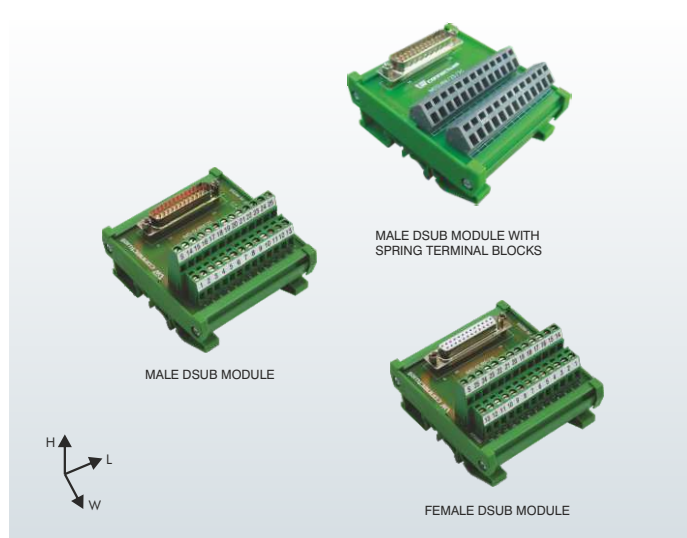
CIRCUIT DIAGRAM

MALE & FEMALE DSUB MODULES

- Housed in V0 fire retardant grade PVC mounting track
- Ease of connection with the use of standard screw connection PCB Terminal Blocks or Screwless Terminal Blocks
- Maximum current rating of 3 A per pin
- Available with male or female DSUB connectors.
- Available with all standard pin configurations from 9 to 50
- Available with LED indication
- Possibility of mounting circuit components between the pins of DSUB connectors
- Mounting options available: DIN Rail mounting & Panel mounting

Connectwell DSUB modules facilitate quick connections of initiators, actuators and sensors to PLC I/O modules with the aid of pre assembled cable harness.

RoHS



GENERAL DATA

Number of Channels	9	15	25	37	50
Width (mm)	88	88	88	88	88
Height (mm)	65	65	65	65	65
Length (mm)*	43	55	81	112	148
Ambient Temperature (Operation)	-20° C ... 50° C				
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **				
Housing Insulation Material	PVC / V0 Grade				
Housing Colour	Green				
Component Mounting Hole Ømm (optional)	1 mm				

CONNECTION DATA

Type of Connection	Screw Connection	Spring Connection
Rated Current / Voltage	16 A / 300 V	15 A / 300 V
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG	28 -12 AWG
Stripping Length	8.3 mm	8 mm
Torque	4.5 lb-in / 0.5 Nm	-

DSUB CONNECTOR ELECTRICAL RATINGS

Contact Resistance	15 m ohm maximum at 500 VDC
Current Rating	3A Max
Operation Voltage	250 VAC
Dielectric Withstanding Voltage	1000 VAC for one minute
Number of Contacts	9, 15, 25, 37, 50

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

DSUB CONNECTOR MATERIALS

Insulator	PBT, Rated UL94V-0
Contacts	Brass
Shell	Steel
Rivet, Boardlock	Copper Alloy

CONFIGURATIONS

All DSUB Configurations available with Male or Female DSUB Connectors.

- 1) DSUB Modules with 1: 1 Connections between discrete screw terminals and DSUB pin. (Male: IMDSUBM/xx/S & Female: IMDSUBF/xx/S)
- 2) DSUB Modules with 1: 1 Connections between discrete spring terminals and DSUB pin. (Male: IMDSUBM/xx/S & Female: IMDSUBF/xx/S)
- 3) DSUB Modules with 5 Component Mounting Holes / Channel.(Male: IMDSUBM/xx/H & Female: IMDSUBF/xx/H)
- 4) DSUB Modules with LED Indication. (Male: IMDSUBM/xx/L1 & Female: IMDSUBF/xx/L1)

