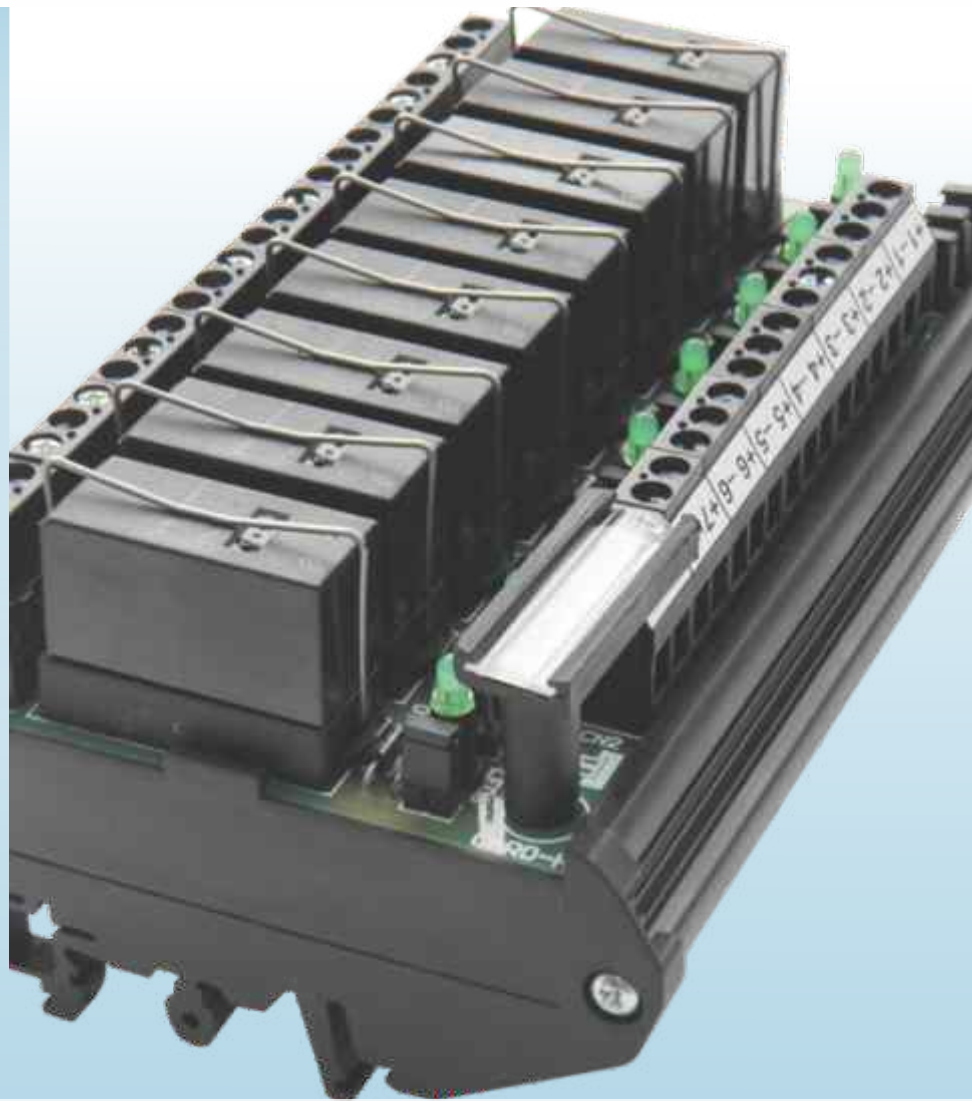
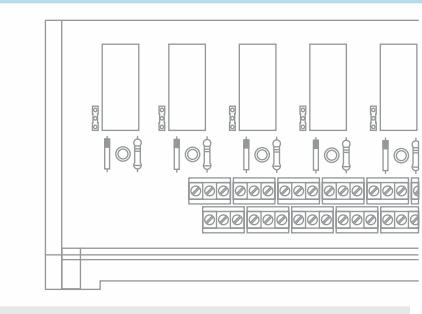


INTERFACE MODULES & ACCESSORIES



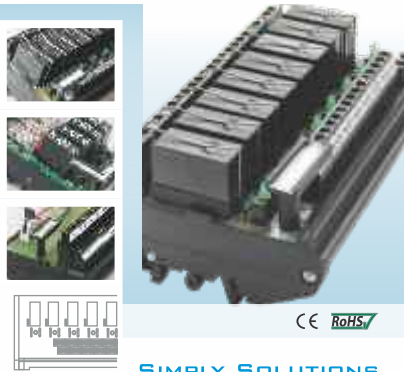
CE **RoHS** ✓

SIMPLY SOLUTIONS



INTERFACE MODULES & ACCESSORIES

INTERFACE MODULES & ACCESSORIES



SIMPLY SOLUTIONS



Our Interface Module range consists of standard 1,2,4,8 & 16 Channel relay modules, CNC module, Digital output module, Accessory module & Passive module. It includes DC as well as AC coil relay cards available with options like fuse and indicators. Interface Module range also includes the SSR modules and economy modules.

Relay module with ultra slim relay have been introduced to compact the size of module. Passive module range consists of modules with FRC connectors, D-Sub connectors, Rack & Panel connectors & RJ45 connectors.

We also provide customised solutions of controller boards and system cables to meet special requirements.



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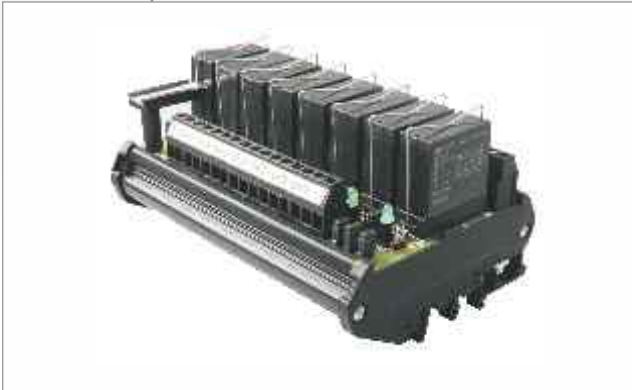
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Relay Module - Electromechanical & SSR Type





1

Section

Relay Modules

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- Input Voltage 24 VDC, Output Voltage 5-200 VDC with Green Led at Relay Input 14-15
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- Compact Solid State Relay Module with Relays Pluggable 20-21

1C/O - COIL VOLTAGE 24V DC/12V DC/48V DC/110V DC

Main Features

- Relay module with 16/8/4/2/1 miniature relays.
- Coil voltage 24V DC/12V DC/48V DC/110V DC.
- 1 change over.
- Freewheeling diode across relay coil for protection.
- Jumpers are provided for selection between positive looping/negative looping.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

COIL DATA

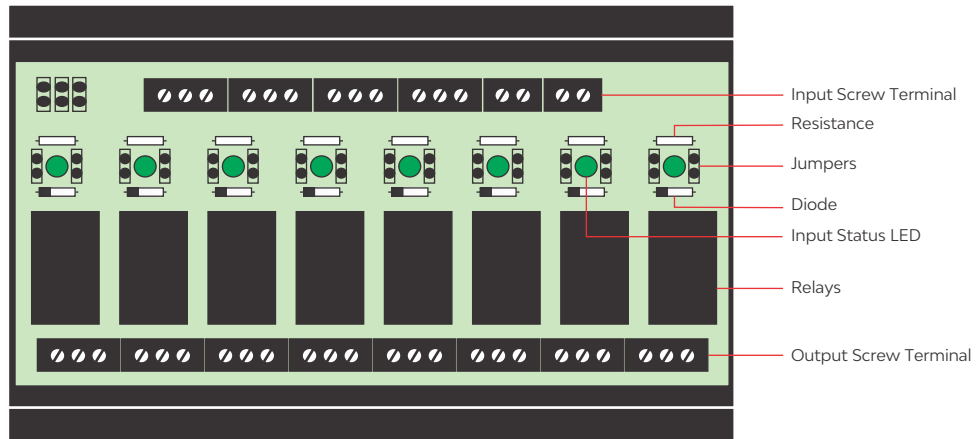
	24V DC	12V DC	48V DC	110V DC
Voltage	24V DC	12V DC	48V DC	110V DC
Input current	16.7 mA	33.3 mA	8.96 mA	5.3 mA
Coil resistance	1440 Ω	360 Ω	5358 Ω	18860 Ω

CONTACT DATA

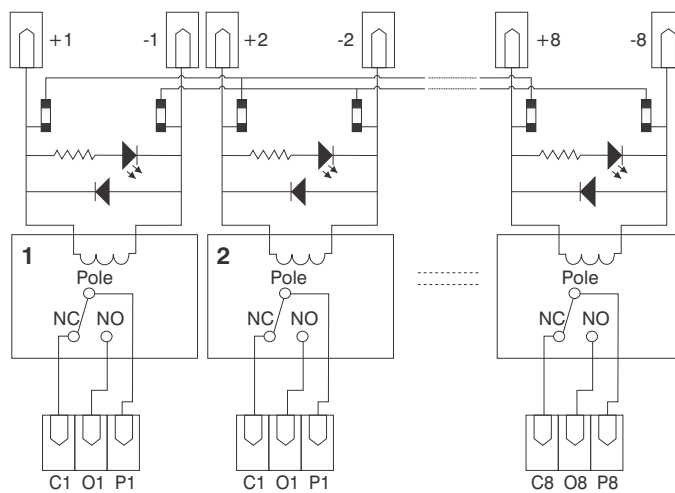
	1CO
No.of contact	1 PDT
Rated load (Resistive)	12A at 250V AC 12A at 24V DC
Contact resistance	100 mΩ max
GENERAL DATA	
Relay	Omron, IDEC, OEN, Tyco, Fujitsu or equivalent
Module height (H)	75 mm
Module depth (D)	90 mm
Housing Color	Black/Green
Operating temperature	0°C to 50°C
Storage temperature	-10°C to 60°C
Relative humidity	5 to 95% RH
Indication	Green LED for input status
Protection	Freewheeling diode across relay coil
Looping on coil side	Common, remove all jumpers to make relay independent
CONNECTION DATA	
Type of connection	Screw connection (PCB terminals block)
Make	Phoenix Contact
Nominal current carrying capacity	24A for single level & 22A for double level
Rated voltage capacity	250V
Conductor cross section solid	Min./Max. 0.2/4.0 mm ²
Conductor cross section stranded	Min./Max. 0.2/2.5 mm ²

1C/O - COIL VOLTAGE 24V DC/12V DC/48V DC/110V DC

Layout of TT-IMRB-08024D1S-C



Connection diagram of TT-IMRB-08024D1S-C



MODEL	Article No.	No. of relay	Module length	Pcs./Pkt.
TT-IMRB-16024D1S-C	01 17 02665	16	253 mm	01
TT-IMRB-08024D1S-C-RL	01 17 06014	08	128 mm	01
TT-IMRB-08024D1-C-RL(G)	01 17 06015	08	128 mm	01
TT-IMRB-08024D1S-C(sealed)	01 17 03009	08	128 mm	01
TT-IMRB-08012D1S-C	01 17 03634	08	128 mm	01
TT-IMRB-04024D1S-C-RL	01 17 06016	04	66 mm	01
TT-IMRB-04024D1-C-RL(G)	01 17 06017	04	66 mm	01
TT-IMRB-04012D1S-C	01 17 03635	04	66 mm	01
TT-IMRB-02024D1S-C	01 17 02664	02	37 mm	02
TT-IMRB-01024D1S	01 17 02733	01	24 mm	04
TT-IMRB-01024D1 (Relays directly soldered)	01 17 02917	01	24 mm	04

