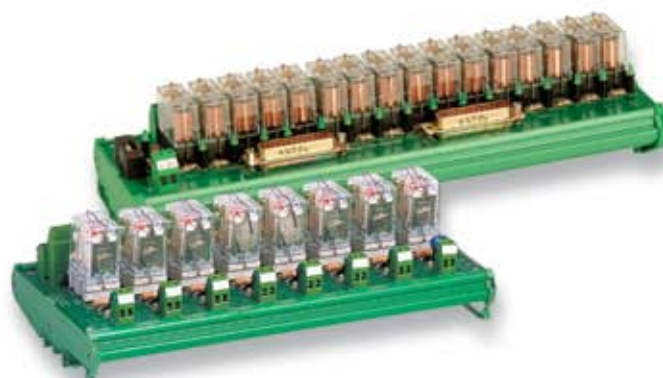




## ● — INTERFACE CARDS — ●





Basic Automation a BRISK group company is one of the fastest growing solution providers of Industrial Interfacing and Automation solutions in the country today. Our mission is to provide swift, reliable and complete customer service and support.

## PRINCIPLES

In our aim to be the complete and leading solution provider of Industrial and Interfacing Automation we look to our founding principles and continue to build upon them.

## HIGH STANDARDS AND ETHICS

In all our work we adhere to highest professional standards and by imposing these high standards we have earned trust and confidence of our customers.

## TECHNICAL INNOVATION AND DYNAMIC GROWTH

Accompanied by growth Basic Automation has more then kept pace with the technological change in the industry and we will keep doing so in the coming years.

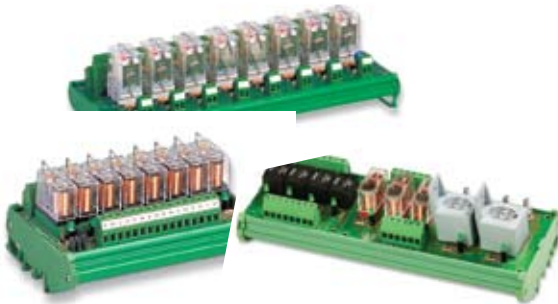
## MEETING AND SURPASSING CUSTOMER NEEDS AND EXPECTATIONS

We believe that if we deliver products of quality beyond customer's expectations, customers will return again and again, asking us to further contribute to their success.



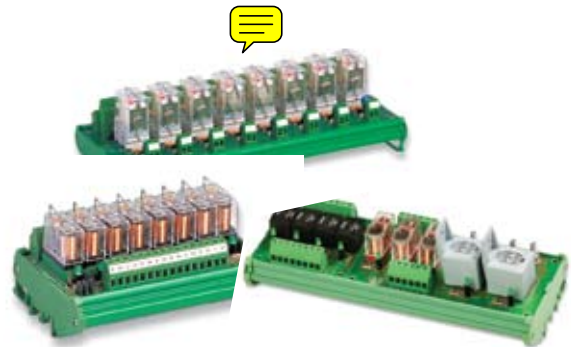
## INTRODUCTION

By following cutting edge solutions, products of highest calibre and above all our extensive marketing network and dedicated employees, has resulted in our meeting complex needs of the most demanding users and propelled Basic Automation to be the preferred supplier of Interfacing products



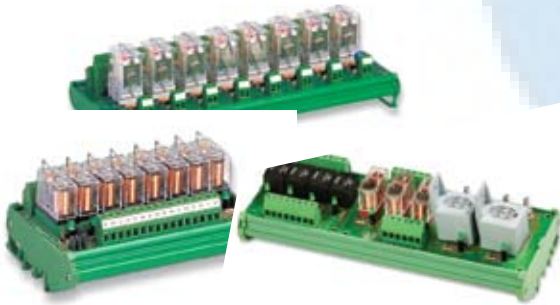
### RELAY INTERFACE MODULE

Basic Automation offers a wide range of interfacing modules used for control process. Whether it is just a small system with few I/O signals or a complex power station that is being put into operation, what they all have in common is that the signals from the automation device must be connected to the field level in an industry. The range offers Standard Cards, PLC/DCS specific cards, CNC Specific Cards, Genset Cards, Panel accessory cards, Passive cards and various Customised solutions.



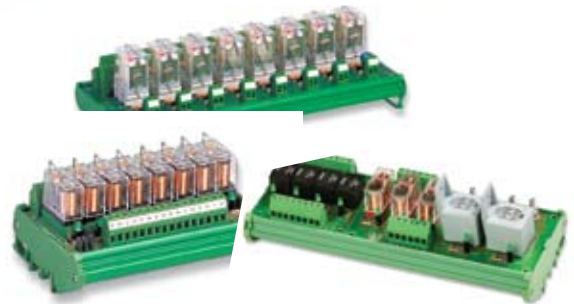
### SIGNAL ISOLATORS & CONVERTERS

Basic Automation offers modular converters for measuring and control technology to avoid distortion of analog signals caused by external interference. With accurate conversions, electrical isolation or adaptation of analog signals, they provide safe and increased transmission quality and thus quality of control circuits. The range includes isolators and converters for Voltage, Current, Temperature, Frequency and Resistance thermometers.



### MEASURING & MONITORING RELAYS

Basic Automation offers a wide range of interfacing modules used for control process. Whether it is just a small system with few I/O signals or a complex power station that is being put into operation, what they all have in common is that the signals from the automation device must be connected to the field level in an industry. The range offers Standard Cards, PLC/DCS specific cards, CNC Specific Cards, Genset Cards, Panel accessory cards, Passive cards and various Customised solutions.



### ANALOG TIMERS

Basic Automation offers modular converters for measuring and control technology to avoid distortion of analog signals caused by external interference. With accurate conversions, electrical isolation or adaptation of analog signals, they provide safe and increased transmission quality and thus quality of control circuits. The range includes isolators and converters for Voltage, Current, Temperature, Frequency and Resistance thermometers.

# contents

## **STANDARD RELAY CARDS**

Relay Interface Module -1C/O Contact Configuration, DC Voltage Cards  
Relay Interface Module -2C/O Contact Configuration, DC Voltage Cards  
Relay Interface Module -4C/O Contact Configuration, DC Voltage Cards  
Relay Interface Module -1C/O Contact Configuration, AC Voltage Cards  
Relay Interface Module -2C/O Contact Configuration, AC Voltage Cards  
Relay Interface Module -4C/O Contact Configuration, AC Voltage Cards  
Relay Interface Module -2C/O Contact Configuration, AC/DC Voltage Cards  
Relay Interface Module -1C/O With Fuse, DC/AC Voltage Cards  
Relay Interface Module -2C/O With Fuse, DC/AC Voltage Cards

## **SOLID STATE RELAY CARDS**

Solid State Relay Modules with DC Output  
Solid State Relay Modules with AC Output

## **PASSIVE INTERFACE CARDS**

Passive Interface Modules with FRC connector  
Passive Interface Modules with D Sub connector

## **PLC INTERFACE LAYOUT**

Digital Input Field Interface Modules  
Digital Input Field Interface Module With LED and Fuse Protection  
Digital Input Field Relay Interface Module With LED Indication & Fuse and Redundancy  
Digital Input Field Relay Interface Module With Relay (Non-Redundant)  
Digital Input Field Interface Module With Relay (Redundant)  
Digital Input Field Interface Module With Relay (Redundant)  
Digital Input Field Interface Module With Optoisolation and Redundancy

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Digital Output Field Interface Module with 1C/O Contacts (Non-Redundant)  
Digital Output Field Interface Module with 1C/O Relay with Fuse (Non-Redundant)  
Digital Output Field Interface Module 2C/O Contacts Non Redundant  
Digital Output Field Interface Module 2C/O Contacts with Fuse Non Redundant  
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Digital Output Field Interface Module 1C/O Contacts with Wetted (Powered Contacts)

## **ANALOG INPUT FIELD INTERFACE MODULES**

Analog Input Field Interface Module with Fuse & 2Wire/4Wire Selection  
Analog Input Field Interface Module with Fuse & 2Wire/4Wire Selection (Redundant)

## **ANALOG OUTPUT FIELD INTERFACE MODULES**

Analog Output Field Interface Module with Fuse (Redundant)  
Analog Output Field Interface Module 4-20mA

## **CNC INTERFACE LAYOUT**

CNC Specific I/O Interface Module

CNC Specific I/O Interface Module with EMR and SSR

## **ACCESSORY CARDS**

Diode Varistor Cards

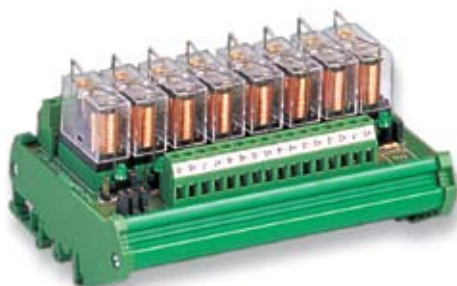
Power Distribution and Fuse Cards

## **GENSET CARDS**

2 Channel Card

3 Channel Card

9 Channel Card



## Relay Interface Module - 1 C/O Contact Configuration, DC Voltage Cards

### APPLICATION

Relay Interface Module 1Changeover with different DC Coils used as Interface between PLC/DCS/Drives digital outputs to field or field devices. Outputs are galvanically isolated through relays.

### TECHNICAL DATA

#### INPUT DATA:

|                    |                        |
|--------------------|------------------------|
| Operating Voltage  | 12 / 24 / 48 / 110 VDC |
| Input Current/Chnl | 25mA @ 24VDC           |
| Input Wiring       | Looped thru Jumpers    |
| Protection (Coil)  | Free Wheeling Diode    |
| Indication/Chnl    | LED                    |

#### OUTPUT DATA

|              |                         |
|--------------|-------------------------|
| Contact Type | SPDT (1C/O)             |
| Max Current  | 10A @ 230VAC/30VDC      |
| Output       | Potential Free          |
| Protection   | Snubber / Fuse Optional |
| Max.Voltage  | 250VAC/DC               |

#### COMPONENT SPECIFICATION:

|          |                            |
|----------|----------------------------|
| Relay    | 12 / 24VDC Coil, 1 C/o 10A |
| Sockets  | 1C/o PCB Solderable Type   |
| Terminal | Screw Type (2.5Sq mm)      |
| PCB      | Glass Epoxy Double Sided   |

#### GENERAL DATA

|                    |                          |
|--------------------|--------------------------|
| No. of Channels    | 1 / 2 / 4 / 8 / 16       |
| Test Voltage       | 1.5kV, 50Hz, 1M          |
| Mounting           | Universal Rail Mountable |
| Identification Tag | Optional (On request)    |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp:

Max 60 Deg.C

\*Relative Humidity:

Max 90% (Non-Condensing)

#### NO. OF CHANNELS      LENGTH      WIDTH

|            |     |   |    |
|------------|-----|---|----|
| 1 Channel  | 23  | X | 92 |
| 2 Channel  | 40  | X | 92 |
| 4 Channel  | 80  | X | 92 |
| 8 Channel  | 135 | X | 92 |
| 16 Channel | 265 | X | 92 |

#### HOW TO ORDER

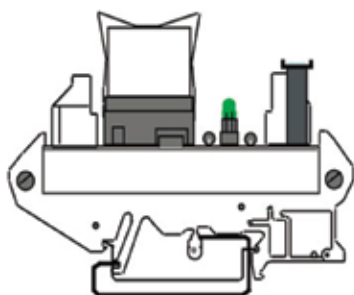
|                  |
|------------------|
| 8 No.Of Channels |
| 12 Coil Voltage  |
| D Signal         |
| Change over      |
| Socket           |
| Relay            |

#### BRM 8 – 24 D – 1 B 0

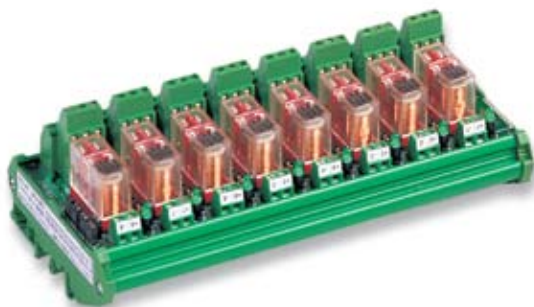
|                    |
|--------------------|
| 1 / 2 / 4 / 8 / 16 |
| 12 / 24 VDC        |
| DC                 |
| 1                  |
| With Socket        |
| Omron / OEN        |

#### Other Options:

Screwless Terminals



Width: 92 mm



## Relay Interface Module -2C/O Contact Configuration, DC Voltage Cards

### APPLICATION

Relay Interface Module 2 Changeover with different DC Coils used as Interface between PLC/DCS/Drives digital outputs to field or field devices. Outputs are galvanically isolated through relays.