ORDERING INFORMATION

DSUB Male Modules : IMDSUBM

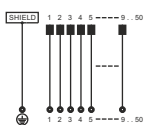
# of Pins	With 1:1 connections (Standard)	With 1:1 connections (Spring Cage)	With Component Mounting Holes	With LED Indication
9	IMDSUBM/9/S	IMDSUBM/9/SC	IMDSUBM/9/H	IMDSUBM/9/L1
15	IMDSUBM/15/S	IMDSUBM/15/SC	IMDSUBM/15/H	IMDSUBM/15/L1
25	IMDSUBM/25/S	IMDSUBM/25/SC	IMDSUBM/25/H	IMDSUBM/25/L1
37	IMDSUBM/37/S	IMDSUBM/37/SC	IMDSUBM/37/H	IMDSUBM/37/L1
50	IMDSUBM/50/S	IMDSUBM/50/SC	IMDSUBM/50/H	IMDSUBM/50/L1

DSUB Female Modules: IMDSUBF

# of Pins	With 1:1 connections (Standard)	With 1:1 connections (Spring Cage)	With Component Mounting Holes	With LED Indication
9	IMDSUBF/9/S	IMDSUBF/9/SC	IMDSUBF/9/H	IMDSUBF/9/L1
15	IMDSUBF/15/S	IMDSUBF/15/SC	IMDSUBF/15/H	IMDSUBF/15/L1
25	IMDSUBF/25/S	IMDSUBF/25/SC	IMDSUBF/25/H	IMDSUBF/25/L1
37	IMDSUBF/37/S	IMDSUBF/37/SC	IMDSUBF/37/H	IMDSUBF/37/L1
50	IMDSUBF/50/S	IMDSUBF/50/SC	IMDSUBF/50/H	IMDSUBF/50/L1

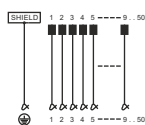
CIRCUIT DIAGRAM

IMDSUBM/x/S



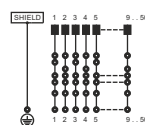
These are the Standard D-SUB Modules which provide 1:1 connection between Double Level Terminal Blocks and Male D-SUB Connectors.

IMDSUBM/x/SC



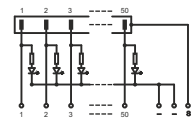
These are the Standard D-SUB Modules which provide 1:1 connection between Spring Cage PCB Terminal Blocks and Male D-SUB Connectors.

IMDSUBM/x/H



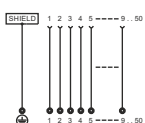
These D-SUB Modules provide the user with Solder Pads for mounting Circuit Building Components.

IMDSUBM/x/L1



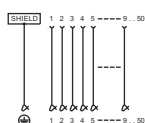
These provide LED Indication on each Connected Line. Alternate Circuits to suit the user's needs are available on request.

IMDSUBF/x/S



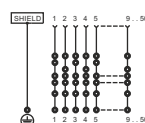
These are the Standard D-SUB Modules which provide 1:1 connection between Double level Terminal Blocks and Female D-SUB Connectors.

IMDSUBF/x/SC



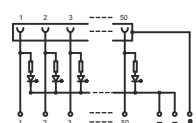
These are the Standard D-SUB Modules which provide 1:1 connection between Spring Cage PCB Terminal Blocks and Female D-SUB Connectors.

IMDSUBF/x/H



These D-SUB Modules provide the user with Solder Pads for mounting Circuit Building Components.