2C/O - COIL VOLTAGE 24V DC/12V DC/48V DC/110V DC

Main Features

- Relay module with 16/8/4/2/1 miniature relays.
- With base (Relay-pluggable).
- Coil voltage 24V DC/12V DC/48V DC/110V DC.
- 2 change over.
- Freewheeling diode across relay coil for protection.
- Jumpers are provided for selection between positive looping/negative looping.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

COIL DATA

	24V DC	12V DC	48V DC	110V DC
Voltage	24V DC	12V DC	48V DC	110V DC
Input current	16.7 mA	33.3 mA	8.96 mA	5.3 mA
Coil resistance	1440 Ω	360 Ω	5358 Ω	18860 Ω

CONTACT DATA

	2CO
No.of contact	2 PDT
Rated load (Resistive)	8A at 250V AC 8A at 30V DC
Contact resistance	100 mΩ max

GENERAL DATA

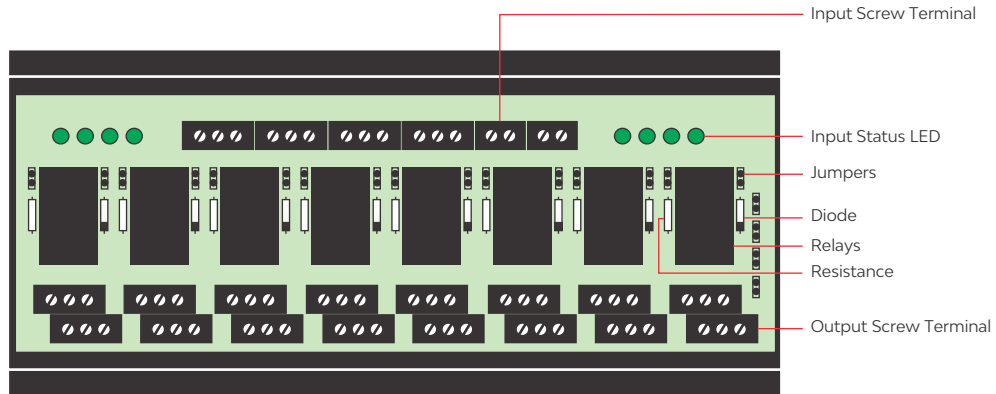
Relay	Omron, IDEC, OEN, Tyco, Fujitsu or equivalent
Module height (H)	75 mm
Module depth (D)	90 mm
Housing Color	Black/Green
Operating temperature	0°C to 50°C
Storage temperature	-10°C to 60°C
Relative humidity	5 to 95% RH
Indication	Green LED for input status
Protection	Freewheeling diode across relay coil
Looping on coil side	Common, remove all jumpers to make relay independent

CONNECTION DATA

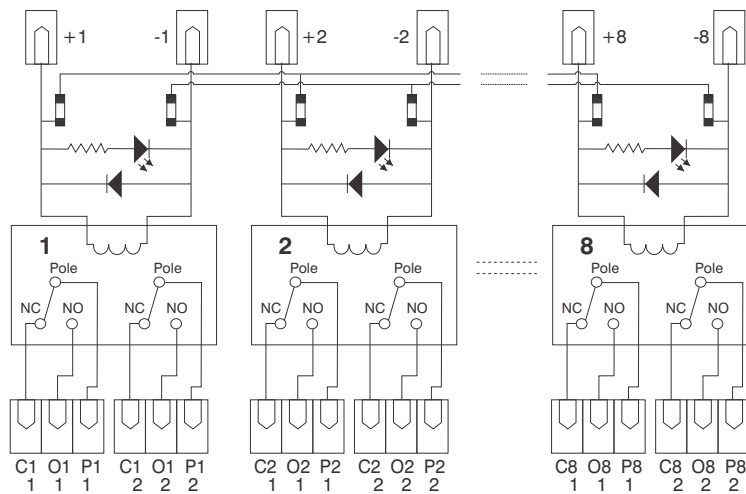
Type of connection	Screw connection (PCB terminals block)
Make	Phoenix Contact
Nominal current carrying capacity	24A for single level & 22A for double level
Rated voltage capacity	250V
Conductor cross section solid	Min./Max. 0.2/4.0 mm ²
Conductor cross section stranded	Min./Max. 0.2/2.5 mm ²

2C/O - COIL VOLTAGE 24V DC/12V DC/48V DC/110V DC

Layout of TT-IMRB-08024D2S-C



Connection Diagram of TT-IMRB-08024D2S-C

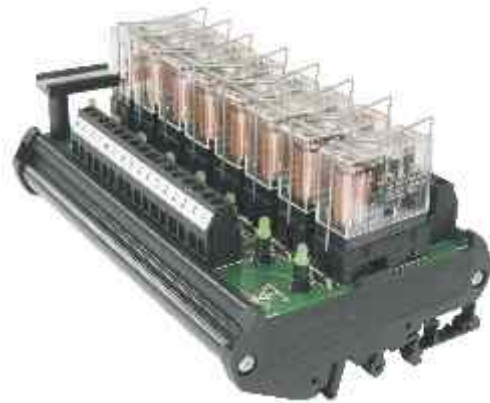


MODEL	Article No.	No. of relay	Module length	Pcs./Pkt.
TT-IMRB-16024D2S-C	01 17 02742	16	368 mm	01
TT-IMRB-08024D2S-C-RL	01 17 06018	08	182 mm	01
TT-IMRB-08024D2S-C-RL(G)	01 17 06019	08	182 mm	01
TT-IMRB-08024D2S-C(sealed)	01 17 03070	08	182 mm	01
TT-IMRB-08012D2S-C	01 17 03258	08	182 mm	01
TT-IMRB-04024D2S-C-RL	01 17 06020	04	105 mm	01
TT-IMRB-04024D2S-C-RL(G)	01 17 06021	04	105 mm	01
TT-IMRB-04012D2S-C	01 17 03636	04	105 mm	01
TT-IMRB-02024D2S-C	01 17 02666	02	54 mm	01
TT-IMRB-02012D2S-C	01 17 03429	02	54 mm	02
TT-IMRB-01024D2S	01 17 01046	01	27 mm	02
TT-IMRB-01024D2	01 17 04007	01	27 mm	04

1C/O - COIL VOLTAGE 230V AC/110V AC/24V AC

Main Features

- Relay module with 16/8/4/2/1 electromechanical relays.
- With base (Relay-pluggable).
- 1 change over.
- Freewheeling diode across relay coil for protection.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

COIL DATA

	230V AC	110V AC	24V AC
Voltage	230V AC	110V AC	24V AC
Input current (50 Hz)	4.7 mA	11 mA	46.5 mA
Power consumption	0.9 VA-50Hz	0.9 VA-50Hz	0.9 VA-50Hz
Coil resistance	26,850 Ω	4600 Ω	260 Ω

CONTACT DATA

	1CO
No.of contact	1 PDT
Rated load (Resistive)	10A, 250V AC/30V DC 5A 30V DC/7.5A, 250V AC
Contact resistance	30 mΩ max

GENERAL DATA

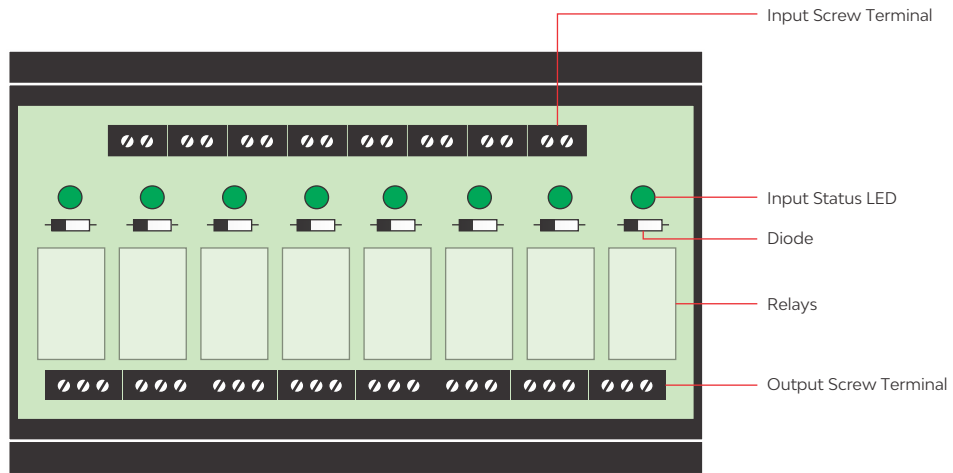
Relay	Omron, IDEC, OEN, Tyco, Fujitsu or equivalent
Module height (H)	75 mm
Module depth (D)	90 mm
Housing Color	Black/Green
Operating temperature	0°C to 50°C
Storage temperature	-10°C to 60°C
Relative humidity	5 to 95% RH
Indication	Green LED for input status
Protection	Freewheeling diode across relay coil

CONNECTION DATA

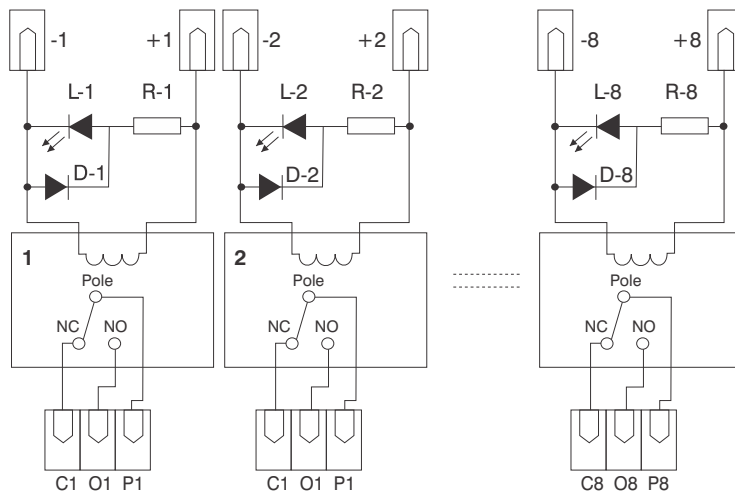
Type of connection	Screw connection (PCB terminals block)
Make	Phoenix Contact
Nominal current carrying capacity	24A for single level & 22A for double level
Rated voltage capacity	250V
Conductor cross section solid	Min./Max. 0.2/4.0 mm ²
Conductor cross section stranded	Min./Max. 0.2/2.5 mm ²

1C/O - COIL VOLTAGE 230V AC/110V AC/24V AC

Layout of TT-IMRB-080230A1S



Connection Diagram of TT-IMRB-080230A1S



MODEL	Article No.	No. of relay	Module length	Pcs./Pkt.
TT-IMRB-160230A1S	01 17 02848	16	250 mm	01
TT-IMRB-160110A1S	01 17 02849	16	250 mm	01
TT-IMRB-16024A1S	01 17 02850	16	250 mm	01
TT-IMRB-080230A1S	01 17 02625	08	128 mm	01
TT-IMRB-080110A1S	01 17 02662	08	128 mm	01
TT-IMRB-08024A1S	01 17 02753	08	128 mm	01
TT-IMRB-040230A1S	01 17 02641	04	67 mm	01
TT-IMRB-040110A1S	01 17 02660	04	67 mm	01
TT-IMRB-04024A1S	01 17 02752	04	67 mm	01
TT-IMRB-020230A1S	01 17 02995	02	35 mm	01
TT-IMRB-010230A1S	01 17 03068	01	26 mm	02

