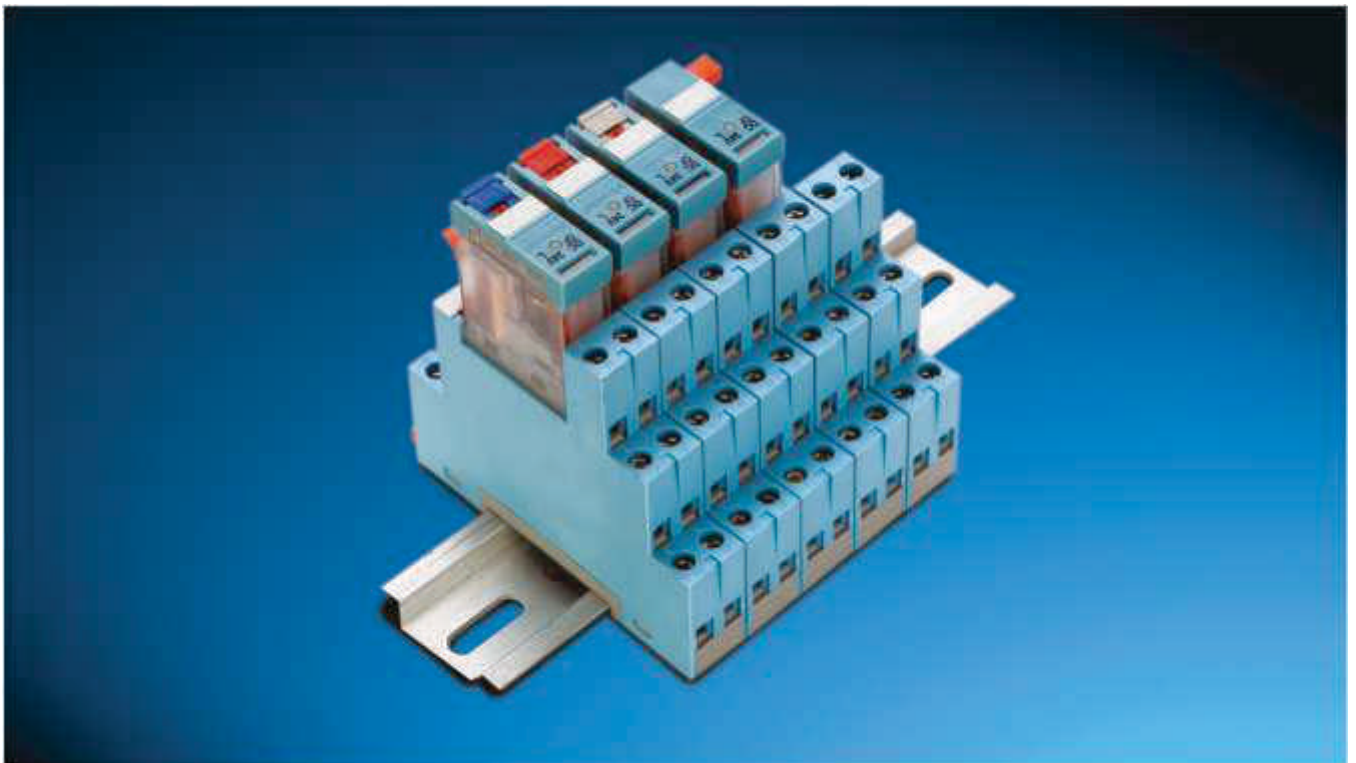
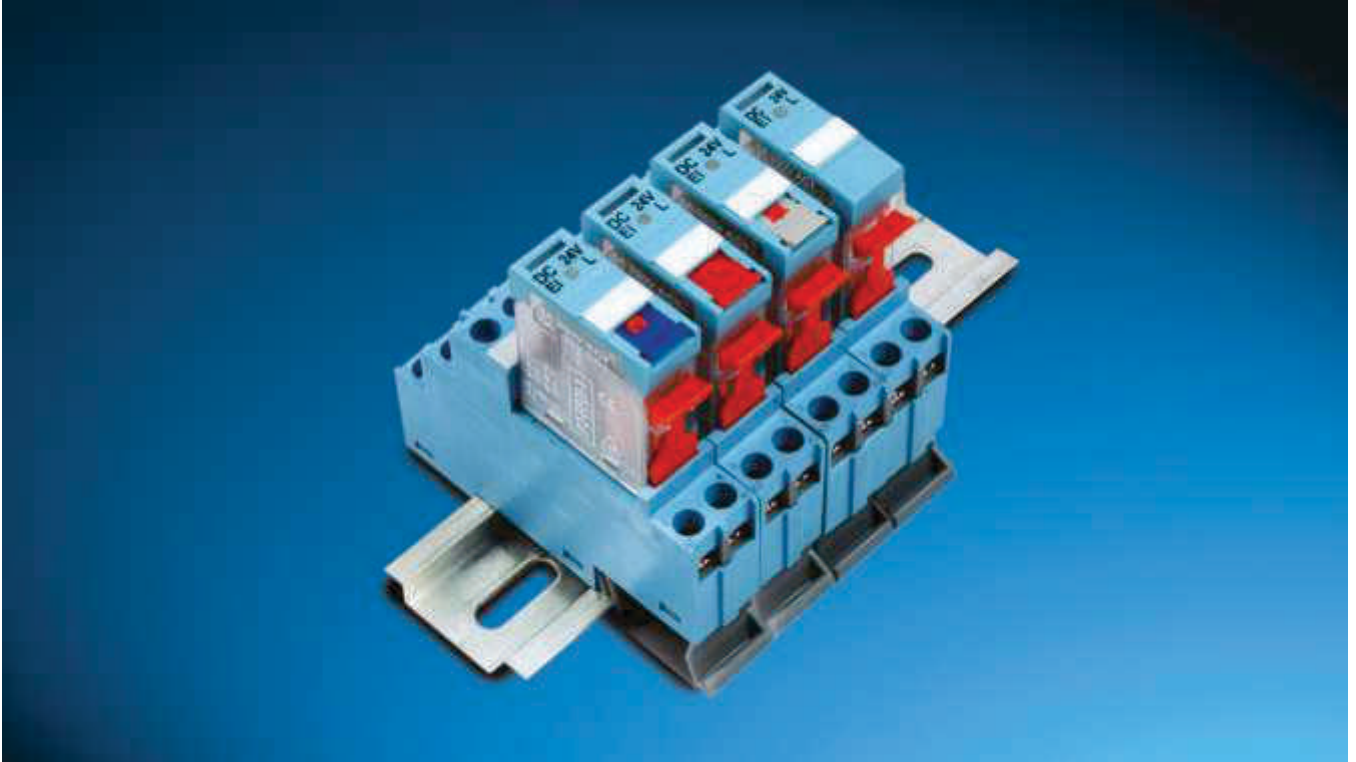