### TECHNICAL DATA

#### INPUT DATA:

|                    |                        |
|--------------------|------------------------|
| Operating Voltage  | 12 / 24 / 48 / 110 VDC |
| Input Current/Chnl | 25mA @ 24VDC           |
| Input Wiring       | Looped thru Jumpers    |
| Protection (Coil)  | Free Wheeling Diode    |
| Indication/Chnl    | LED                    |

#### OUTPUT DATA

|              |                       |
|--------------|-----------------------|
| Contact Type | DPDT (2C/O)           |
| Max Current  | 5A @230VAC/30VDC      |
| Output       | Potential Free        |
| Protection   | Snubber/Fuse Optional |
| Max.Voltage  | 250VAC/DC             |

#### COMPONENT SPECIFICATION:

|          |                            |
|----------|----------------------------|
| Relay    | 12 / 24VDC Coil, 2 C/o, 5A |
| Sockets  | 2C/o PCB Solderable Type   |
| Terminal | Screw Type (2.5Sq mm)      |
| PCB      | Glass Epoxy Double Sided   |

#### GENERAL DATA

|                     |                          |
|---------------------|--------------------------|
| No. of Channels     | 1 / 2 / 4 / 8 / 16       |
| Test Voltage        | 1.5kV, 50Hz, 1M          |
| Mounting:           | Universal Rail Mountable |
| Identification Tag: | Optional (On request)    |

#### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C

\*Relative Humidity: Max 90% (Non-Condensing)

| NO. OF CHANNELS | LENGTH | WIDTH |
|-----------------|--------|-------|
| 1 Channel       | 23 X   | 92    |
| 2 Channel       | 46 X   | 92    |
| 4 Channel       | 110 X  | 92    |
| 8 Channel       | 190 X  | 92    |
| 16 Channel      | 370 X  | 92    |

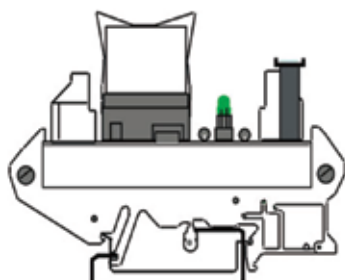
#### HOW TO ORDER?

|                |                    |
|----------------|--------------------|
| No.Of Channels | 1 / 2 / 4 / 8 / 16 |
| Coil Voltage   | 12 / 24 VDC        |
| Signal         | DC                 |
| Change over    | 2                  |
| Socket         | With Socket        |
| Relay          | Omron / OEN        |

#### BRM 8 – 24 D – 2 B O

#### Other Options:

Screwless Terminals



Width: 92 mm



## Relay Interface Module - 4 C/O Contact Configuration, DC Voltage Cards

### APPLICATION

Relay Interface Module 4 Changeover with different DC Coils used as Interface between PLC/DCS/Drives digital outputs to field or field devices. Outputs are galvanically isolated through relays.

### TECHNICAL DATA

#### INPUT DATA:

|                    |                     |
|--------------------|---------------------|
| Operating Voltage  | 12 / 24 / 110 VDC   |
| Input Current/Chnl | 25mA @ 24VDC        |
| Input Wiring       | Looped thru Jumpers |
| Protection (Coil)  | Free Wheeling Diode |
| Indication/Chnl    | LED                 |

#### OUTPUT DATA

|              |                         |
|--------------|-------------------------|
| Contact Type | 4 Change Over           |
| Max Current  | 5A @ 230VAC/30VDC       |
| Output       | Potential Free          |
| Protection   | Snubber / Fuse Optional |
| Max.Voltage  | 250VAC/DC               |

#### COMPONENT SPECIFICATION:

|          |                          |
|----------|--------------------------|
| Relay    | 12 / 24VDC Coil, 4 C/o   |
| Sockets  | 4C/o PCB Solderable Type |
| Terminal | Screw Type (2.5Sq mm)    |
| PCB      | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                          |
|--------------------|--------------------------|
| No. of Channels    | 1 / 4 / 8                |
| Test Voltage       | 1.5kV, 50Hz, 1M          |
| Mounting           | Universal Rail Mountable |
| Identification Tag | Optional (On request)    |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp:

Max 60 Deg.C

\*Relative Humidity:

Max 90% (Non-Condensing)

#### NO. OF CHANNELS      LENGTH      WIDTH

|           |     |   |    |
|-----------|-----|---|----|
| 1 Channel | 50  | X | 92 |
| 4 Channel | 138 | X | 92 |
| 8 Channel | 260 | X | 92 |

#### HOW TO ORDER

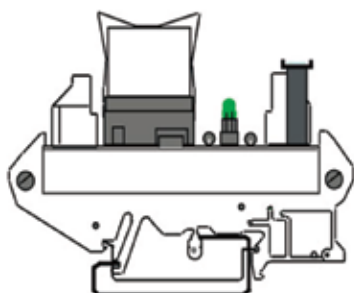
**8** No.Of Channels  
**12** Coil Voltage  
**D** Signal  
**4** Change over  
**B** Socket  
**0** Relay

#### BRM 8 – 24 D – 1 B 0

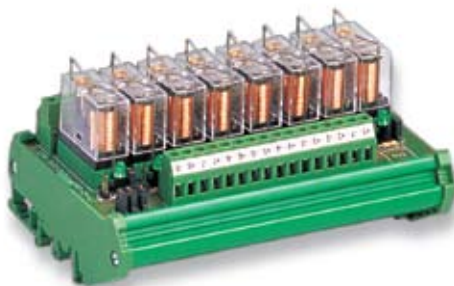
1 / 4 / 8  
 12 / 24 VDC  
 DC  
 4  
 With Socket  
 Omron / OEN

#### Other Options:

Screwless Terminals



Width: 92 mm



## Relay Interface Module - 1C/O

### Contact Configuration, AC Voltage Cards

#### APPLICATION

Relay Interface Module 1 Changeover with different AC Coils used as Interface between PLC/DCS/Drives digital outputs to field or field devices. Outputs are galvanically isolated through relays.

#### TECHNICAL DATA

##### INPUT DATA:

|                    |                     |
|--------------------|---------------------|
| Operating Voltage  | 110 / 230VAC        |
| Input Current/Chnl | 15mA @ 24VDC        |
| Input Wiring       | Looped thru Jumpers |
| Protection (Coil)  | Not Applicable      |
| Indication/Chnl    | LED                 |

##### OUTPUT DATA

|              |                       |
|--------------|-----------------------|
| Contact Type | SPDT (1C/O)           |
| Max Current  | 10A @ 230VAC/30VDC    |
| Output       | Potential Free        |
| Protection   | Snubber/Fuse Optional |
| Max.Voltage  | 250VAC/DC             |

##### COMPONENT SPECIFICATION:

|          |                          |
|----------|--------------------------|
| Relay    | 230VAC Coil, 1 C/o 10A   |
| Sockets  | 1C/o PCB Solderable Type |
| Terminal | Screw Type (2.5Sq mm)    |
| PCB      | Glass Epoxy Double Sided |

##### GENERAL DATA

|                     |                          |
|---------------------|--------------------------|
| No. of Channels     | 1 / 2 / 4 / 8 / 16       |
| Test Voltage        | 1.5kV, 50Hz, 1M          |
| Mounting:           | Universal Rail Mountable |
| Identification Tag: | Optional (On request)    |

#### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C

\*Relative Humidity: Max 90% (Non-Condensing)

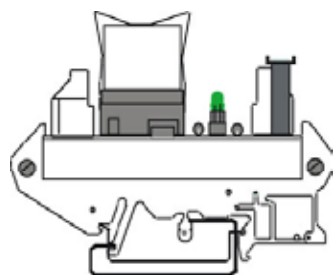
| NO. OF CHANNELS | LENGTH | WIDTH |
|-----------------|--------|-------|
| 1 Channel       | 23 X   | 92    |
| 2 Channel       | 40 X   | 92    |
| 4 Channel       | 80 X   | 92    |
| 8 Channel       | 35 X   | 92    |
| 16 Channel      | 65 X   | 92    |

#### HOW TO ORDER?

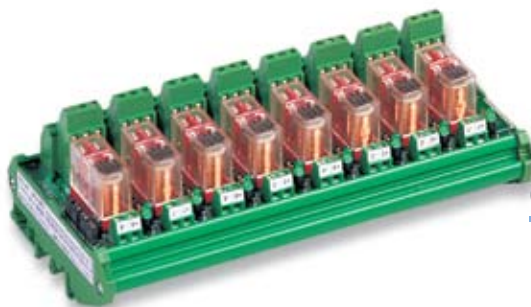
|                         | BRM 8 – 24 D – 2 B O |
|-------------------------|----------------------|
| <b>8</b> No.Of Channels | 1 / 2 / 4 / 8 / 16   |
| <b>12</b> Coil Voltage  | 12 / 24 VDC          |
| <b>A</b> Signal         | DC                   |
| <b>2</b> Change over    | 2                    |
| <b>B</b> Socket         | With Socket          |
| <b>O</b> Relay          | Omron / OEN          |

#### Other Options:

Screwless Terminals



Width: 92 mm



## Relay Interface Module - 2 C/O Contact Configuration, DC Voltage Cards

### APPLICATION

Relay Interface Module 2 Changeover with different AC Coils used as Interface between PLC/DCS/Drives digital outputs to field or field devices. Outputs are galvanically isolated through relays.

### TECHNICAL DATA

#### INPUT DATA:

|                    |                     |
|--------------------|---------------------|
| Operating Voltage  | 110 / 230VAC        |
| Input Current/Chnl | 25mA @ 24VDC        |
| Input Wiring       | Looped thru Jumpers |
| Protection (Coil)  | Free Wheeling Diode |
| Indication/Chnl    | LED                 |

#### OUTPUT DATA

|              |                         |
|--------------|-------------------------|
| Contact Type | DPDT (2C/O)             |
| Max Current  | 5A @230VAC/30VDC        |
| Output       | Potential Free          |
| Protection   | Snubber / Fuse Optional |
| Max.Voltage  | 250VAC/DC               |

#### COMPONENT SPECIFICATION:

|          |                               |
|----------|-------------------------------|
| Relay    | 110 / 230 VAC Coil, 2 C/o, 5A |
| Sockets  | 1C/o PCB Solderable Type      |
| Terminal | Screw Type (2.5Sq mm)         |
| PCB      | Glass Epoxy Double Sided      |

#### GENERAL DATA

|                    |                          |
|--------------------|--------------------------|
| No. of Channels    | 1 / 2 / 4 / 8 / 16       |
| Test Voltage       | 1.5kV, 50Hz, 1M          |
| Mounting           | Universal Rail Mountable |
| Identification Tag | Optional (On request)    |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp:

Max 60 Deg.C

\*Relative Humidity:

Max 90% (Non-Condensing)

#### NO. OF CHANNELS      LENGTH      WIDTH

|            |     |   |    |
|------------|-----|---|----|
| 1 Channel  | 23  | X | 92 |
| 2 Channel  | 46  | X | 92 |
| 4 Channel  | 110 | X | 92 |
| 8 Channel  | 190 | X | 92 |
| 16 Channel | 370 | X | 92 |

#### HOW TO ORDER

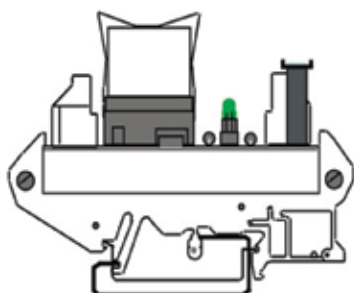
**8** No.Of Channels  
**12** Coil Voltage  
**D** Signal  
**4** Change over  
**B** Socket  
**0** Relay

#### BRM 8 – 230 A – 1 B 0

1 / 2 / 4 / 8 / 16  
110 / 230 VAC  
AC  
2  
With Socket  
Omron / OEN

#### Other Options:

Screwless Terminals



Width: 92 mm



## Relay Interface Module -4C/O

### Contact Configuration, AC Voltage Cards

#### APPLICATION

Relay Interface Module 2Changeover with different AC Coils used as Interface between PLC/DCS/Drives digital outputs to field or field devices. Outputs are galvanically isolated through relays.

#### TECHNICAL DATA

##### INPUT DATA:

|                    |                     |
|--------------------|---------------------|
| Operating Voltage  | 110VAC / 230VAC     |
| Input Current/Chnl | 40mA @ 24VDC        |
| Input Wiring       | Looped thru Jumpers |
| Protection (Coil)  | Free Wheeling Diode |
| Indication/Chnl    | LED                 |

##### OUTPUT DATA

|              |                       |
|--------------|-----------------------|
| Contact Type | 4 Change Over         |
| Max Current  | 5A @ 230VAC/30VDC     |
| Output       | Potential Free        |
| Protection   | Snubber/Fuse Optional |
| Max.Voltage  | 250VAC/DC             |

##### COMPONENT SPECIFICATION:

|          |                           |
|----------|---------------------------|
| Relay    | 110 / 230 VAC Coil, 4 C/o |
| Sockets  | 4C/o PCB Solderable Type  |
| Terminal | Screw Type (2.5Sq mm)     |
| PCB      | Glass Epoxy Double Sided  |

##### GENERAL DATA

|                     |                          |
|---------------------|--------------------------|
| No. of Channels     | 1 / 4 / 8                |
| Test Voltage        | 1.5kV, 50Hz, 1M          |
| Mounting:           | Universal Rail Mountable |
| Identification Tag: | Optional (On request)    |

#### STANDARDS & APPROVAL

- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

#### NO. OF CHANNELS      LENGTH      WIDTH

|           |       |    |
|-----------|-------|----|
| 1 Channel | 50 X  | 92 |
| 4 Channel | 138 X | 92 |
| 8 Channel | 260 X | 92 |

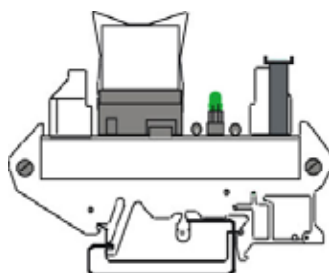
#### HOW TO ORDER?