1C/O WITH FUSE AT OUTPUT - COIL VOLTAGE 24V DC/12V DC/48V DC/110V DC

Main Features

- Relay module with 4/8/16 miniature relays.
- With base (Relay-pluggable).
- Coil voltage 24V DC/12V DC/48V DC/110V DC.
- 1 change over.
- Freewheeling diode across relay coil for protection.
- Fuse are provided in contact path.
- Jumpers are provided for selection between positive looping/negative looping.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

COIL DATA

	24V DC	12V DC	48V DC	110V DC
Voltage	24V DC	12V DC	48V DC	110V DC
Input current	16.7 mA	33.3 mA	8.96 mA	5.3 mA
Coil resistance	1440 Ω	360 Ω	5358 Ω	18860 Ω

CONTACT DATA

	1CO
No.of contact	1 PDT
Rated load (Resistive)	12A at 250V AC 12A at 24V DC
Contact resistance	100 mΩ max

GENERAL DATA

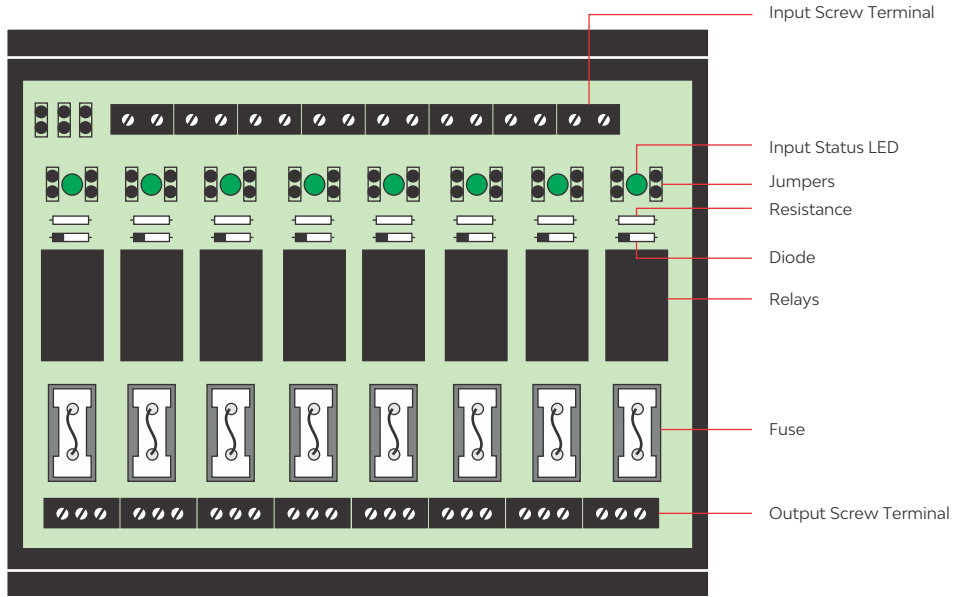
Relay	Omron, IDEC, OEN, Tyco, Fujitsu or equivalent
Module height (H)	75 mm
Module depth (D)	126 mm
Housing Color	Black/Green
Operating temperature	0°C to 50°C
Storage temperature	-10°C to 60°C
Relative humidity	5 to 95% RH
Indication	Green LED for input status
Fuses	In common path of contact of each relay
Rating	2A (default, to be replaced with suitable fuse as per need)
Looping on coil side	Common, remove all jumpers to make relay independent

CONNECTION DATA

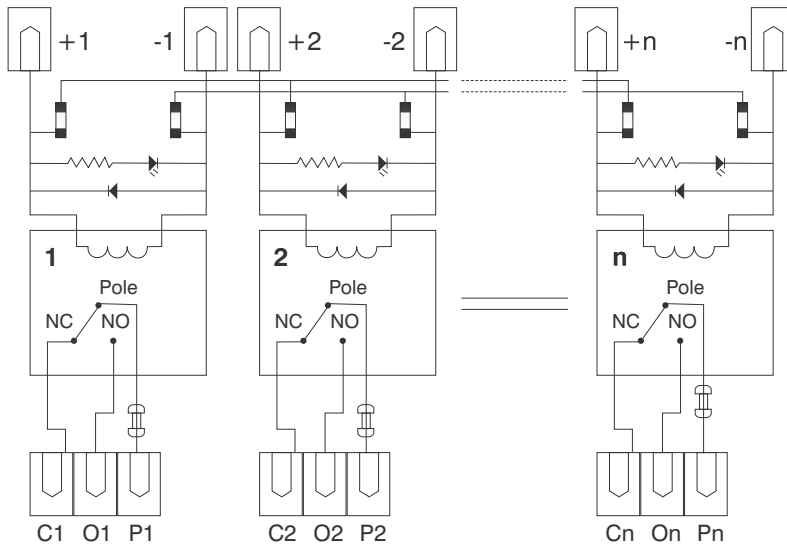
Type of connection	Screw connection (PCB terminals block)
Make	Phoenix Contact
Nominal current carrying capacity	24A for single level & 22A for double level
Rated voltage capacity	250V
Conductor cross section solid	Min./Max. 0.2/4.0 mm ²
Conductor cross section stranded	Min./Max. 0.2/2.5 mm ²

1C/O WITH FUSE AT OUTPUT - COIL VOLTAGE 24V DC/12V DC/48V DC/110V DC

Layout of TT-IMRB-08024D1S-C(F)



Connection Diagram of TT-IMRB-08024D1S-C(F)



MODEL	Article No.	No. of relay	Module length	Pcs./Pkt.
TT-IMRB-16024D1S-C(F)	01 17 02973	16	252 mm	01
TT-IMRB-08024D1S-C(F)	01 17 02746	08	128 mm	01
TT-IMRB-04024D1S-C(F)	01 17 02745	04	67 mm	01

1C/O WITH FUSE & FUSE FAIL INDICATION AT OUTPUT - COIL VOLTAGE 24V DC/12V DC/48V DC/110V DC

Main Features

- Relay module with 4/8/16 miniature relays.
- With base (Relay-pluggable).
- Coil voltage 24V DC/12V DC/48V DC/110V DC.
- 1 change over.
- Freewheeling diode across relay coil for protection.
- Fuse with fuse blown indication in contact path.
- Jumpers are provided for selection between positive looping/negative looping.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

COIL DATA

	24V DC	12V DC	48V DC	110V DC
Voltage	24V DC	12V DC	48V DC	110V DC
Input current	16.7 mA	33.3 mA	8.96 mA	5.3 mA
Coil resistance	1440 Ω	360 Ω	5358 Ω	18860 Ω

CONTACT DATA

	1CO
No.of contact	1 PDT
Rated load (Resistive)	12A at 250V AC 12A at 24V DC
Contact resistance	100 mΩ max

GENERAL DATA

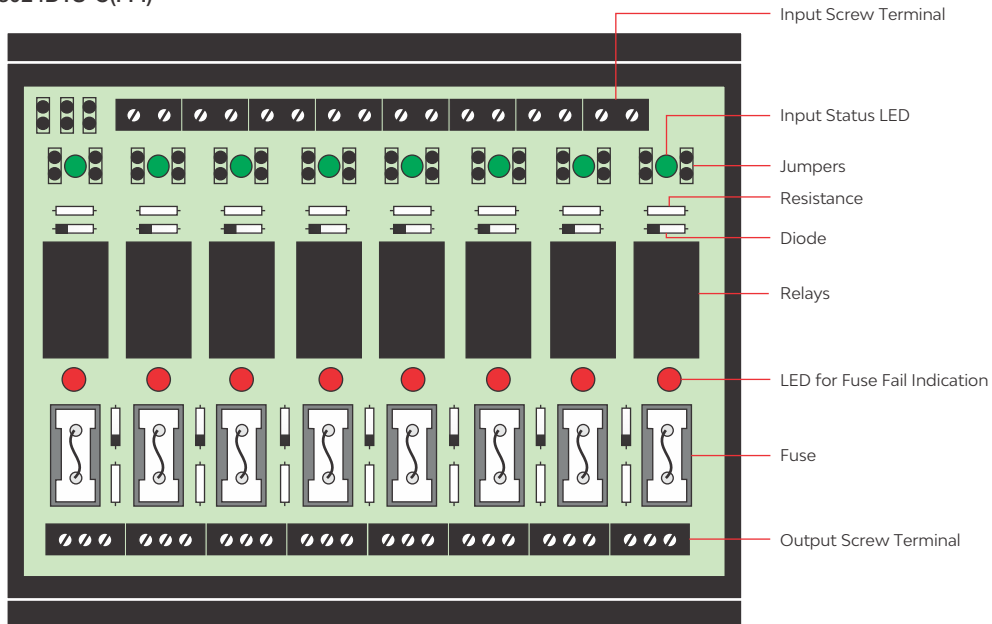
Relay	Omron, IDEC, OEN, Tyco, Fujitsu or equivalent
Module height (H)	75 mm
Module depth (D)	126 mm
Housing Color	Black/Green
Operating temperature	0°C to 50°C
Storage temperature	-10°C to 60°C
Relative humidity	5 to 95% RH
Indication	Green LED for input status
Fuses	In common path of contact of each relay
Rating	2A (default, to be replaced with suitable fuse as per need)
Looping on coil side	Common, remove all jumpers to make relay independent

CONNECTION DATA

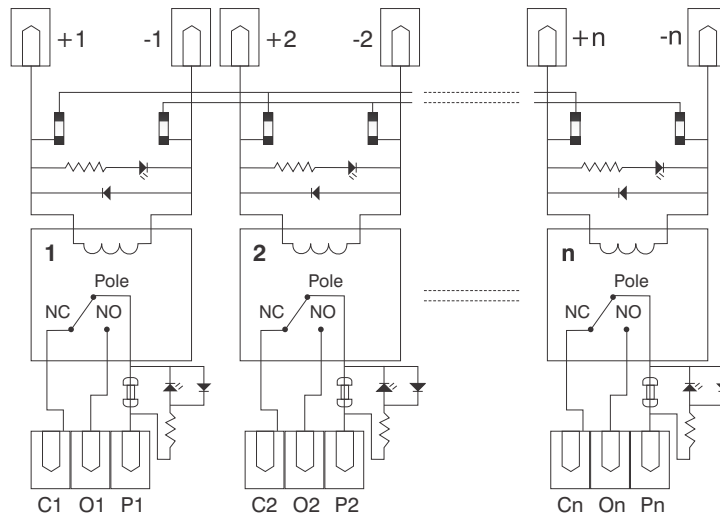
Type of connection	Screw connection (PCB terminals block)
Make	Phoenix Contact
Nominal current carrying capacity	24A for single level & 22A for double level
Rated voltage capacity	250V
Conductor cross section solid	Min./Max. 0.2/4.0 mm ²
Conductor cross section stranded	Min./Max. 0.2/2.5 mm ²

1C/O WITH FUSE & FUSE FAIL INDICATION AT OUTPUT - COIL VOLTAGE 24V DC/12V DC/48V DC/110V DC

Layout of TT-IMRB-08024D1S-C(FFI)