# Catalogue

## Series P2



Benefits  
of the new



A detailed view of the P2 relay with various components labeled. The relay is blue and transparent, showing internal contacts and a coil. A blue lock lever is on top, and a push button is on the side.

**Coil Voltage Marking**

**Mechanical Flag Indicator**

**In-Built Free Wheeling Diode & Polarity Diode**

**Contact Rating**  
Standard Contact : 6 Amps @ 250V AC1

**Contact Type:**  
2 Change Over Contact

**Part Number & Technical information**  
marked on the side of the relay

**Isolation between coil and contact 5KV**

**LED Indicator**

**Marking Label**

**Colour coded lock lever**  
according to coil voltage  
DC Blue  
AC Red  
AC / DC Grey

**Push Button and Lockable Lever with 3 functions**

1. Lift to lever / lockable button
2. Push to test button / Manual test button
3. Slide Lever protection against unintentional activation of test button

**AC 115V, 230V**  
**DC 12V, 24V, 48V, 110V**  
**AC / DC 24V, 48V coils available**

**Industrial 2.5 mm Faston Terminals**

**P2 is a Two Pole Industrial Plug-in Relay with all the In-Built Mechanical and Electronic features which are a must for Input / Output PLC applications.**

A detailed view of the S2D socket, which is a blue industrial interface socket with multiple terminals. It is designed for DIN and Euro standards.

**Finger Grip for easy removal**  
of relay from socket

**Contact NO 1(14), 7(24)**  
**Terminals CO 2(11), 8(21)**  
**NC 3(12), 9(22)**

**Inbuilt easy to use Retainer Clip**

**Coil terminals (4, A1 +ve) (5, A2 -ve)**

**Clearly visible Terminal numbering**  
according to DIN & Euro Standards

**Large wire inlets (Upto 4sq mm)**  
for easy wiring

**Touch protected -Ve / A2 Looping Bridges (S2D-B1 / S2D-B4)**

**Socket with width of 15mm**

**Industrial size combination screws ( M3 )**

**Standard 35mm DIN rail or Panel Mountable Socket**

**Socket marking label**

**S2D is a Two Pole Touch protected Interface Socket with Input / Output configuration Coil Terminals ( A1 & A2 ) on one side and Contact Terminals ( NO, NC, CO ) on the opposite side.**

Benefits  
of the new



Coil Voltage Marking

Mechanical Flag Indicator

In-Built Free Wheeling Diode & Polarity Diode

Contact Rating  
Standard Contact : 6 Amps @ 250V AC1

Contact Type:  
2 Change Over Contact

Part Number & Technical information marked on the side of the relay

Isolation between coil and contact 5KV

LED Indicator

Marking Label

Colour coded lock lever according to coil voltage  
DC Blue  
AC Red  
AC / DC Grey