#### BRM 8 – 24 D – 2 B O

|                         |             |
|-------------------------|-------------|
| <b>8</b> No.Of Channels | 1 / 4 / 8   |
| <b>23</b> Coil Voltage  | 110/230 AC  |
| <b>A</b> Signal         | AC          |
| <b>4</b> Change over    | 4           |
| <b>B</b> Socket         | With Socket |
| <b>O</b> Relay          | Omron / OEN |

#### Other Options:

Screwless Terminals



Width: 92 mm



## Relay Interface Module - 2 C/O Contact Configuration, AC/DC Voltage Cards

### APPLICATION

Relay Interface Module 2Changeover with different AC or DC Coils used as Interface between PLC/DCS/Drives digital outputs to field or field devices. Outputs are galvanically isolated through relays.

### TECHNICAL DATA

#### INPUT DATA:

|                    |                            |
|--------------------|----------------------------|
| Operating Voltage  | 12 / 24VDC or 110 / 230VAC |
| Input Current/Chnl | 20mA @ 24VDC               |
| Input Wiring       | Looped thru Jumpers        |
| Protection (Coil)  | Free Wheeling Diode        |
| Indication/Chnl    | LED                        |

#### OUTPUT DATA

|              |                         |
|--------------|-------------------------|
| Contact Type | DPDT (2C/O)             |
| Max Current  | 5A @230VAC/30VDC        |
| Output       | Potential Free          |
| Protection   | Snubber / Fuse Optional |
| Max.Voltage  | 250VAC/DC               |

#### COMPONENT SPECIFICATION:

|          |                            |
|----------|----------------------------|
| Relay    | 12 / 24VDC Coil, 2 C/o, 5A |
| Sockets  | 2C/o PCB Solderable Type   |
| Terminal | Screw Type (2.5Sq mm)      |
| PCB      | Glass Epoxy Double Sided   |

#### GENERAL DATA

|                    |                          |
|--------------------|--------------------------|
| No. of Channels    | 4 / 8                    |
| Test Voltage       | 1.5kV, 50Hz, 1M          |
| Mounting           | Universal Rail Mountable |
| Identification Tag | Optional (On request)    |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp:

Max 60 Deg.C

\*Relative Humidity:

Max 90% (Non-Condensing)

| NO. OF CHANNELS | LENGTH | X | WIDTH |
|-----------------|--------|---|-------|
| 4 Channel       | 130    | X | 92    |
| 8 Channel       | 235    | X | 92    |

#### HOW TO ORDER?

8 No.Of Channels

12 Coil Voltage

D Signal

4 Change over

B Socket

0 Relay

**BRM 8 – 24 D – 2 B 0 MY2**

4 / 8

24VDC / 110 / 230VAC

AC / DC

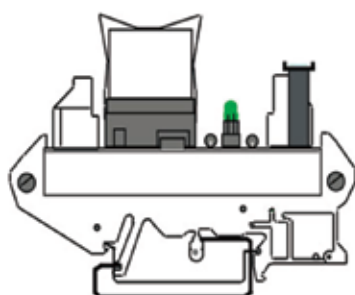
2

With Socket

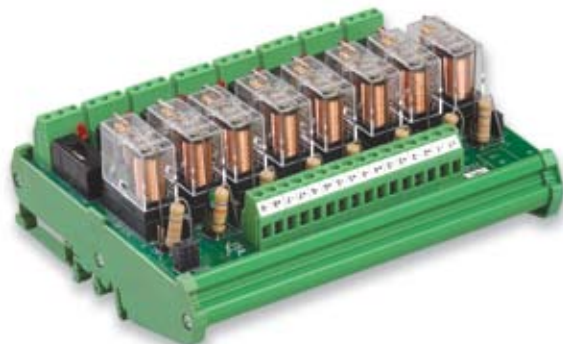
Omron / OEN

#### Other Options:

Screwless Terminals



Width: 92 mm



## Relay Interface Module - 1C/O With Fuse, DC/AC Voltage Cards

### APPLICATION

Relay Interface Module 1 Changeover with different AC or DC Coils used as Interface between PLC/DCS/ Drives digital outputs to field or field devices. Outputs are galvanically isolated through relays.

### TECHNICAL DATA

#### INPUT DATA:

|                    |                              |
|--------------------|------------------------------|
| Operating Voltage  | 12 / 24VDC / 110 / 230AC     |
| Input Current/Chnl | 25mA @ 24VDC                 |
| Input Wiring       | Looped thru Jumpers          |
| Protection (Coil)  | Free Wheeling Diode(DC Only) |
| Indication/Chnl    | LED                          |

#### OUTPUT DATA

|              |                             |
|--------------|-----------------------------|
| Contact Type | SPDT (1C/O)                 |
| Max Current  | 10A @ 230VAC/30VDC          |
| Output       | Potential Free              |
| Protection   | Fuse (Fuse Fail Indication) |
| Max.Voltage  | 250VAC                      |

#### COMPONENT SPECIFICATION:

|          |                            |
|----------|----------------------------|
| Relay    | 12 / 24VDC Coil, 2 C/o 10A |
| Sockets  | 1C/o PCB Solderable Type   |
| Terminal | Screw Type (2.5Sq mm)      |
| PCB      | Glass Epoxy Double Sided   |

#### GENERAL DATA

|                     |                          |
|---------------------|--------------------------|
| No. of Channels     | 4 / 8 / 16               |
| Test Voltage        | 1.5kV, 50Hz, 1M          |
| Mounting:           | Universal Rail Mountable |
| Identification Tag: | Optional (On request)    |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C

\*Relative Humidity: Max 90% (Non-Condensing)

| NO. OF CHANNELS | LENGTH | WIDTH |
|-----------------|--------|-------|
| 4 Channel       | 90 X   | 92    |
| 8 Channel       | 150 X  | 92    |
| 16 Channel      | 290 X  | 92    |

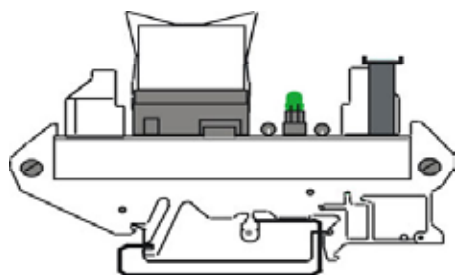
#### HOW TO ORDER?

|           |                |                            |
|-----------|----------------|----------------------------|
| <b>8</b>  | No.Of Channels | 4 / 8 / 16                 |
| <b>12</b> | Coil Voltage   | 12 / 24 VDC / 110 / 230VAC |
| <b>D</b>  | Signal         | AC / DC                    |
| <b>1</b>  | Change over    | 1                          |
| <b>B</b>  | Socket         | With Socket                |
| <b>O</b>  | Relay          | Omron / OEN                |

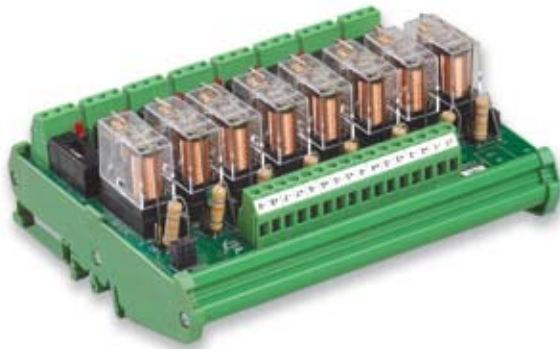
#### BRM 8 – 230A – 1 B OFI

#### Other Options:

Screwless Terminals



Width: 92 mm



## Relay Interface Module - 2C/O With Fuse, DC/AC Voltage Cards

### APPLICATION

Relay Interface Module 2 Changeover with different AC Coils used as Interface between PLC/DCS/Drives digital outputs to field or field devices. Outputs are galvanically isolated through relays.

### TECHNICAL DATA

#### INPUT DATA:

|                    |                              |
|--------------------|------------------------------|
| Operating Voltage  | 12 / 24DC / 110 / 230AC      |
| Input Current/Chnl | 25mA @ 24VDC                 |
| Input Wiring       | Looped thru Jumpers          |
| Protection (Coil)  | Free Wheeling Diode(DC Only) |
| Indication/Chnl    | LED                          |

#### OUTPUT DATA

|              |                             |
|--------------|-----------------------------|
| Contact Type | DPDT (2C/O)                 |
| Max Current  | 5A @230VAC/30VDC            |
| Output       | Potential Free              |
| Protection   | Fuse (Fuse Fail Indication) |
| Max.Voltage  | 250VAC                      |

#### COMPONENT SPECIFICATION:

|          |                            |
|----------|----------------------------|
| Relay    | 12 / 24VDC Coil, 2 C/o,10A |
| Sockets  | 2C/o PCB Solderable Type   |
| Terminal | Screw Type (2.5Sq mm)      |
| PCB      | Glass Epoxy Double Sided   |

#### GENERAL DATA

|                    |                          |
|--------------------|--------------------------|
| No. of Channels    | 4 / 8 / 16               |
| Test Voltage       | 1.5kV, 50Hz, 1M          |
| Mounting           | Universal Rail Mountable |
| Identification Tag | Optional (On request)    |

### STANDARDS & APPROVAL

- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

#### NO. OF CHANNELS      LENGTH      WIDTH

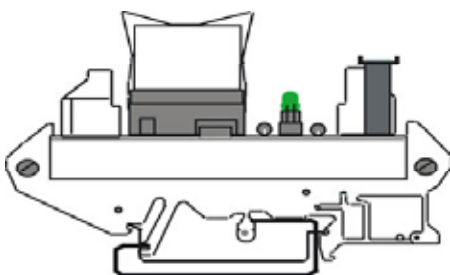
|            |     |   |    |
|------------|-----|---|----|
| 4 Channel  | 120 | X | 92 |
| 8 Channel  | 250 | X | 92 |
| 16 channel | 490 | X | 92 |

#### HOW TO ORDER?

|                         |                            |
|-------------------------|----------------------------|
| <b>8</b> No.Of Channels | 4 / 8 / 16                 |
| <b>12</b> Coil Voltage  | 12 / 24 VDC / 110 / 230VAC |
| <b>D</b> Signal         | AC / DC                    |
| <b>1</b> Change over    | 2                          |
| <b>B</b> Socket         | With Socket                |
| <b>0</b> Relay          | Omron / OEN                |

#### Other Options:

Screwless Terminals



Width: 92 mm



## Relay Interface Module - Solid State Relay Module with DC Load

### APPLICATION

Solid State Relay Modules with option of Fuse provide Optoisolation and Noise free outputs and have a High Switching Speed used for Interfacing PLC/DCS digital outputs to field or field devices. .

### TECHNICAL DATA

#### INPUT DATA:

|                    |                     |
|--------------------|---------------------|
| Operating Voltage  | 3 to 32VDC /        |
| Input Current/Chnl | 15mA DC             |
| Input Wiring       | Looped thru Jumpers |
| Indicayion/Chnl    | LED                 |

#### OUTPUT DATA

|                   |                |
|-------------------|----------------|
| Operating voltage | 24VDC to 60VDC |
| Contact Type      | SPST (1NO)     |
| Max Current       | 3A / 5A / 7A   |
| Max Turn On       | 50u Sec        |
| Max turn Off      |                |

#### COMPONENT SPECIFICATION:

|          |                          |
|----------|--------------------------|
| Relay    | Cosmo Relays             |
| Sockets  | Not Applicable           |
| Terminal | Screw Type (2.5Sq mm)    |
| PCB      | Glass Epoxy Double Sided |

#### GENERAL DATA

|                     |                          |
|---------------------|--------------------------|
| No. of Channels     | 1 / 2 / 4 / 8 / 16       |
| Test Voltage        | 30 Amp                   |
| Mounting:           | Universal Rail Mountable |
| Identification Tag: | Optional (On request)    |

#### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C

\*Relative Humidity: Max 90% (Non-Condensing)

#### NO. OF CHANNELS      LENGTH      WIDTH

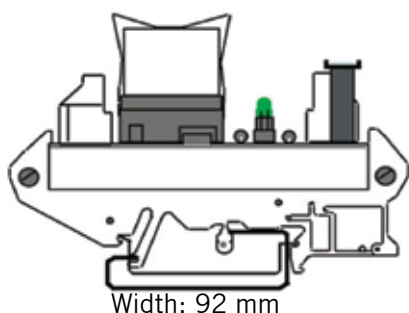
|            |       |    |
|------------|-------|----|
| 8 Channel  | 120 X | 92 |
| 16 Channel | 265 X | 92 |

#### HOW TO ORDER?

**BRM 8 – 24DI – 100A0-SSR**

**8** No.Of Channels      8 / 16

**24** Input Voltage      12 / 24 VDC





## Relay Interface Module - Solid State Relay Module with AC Load

### APPLICATION

Solid State Relay Modules with option of Fuse provide Optoisolation and Noise free outputs and have a High Switching Speed used for Interfacing PLC/DCS digital outputs to field or field devices.