Connection Diagram of TT-IMRB-08024D1S-C(FFI)



MODEL	Article No.	No. of relay	Module length	Pcs./Pkt.
TT-IMRB-16024D1S-C(FFI)	01 17 02926	16	269 mm	01
TT-IMRB-08024D1S-C(FFI)	01 17 02856	08	138 mm	01
TT-IMRB-04024D1S-C(FFI)	01 17 02857	04	73 mm	01

RELAY MODULE - SOLID STATE TYPE

INPUT VOLTAGE 24 VDC, OUTPUT VOLTAGE 5-200 VDC WITH GREEN LED AT RELAY INPUT

Main Features

- SSR relay module with solid state relays.
- Relays directly soldered.
- 8/4 channels.
- Input voltage 3-32V DC.
- Output Voltage 5-200V DC.
- Jumpers are provided for selection between positive/negative looping.
- Free wheeling diodes are provided for polarity protection.
- Rated load current 3A.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

INPUT DATA

Nominal input voltage	3-32V DC
Maximum input current	16mA
Input LED Indication	Green
Turn-on time	2.5 ms
Turn-off time	40 μs

OUTPUT DATA

Operating voltage range	5-200V DC
Load current	3A at 55°C

RELAY DATA

Relay	704-A PMDD 200 05 00
Relay type	SSR DC Relay
Make	Unison
I/P to O/P isolation	2.5kV for 1 min

GENERAL DATA

Housing color	Black/Green
Module height (H)	65 mm
Module depth (D)	126 mm
Operating temperature	0°C to 80°C
Storage temperature	-10°C to 100°C
Bussing	Jumpers are provided for selection between positive/negative looping
Indication	Green LED for input status

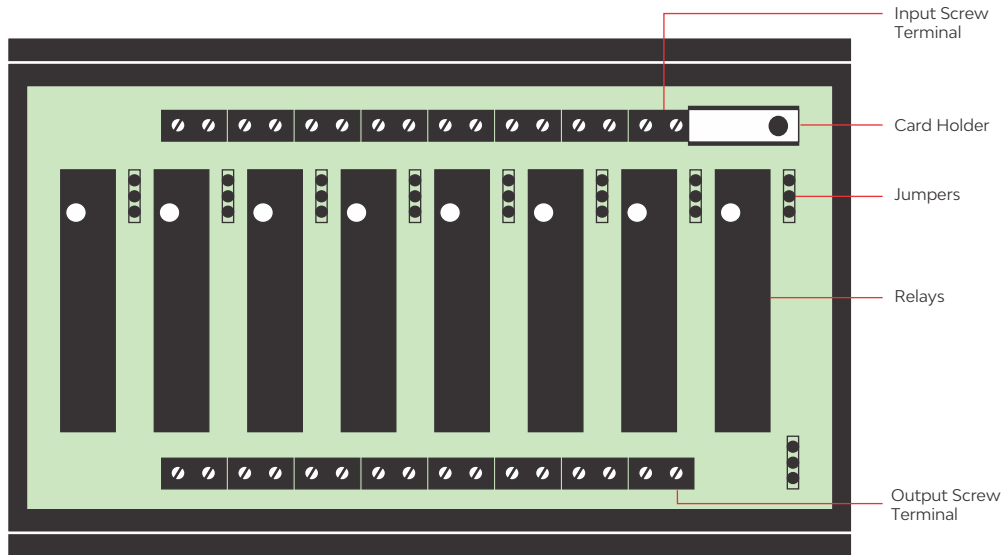
CONNECTION DATA

Type of connection	Screw connection (PCB terminals block)
Make	Phoenix Contact
Nominal current carrying capacity	24A for single level & 22A for double level
Rated voltage capacity	250V
Conductor cross section solid	Min./Max. 0.2/4.0 mm ²
Conductor cross section stranded	Min./Max. 0.2/2.5 mm ²

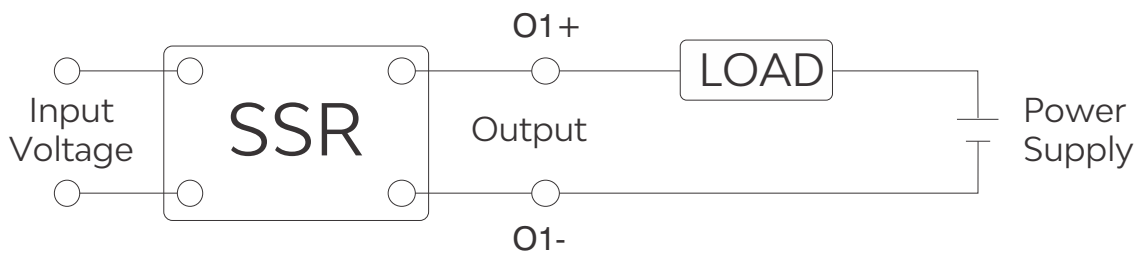
RELAY MODULE - SOLID STATE TYPE

INPUT VOLTAGE 24 VDC, OUTPUT VOLTAGE 5-200 VDC WITH GREEN LED AT RELAY INPUT

Layout of TT-IMRB-08024D1-SSR-U



Connection Diagram of TT-IMRB-08024D1-SSR-U



MODEL	Article No.	No. of relay	Module length	Pcs./Pkt.
TT-IMRB-08024D1-SSR-U	01 17 06334	08	142 mm	01
TT-IMRB-04024D1-SSR-U	01 17 06333	04	72 mm	01

RELAY MODULE - SOLID STATE TYPE

INPUT VOLTAGE 24V DC, OUTPUT VOLTAGE 24V DC WITH GREEN LED AT INPUT

Main Features

- SSR relay module with solid state relays.
- Relays directly soldered.
- 8/4 channels.
- Input voltage 24V DC.
- Output voltage 24V DC.
- Green LED for input status.
- Jumpers are provided for selection between positive/negative looping.
- Free wheeling diodes are provided for polarity protection.
- Rated load current 3A.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

INPUT DATA

Nominal input voltage	24V DC
Maximum input current	15mA DC
Maximum turn-on time	50 μ
Nominal turn-on time	10 μ s
Maximum turn-off time	100 μ s
Nominal input resistance	2.2 K Ω

OUTPUT DATA

Nominal operating voltage	24V DC
Operating voltage range	3-60V DC
Maximum load current	3A

RELAY DATA

Relay	M-ODC24
Relay type	SSR DC Relay
Make	Crydom
Isolation	4000 Vrms
Capacitance, input/output	8pF

GENERAL DATA

Housing color	Black/Green
Module height (H)	65 mm
Module depth (D)	126 mm
Operating temperature	0°C to 80°C
Storage temperature	-10°C to 100°C
Indication	Green LED for input status
Bussing	Jumpers are provided for selection between positive/negative looping

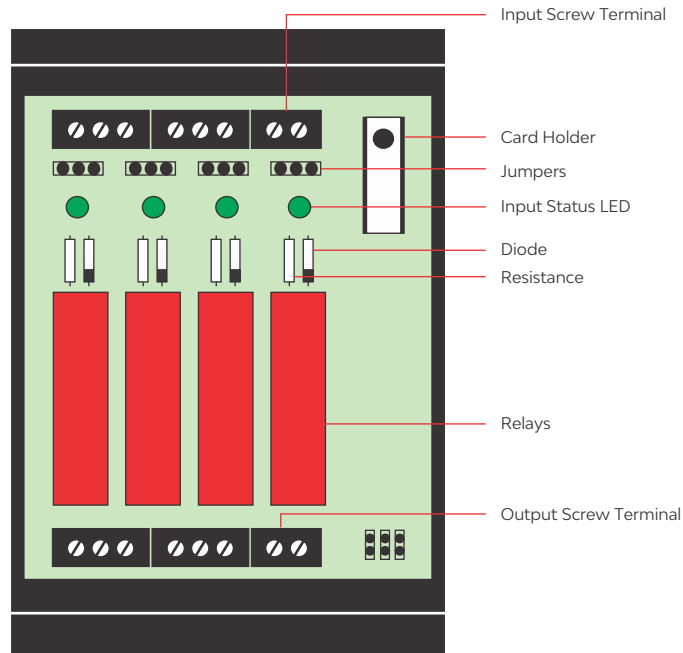
CONNECTION DATA

Type of connection	Screw connection (PCB terminals block)
Make	Phoenix Contact
Nominal current carrying capacity	24A for single level & 22A for double level
Rated voltage capacity	250V
Conductor cross section solid	Min./Max. 0.2/4.0 mm ²
Conductor cross section stranded	Min./Max. 0.2/2.5 mm ²

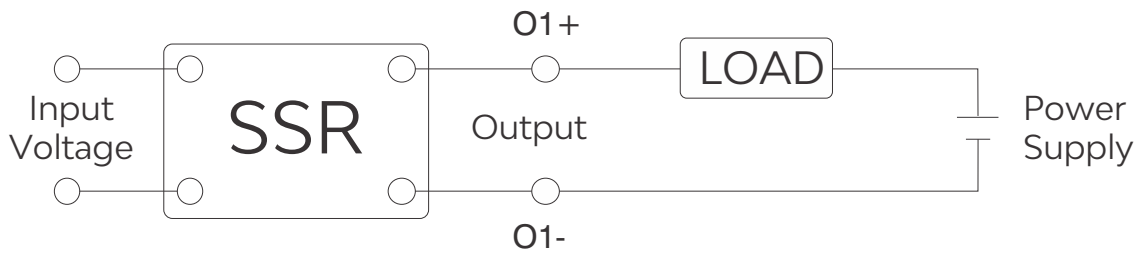
RELAY MODULE - SOLID STATE TYPE

INPUT VOLTAGE 24V DC, OUTPUT VOLTAGE 24V DC WITH GREEN LED AT INPUT

Layout of TT-IMRB-04024D1-SSR(II)



Connection Diagram of TT-IMRB-04024D1-SSR(II)



MODEL	Article No.	No. of relay	Module length	Pcs./Pkt.
TT-IMRB-08024D1-SSR(II)	01 17 02904	08	105 mm	01
TT-IMRB-04024D1-SSR(II)	01 17 02903	04	55 mm	01

RELAY MODULE - SOLID STATE TYPE

INPUT VOLTAGE 24V DC, OUTPUT VOLTAGE 240V AC WITH GREEN LED AT INPUT

Main Features

- SSR relay module with solid state relays.
- Relays directly soldered.
- 8/4 channels.
- Input voltage 24V DC and output voltage 240V AC.
- Jumpers are provided for selection between positive/negative looping.
- Green LED for input status.
- Free wheeling diodes are provided for polarity protection.
- Rated load current 3A.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

INPUT DATA

Nominal input voltage	24V DC
Maximum input current	15mA DC
Maximum turn-on time	8.33 ms
Maximum turn-off time	8.33 ms
Nominal input resistance	2000 Ω

OUTPUT DATA

Nominal operating voltage	24V DC
Operating voltage range	24-280V DC
Maximum load current	3A

RELAY DATA

Relay	M-OAC24A
Relay type	SSR AC Relay
Make	Crydom
Isolation	4000 Vrms
Capacitance, input/output	8pF