Push Button and Lockable Lever with 3 functions

1. Lift to lever / lockable button
2. Push to test button / Manual test button
3. Slide Lever protection against unintentional activation of test button

AC 115V, 230V  
DC 12V, 24V, 48V, 110V  
AC / DC 24V, 48V coils available

Industrial 2.5 mm Faston Terminals

**P2 is a Two Pole Industrial Plug-in Relay with all the In-Built Mechanical and Electronic features which are a must for Input / Output PLC applications.**

Finger Grip for easy removal of relay from socket

Contact NO 1(14), 7(24)  
Terminals CO 2(11), 8(21)  
NC 3(12), 9(22)

Socket marking label

Industrial size combination screws ( M3 )

Standard 35mm DIN rail or Panel Mountable Socket

Inbuilt easy to use Retainer Clip

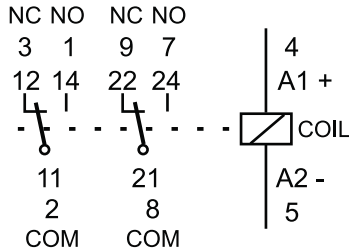
Coil terminals (4, A1 +ve) (5, A2 -ve)

Clearly visible Terminal numbering according to DIN & Euro Standards

16mm

Socket with Width of 16mm

**S2LD is a Two Pole Touch protected Socket with Input / Output configuration Coil Terminals ( A1 & A2 ) on one side and Contact Terminals ( NO, NC, CO ) on the opposite side.**



# P2

## Two Poles, Change-Over Contact

**6A 250V AC1 0.5A 110V DC1**  
**6A 30V DC1 0.2A 220V DC1**

### Contacts

Materials: Standard, AgNi  
Optional, code 1 AgNi + 0.2μ Au  
Optional, code 2 AgNi + 5.0μ Au  
Max. switching current 6 A  
Max. Peak inrush current (20 ms.) 30 A  
Max. Switching voltage 250 V  
Max. AC load (Graph 1)\* 1.5 KVA  
Max. DC load See Graph 2\*

### Coils (Ohms ± 10% @ 20°C)

Pull-in voltage ≤ 0.8 x Un  
Drop-out voltage ≥ 0.1 x Un  
Nominal coil power 1.1 VA (AC) / 0.7 W (DC)

VAC	Ω	mA	VDC	Ω	mA
24	290	45.0	12	224	53.0
48	1,200	23.0	24	742	32.0
115	7,300	9.5	48	3,500	13.7
120	7,091		110	19,900	5.5
230	28,800	4.7			
240	27,800				

### Insulation

Dielectric strength (1 minute): Open contacts 1,000 V  
Between adjacent poles 3,000 V  
Between contacts & coil 5 KV  
Isolation resistance at 500VDC > 3GΩ  
Isolation, IEC 61810-5 : 4 KV / 3

### Specifications

Operate Time + Bounce Time 10 ms.  
Release Time + Bounce Time 8 ms.  
Ambient Temperature -40°C (no ice)... +70°C  
Mechanical life ops. 10 Million AC, 20 Million DC relays  
Electrical life at nominal load > 100,000 ops.  
Operating frequency at nominal load 1,200 / hour  
Protection degree IP40 / RT1  
Weight Approx. 21 gms.

### Standard types

**AC 50 Hz : 24, 48, 115, 230**  
**AC 60 Hz : 120, 240**  
F = Mechanical Flag Indicator  
P = LED  
R = RC, (Snubber Circuit)  
**DC : 12, 24, 48, 110**  
F = Mechanical Flag Indicator  
P = LED  
W = Free Wheeling Diode  
Z = Polarity & Free-Wheeling Diodes  
I = Lockable & Manual Push Button  
B = AC/DC Bridge Rectifier (24/48V)

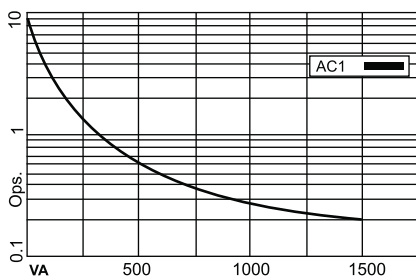
P2-F	.... VAC
P2-FP	.... VAC
P2-FPR	.... VAC
P2-F	.... VDC
P2-FP	.... VDC
P2-FPW	.... VDC
P2-FPZ	.... VDC
P2-FPZI	.... VDC
P2-FPB	.... ADC