### TECHNICAL DATA

#### INPUT DATA:

|                    |                     |
|--------------------|---------------------|
| Operating Voltage  | 250VAC              |
| Input Current/Chnl | 15mA DC             |
| Input Wiring       | Looped thru Jumpers |
| Indication/Chnl    | LED                 |

#### OUTPUT DATA

|                   |              |
|-------------------|--------------|
| Operating Voltage | 250VAC       |
| Contact Type      | SPST (1NO)   |
| Max Current       | 3A / 5A / 7A |
| Max Turn On       | 1/2 Cycle    |
| Max turn Off      | 1/2 Cycle    |

#### COMPONENT SPECIFICATION:

|          |                          |
|----------|--------------------------|
| Relay    | Cosmo Relays             |
| Sockets  | Not Applicable           |
| Terminal | Screw Type (2.5Sq mm)    |
| PCB      | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                          |
|--------------------|--------------------------|
| No. of Channels    | 8 / 16                   |
| Peak Surge         | 30 Amp                   |
| Mounting           | Universal Rail Mountable |
| Identification Tag | Optional (On request)    |
| Protection         | Fuse Optional            |

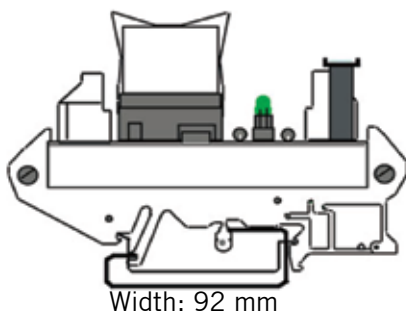
#### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,  
\*ANSI IPC 319 MIL 275B  
\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C  
\*Relative Humidity: Max 90% (Non-Condensing)

| NO. OF CHANNELS | LENGTH | X | WIDTH |
|-----------------|--------|---|-------|
| 8 Channel       | 120    | X | 92    |
| 16 Channel      | 265    | X | 92    |

| HOW TO ORDER?    | BRM 8 – 24AI – 100A0-SSR |
|------------------|--------------------------|
| 8 No.Of Channels | 8 / 16                   |
| 24 Input Voltage | 250 VAC                  |





## Passive Modules - FRC Connector to Terminals

### APPLICATION

Passive Interface Modules are used to convert the conventional Wiring. It consists of FRC male connector at one side and Screw type Terminals at the other side.

### TECHNICAL DATA

#### INPUT DATA:

|                     |                 |
|---------------------|-----------------|
| Connector Typ       | FRC/IDC Plug In |
| O/P Termination     | Screw Type      |
| Operating Voltage   | 60VDC, MAX      |
| Current Per Channel | 1Amp Max        |
| Indication          | LED (Optional)  |

#### GENERAL DATA

|                    |                           |
|--------------------|---------------------------|
| No of Pins         | 20/40/50                  |
| Identification Tag | Optional (On request)     |
| Mounting           | Universal Rail Mountable  |
| Test Voltage       | 500V Between Each Channel |

#### COMPONENT SPECIFICATION:

|          |                          |
|----------|--------------------------|
| Terminal | Screw Type (2.5Sq mm)    |
| PCB      | Glass Epoxy Double Sided |

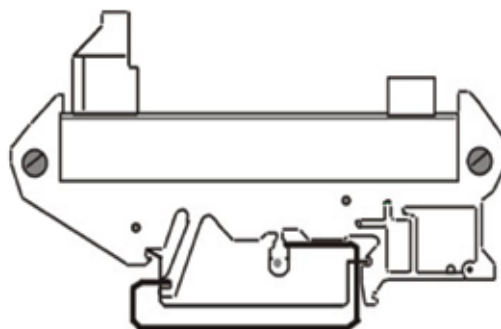
### STANDARDS & APPROVAL

- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

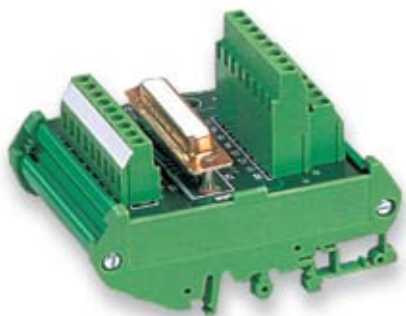
- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

| NO. OF CHANNELS | LENGTH | WIDTH |
|-----------------|--------|-------|
| BRMF-20M        | 68 X   | 92    |
| BRMF-40M        | 122 X  | 92    |
| BRMF-50M        | 147 X  | 92    |

| HOW TO ORDER?                  | BRMF – 20 M– X |
|--------------------------------|----------------|
| F Connector Type FRC Connector |                |
| 25 No Pins Of                  | 20/40/50       |
| M Connector Type Male          |                |
| X LEDs                         |                |



Width: 92 mm



## Passive Modules - D Sub Connector to Terminals

### APPLICATION

Passive Interface Modules are used to convert the conventional Wiring. It consists of D type male or female connector at one side and Screw type Terminals at the other side.

### TECHNICAL DATA

#### INPUT DATA:

|                     |                |
|---------------------|----------------|
| Connector Typ       | D Type Plug In |
| O/P Termination     | Screw Type     |
| Operating Voltage   | 60VDC, MAX     |
| Current Per Channel | 1Amp Max       |
| Indication          | LED (Optional) |

#### GENERAL DATA

|                    |                           |
|--------------------|---------------------------|
| No of Pins         | 15/25/37/50               |
| Identification Tag | Optional (On request)     |
| Mounting           | Universal Rail Mountable  |
| Test Voltage       | 500V Between Each Channel |

#### COMPONENT SPECIFICATION:

|          |                          |
|----------|--------------------------|
| Terminal | Screw Type (2.5Sq mm)    |
| PCB      | Glass Epoxy Double Sided |

#### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp:

Max 60 Deg.C

\*Relative Humidity:

Max 90% (Non-Condensing)

#### NO. OF CHANNELS

#### LENGTH WIDTH

|            |     |   |    |
|------------|-----|---|----|
| BRMD-15M/F | 50  | X | 92 |
| BRMD-25M/F | 64  | X | 92 |
| BRMD-37M/F | 88  | X | 92 |
| BRMD-50M/F | 150 | X | 92 |

#### HOW TO ORDER?

**D** Connector Type

**25** No Pins Of

**M** Connector Type

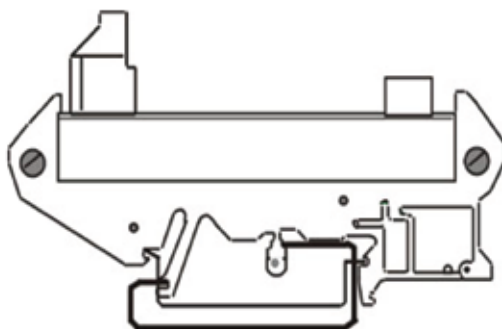
**X** LEDs

#### BRM 8 – 24AI – 100A0-SSR

D Type

250 VAC

Male - Female



Width: 92 mm



## Wiring Solutions for Analog and Digital I/Os

### TECHNICAL SPECIFICATIONS

| DIGITAL INPUT                                                                              | DIGITAL OUTPUT                                                                  | ANALOG OUTPUT                                                           | ANALOG INPUT                           |
|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------|
| <b>With Fuse</b><br>*2 Wire Interrogation<br>*2 Wire Reading Type                          | <b>1C/o With Opt. Fuse &amp; Potential Free/Wetted</b><br>*Sourcing or *Sinking | <b>With 2Wire/4Wire</b><br><b>With Option Of Fuse</b><br>(4-20mA/0-10V) | <b>With Option of Fuse</b><br>(4-20mA) |
| <b>With Relay</b><br>*2 Wire Interrogation<br>*2 Wire Reading Type                         | <b>2C/o With Opt. Fuse &amp; Potential Free/Wetted</b><br>*Sourcing or *Sinking | <b>With 2 Wire</b><br><b>With Option Of Fuse</b>                        | <b>With Redundancy</b><br>(4-20mA)     |
| <b>With Optoisolation</b><br>*2 Wire Interrogation<br>*2 Wire Reading Type                 | <b>Solid State Relay With Opt. Fuse</b><br>*Sourcing or *Sinking                | <b>With 4 Wire With</b><br><b>Option Of Fuse</b>                        |                                        |
| <b>With Redundancy with optional Test</b><br>*2 Wire Interrogation<br>*2 Wire Reading Type | <b>With Redundancy With Opt. Auto Test</b><br>*Sourcing or *Sinking             | <b>With Redundancy</b><br>(4-20mA)                                      |                                        |



## Digital Input Field Interface Module With LED and Fuse Protection

### APPLICATION

Digital Field Interface Modules with Fuse and LED Indication in each path used to Interface between PLC/DCS Digital Inputs to field devices such as Proximity sensors, Limit Switch i.e. Potential Free contacts etc.

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|                    |                             |
|--------------------|-----------------------------|
| Field Signal       | 24VDC                       |
| Protection         | Fuse in Each channel        |
| Type of Connection | 2 Wire Interogaton Reading. |
| Termination        | Terminals                   |
| Indication/Chnl    | LED                         |

#### OUTPUT DATA (SYSTEM SIDE)

|                                               |                               |
|-----------------------------------------------|-------------------------------|
| System Signal                                 | 24VDC                         |
| Protection                                    | Fuse (Fuse Fail Indication)   |
| Termination                                   | Plug In Type D type Connector |
| Isolation between input and output on request |                               |

#### COMPONENT SPECIFICATION:

|             |                          |
|-------------|--------------------------|
| Fuse        | Glass Fuse(5x20mm) 100mA |
| Fuse Holder | Vertical / Horizontal    |
| Terminals   | Screw Type (2.5Sq mm)    |
| PCB         | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 16, 32                      |
| Test Voltage       | 500V, 50 Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

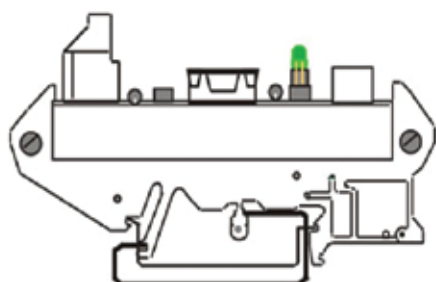
\*Ambient Opt Temp: Max 60 Deg.C

\*Relative Humidity: Max 90% (Non-Condensing)

#### TYPE OF CARD

#### LENGTH WIDTH

|                   |     |   |     |
|-------------------|-----|---|-----|
| BRM16-DIF-D25     | 180 | X | 126 |
| BRM16-DI(WOF)-D25 | 100 | X | 126 |
| BRM32-DIFI-D37    | 390 | X | 126 |



Width: 126 mm

#### PREFAB CABLE HARNESS





## Digital Input Field Relay Interface Module With LED Indication & Fuse and Redundancy

### APPLICATION

Digital Field Interface Modules with Fuse and LED Indication in each path used to Interface between PLC/DCS Redundant Digital Inputs to field devices such as Proximity sensors, Limit Switch i.e. Potential Free contacts etc. Accepts Single Input from Field & delivers Double outputs to System

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|                    |                              |
|--------------------|------------------------------|
| Field              | 24VDC (1 I/p per Channel)    |
| Protection         | Fuse in Each Path            |
| Type of Connection | 2 Wire Interrogation Reading |
| Termination        | Terminals                    |
| Indication/Chnl    | LED                          |

#### OUTPUT DATA (SYSTEM SIDE)

|                                               |                                               |
|-----------------------------------------------|-----------------------------------------------|
| System                                        | 24VDC (2 O/p's per Channel)                   |
| Protection:                                   | Fuse (Fuse Fail Indication                    |
| Termination                                   | Plug In Type D type Connector (Con1 and Con2) |
| Isolation between Input and Output on request |                                               |

#### COMPONENT SPECIFICATION:

|             |                          |
|-------------|--------------------------|
| Fuse        | Glass Fuse(5x20mm) 100mA |
| Fuse Holder | Vertical / Horizontal    |
| Terminals   | Screw Type (2.5Sq mm)    |
| PCB         | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 16, 32                      |
| Test Voltage       | 500V, 50 Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

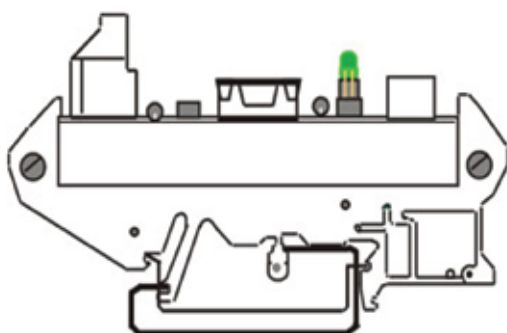
### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,  
\*ANSI IPC 319 MIL 275B  
\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C  
\*Relative Humidity: Max 90% (Non-Condensing)

#### TYPE OF CARD

| TYPE OF CARD        | LENGTH | WIDTH |
|---------------------|--------|-------|
| BRM16-DIF(RED)-D25  | 190 X  | 126   |
| BRM32-DIFI(RED)-D37 | 390 X  | 126   |



Width: 126 mm

#### PREFAB CABLE HARNESS





## Digital Input Field Relay Interface Module With Relay (Non-Redundant)

### APPLICATION

Digital Field Interface Modules with 1C/o & 2C/o Relay used to Interface between PLC/DCS Redundant Digital Inputs to field devices such as Proximity sensors, Limit Switch i.e. Potential Free contacts etc. Inputs are Galvanically isolated thru Relays

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|                    |                             |
|--------------------|-----------------------------|
| Field              | 24VDC, 110VAC, 230VAC       |
| Protection         | Fuse in Each Path           |
| Type of Connection | 2 Wire Interogaton Reading. |
| Termination        | Terminals                   |
| Indication/Chnl    | LED                         |