GENERAL DATA

Housing color	Black/Green
Module height (H)	65 mm
Module depth (D)	126 mm
Operating temperature	0°C to 80°C
Storage temperature	-10°C to 100°C
Bussing	Jumpers are provided for selection between positive/negative looping
Indication	Green LED for input status

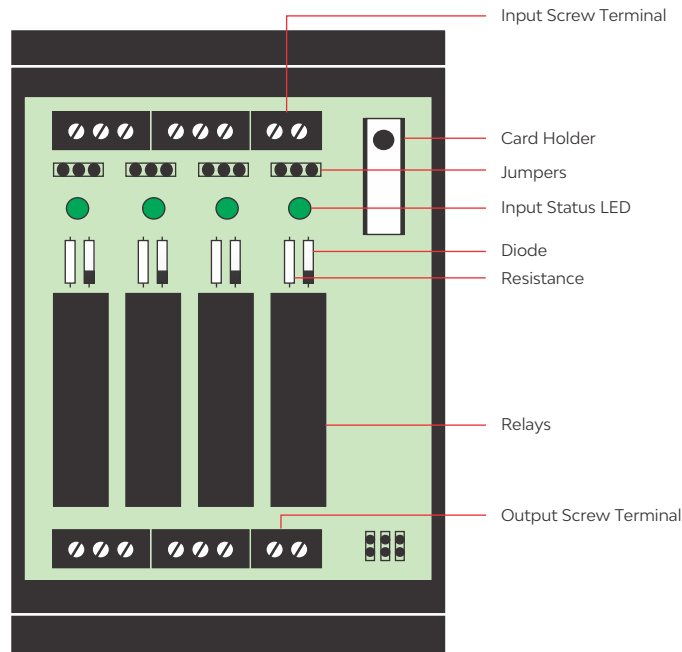
CONNECTION DATA

Type of connection	Screw connection (PCB terminals block)
Make	Phoenix Contact
Nominal current carrying capacity	24A for single level & 22A for double level
Rated voltage capacity	250V
Conductor cross section solid	Min./Max. 0.2/4.0 mm ²
Conductor cross section stranded	Min./Max. 0.2/2.5 mm ²

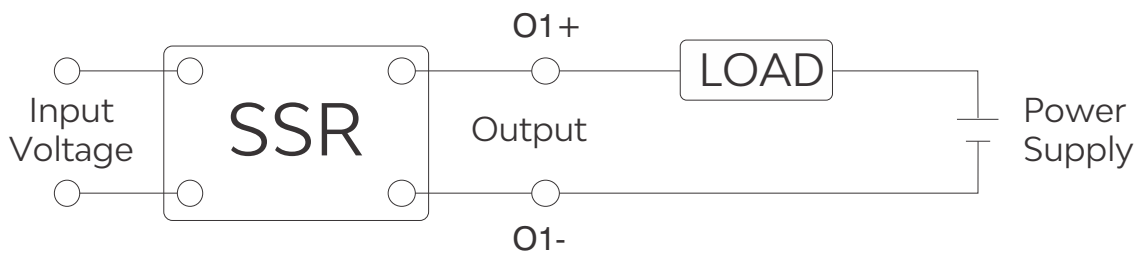
RELAY MODULE - SOLID STATE TYPE

INPUT VOLTAGE 24V DC, OUTPUT VOLTAGE 240V AC WITH GREEN LED AT INPUT

Layout of TT-IMRB-04024D1-240A(SSR-II)



Connection Diagram of TT-IMRB-04024D1-240A(SSR-II)



MODEL	Article No.	No. of relay	Module length	Pcs./Pkt.
TT-IMRB-08024D1-240A(SSR-II)	01 17 02983	08	105 mm	01
TT-IMRB-04024D1-240A(SSR-II)	01 17 02982	04	55 mm	01

COMPACT SOLID STATE RELAY MODULE WITH RELAYS PLUGGABLE

Main Features

- SSR compact relay module with slim solid state relays.
- With base (Relay-pluggable).
- 8/4 channels.
- Input voltage 24V DC.
- Output voltage 24V DC.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

INPUT DATA

Control voltage range	3-32 V DC
Reverse polarity protection	Yes
Control supply current consumption	5-15 mA
Input impedance (Current regulator circuit impedance)	1 k Ω - 2 k Ω
Minimum turn on voltage	2.6 V DC
Turn off voltage	<2.5 V DC

OUTPUT DATA

Operating output DC voltage range	5-100V DC
Continuos drain current @ 20°C	6 Amp
Continuos drain current @ 55°C	2.5 Amp
Maximum drain to source break down voltage	100V DC
Static drain to source ON resistance	0.03 Ω
On state voltage drop @ rated current	<0.7V DC

RELAY DATA

Relay	802 PMDD 100 06 00
Relay type	Slim SSR
Make	Unison

GENERAL DATA

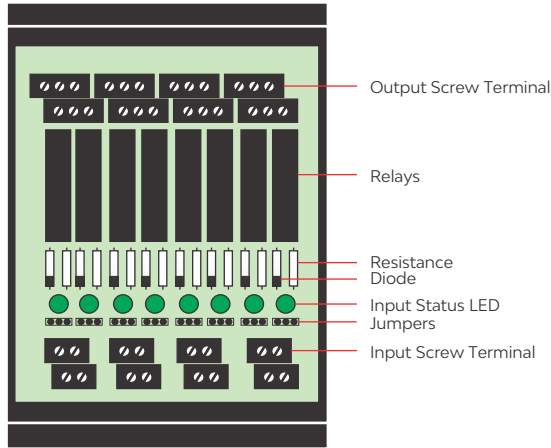
Housing color	Black/Green
Module height (H)	65 mm
Module depth (D)	126 mm
Operating temperature	0°C to 80°C
Storage temperature	-10°C to 100°C
Bussing	Common, remove all jumpers to make relay independent

CONNECTION DATA

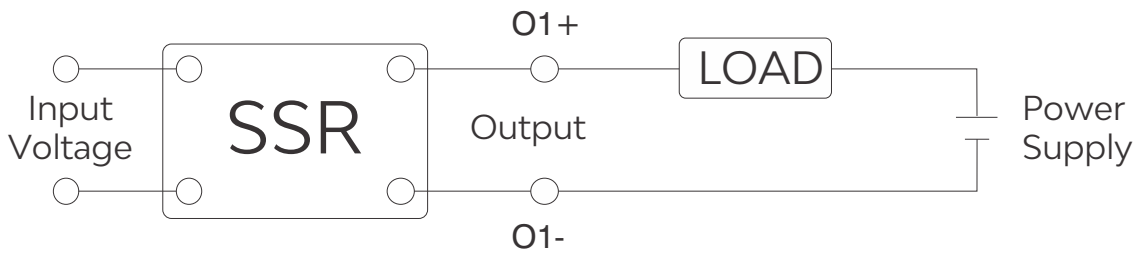
Type of connection	Screw connection (PCB terminals block)
Make	Phoenix Contact
Nominal current carrying capacity	24A for single level & 22A for double level
Rated voltage capacity	250V
Conductor cross section solid	Min./Max. 0.2/4.0 mm ²
Conductor cross section stranded	Min./Max. 0.2/2.5 mm ²

COMPACT SOLID STATE RELAY MODULE WITH RELAYS PLUGGABLE

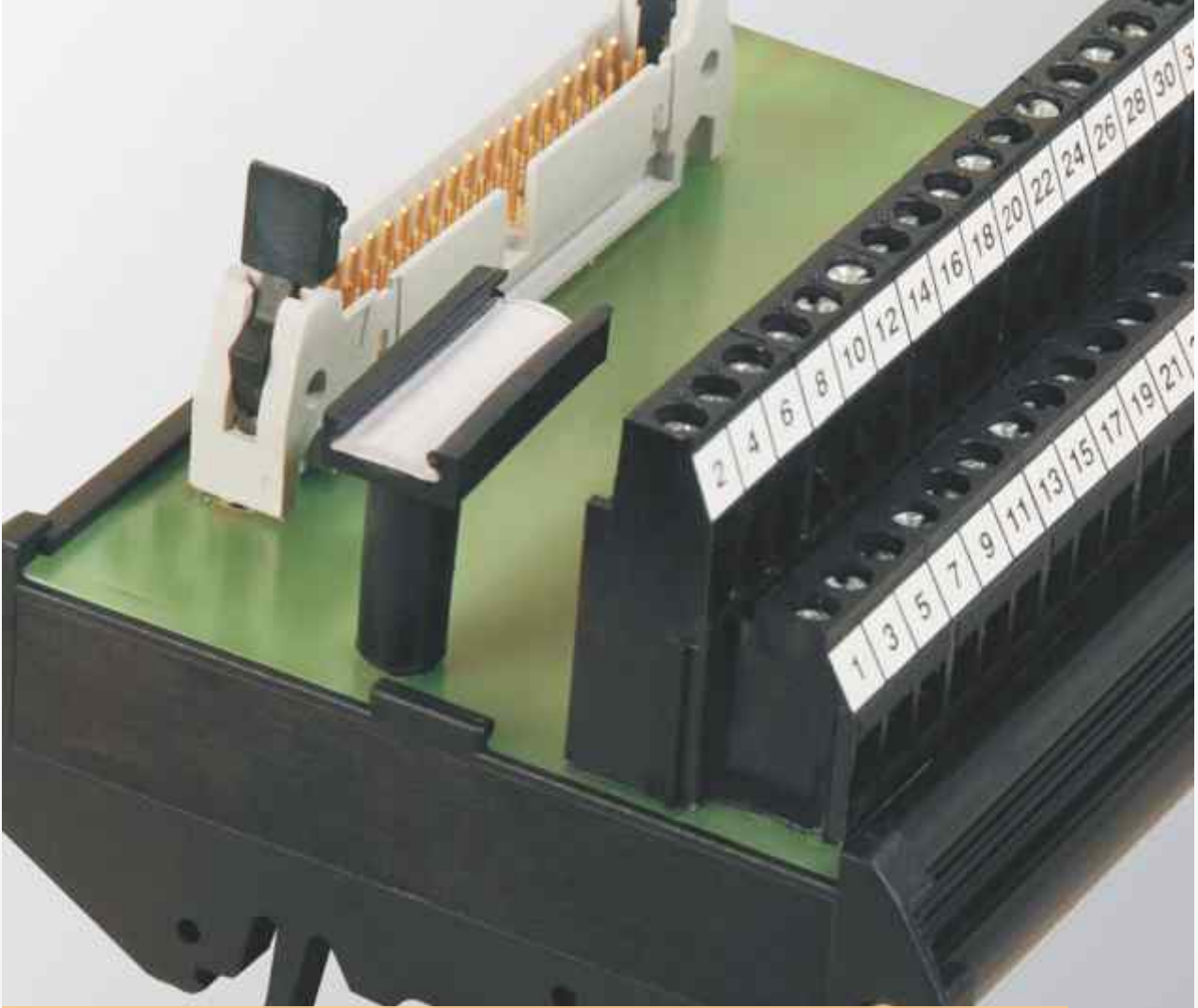
Layout of TT-IMRB-08024D1S-C(S-SSR)



Connection Diagram of TT-IMRB-08024D1S-C(S-SSR)



MODEL	Article No.	No. of relay	Module length	Pcs./Pkt.
TT-IMRB-08024D1S-C(S-SSR)	01 17 02959	08	82 mm	01
TT-IMRB-04024D1S-C(S-SSR)	01 17 06332	04	43 mm	01