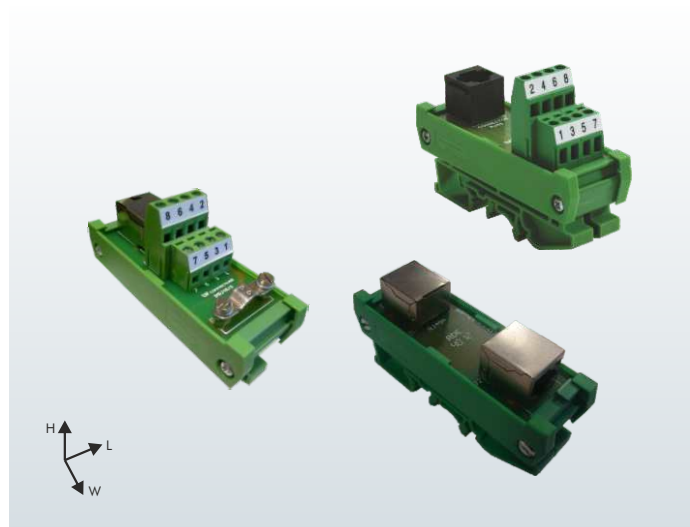
IMDSUBF/x/L1



These provide LED Indication on each Connected Line. Alternate Circuits to suit the user's needs are available on request.

RJ45 INTERFACE MODULES

- Ease of connection with the use of standard screw connection Terminal Blocks.
- Mounting Options available:
DIN Rail mounting & Panel mounting.
- Housed in V0 fire retardant grade PVC mounting track.
- Possibility of having standard / cross-over connection using the same module.
- Modules are also available with shielded RJ45 connectors.



RoHS

GENERAL DATA

	Non Shielded	Shielded
Width (mm)	88	88
Height (mm)	65	65
Length (mm)*	30	36
RJ45 Connector Orientation	Vertical / Horizontal	
Ambient Temperature (Operation)	-20° C ... 50° C	
Mounting Types **	DIN32 / DIN35 / DIN35-15 / PANEL **	
Housing Insulation Material	PVC / V0 Grade	
Housing Colour	Green	

CONNECTION DATA

Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

RJ45 CONNECTOR DATA

Voltage Rating	125 VAC RMS.
Current Rating	1.5 AMP
Contact Resistance	30 milli ohms max.
Housing Material	Glass Filled Polyester UL94V-0
Housing Color	Black
Contact Material	Phosphor Bronze (Internal Dia. 0.46mm)
Contact Plating	Gold Flash Plating Over Nickel
Shield Material	0.23 Thickness Brass with Nickel Plating

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

ORDERING INFORMATION

RJ45 Interface Module with Vertical RJ45 Connector

IMRJ45/8/V

RJ45 Interface Module with Horizontal RJ45 Connector

IMRJ45/8/H

RJ45 Interface Module with Horizontal RJ45 Shielded Connector

IMRJ45/8/HS

RJ45 Interface Module with Horizontal RJ45 Shielded Connector on both the side

IMRJ45/1:1/8/HS

RJ45 Interface Module with Horizontal RJ45 Shielded Connector & Shield Clamp

IMRJ45/8/HS-V1

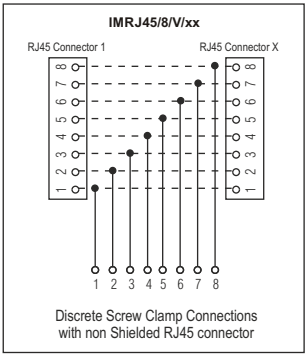
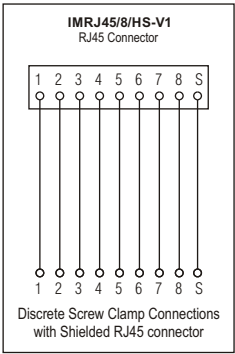
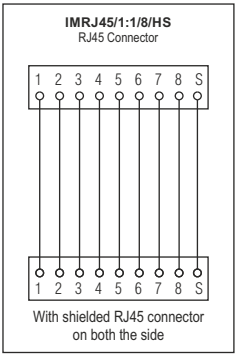
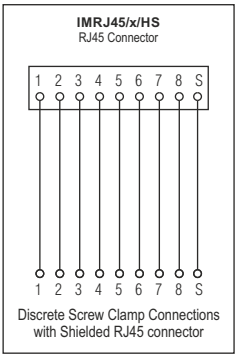
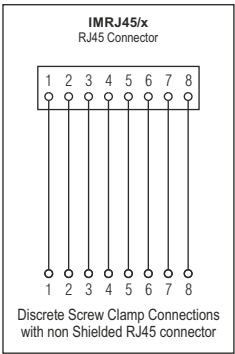
RJ45 Interface Module with Vertical RJ45 Shielded Connector on both the side