#### OUTPUT DATA (SYSTEM SIDE)

|                                               |                               |
|-----------------------------------------------|-------------------------------|
| System                                        | 24VDC                         |
| Protection:                                   | Fuse (Fuse Fail Indication)   |
| Termination                                   | Plug In Type D type Connector |
| Isolation between input and output on request |                               |

#### COMPONENT SPECIFICATION:

|             |                            |
|-------------|----------------------------|
| Fuse        | Glass Fuse(5x20mm) 100mA   |
| Fuse Holder | Vertical / Horizontal      |
| Terminals   | Screw Type (2.5Sq mm)      |
| PCB         | Glass Epoxy Double Sided   |
| Relay:      | 1 / 2C/o -24DC/110AC/230AC |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 16, 32                      |
| Voltage Available  | 24DC/110VAC/230VAC          |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

#### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

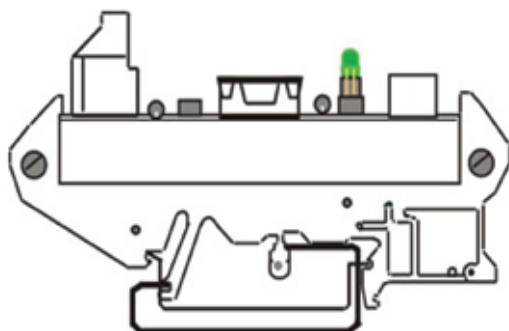
\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C

\*Relative Humidity: Max 90% (Non-Condensing)

#### TYPE OF CARD

|                     | LENGTH |   | WIDTH |
|---------------------|--------|---|-------|
| BRM8-24DIFR-1B-D15  | 160    | X | 126   |
| BRM16-24DIFR-1B-    | 255    | X | 126   |
| BRM8-24DIFR-2B-D15  | 180    | X | 126   |
| BRM16-24DIFR-2B-D25 | 290    | X | 126   |



Width: 126 mm

#### PREFAB CABLE HARNESS





## Digital Input Field Interface Module With Relay (Redundant)

### APPLICATION

DI Redundant Field Interface Modules with 1C/o & 2C/o Relay used to Interface between PLC/DCS Redundant Digital Inputs to field devices such as Proximity sensors, Limit Switch i.e. Potential Free contacts etc. Inputs are galvanically isolated thru Relays. Accepts Single Input from Field & delivers Double outputs to System

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|                    |                              |
|--------------------|------------------------------|
| Field              | 24VDC, 110VAC, 230VA         |
| Protection         | Fuse in Each Path            |
| Type of Connection | 2 Wire Interrogation Reading |
| Termination        | Terminals                    |
| Indication/Chnl    | LED                          |

#### OUTPUT DATA (SYSTEM SIDE)

|                                               |                               |
|-----------------------------------------------|-------------------------------|
| System Signal                                 | 24VDC (2 O/p's per Channel)   |
| Protection:                                   | Fuse (Fuse Fail Indication    |
| Termination                                   | Plug In Type D type Connector |
| Isolation between Input and Output on request |                               |

#### COMPONENT SPECIFICATION:

|             |                            |
|-------------|----------------------------|
| Fuse        | Glass Fuse(5x20mm) 100mA   |
| Fuse Holder | Vertical / Horizontal      |
| Terminals   | Screw Type (2.5Sq mm)      |
| PCB         | Glass Epoxy Double Sided   |
| Relay:      | 1 / 2C/o -24DC/110AC/230AC |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 8,16                        |
| Test Voltage       | 24DC/110VAC/230VAC          |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

#### STANDARDS & APPROVAL

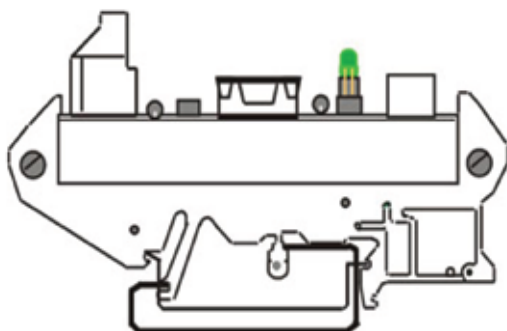
- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

#### NO. OF CHANNELS

#### LENGTH WIDTH

|                          |       |     |
|--------------------------|-------|-----|
| BRM8-24DDIR(RED)-1B-D15  | 160 X | 126 |
| BRM16-24DDIR(RED)-1B-D25 | 255 X | 126 |
| BRM8-24DIR(RED)-2B-D15   | 210 X | 126 |



Width: 126 mm

#### PREFAB CABLE HARNESS





## Digital Input Field Interface Module With Relay (Redundant)

### APPLICATION

DI Redundant Field Interface Modules with Relay and Autotest features used to Interface between PLC/DCS Redundant Digital Inputs to field devices. Provision to diagnose all Digital Inputs of PLC/DCS with the help of Auto High or Auto Low Signa

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|                    |                             |
|--------------------|-----------------------------|
| Field              | 24VDC, 110VAC, 230VAC       |
| Protection         | Fuse in Each Path           |
| Type of Connection | 2 Wire Interogaton Reading. |
| Termination        | Terminals                   |
| Indication/Chnl    | LED                         |

#### OUTPUT DATA (SYSTEM SIDE)

|                                       |                               |
|---------------------------------------|-------------------------------|
| System Signal                         | 24VDC (2 O/p's per channel)   |
| Protection:                           | Fuse (Fuse Fail Indication)   |
| Termination                           | Plug In Type D type Connector |
| Input and Output Gavanically Isolated |                               |

#### COMPONENT SPECIFICATION:

|             |                          |
|-------------|--------------------------|
| Fuse        | Glass Fuse(5x20mm) 100mA |
| Fuse Holder | Vertical / Horizontal    |
| Terminals   | Screw Type (2.5Sq mm)    |
| PCB         | Glass Epoxy Double Sided |
| Relay:      | 2C/o -24DC/110AC/230AC   |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 16                          |
| Voltage Available  | 24DC/110VAC/230VAC          |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

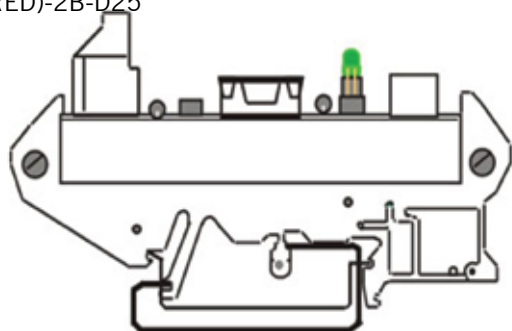
#### STANDARDS & APPROVAL

- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

#### TYPE OF CARD

|                             | LENGTH |   | WIDTH |
|-----------------------------|--------|---|-------|
| BRM16-24DDI(AT-RED)-2B-D25  | 300    | X | 126   |
| BRM16-110ADI(AT-RED)-2B-D25 | 400    | X | 126   |
| BRM8-230ADI(AT-RED)-2B-D25  | 400    | X | 126   |



Width: 126 mm

INTERFACE CARDS

#### PREFAB CABLE HARNESS





# Digital Input Field Interface Module With Optoisolation and Redundancy

## APPLICATION

Digital Field Interface Modules with Fuse and LED Indication in each path used to Interface between PLC/DCS Redundant Digital Inputs to field devices such as Proximity sensors, Limit Switch i.e. Potential Free contacts etc. Accepts Single Input from Field & delivers Double outputs to System

## TECHNICAL DATA

### INPUT DATA (FIELD SIDE):

|                    |                              |
|--------------------|------------------------------|
| Field              | 24VDC (1 I/p per Channel)    |
| Protection         | Fuse in Each Path            |
| Type of Connection | 2 Wire Interrogation Reading |
| Termination        | Terminals                    |
| Indication/Chnl    | LED                          |

### OUTPUT DATA (SYSTEM SIDE)

|                                       |                               |
|---------------------------------------|-------------------------------|
| System Signal                         | 24VDC (2 O/p's per Channel)   |
| Protection:                           | Fuse (Fuse Fail Indication    |
| Termination                           | Plug In Type D type Connector |
| Input and Output Gavanically Isolated |                               |

### COMPONENT SPECIFICATION:

|             |                          |
|-------------|--------------------------|
| Fuse        | Glass Fuse(5x20mm) 100mA |
| Fuse Holder | Vertical / Horizontal    |
| Terminals   | Screw Type (2.5Sq mm)    |
| PCB         | Glass Epoxy Double Sided |
| Relay:      | 2C/o -24DC/110AC/230AC   |

### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 16                          |
| Test Voltage       | 500V, 50 Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,  
\*ANSI IPC 319 MIL 275B  
\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C  
\*Relative Humidity: Max 90% (Non-Condensing)

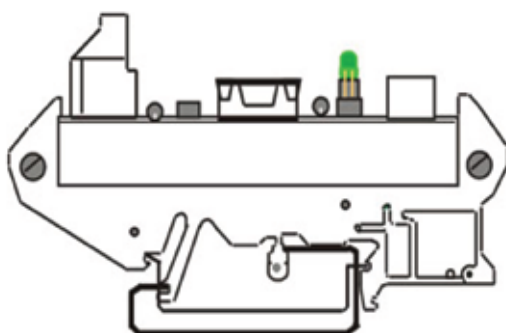
### NO. OF CHANNELS

### LENGTH

### WIDTH

|                             |     |   |     |
|-----------------------------|-----|---|-----|
| BRM16-DIFI(RED-ISO)-D25-SPD | 254 | X | 126 |
| BRM32-DIFI(RED-ISO)-D37-SPD | 330 | X | 126 |

### PREFAB CABLE HARNESS



Width: 126 mm



## Digital Output Field Interface Module with 1C/O Contacts (Non-Redundant)

### APPLICATION

Digital Output Relay Interface Module with 1C/o Relay used as Interface between PLC/DCS/Drives digital outputs to field or field devices such as Contactor, Solenoid Valve, Motors, etc. Outputs are galvanically isolated through relays

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|                      |                        |
|----------------------|------------------------|
| Operating Voltage    | 24VDC                  |
| Input Current/Chnl   | 25mA @ 24VDC           |
| Input Wiring         | Source type OR specify |
| Protection (Coil)    | Free wheeling diode    |
| Indication/Chnl      | LED                    |
| Termination (System) | D Type or FRC          |

#### OUTPUT DATA (SYSTEM SIDE)

|                    |                              |
|--------------------|------------------------------|
| Contact Type       | SPDT (1C/O)                  |
| Max Output Current | 10A @230VAC/30VDC            |
| Output Wiring      | Pot Free / Wetted (optional) |
| Protection         | Fuse Optional                |
| Max. Voltage       | 250VAC/DC                    |
| Termination Field  | Screw type Terminal Blocks   |

#### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 24VDC Coil, 1 C/o        |
| Socket    | 1C/o PCB Solderable Type |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 8, 16                       |
| Test Voltage       | 2.5kV, 50Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

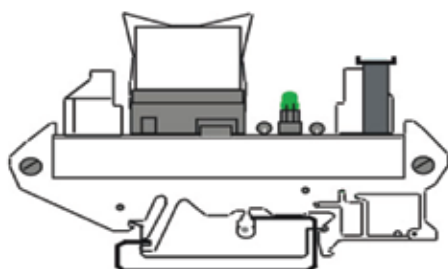
\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C

\*Relative Humidity: Max 90% (Non-Condensing)

#### TYPE OF CARD

|                       | LENGTH |   | WIDTH |
|-----------------------|--------|---|-------|
| BRM8-24DDO-1B-D15     | 135    | X | 92    |
| BRM16-24DDO-1B-D25    | 265    | X | 92    |
| BRM8-24DDO-1B-F20     | 135    | X | 92    |
| BRM16-24DDO-1B-F20    | 260    | X | 92    |
| BRM16-24DDO-1B-F40(M) | 265    | X | 92    |



Width: 126 mm

#### PREFAB CABLE HARNESS





## Digital Output Field Interface Module with 1C/O Relay with Fuse (Non-Redundant)

### APPLICATION

Digital Output Relay Interface Module with Fuse and Fuse Fail Indication used as Interface between PLC/DCS/Drives digital outputs to field or field devices such as Contactor, Solenoid Valve, Motors, etc. Outputs are galvanically isolated through relays

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|                      |                        |
|----------------------|------------------------|
| Operating Voltage    | 24VDC                  |
| Input Current/Chnl   | 25mA @ 24VDC           |
| Input Wiring         | Source type OR specify |
| Protection (Coil)    | Free wheeling diode    |
| Indication/Chnl      | LED                    |
| Termination (System) | D Type or FRC          |

#### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 24VDC Coil, 1 C/o        |
| Socket    | 1C/o PCB Solderable Type |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

#### OUTPUT DATA (SYSTEM SIDE)

|                      |                               |
|----------------------|-------------------------------|
| Contact Type         | 24VDC (2 O/p's per Channel)   |
| Max Output Current : | Fuse (Fuse Fail Indication    |
| Output Wiring        | Plug In Type D type Connector |
| Protection           | Fuse & Fuse Fail Indication   |
| Max. Voltage         | 250VAC/DC                     |
| Termination Field    | Screw type Terminal Blocks    |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 8, 16                       |
| Test Voltage       | 2.5kV, 50Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