Passive Module, Accessory Module & CNC Modules





2

Section

Passive Module, Accessory Module & CNC Module

24-31

Passive Module

24-27

- Passive Module with FRC Connector
- Passive Module with D-Sub Connector

24-25

26-27

Accessory Module

28-29

- Potential Distribution Module

28-29

CNC Module

30-31

- CNC Interface Module with 24 Inputs & 16 Outputs

30-31

PASSIVE MODULE WITH FRC CONNECTOR

Main Features

- Passive module having screw terminal connectors at one end and flat ribbon connector at other end.
- Input & output are electrically connected with each other in 1:1 connection.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

INPUT DATA

Input voltage	60V AC/DC
Max. current carrying capacity	1A (Per pole)

GENERAL DATA

Module height (H)	66 mm
Module depth (D)	90 mm
Color	Black/Green
Operating temperature	0°C to 50°C
Storage temperature	-10°C to 60°C
Relative humidity	5 to 95% RH

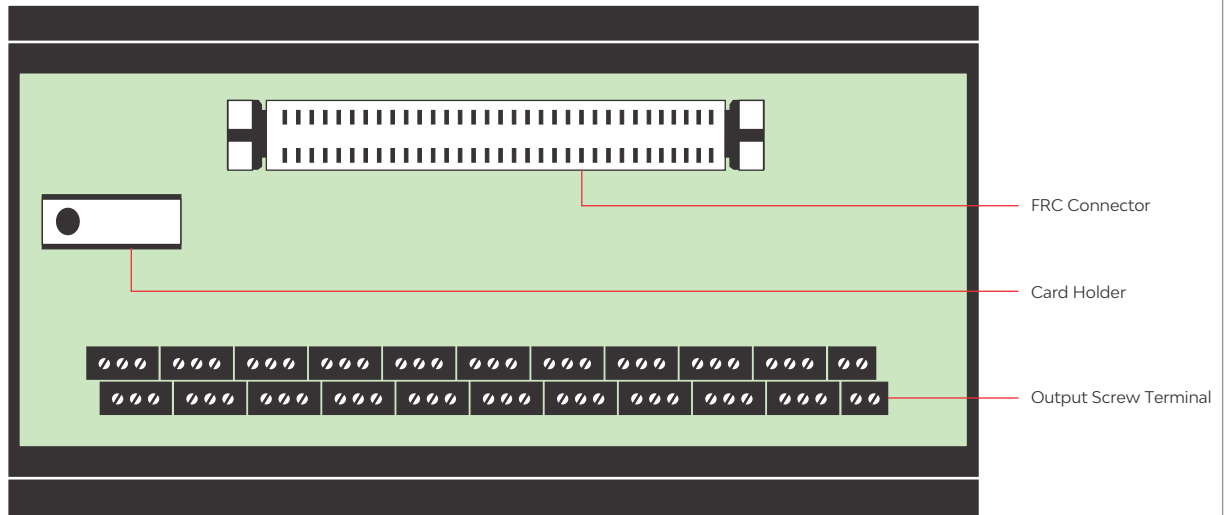
CONNECTION DATA

Connection 1	PCB terminal block
Type of connection	Screw connection
Make	Phoenix Contact
Specification, current & voltage	24A and 250V
Conductor cross section solid	Min/Max 0.2/4.0 mm ²
Conductor cross section stranded	Min/Max 0.2/2.5 mm ²
Connection 2	Flat ribbon connection
Make	FCI, Omron, Essen Deinki or equivalent

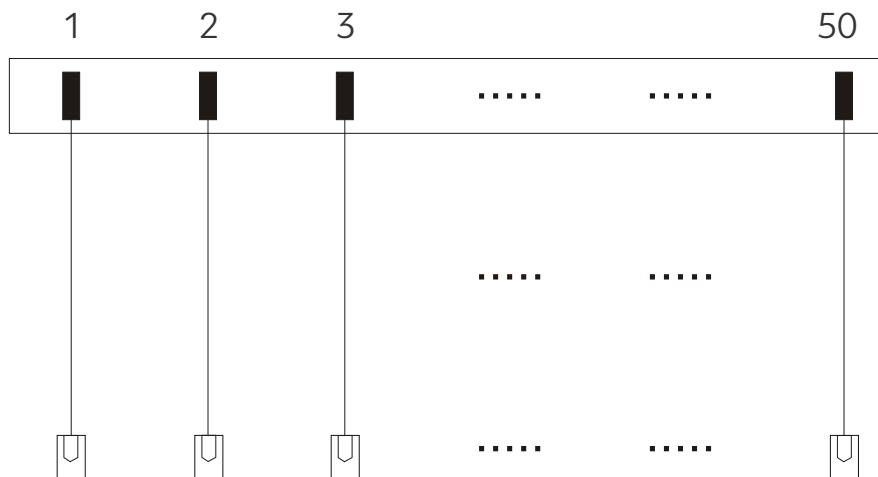
MODEL	Article No.	No. of poles	Module length	Pcs./Pkt.
TT-IMPB-F10	-	10	-	01
TT-IMPB-F14	01 17 03008	14	43 mm	01
TT-IMPB-F16	-	16	-	01
TT-IMPB-F20	01 17 02960	20	59 mm	01
TT-IMPB-F26	01 17 03556	26	76 mm	01
TT-IMPB-F34	01 17 00948	34	112 mm	01
TT-IMPB-F40	01 17 00947	40	110 mm	01
TT-IMPB-F50	01 17 00946	50	136 mm	01
TT-IMPB-F60	-	60	-	01
TT-IMPB-F64	-	64	-	01

PASSIVE MODULE WITH FRC CONNECTOR

Layout of TT-IMPB-F50



Connection Diagram of TT-IMPB-F50



PASSIVE MODULE WITH D-SUB CONNECTOR

Main Features

- Passive module having screw terminals connectors at one end and D-Sub male/female connector at other end.
- Input & output are electrically connected with each other in 1:1 connection.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

INPUT DATA

Input voltage	125V AC/DC
Max. current carrying capacity	1A (Per pole)

GENERAL DATA

Module height (H)	66 mm
Module depth (D)	90 mm
Color	Black/Green
Operating temperature	0°C to 50°C
Storage temperature	-10°C to 60°C
Relative humidity	5 to 95% RH

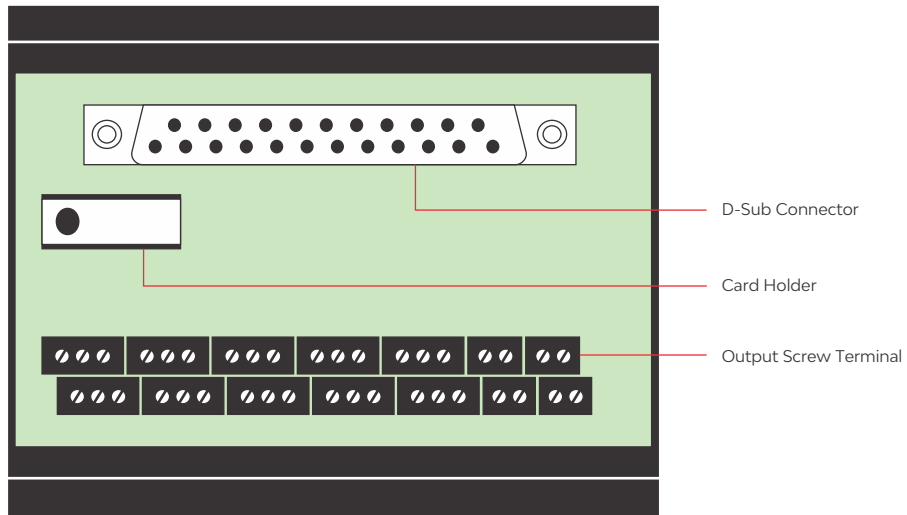
CONNECTION DATA

Connection 1	PCB terminal block
Type of connection	Screw connection
Make	Phoenix Contact
Specification, current & voltage	24A and 250V
Conductor cross section solid	Min/Max 0.2/4.0 mm ²
Conductor cross section stranded	Min/Max 0.2/2.5 mm ²
Connection 2	D-Sub connector
Make	FCI, Omron, Essen Deinki or equivalent

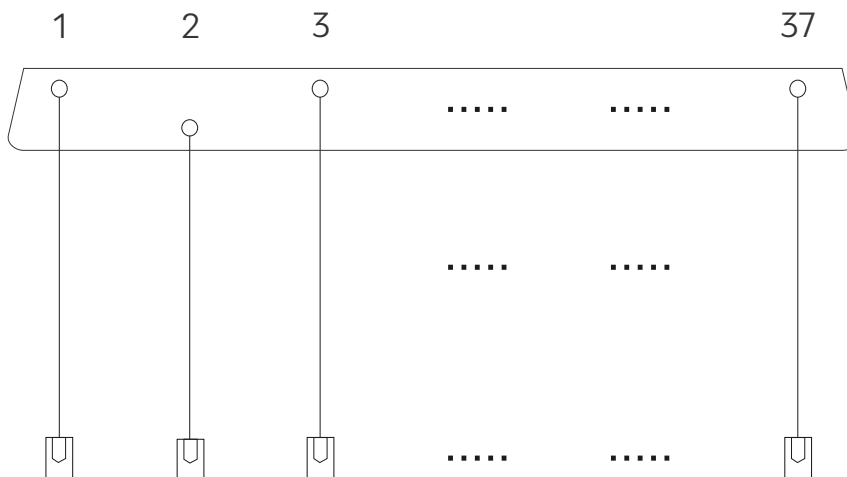
MODEL	Article No.	No. of poles	Module length	Pcs./Pkt.
TT-IMPB-D9F	01 17 03094	09	36 mm	01
TT-IMPB-D9M	01 17 03093	09	36 mm	01
TT-IMPB-D15F	01 17 03095	15	48 mm	01
TT-IMPB-D15M	01 17 03013	15	48 mm	01
TT-IMPB-D25F	01 17 00950	25	73 mm	01
TT-IMPB-D25M	01 17 00949	25	73 mm	01
TT-IMPB-D37F	01 17 00952	37	105 mm	01
TT-IMPB-D37M	01 17 00951	37	105 mm	01
TT-IMPB-D50F	01 17 03012	50	136 mm	01
TT-IMPB-D50M	01 17 03096	50	136 mm	01

PASSIVE MODULE WITH D-SUB CONNECTOR

Layout of TT-IMPB-D37F



Connection Diagram of TT-IMPB-D37F



POWER DISTRIBUTION MODULE

Main Features

- Power distribution modules are used for distributing power to multiple field devices.
- Installation time is significantly reduced because we have eliminated the need for external bridges or daisy-chain wiring.
- Simple & inexpensive to implement.
- Two separate rows of terminal blocks are internally bridged for powering multiple field devices by one power supply.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

INPUT DATA

Input voltage
Input current
Connection

250V AC/DC

20A

One power supply has to be connected between P1 & P2

CONTACT DATA

Current rating per branch
Output voltage

5A

Divided equally into two rows

GENERAL DATA

No. of channels
Module height (H)
Module depth (D)
Color
Operating temperature
Storage temperature
Relative humidity

01

65 mm

90 mm

Black

0°C to 50°C

-10°C to 60°C

5 to 95% RH

CONNECTION DATA

Type of connection
Make
Color
Nominal current
Rated voltage
Conductor cross section solid
Conductor cross section stranded

Screw connection (PCB terminal block)

Phoenix Contact

Black

24A for 1 single level & 22A for 2 double level

250V

Min/Max. 0.2/4.0 mm²

Min/Max. 0.2/2.5 mm²

MODEL

TT-IMPB-PDM

Article No.