IMRJ45/1:1/8/V

6 Channel RJ45 Interface Module with Vertical RJ45 Connector

IMRJ45/8/V/6 (L: 83 x W:88 x H:65)

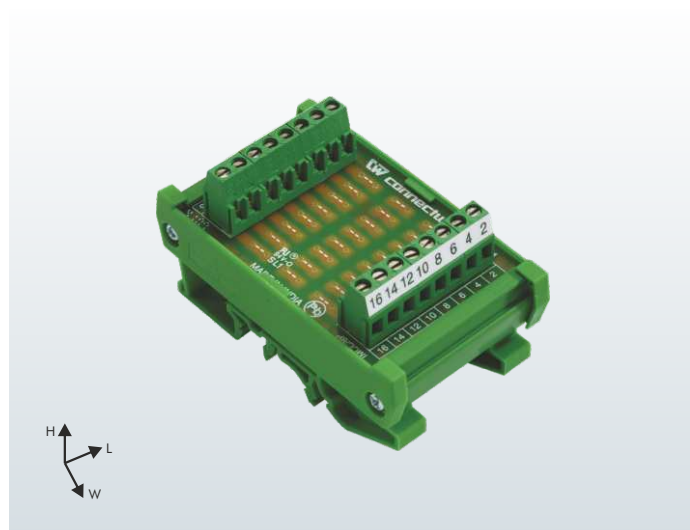
CIRCUIT DIAGRAM



COMPONENT CARRIER MODULES

- Connectwell Component Carrier module is used for the electronic circuit development for R&D purpose
- Ease of connection with the use of standard screw connection Terminal Blocks
- Mounting Options available:
DIN Rail mounting & Panel mounting
- Mounting Holes provided for discrete electronic components
- Maximum PCB track current rating of 10 A
- Housed in V0 fire retardant grade PVC mounting track

Connectwell DIN Rail & Panel mounting Component Carrier module is simple and attractive way for an experimenters to build an electronic circuit for prototype.



RoHS

GENERAL DATA							
Number of Channels		4	8	12	16	20	24
Width	W (mm)	88	88	88	88	88	88
Height	H (mm)	51	51	51	51	51	51
Length	L (mm)*	32	53	73	93	113	133
Component Mounting Holes / Channel		6					
Component Mounting Hole Ø mm		1.1 mm					
Rated Current Carrying Capacity / Channel		10 A (Max.)					
Ambient Temperature (Operation)		-20° C ... 50° C					
Mounting Types **		DIN32 / DIN35 / DIN35-15 / PANEL **					
Housing Insulation Material		PVC / V0 Grade					
Housing Colour		Green					

CONNECTION DATA	
Type of Connection	Screw Connection
Wire Connection Possibility	0.5 - 2.5 sq.mm / 30 -14 AWG
Stripping Length	8.3 mm
Torque	4.5 lb-in / 0.5 Nm

* Module Lengths mentioned are for RAIL Mounting option only. The lengths may vary for PANEL Mounting

** PANEL Mounting relay modules are available on request. Please use the suffix -P with the cat. no. for ordering.

ORDERING INFORMATION

of Channels

Cat. No.