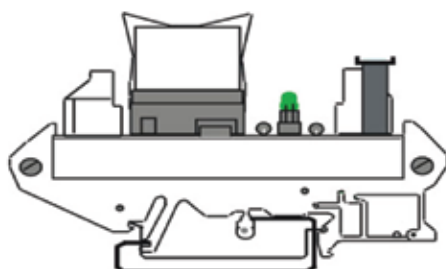
\*Ambient Opt Temp: Max 60 Deg.C

\*Relative Humidity: Max 90% (Non-Condensing)

#### TYPE OF CARD

|                          | LENGTH | WIDTH |
|--------------------------|--------|-------|
| BRM8-24DDO-1B-Fi-D15     | 135 X  | 126   |
| BRM16-24DDO-1B-Fi-D25    | 265 X  | 126   |
| BRM8-24DDO-1B-Fi-F20     | 135 X  | 126   |
| BRM16-24DDO-1B-Fi-F20    | 260 X  | 126   |
| BRM16-24DDO-1B-Fi-F40(M) | 265 X  | 126   |

#### PREFAB CABLE HANESS



Width: 92 mm



# Digital Output Field Interface Module 2C/O Contacts Non Redundant

## APPLICATION

Digital Output Relay Interface Module 2C/o used as Interface between PLC/DCS/Drives digital outputs to field or field devices such as Contactor, Solenoid Valve, Motors and etc Outputs are galvanically isolated through relays

## TECHNICAL DATA

### INPUT DATA (FIELD SIDE):

|                      |                        |
|----------------------|------------------------|
| Operating Voltage    | 24VDC                  |
| Input Current/Chnl   | 25mA @ 24VDC           |
| Input Wiring         | Source type OR specify |
| Protection (Coil)    | Free wheeling diode    |
| Indication/Chnl      | LED                    |
| Termination (System) | D Type or FRC          |

### OUTPUT DATA (SYSTEM SIDE)

|                    |                              |
|--------------------|------------------------------|
| Contact Type       | DPDT (2C/O)                  |
| Max Output Current | 5A @230VAC/30VDC             |
| Output Wiring      | Pot Free / Wetted (optional) |
| Protection         | Fuse - Optional              |
| Max. Voltage       | 250VAC/DC                    |
| Termination Field  | Screw type Terminal Blocks   |

### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 24VDC Coil, 1 C/o        |
| Socket    | 1C/o PCB Solderable Type |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 8, 16                       |
| Test Voltage       | 2.5kV, 50Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

## STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

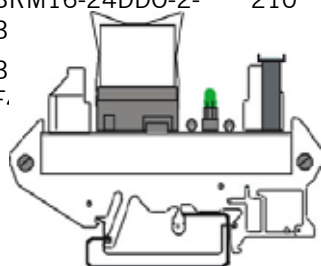
\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C

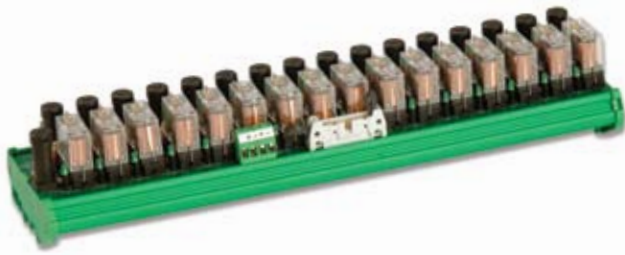
\*Relative Humidity: Max 90% (Non-Condensing)

### TYPE OF CARD

| TYPE OF CARD        | LENGTH |   | WIDTH |
|---------------------|--------|---|-------|
| BRM8-24DDO-2B-D15   | 165    | X | 126   |
| BRM16-24DDO-2-B-D25 | 265    | X | 126   |
| BRM8-24DDO-2B-F20   | 165    | X | 126   |
| BRM16-24DDO-2-B     | 210    | X | 126   |
| B F.                |        | X | 126   |



### PREFAB CABLE HARNESS



# Digital Output Field Interface Module 2C/O Contacts with Fuse Non Redundant

## APPLICATION

Digital Output Relay Interface Module 2C/o used as Interface between PLC/DCS/Drives digital outputs to field or field devices such as Contactor, Solenoid Valve, Motors and etc Outputs are galvanically isolated through relays

## TECHNICAL DATA

### INPUT DATA (FIELD SIDE):

|                      |                        |
|----------------------|------------------------|
| Operating Voltage    | 24VDC                  |
| Input Current/Chnl   | 25mA @ 24VDC           |
| Input Wiring         | Source type OR specify |
| Protection (Coil)    | Free wheeling diode    |
| Indication/Chnl      | LED                    |
| Termination (System) | D Type or FRC          |

### OUTPUT DATA (SYSTEM SIDE)

|                      |                              |
|----------------------|------------------------------|
| Contact Type         | DPDT (2C/O)                  |
| Max Output Current : | 5A @230VAC/30VDC             |
| Output Wiring        | Pot Free / Wetted (optional) |
| Protection           | Fuse & Fuse Fail Indication  |
| Max. Voltage         | 250VAC/DC                    |
| Termination Field    | Screw type Terminal Blocks   |

### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 24VDC Coil, 2 C/o        |
| Socket    | 2C/o PCB Solderable Type |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 8, 16                       |
| Test Voltage       | 2.5kV, 50Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

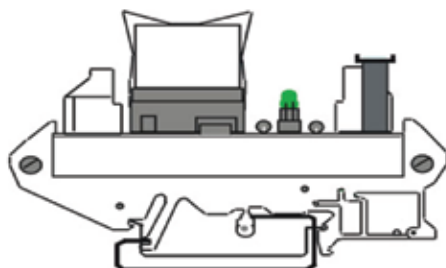
## STANDARDS & APPROVAL

- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

### TYPE OF CARD

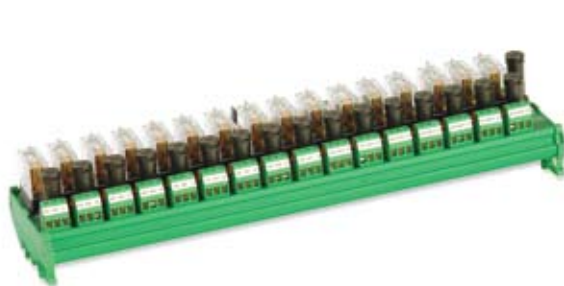
|                          | LENGTH | WIDTH |
|--------------------------|--------|-------|
| BRM8-24DDO-2B-Fi-D15     | 190 X  | 126   |
| BRM16-24DDO-2B-Fi-D25    | 385 X  | 126   |
| BRM8-24DDO-2B-Fi-F20     | 190 X  | 126   |
| BRM16-24DDO-2B-Fi-F20    | 210 X  | 126   |
| BRM16-24DDO-2B-Fi-F40(M) | 380 X  | 126   |



Width: 126 mm

### PREFAB CABLE HANESS





## Digital Output Field Interface Module 1 C/O Contacts with Wetted (Powered Contacts)

### APPLICATION

Digital Output Relay Interface Module 1C/o with Wetted Contacts & Fuse used as Interface between PLC/DCS/Drives digital outputs to field or field devices such as Contactor, Solenoid Valve, Motors and etc Outputs are galvanically isolated through relays

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|                      |                        |
|----------------------|------------------------|
| Operating Voltage    | 24VDC                  |
| Input Current/Chnl   | 25mA @ 24VDC           |
| Input Wiring         | Source type OR specify |
| Protection (Coil)    | Free wheeling diode    |
| Indication/Chnl      | LED                    |
| Termination (System) | D Type or FRC          |

#### OUTPUT DATA (SYSTEM SIDE)

|                    |                            |
|--------------------|----------------------------|
| Contact Type       | DPDT (2C/O)                |
| Max Output Current | 5A @230VAC/30VDC           |
| Output Wiring      | Wetted (Powered Contacts)  |
| Protection         | Fuse (Optional)            |
| Max. Voltage       | 250VAC/DC                  |
| Termination Field  | Screw type Terminal Blocks |

#### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 24VDC Coil, 2 C/o        |
| Socket    | 2C/o PCB Solderable Type |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 8, 16                       |
| Test Voltage       | 2.5kV, 50Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp:

Max 60 Deg.C

\*Relative Humidity:

Max 90% (Non-Condensing)

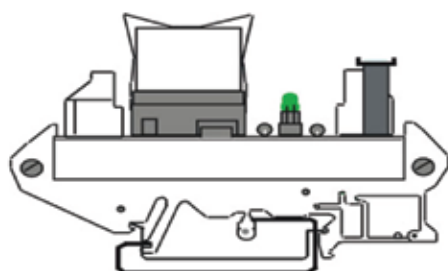
#### TYPE OF CARD

#### LENGTH

#### WIDTH

|                      |     |   |     |
|----------------------|-----|---|-----|
| BRM8-24DDO-1B-D15    | 160 | X | 126 |
| BRM16-24DDO-1B-D25   | 305 | X | 126 |
| BRM8-24DDO-1B-W-D15  | 150 | X | 126 |
| BRM16-24DDO-1B-W-D25 | 290 | X | 126 |

### PREFAB CABLE HARNESS



Width: 126 mm



# Digital Output Field Interface Module with 2C/O Contacts Redundant

## APPLICATION

Digital Output Relay Interface Module 2C/o Contacts used as Interface between PLC/DCS/Drives digital outputs to field or field devices such as Contactor, Solenoid Valve, Motors and etc Outputs are galvanically isolated through relays

## TECHNICAL DATA

### INPUT DATA (FIELD SIDE):

|                      |                        |
|----------------------|------------------------|
| Operating Voltage    | 24VDC                  |
| Input Current/Chnl   | 25mA @ 24VDC           |
| Input Wiring         | Source type OR specify |
| Protection (Coil)    | Free wheeling diode    |
| D Type or FRC        | LED                    |
| Termination (System) | Indication/Chnl        |

### OUTPUT DATA (SYSTEM SIDE)

|                      |                             |
|----------------------|-----------------------------|
| Contact Type         | DPDT (2C/O)                 |
| Max Output Current : | 5A @230VAC/30VDC            |
| Output Wiring        | Wetted (Powered Contacts)   |
| Protection           | Fuse & Fuse Fail Indication |
| Max. Voltage         | 250VAC/DC                   |
| Termination Field    | Screw type Terminal Blocks  |

### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 24VDC Coil, 2 C/o        |
| Socket    | 2C/o PCB Solderable Type |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 8, 16                       |
| Test Voltage       | 2.5kV, 50Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

### STANDARDS & APPROVAL

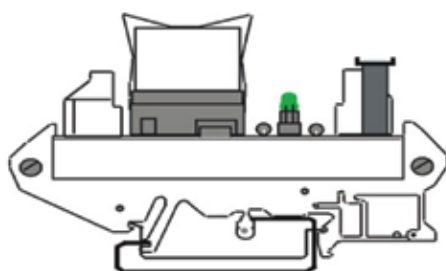
- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

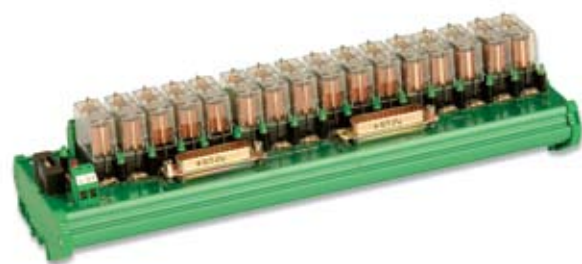
### TYPE OF CARD

|                         | LENGTH |   | WIDTH |
|-------------------------|--------|---|-------|
| BRM8-24DDO(RED)-2B-D15  | 180    | X | 92    |
| BRM16-24DDO(RED)-2B-D25 | 350    | X | 92    |

### PREFAB CABLE HARNESS



Width: 126 mm



## Digital Output Field Interface Module with 1C/O Contacts Redundant with Fuse

### APPLICATION

Digital Output Relay Interface Module 1C/o Relay used as Interface between PLC/DCS/Drives digital outputs to field or field devices such as Contactor, Solenoid Valve, Motors and etc Outputs are galvanically isolated through relays

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|                      |                        |
|----------------------|------------------------|
| Operating Voltage    | 24VDC                  |
| Input Current/Chnl   | 25mA @ 24VDC           |
| Input Wiring         | Source type OR specify |
| Protection (Coil)    | Free wheeling diode    |
| Indication/Chnl      | LED                    |
| Termination (System) | D Type or FRC          |

#### OUTPUT DATA (SYSTEM SIDE)

|                    |                             |
|--------------------|-----------------------------|
| Contact Type       | SPDT (1C/O)                 |
| Max Output Current | 10A @230VAC/30VDC           |
| Output Wiring      | Wetted (Powered Contacts)   |
| Protection         | Fuse & Fuse Fail Indication |
| Max. Voltage       | 250VAC/DC                   |
| Termination Field  | Screw type Terminal Blocks  |

#### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 24VDC Coil, 2 C/o        |
| Socket    | 2C/o PCB Solderable Type |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 8, 16                       |
| Test Voltage       | 2.5kV, 50Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

### STANDARDS & APPROVAL

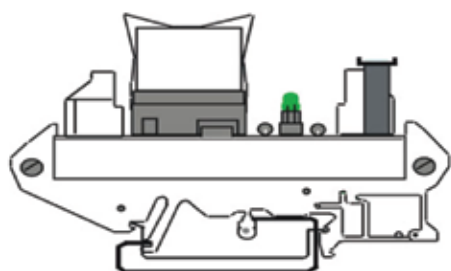
\*PCB: Type tested STQC, IEC 61373,  
\*ANSI IPC 319 MIL 275B  
\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C  
\*Relative Humidity: Max 90% (Non-Condensing)