01 17 03852

Module length

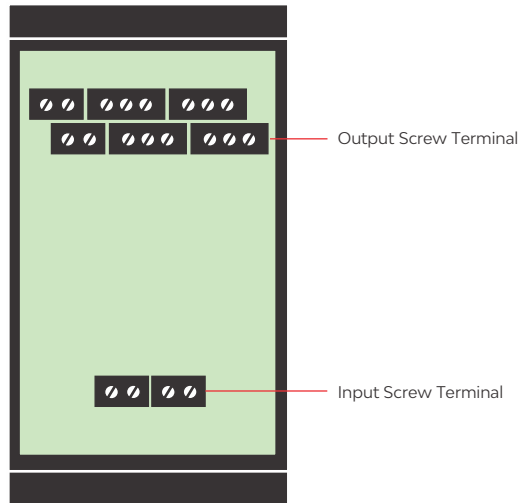
52 mm

Pcs./Pkt.

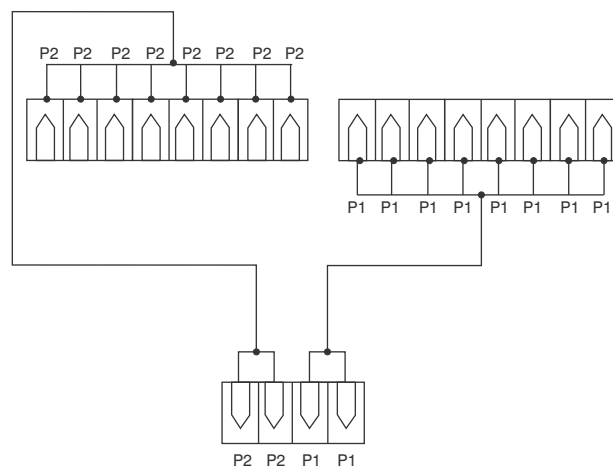
01

POWER DISTRIBUTION MODULE

Layout of TT-IMPB-PDM



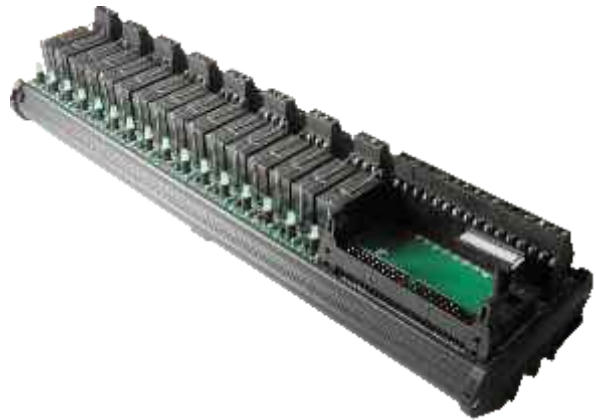
Connection Diagram of TT-IMPB-PDM



CNC INTERFACE MODULE WITH 24 INPUTS & 16 OUTPUTS

Main Features

- CNC module having 24 inputs and 16 outputs.
- Serve the purpose of one passive module (for CNC inputs) and one 16 channel relay module (for CNC outputs) on single module.
- Module with 16 interposing relays.
- With base (Relay-pluggable).
- Coil voltage 24V DC.
- 1 changeover.
- FRC 50 connector is provided on input side of the CNC module for the termination of CNC inputs and outputs.
- Mounting DIN 35 carrier rail.
- Available in green and black profile.



Technical Specification

COIL DATA

	24V DC	12V DC	48V DC	110V DC
Voltage	24V DC	12V DC	48V DC	110V DC
Input current	16.7 mA	20.8 mA	8.96 mA	5.3 mA
Coil resistance	1440 Ω	576 Ω	5358 Ω	18860 Ω

CONTACT DATA

	1CO
No.of contact	1 PDT
Rated load (Resistive)	8A at 250V AC 12A at 24V DC
Contact resistance	100 mΩ max

GENERAL DATA

Relay	Omron, IDEC, OEN, Tyco, Fujitsu or equivalent
Module height (H)	75 mm
Module depth (D)	90 mm
Housing Color	Black/Green
Operating temperature	0°C to 50°C
Storage temperature	-10°C to 60°C
Relative humidity	5 to 95% RH
Indication	Green LED for input status
Protection	Freewheeling diode across relay coil
Looping on coil side	Common, remove all jumpers to make relay independent

CONNECTION DATA

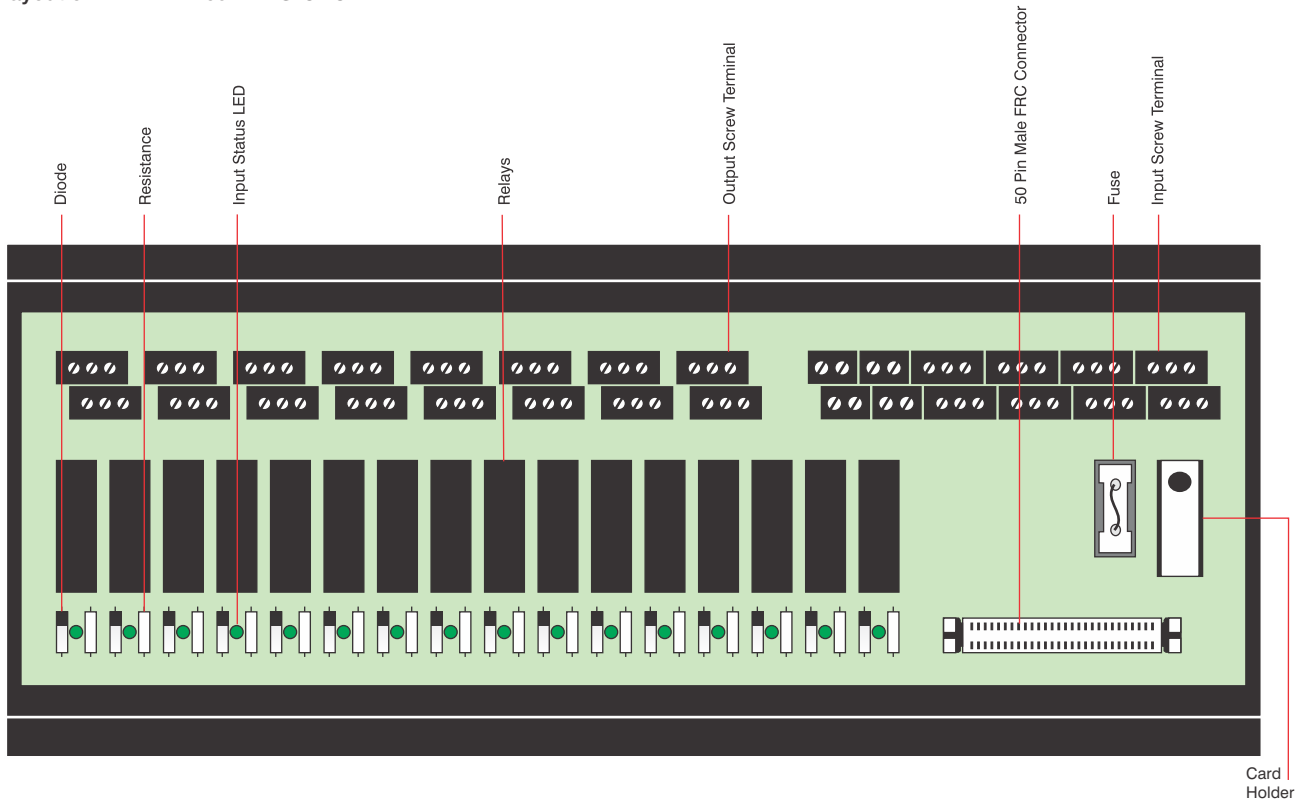
Input connection type	FRC connector having 50 pins male
Make	FCI, Omron, Essen Deinki or equivalent
Output connection type	Screw connection (PCB terminal block)
Make	Phoenix Contact
Specification	22A, 250V
Conductor cross section solid	Min/Max. 0.2/4.0 mm ²
Conductor cross section stranded	Min/Max. 0.2/2.5 mm ²

MODEL

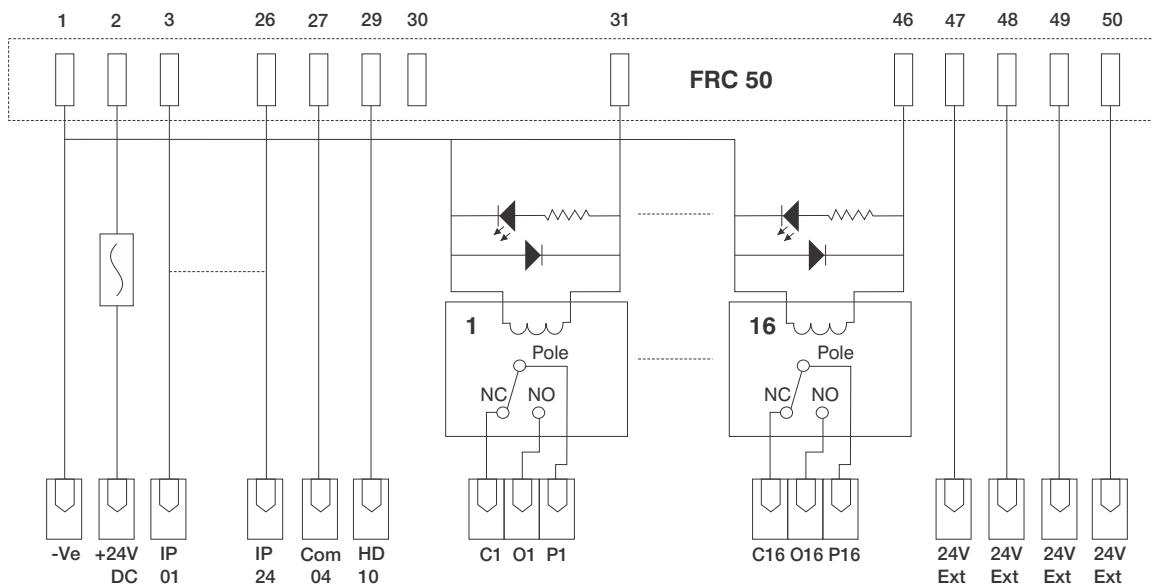
MODEL	Article No.	No. of relays	Module length	Pcs./Pkt.
TT-IMRB-16024D1S-CNC	01 17 02933	16	312 mm	01
TT-IMRB-16024D1S-CNC (F)	01 17 04601	16	312 mm	01

CNC INTERFACE MODULE WITH 24 INPUTS & 16 OUTPUTS

Layout of TT-IMRB-16024D1S-CNC



Schematic of TT-IMRB-16024D1S-CNC





Cable Assembly & Components for Interface Modules





3

Section

Cable Assembly & Components for Interface Modules

34-39

Cable Assembly

34-35

- Cable Assembly with FRC, D-Sub and EDAC Connectors

34-35

Components for Interface Modules

36-39

- DIN Rail Mounted PCB Support
- Relays-Electromechanical & SSR

36-37

38-39

CABLE ASSEMBLY WITH FRC, D-SUB AND EDAC CONNECTOR

Cable Assembly

Ready to use system cables assembled with different types of connectors (FRC, D-SUB etc) are commonly known as Cable Assembly.