4

IMCC/4

8

IMCC/8

12

IMCC/12

16

IMCC/16

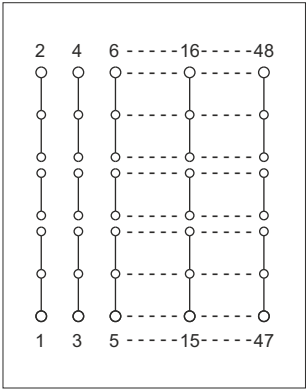
20

IMCC/20

24

IMCC/24

CIRCUIT DIAGRAM



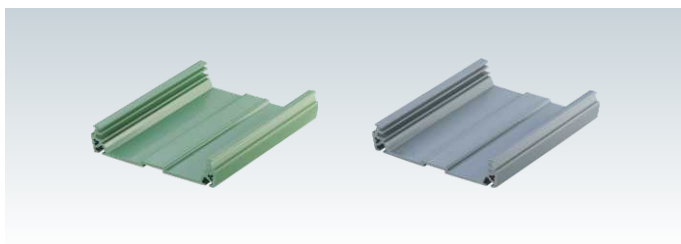
ACCESSORIES

Interface Module Accessories for Housing 73 mm & 108 mm width PCB Circuits

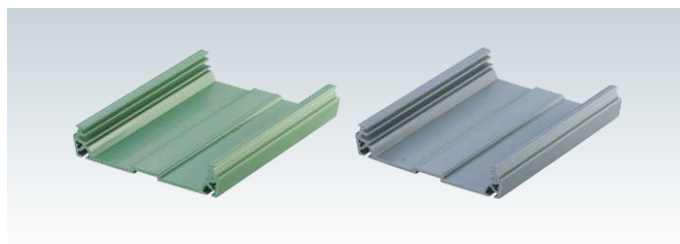
Connectwell uses V0 grade PVC Mounting Tracks for housing its Interface Modules. These tracks are used with a combination of Mounting Feet & End Sections to achieve DIN Rail mounting and panel mounting. The Mounting Tracks are available in standard lengths of 1 or 2 meters and can be precisely cut to required lengths. Alternately Connectwell can provide kits with pre-cut track lengths, End Sections, Mounting Feet & Screws.

MOUNTING TRACK

Mounting Track for 73 mm PCB Circuits



Mounting Track for 108 mm PCB Circuits

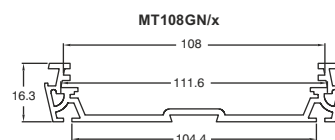
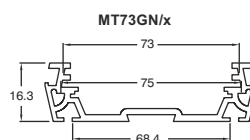


Technical Information

Standard Length	1 m or 2 m (Precut Lengths of Mounting Track available on request)
Mounting Track Material	PVC
Short Term Temperature	80°C
Continuous Temperature	70°C

Ordering Information

73 mm Mounting Track	GREEN	GREY
1 mtr Length	MT73GN/1	MT73G/1
2 mtr Length	MT73GN/2	MT73G/2

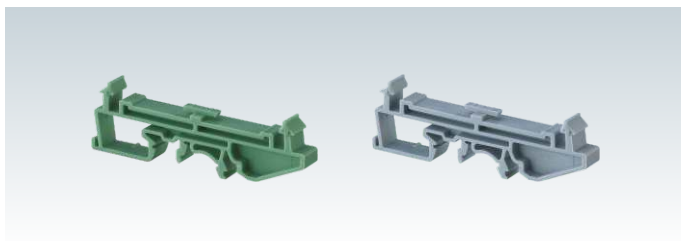


108 mm Mounting Track	GREEN	GREY
1 mtr Length	MT108GN/1	MT108G/1
2 mtr Length	MT108GN/2	MT108G/2

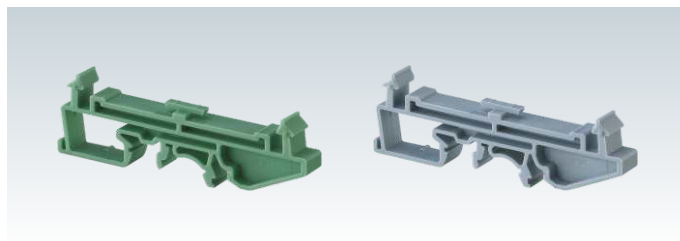
Note: Tracks accept Standard 'K' Marking Tags for identification.