#### TYPE OF CARD

|                         | LENGTH |   | WIDTH |
|-------------------------|--------|---|-------|
| BRM8-24DDO(RED)-1B-D15  | 135    | X | 92    |
| BRM16-24DDO(RED)-1B-D25 | 165    | X | 92    |

#### PREFAB CABLE HARNESS



Width: 126 mm



## Digital Output Field Interface Module 2C/O Contacts with Wetted Contacts with Fuse

### APPLICATION

Digital Output Relay Interface Module 1C/o with Wetted Contacts & Fuse used as Interface between PLC/DCS/Drives digital outputs to field or field devices such as Contactor, Solenoid Valve, Motors and etc Outputs are galvanically isolated through relays

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|                      |                        |
|----------------------|------------------------|
| Operating Voltage    | 24VDC                  |
| Input Current/Chnl   | 25mA @ 24VDC           |
| Input Wiring         | Source type OR specify |
| Protection (Coil)    | Free wheeling diode    |
| Indication/Chnl      | LED                    |
| Termination (System) | D Type or FRC          |

#### OUTPUT DATA (SYSTEM SIDE)

|                      |                             |
|----------------------|-----------------------------|
| Contact Type         | DPDT (2C/O)                 |
| Max Output Current : | 5A @230VAC/30VDC            |
| Output Wiring        | Wetted (Powered Contacts)   |
| Protection           | Fuse & Fuse Fail Indication |
| Max. Voltage         | 250VAC/DC                   |
| Termination Field    | Screw type Terminal Blocks  |

#### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 24VDC Coil, 2 C/o        |
| Socket    | 2C/o PCB Solderable Type |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 8, 16                       |
| Test Voltage       | 2.5kV, 50Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

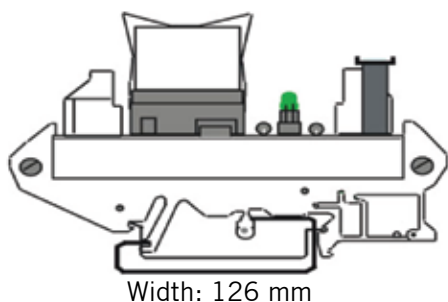
\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C

\*Relative Humidity: Max 90% (Non-Condensing)

| TYPE OF CARD           | LENGTH |   | WIDTH |
|------------------------|--------|---|-------|
| BRM8-24DDO-2B-WFi-D15  | 160    | X | 126   |
| BRM16-24DDO-2-WFi-D25  | 305    | X | 126   |
| BRM8-24DDO-2B-OFi-D15  | 150    | X | 126   |
| BRM16-24DDO-2B-OFi-D25 | 290    | X | 126   |



### PREFAB CABLE HANESS





# Analog Input Field Interface Module with Fuse & 2Wire/4Wire Selection

## APPLICATION

Analog Field Interface Modules with option of fuse in each path and provision of selection of 2 Wire/4 Wire using DIP switches used for Interfacing PLC/DCS Analog Inputs with field or field devices such as 2/4 wire current transmitters, etc.

## TECHNICAL DATA

### INPUT DATA (FIELD SIDE):

|               |                        |
|---------------|------------------------|
| Field Signal: | 4-20mA 2 Wire / 4 Wire |
| Protection :  | Fuse in each path      |
| Indication    | LED                    |
| Termination   | Screw Type             |

### OUTPUT DATA (SYSTEM SIDE)

|               |                                |
|---------------|--------------------------------|
| System Signal | 4-20mA / 1-5V / 0-10V          |
| Connection    | 2/4 Wire selection thru DIP Sw |
| Isolation:    | 3 Way                          |
| Termination   | Plug In Connector (D Type)     |

### COMPONENT SPECIFICATION:

|             |                          |
|-------------|--------------------------|
| Fuse Link   | Glass Fuse (5 x 20mm)    |
| Fuse Holder | Vertical / Horizontal    |
| Terminals   | Screw Type (2.5Sq mm)    |
| PCB         | Glass Epoxy Double Sided |

### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 8, 16                       |
| Test Voltage       | 500V in each Channel        |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

## STANDARDS & APPROVAL

- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

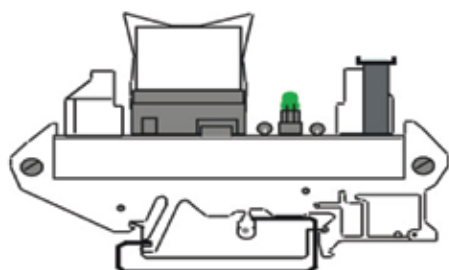
- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

### TYPE OF CARD

### LENGTH WIDTH

|                      |     |   |     |
|----------------------|-----|---|-----|
| BRM8-AI-(2W-4W)-D25  | 192 | X | 126 |
| BRM16-AI-(2W-4W)-D37 | 350 | X | 126 |
| BRM8-AI-(2W)-D25     | 100 | X | 126 |
| BRM16-AI-(2W)-D25    | 190 | X | 126 |
| BRM8-AI-D25          | 172 | X | 126 |

### PREFAB CABLE HARNESS





## Analog Input Field Interface Module with Fuse & 2Wire/4Wire Selection (Redundant)

### APPLICATION

Analog Field Interface Modules with option of fuse in each path and provision of selection of 2 Wire/4 Wire using DIP switches used for Interfacing PLC/DCS Analog Inputs with field or field devices such as 2/4 wire current transmitters, etc. Accepts one input (4-20mA) and delivers two outputs 1-5V to system

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|               |                                   |
|---------------|-----------------------------------|
| Field Signal: | 4-20mA 2 Wire / 4 Wire Single O/P |
| Protection :  | Fuse in each path                 |
| Indication    | LED                               |
| Termination   | Screw Type                        |

#### OUTPUT DATA (SYSTEM SIDE)

|               |                                |
|---------------|--------------------------------|
| System Signal | 4-20mA / 1-5V / 0-10V Dual O/P |
| Connection    | 2/4 Wire selection thru DIP Sw |
| Isolation:    | 3 Way                          |
| Termination   | Plug In Connector (D Type)     |

#### COMPONENT SPECIFICATION:

|             |                          |
|-------------|--------------------------|
| Fuse Link   | Glass Fuse (5 x 20mm)    |
| Fuse Holder | Vertical / Horizontal    |
| Terminals   | Screw Type (2.5Sq mm)    |
| PCB         | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 8                           |
| Test Voltage       | 500V in each Channel        |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

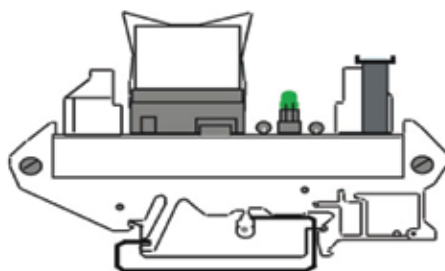
### STANDARDS & APPROVAL

- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

#### TYPE OF CARD

|                            | LENGTH |   | WIDTH |
|----------------------------|--------|---|-------|
| BRM8-AI-(RED)-SPD-D25(V-I) | 162    | X | 126   |
| BRM8-AI-(RED)-SPD-D25(I-V) | 154    | X | 126   |



Width: 126 mm

#### PREFAB CABLE HARNESS





# Analog Output Field Interface Module with Fuse (Redundant)

## APPLICATION

Analog Output Field Interface Modules with Redundancy and option of fuse in each path used for Interfacing PLC/DCS Analog Outputs with field or field devices. Accepts two inputs (4-20mA / 1-5V) from field and delivers one output 1-5V to field

## TECHNICAL DATA

### INPUT DATA (FIELD SIDE):

|               |                            |
|---------------|----------------------------|
| Field Signal: | 4-20mA 2 Wire / 4 Wire     |
| Protection :  | Fuse in each path          |
| Termination   | Plug In Connector (D Type) |

### OUTPUT DATA (SYSTEM SIDE)

|              |                                     |
|--------------|-------------------------------------|
| Field Signal | 4-20mA / 1-5V (Single O/P to Field) |
| Isolation:   | 3 Way                               |
| Termination: | Screw Type                          |

### COMPONENT SPECIFICATION:

|             |                          |
|-------------|--------------------------|
| Fuse Link   | Glass Fuse (5 x 20mm)    |
| Fuse Holder | Vertical / Horizontal    |
| Terminals   | Screw Type (2.5Sq mm)    |
| PCB         | Glass Epoxy Double Sided |

### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 4 / 8                       |
| Test Voltage       | 500V in each Channel        |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

## STANDARDS & APPROVAL

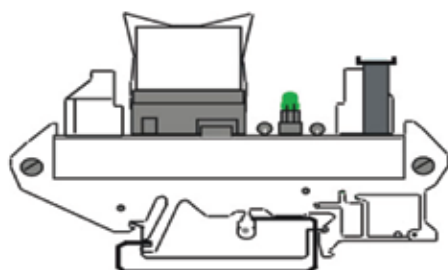
- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

### TYPE OF CARD

|                            | LENGTH | WIDTH |
|----------------------------|--------|-------|
| BRM4-AO-(RED)-SPD-D15(V-I) | 200    | X 126 |
| BRM8-AO-(RED)-SPD-D25(I-V) | 240X   | 126   |

### PREFAB CABLE HARNESS



Width: 126 mm



# Analog Output Field Interface Module 4-20mA

## APPLICATION

Analog Output Field Interface Modules with option of fuse in each path used for Interfacing PLC/DCS Analog Outputs to field or field devices. Protection against short circuit is provided in each channel through Fuse.

## TECHNICAL DATA

### INPUT DATA (FIELD SIDE):

|               |                            |
|---------------|----------------------------|
| Field Signal: | 4-20mA / 1-5V / 1-10V      |
| Protection :  | Fuse in each path          |
| Termination   | Plug In Connector (D Type) |

### OUTPUT DATA (SYSTEM SIDE)

|               |                            |
|---------------|----------------------------|
| System Signal | 4-20mA                     |
| Isolation:    | 3 Way                      |
| Termination   | Plug In Connector (D Type) |

### COMPONENT SPECIFICATION:

|             |                          |
|-------------|--------------------------|
| Fuse Link   | Glass Fuse (5 x 20mm)    |
| Fuse Holder | Vertical / Horizontal    |
| Terminals   | Screw Type (2.5Sq mm)    |
| PCB         | Glass Epoxy Double Sided |

### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 4 / 8 / 16                  |
| Test Voltage       | 500V in each Channel        |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,  
\*ANSI IPC 319 MIL 275B  
\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C  
\*Relative Humidity: Max 90% (Non-Condensing)

### TYPE OF CARD

|              | LENGTH |   | WIDTH |
|--------------|--------|---|-------|
| BRM4-AO-D15  | 75     | X | 92    |
| BRM8-AO-D25  | 190    | X | 92    |
| BRM16-AO-D25 | 210    | X | 126   |

### PREFAB CABLE HARNESS

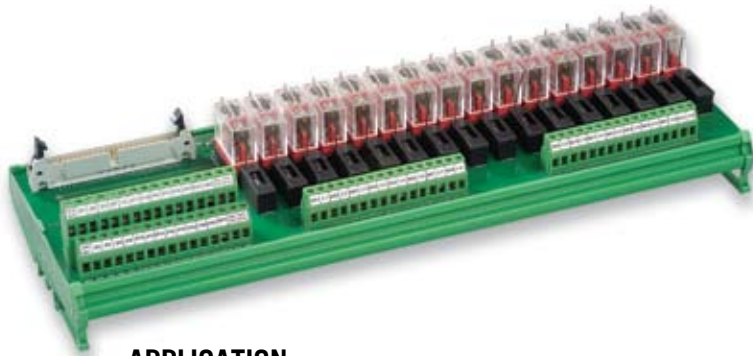


# CNC INTERFACING SOLUTION

## SPECIFICATIONS

### FEATURES OF CNC CARD

- CNC Input Outputs are effectively connected via 50 pin cable to relay card
- 24 I/P, 16 O/P are separated and are taken individually on PCB terminal blocks.
- O/P's are Isolated and Amplified to given Potential free contact through relay of 10amp.
- Signal Indicator is provided through LEDs of all I/P, and O/P
- The complete module is encapsulated in a profile.
- Models available with combination of EMR's and SSR's
- Process wiring is reliably connected to the module via Screw terminals.
- Address on terminal blocks are as per CNC addresses.
- Very compact in size.