They are used to ensure a reliable connection between the automation equipments & the modules. These cables are connected into 1:1 Connection.

The cables are pre assembled round cables which are available in all customized length. These cables can withstand operational ambient temperature of -20°C to 50°C. The standard available cable brands are LAPP, HELUKABEL or any equivalent imported brand.



Round shielded / Non shielded cable assemblies with flat ribbon connectors (FRC).

Properties

- Cable conductor cross-section- AWG 26/0.14 mm².
- Max. permissible current capacity per path- 1A.
- Operating Voltage- 50 VAC/ 60 VDC.

Non Shielded cable assembled with FRC connectors at both ends.

- Available in - 10, 14, 16, 20, 26, 34, 40, 50.

Non Shielded cable assembled with FRC connector at one end and other end open fitted with ferrules / lugs.

- Available in - 10, 14, 16, 20, 26, 34, 40, 50.

Non Shielded cable assembled with 50 pin FRC connector at one end and 40 pin FCN female connector at other end.

Shielded cable assembled with FRC connectors at both end.

- Available in - 10, 14, 16, 20, 26, 34, 40, 50.

Customized cables assembled with different-different connectors are also available on request.

Any customised lengths are available as per requirements.



Round shielded / Non shielded cable assemblies with D-Sub connectors

Properties

- Cable conductor cross-section- AWG 26/0.14 mm² / AWG 24/0.25 mm².
- Max. permissible current capacity per path- 2A.
- Operating Voltage- 125 VAC/ VDC.
- Shield-Tinned Copper Braided Shield.

Round shielded / Non shielded cable with D-SUB Male connectors at both ends.

- Available in - 9, 15, 25, 37, 50.

Round shielded / Non shielded cable with D-SUB Female connector at both ends.

- Available in - 9, 15, 25, 37, 50.

Round shielded / Non shielded cable with D-SUB Male connector at one end & D-SUB Female connector at other end.

- Available in - 9, 15, 25, 37, 50.

Round shielded / Non shielded cable with D-SUB Male connector at one end & other end open fitted with ferrules / lugs.

- Available in - 9, 15, 25, 37, 50.

Round shielded / Non shielded cable with D-SUB Female connector at one end & other end open fitted with ferrules / lugs.

- Available in - 9, 15, 25, 37, 50.



Round shielded cable assemblies with ELCO/EDAC connectors.

Properties

- Crimp pins used are gold plated type.
- Cable conductor cross-section- AWG 22/0.5 mm².
- Max. permissible current capacity per path-1.5A.
- Operating Voltage- 25 VAC/ 60 VDC.
- Shield-Tinned Copper Braided Shield.

Round shielded cable with ELCO/EDAC connectors at both ends.

- Available in - 20, 38, 56.

Round shielded cable with ELCO / EDAC connector at one end & other end open fitted with ferrules/lugs.

- Available in - 20, 38, 56.

Any customised lengths are available as per requirements.

Vastly used in oil & gas industries where high class precision is required.

Customised cables assembled with combination of different ELCO / EDAC connectors are also available on request.

CABLE ASSEMBLY WITH FRC, D-SUB AND EDAC CONNECTOR

Round shielded cable assemblies with D-Sub 25 pin male connectors at both ends



Round shielded cable assemblies with D-Sub 37 pin male connectors at both ends



Round shielded cable assemblies with D-Sub 25 pin female connectors at both ends



Round shielded cable assemblies with D-Sub 15 pin male at one end and female at other end



Round shielded cable assemblies with 50 pin FRC connector at one end and other end open fitted with ferrule



Round shielded cable assemblies with 34 pin FRC connectors at both ends



DIN RAIL MOUNTED PCB SUPPORT

DIN Rail (EN 60715) Mounted PCB Support

The compact PCB mounting profile provides a multiple possibilities for the construction of electronics circuits. This enables the user to develop individual practical electronic modules. Depending on the required module size and the space available. The profile can be cut to length and combined with side and foot elements to form a module.

Further advantages

- Quick assembly.
- Labeling facilities in the mounting profile.
- Side element using SS-ZB marking material.





The **PMP...72** and **PMP...108** panel mounting bases have three levels for accommodating the printed circuit boards. This enables a flexible printed circuit board assembly, which is particularly space-saving, even for SMD technology. Two profiles for printed circuit board sizes of 72 mm or 107.5 mm are available for comprehensive electronics circuits and multi-position connection methods. The profiles are available in lengths up to 100 cm for this arrangement.

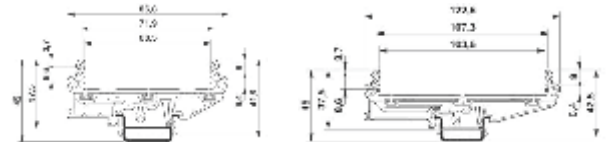
Material information concerning the housing

PVC profile inflammability class VO (UL 94) Polyamide PA side elements. Inflammability class VO (UL 94).

To define the profile length and width please observe the order key please indicate the desired length in (cm).

Further advantages

- Fast installation on conventional  or  DIN rails.
- The modules can be marked with Trinity Touch marking material in the label grooves.
- Side elements with foot elements to form the PCB module to be mounted on all the conventional DIN rail (EN 60715).



PM...72-PROFILE









PM...108-PROFILE



DIN RAIL MOUNTED PCB SUPPORT

PM...72-PROFILE

PM...108-PROFILE

DESCRIPTION	Type	Article No.	Pcs. Pkt.	Type	Article No.	Pcs. Pkt.
Drawn section Found length 100cm Cut to length according to customer specifications	TT-PMP-MC72-GR	01 17 00890	1	TT-PMP-MC108-GR	01 17 00894	1
Side element with foot , 5mm wide, right hand side, for mounting on  or 	TT-PMP-RSC72WF-GR	01 17 00891	10	TT-PMP-RSC108WF-GR	01 17 00895	10
Side element with foot , 5 mm wide, left hand side for mounting on  or 	TT-PMP-LSC72WF-GR	01 17 00892	10	TT-PMP-LSC108WF-GR	01 17 00896	10
Side element , 5 mm wide	TT-PMP-SC72-GR	01 17 00916		TT-PMP-SC108-GR	01 17 00897	
Foot element , for mounting on  or  , under the PMP...72 or PMP...108 profile housing	TT-PMP-FC72-GR	01 17 00893	10	TT-PMP-FC108-GR	01 17 00898	10
Markers, unprinted, 5-section, for snapping into devices and components with special marker groove, labeling with M PEN or CMS system, lettering field size: 20x8 mm, white for SAB boxes.	TT-PMP-ACC-MARKER	01 17 00908	1			

Profile housing, in profile width: 72 mm, 108 mm available.

GENERAL DATA	
Housing type	Panel mounting base
Housing material	PVC
Colors	Green
TECHNICAL DATA	
Inflammability class acc. to UL 94	V0
CONFIGURATION OPTIONS	
PMP profile PCB width	108 mm (PMP...108) 72 mm (PMP...72)
Number of positions	Pale green (...GR)

Application:

Relay modules, Switch modules, Fuse modules, Diodes modules, Power supply modules, Over-voltage protection modules, Pats transmission & receiver modules, Analogue/ Digital convertor etc...

RELAYS-ELECTROMECHANICAL & SSR



G2R-(S) Series

- Slim and space-saving power plug-in relay.
- Lockable test button models now available.
- Built-in mechanical operation indicator.
- AC type is equipped with a coil-disconnection self diagnostic function (LED type).
- High switching power (1-pole: 10 A).
- RoHS compliant.



G5LE Series

- Cubic, single-pole 10A power relay.
- Ideal for a wide variety of applications such as home appliances, OA equipments, vending machines, etc.
- Ambient operating temperature 85°C.
- UL class-B coil insulation for standard model.
- UL, CSA, EN standards approved and conforms to electrical appliance and material safety law (300V max.).



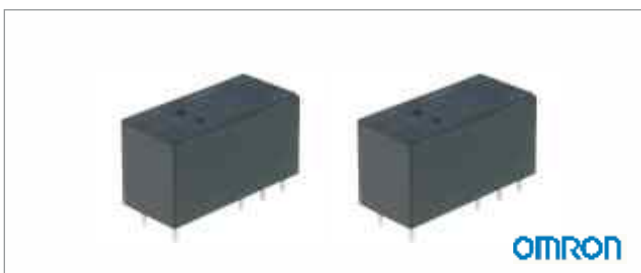
G2R Series

- Conforms to VDE0435 (VDE approval: C250 insulation grade), UI508, CSA22.2, SEV, SEMKO.
- High-sensitivity (360 mW) and high-capacity(16 A) types available.
- Double-winding latching type available.
- Plug-in with test button and quick-connect terminals available.



G3R/G3RD Series

- Same shape as SSR type G2R power relay for PCB mounting.
- Direct mounting to PCB.
- Also standardized with input indicator.
- High dielectric strengths of 2500V AC for 2A models.
- High voltage DC version also available.
- Minimum input packing unit is 20 pcs.
- DC control.
- AC & DC outputs available with max. current rating of 2A.



G2RL Series

- High-sensitivity (250 mW) and High-capacity (16 A) versions.
- Designed for cooking and HVAC controls: blower motor, damper, active air purification, duct flow boost fans, etc.
- Conforms to VDE (EN61810-1). UL recognized/CSA certified.
- Meets EN60335-1 requirements for household products.
- Coil insulation system: Class F.
- RoHS compliant.



SSR20/SSR21 Series

- Pin to pin compatible with G2R electromechanical relays.
- LED input voltage.
- Non-polarized input.
- Rated operational current upto 5A for DC load models & 3A for AC load models.
- Zero crossing commutation for models with AC voltage output or instantaneous for DC voltage output models.
- Output voltage from 12V AC to 275V AC or from 0V DC to 35V DC.
- 2500V input-output insulation.
- RC filter protection for AC models.

RELAYS-ELECTROMECHANICAL & SSR



RJ Series

- Compact housing only 12.7-mm wide.
- Large contact rating.
RJ1S (1-pole): 12A.
RJ2S (2-pole): 8A.
- Non-polarized LED indicator available.
- Electrical life: 200,000 operations (AC load).
Mechanical life: 30 million operations (AC coil).
- UL recognized, CSA certified, EN compliant.



RJ Series - PCB type

- SPDT, SPST-NO, DPDT, DPST-NO SPDT, SPST-NO are available in high capacity type.
- Compact housing - only 12.7-mm wide.
- High contact rating.
RJ1V (1-pole): 12A, 16A.
RJ2V (2-pole): 8A.
- Electrical life: 200,000 operations (AC load).
Mechanical life: 30 million operations (AC coil, SPDT, DPDT).
- Flux-tight structure.



RU Series

- Two terminal styles: plug-in and PCB mount.
- Non-polarized LED indicator available on plug-in relays.
- Mechanical flag indicator available on plug-in relays.
- Manual latching lever with color coding for AC or DC coil.
- Snap-on yellow marking plate; optional marking plates are available in four other colors.
- Maximum contact ratings: 10A (RU2), 6A (RU4), 3A (RU42).
- UL, CSA, c-UL, EN compliant.

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