MOUNTING FEET

Mounting Feet for 73 mm Mounting Track



Mounting Feet for 108 mm Mounting Track



Technical Information

Mounting Track Material

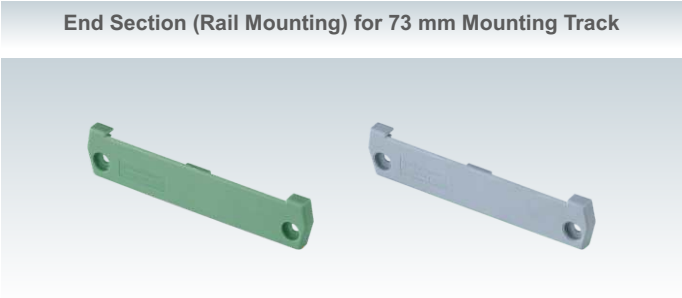
Ordering Information

73 mm Mounting Feet	GREEN	GREY
Cat. No.	MFMT73GN	MFMT73G

Polyamide 66

108 mm Mounting Feet	GREEN	GREY
Cat. No.	MFMT108GN	MFMT108G

END SECTION (RAIL MOUNTING)

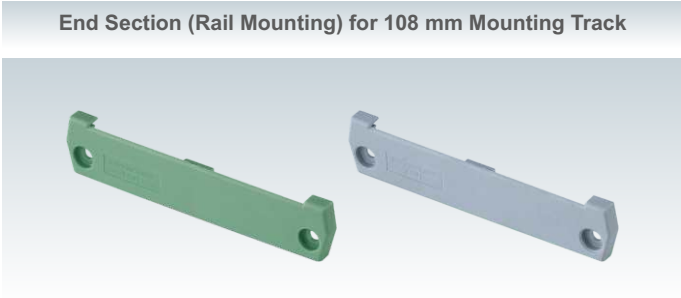


Technical Information

Mounting Track Material

Ordering Information

Rail End Section 73 mm	GREEN	GREY
Cat. No.	ESMT73GN	ESMT73G

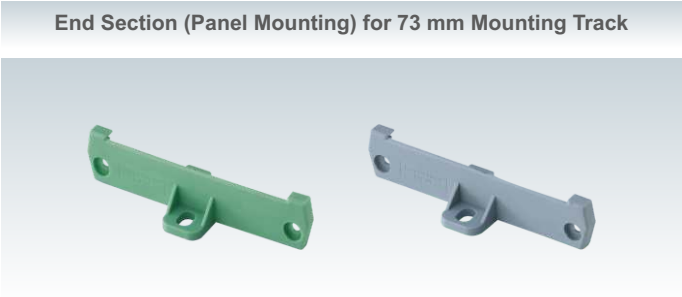


Polyamide 66

Rail End Section 108 mm	GREEN	GREY
Cat. No.	ESMT108GN	ESMT108G

Note: ESMT are supplied with a set of screws used to fix them on to the Mounting Track.

END SECTION (PANEL MOUNTING)

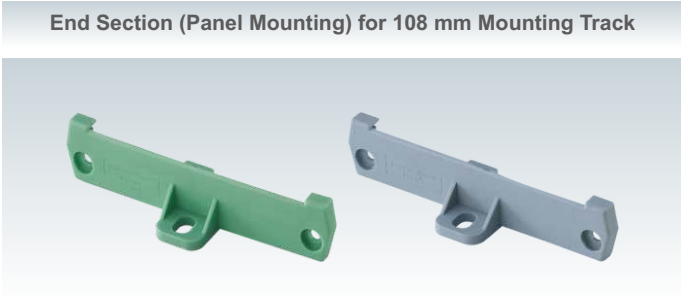


Technical Information

Mounting Track Material

Ordering Information

Panel End Section 73 mm	GREEN	GREY
Cat. No.	ESPMT73GN	ESPMT73G



Polyamide 66

Panel End Section 108 mm	GREEN	GREY
Cat. No.	ESPMT108GN	ESPMT108G

Note: ESPMT are supplied with a set of screws used to fix them on to the Mounting Track.

MOUNTING TRACK ASSEMBLIES



Ready to use, cut-length assemblies of Mounting Track along with ESMTs / ESPMTs and MFMTs are available on request.