## CNC Specific I/O Interface Module

### APPLICATION

Passive Cum Relay Interface Module with 24I/p and 16 O/p with option of Fuse in each contact used to interface with Fanuc/Siemens I/O module to field or field devices like solenoid valve, Contractors and etc. Outputs are galvanically isolated

### TECHNICAL DATA

#### INPUT DATA (FIELD SIDE):

|                    |                      |
|--------------------|----------------------|
| Operating Voltage  | 24VDC                |
| Input Current/Chnl | 25mA @ 24VDC         |
| Protection (Coil)  | Free wheeling diode  |
| Termination        | Plug In, FRC 50 Pins |

#### OUTPUT DATA (SYSTEM SIDE)

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Contact Type         | SPDT (1C/O)                                                |
| Max Output Current : | 5A @230VAC/30VDC                                           |
| Output Wiring        | Wetted (Powered Contacts)                                  |
| Indication/Chnl      | LED for outputs                                            |
| Termination          | Screw type Terminal Blocks (24 Field I/P and 16 Relay O/P) |

#### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 24VDC Coil, 2 C/o        |
| Socket    | 1C/o PCB Solderable Type |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 16                          |
| Test Voltage       | 2.5kV, 50Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

### STANDARDS & APPROVAL

- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

| NO. OF CHANNEL  | LENGTH | WIDTH |
|-----------------|--------|-------|
| BRM16-1B(F)-SF  | 310    | X 126 |
| BRM16-1B-SF     | 310    | X 92  |
| BRM16-1NB(F)-SF | 310    | X 126 |
| BRM16-1NB-SF    | 310    | X 92  |

### PREFAB CABLE HARNESS



Width: 92 mm



# CNC Specific I/O Interface Module with EMR and SSR

## APPLICATION

Passive Cum Relay Interface Module with 24I/p and 16 O/p with option of Fuse in each contact used to interface with Fanuc/Siemens I/O module to field or field devices like solenoid valve, Contractors and etc. Outputs are galvanically isolated

## TECHNICAL DATA

### INPUT DATA (FIELD SIDE):

|                    |                      |
|--------------------|----------------------|
| Operating Voltage  | 24VDC                |
| Input Current/Chnl | 25mA @ 24VDC         |
| Protection (Coil)  | Free wheeling diode  |
| Termination        | Plug In, FRC 50 Pins |

### OUTPUT DATA (SYSTEM SIDE)

|                    |                                                               |
|--------------------|---------------------------------------------------------------|
| Contact Type       | SPDT (1C/O)                                                   |
| Max Output Current | 10A @230VAC/30VDC                                             |
| Output Wiring      | Wetted (Powered Contacts)                                     |
| Indication/Chnl    | LED for outputs                                               |
| Termination        | Screw type Terminal Blocks<br>(24 Field I/P and 16 Relay O/P) |

### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 24VDC Coil, 1 C/o        |
| Socket    | 1C/o PCB Solderable Type |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

### GENERAL DATA

|                    |                             |
|--------------------|-----------------------------|
| No. of Channels    | 16                          |
| Test Voltage       | 2.5kV, 50Hz, 1M             |
| Mounting           | Universal Dinrail Mountable |
| Identification Tag | Optional (On request)       |

## STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,

\*ANSI IPC 319 MIL 275B

\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C

\*Relative Humidity: Max 90% (Non-Condensing)

| NO. OF CHANNELS      | LENGTH | WIDTH |
|----------------------|--------|-------|
| BRM16-12E-4SSR-SF    | 310 X  | 126   |
| BRM16-1B-SF          | 310 X  | 92    |
| BRM16-10E-6SSR-SF    | 310 X  | 126   |
| BRM16-10E-6SSR(F)-SF | 310 X  | 92    |

## PREFAB CABLE HARNESS



Width: 92 mm



## Diode Module

### APPLICATION

Lamp test configurations for DC & AC applications available as standards. Available with individual Common Anode and Common Cathode standard diode configurations.

### DIODE DATA

|                                   |        |
|-----------------------------------|--------|
| Diode Type                        | 1N4007 |
| Max VRRM                          | 1000V  |
| Max DC Blocking                   | 1000V  |
| Max Average For Rectified Current | 1A     |

### GENERAL DATA

|                                      |                                |
|--------------------------------------|--------------------------------|
| No. of Channels                      | 4,8,16                         |
| Max DC Reverse Cur at rated DC blk.V | 500uA-TA=25 C<br>30uA-TA=100 C |
| Identification Tag                   | Optional (On request)          |
| Mounting                             | Universal-Din Rail             |

Individual Diode Module, Lamp Test Module.

Common Anode Module, Common Anode Lamp Test Module

Common Cathode Module, Common Cathode Lamp Test Module



## Varistor Module

### APPLICATION

Used to suppress spikes, available with individual and common anode standard configurations. Available with various varistor voltage ratings.

### VARISTOR DATA

|                    |                       |                    |                       |
|--------------------|-----------------------|--------------------|-----------------------|
| Varistor Type      | 14mm Diameter         | No. of Channels    | 4,8,16                |
| Max Allowable V AC | 50V / 130V / 275V     | Range Of MOV       | 11V to 1100V          |
| Max Allowable V DC | 65V / 170V / 350V     | Response Time      | <25 ns                |
| Varistor Voltage   | 59-71/153-187/315-185 | Identification Tag | Optional (On request) |
| Clamping Voltage   | 135 / 340 / 710       | Mounting           | Universal-Din Rail    |
| Clamping Current   | 50                    |                    |                       |

Single Varistor Configuration

Common Anode Configuration



## Power Distribution Module

### APPLICATION

Power Distribution Module is simple distribution of power supply into 4/8/16 channel. It replace the conventional control bus bar distribution into modular power distribution, available in 24VDC/110VAC/230VAC with Fuse & Fuse Fail indication & ON/OFF control in each channel.

### COMPONENT DATA

|             |                          |
|-------------|--------------------------|
| Fuse Link   | Glass Fuse (5 x 20mm)    |
| Fuse Holder | Vertical / Horizontal    |
| Terminals   | Screw Type (2.5Sq mm)    |
| PCB         | Glass Epoxy Double Sided |

### GENERAL DATA

|                      |                        |
|----------------------|------------------------|
| No. of Channels      | 4,8,16                 |
| Voltage Range        | 24VDC/110-230VAC       |
| Control each channel | Optional Toggle Switch |
| Identification Tag   | Optional (On request)  |
| Mounting             | Universal-Din Rail     |

|                  |          |
|------------------|----------|
| BRM8-24D-PDB     | 115 X 92 |
| BRM8-110A-PDB-TG | 155 X 92 |
| BRM8-230A-PDB-TG | 155 X 92 |

Application



## Fuse Module

### APPLICATION

Protection for each channel thru Fast Blow or Slow Blow fuses, replacable fuses with fuse blown indication in each channel.

### COMPONENT DATA

|             |                          |
|-------------|--------------------------|
| Fuse Link   | Glass Fuse (5 x 20mm)    |
| Fuse Holder | Vertical / Horizontal    |
| Terminals   | Screw Type (2.5Sq mm)    |
| PCB         | Glass Epoxy Double Sided |

### GENERAL DATA

|                      |                        |
|----------------------|------------------------|
| No. of Channels      | 8                      |
| Control each channel | Optional Toggle Switch |
| Identification Tag   | Optional (On request)  |
| Mounting             | Universal-Din Rail     |

Fuse Modules with Single Fuse per channel  
Fuse Modules with one side at Common potential



## 2 Channel Cranking Relay

### APPLICATION

The Dual Channel Cranking Relay Modules can be used in high current switching required for Engine Start Stop Application.

### TECHNICAL DATA

#### INPUT DATA:

|                    |                     |
|--------------------|---------------------|
| Operating Voltage  | 12VDC               |
| Input Current/Chnl | 25mA @ 24VDC        |
| Protection (Coil)  | Free Wheeling Diode |
| Indication/chhl    | LED                 |

#### OUTPUT DATA

|               |                |
|---------------|----------------|
| Contact Type  | SPST (1NO)     |
| Max Current : | 70A            |
| Output        | Potential Free |
| Max.Voltage   | 250VAC/DC      |

#### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 530-1A-12TO              |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                          |
|--------------------|--------------------------|
| No. of Channels    | 2                        |
| Test Voltage       | 1.5kV, 50Hz, 1M          |
| Mounting           | Universal Rail Mountable |
| Identification Tag | Optional (On request)    |

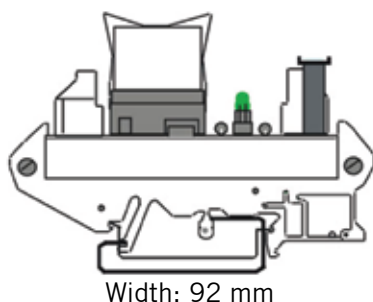
#### STANDARDS & APPROVAL

- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

| NO. OF CHANNEL | LENGTH | WIDTH |
|----------------|--------|-------|
| 2 Channel      | 90 X   | 92    |

| HOW TO ORDER?     | BRM 2 - 12 D - 53 GNS |
|-------------------|-----------------------|
| 2 No. Of Channels | 2                     |
| 12 Coil Voltage   | 12                    |
| D Signal          | DC                    |





## 3 Channel Cranking Relay Module

### APPLICATION

The Dual Channel Cranking Relay Modules can be used in high current switching required for Engine Start Stop Application. It also has a provision for remote indication or alarm.

### TECHNICAL DATA

#### INPUT DATA:

|                    |                     |
|--------------------|---------------------|
| Operating Voltage  | 12 VDC              |
| Input Current/Chnl | 25mA @ 24VDC        |
| Protection (Coil)  | Free wheeling diode |
| Indication/Chnl    | LED                 |

#### OUTPUT DATA

|              |                           |
|--------------|---------------------------|
| Contact Type | SPST (1C/O)               |
| Max Current  | 70 Ampa (for Relay 1 & 2) |
| Output       | Potential Free            |
| Max.Voltage  | 250VAC/DC                 |

#### COMPONENT SPECIFICATION:

|           |                                        |
|-----------|----------------------------------------|
| Relay     | 530-1A-12T0 - 2Nos<br>58-12-1C - 1 Nos |
| Terminals | Screw Type (2.5Sq mm)                  |
| PCB       | Glass Epoxy Double Sided               |

#### GENERAL DATA

|                    |                          |
|--------------------|--------------------------|
| No. of Channels    | 3                        |
| Test Voltage       | 1.5kV, 50Hz, 1M          |
| Mounting           | Universal Rail Mountable |
| Identification Tag | Optional (On request)    |

#### STANDARDS & APPROVAL

\*PCB: Type tested STQC, IEC 61373,  
\*ANSI IPC 319 MIL 275B  
\*Terminals: UL/CE & CSA

\*Ambient Opt Temp: Max 60 Deg.C  
\*Relative Humidity: Max 90% (Non-Condensing)

| NO. OF CHANNELS | LENGTH | WIDTH |
|-----------------|--------|-------|
| 2 Channel       | 90     | X 92  |

#### HOW TO ORDER?

|                   |    |
|-------------------|----|
| 3 No. Of Channels | 3  |
| 12 Coil Voltage   | 12 |
| D Signal          | DC |

#### BRM 3 - 12 D - 53 - 58 GNS



Width: 92 mm



## 9 Channel Relay Card

### APPLICATION

The 9 Channel Relay Modules can be used in high current switching required for Engine Start Stop Application. It also has provision for remote indication or alarm

### TECHNICAL DATA

#### INPUT DATA:

|                    |                     |
|--------------------|---------------------|
| Operating Voltage  |                     |
| Relay 1 & 2        | 12VDC               |
| Relay 3, 4 & 5     | 12VDC               |
| Relay 6, 7, 8, 9   | 12VDC               |
| Input Current/Chnl | 25mA @ 24VDC        |
| Protection (Coil)  | Free Wheeling Diode |
| Indication/Chnl    | LED                 |

#### OUTPUT DATA

|                              |                       |
|------------------------------|-----------------------|
| No of Poles and Max Current. |                       |
| Relay 1 & 2                  | SPST (1NO) - 70 Amps  |
| Relay 3, 4 & 5               | SPST (1NO) - 10 Amps  |
| Relay 6, 7, 8, 9             | SPST (1NO) - 5 Amps   |
| Contact Type                 | Potential Free Output |
| Max.Voltage                  | 250VAC/DC             |

#### COMPONENT SPECIFICATION:

|           |                          |
|-----------|--------------------------|
| Relay     | 530-1A-12TO - 2Nos       |
|           | 58-12-1C - 1 Nos         |
|           | 65-12-1C - 4nos          |
| Terminals | Screw Type (2.5Sq mm)    |
| PCB       | Glass Epoxy Double Sided |

#### GENERAL DATA

|                    |                          |
|--------------------|--------------------------|
| No. of Channels    | 9                        |
| Test Voltage       | 1.5kV, 50Hz, 1M          |
| Mounting           | Universal Rail Mountable |
| Identification Tag | Optional (On request)    |

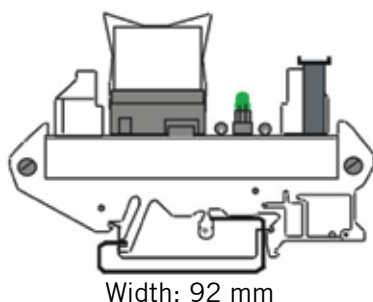
#### STANDARDS & APPROVAL

- \*PCB: Type tested STQC, IEC 61373,
- \*ANSI IPC 319 MIL 275B
- \*Terminals: UL/CE & CSA

- \*Ambient Opt Temp: Max 60 Deg.C
- \*Relative Humidity: Max 90% (Non-Condensing)

| NO. OF CHANNEL | LENGTH | WIDTH |
|----------------|--------|-------|
| 2 Channel      | 90 X   | 92    |

| HOW TO ORDER?     | BRM 9 - 12 D - 53 - 58 - 65 GNS |
|-------------------|---------------------------------|
| 2 No. Of Channels | 3                               |
| 12 Coil Voltage   | 12                              |
| D Signal          | DC                              |



**OTHER OPTIONS** - Also available as separat modules of 4 and 5 Channels

# NOTES