### Suitable Sockets : S2D, S2LD, S2P

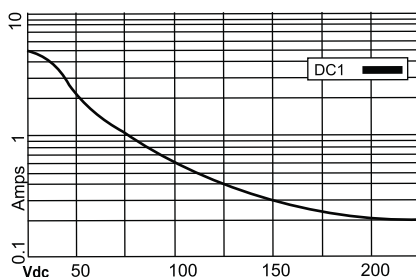
### Approvals



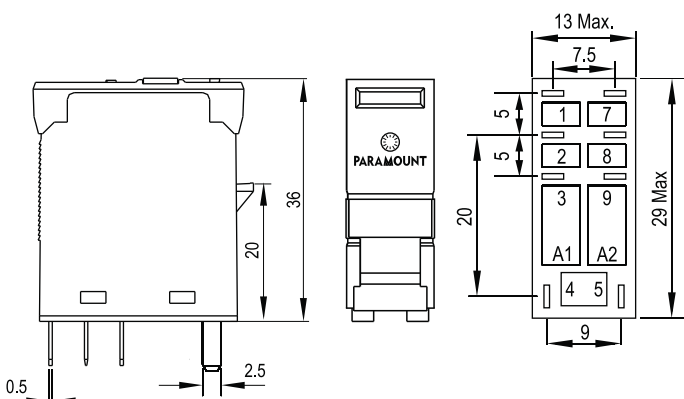
**Graph 1** Electrical life, ops x 10<sup>6</sup>



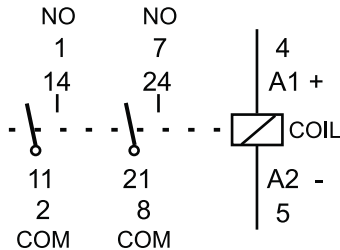
**Graph 2** Max. DC load



### Dimensions in mm.







# P2-A

**Two Poles, Normally Open Contact**

**6A 250V AC1 0.8A 110V DC1**  
**6A 30V DC1 0.4A 220V DC1**

## Contacts

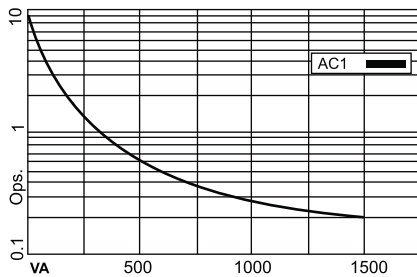
Materials: Standard, AgNi  
Optional, code 1 AgNi + 0.2μ Au  
Optional, code 2 AgNi + 5.0μ Au  
Max. switching current 6 A  
Max. Peak inrush current (20 ms.) 15 A  
Max. Switching voltage 250 V  
Max. AC load (Table 1) 1.5 KVA  
Max. DC load See Table 3

## Coils (Ohms ± 10% @ 20°C)

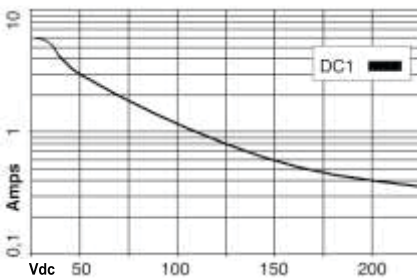
Pull-in voltage ≤ 0.8 x Un  
Drop-out voltage ≥ 0.1 x Un  
Nominal coil power 1.1 VA (AC) / 0.7 W (DC)

VAC	Ω	mA	VDC	Ω	mA
24	290	45.0	12	224	53.0
48	1.200	23.0	24	742	32.0
115	7.300	9.5	48	3.500	13.7
120	7.091		110	19.900	5.5
230	28.800	4.7			
240	27.800				

**Graph 1** Electrical life, ops x 10<sup>6</sup>



**Graph 3** Max. DC load



## Insulation

Dielectric strength (1 minute): Open contacts 1.000 V  
Between adjacent poles 3.000 V  
Between contacts & coil 5 KV  
Isolation resistance at 500VDC > 3GΩ  
Isolation, IEC 61810-5 : 4 KV / 3

## Specifications

Operate Time + Bounce Time 10 ms.  
Release Time + Bounce Time 8 ms.  
Ambient Temperature -40°C (no ice)... +70°C  
Mechanical life ops. 10 Million AC, 20 Million DC relays  
Electrical life at nominal load > 100,000 ops.  
Operating frequency at nominal load 1,200 / hour  
Protection degree IP40 / RT1  
Weight Approx. 21 gms.

## Standard types

**AC 50 Hz : 24, 48, 115, 230**

**AC 60 Hz : 120, 240**

F = Mechanical Flag Indicator

P = LED

R = RC, (Snubber Circuit)

**P2-A-F .... VAC**

**P2-A-FP .... VAC**

**P2-A-FPR .... VAC**

**DC : 12, 24, 48, 110**

F = Mechanical Flag Indicator

P = LED

W = Free-Wheeling Diodes

Z = Polarity & Free-Wheeling Diodes

B = AC/DC Bridge Rectifier (24/48V)

**P2-A-F .... VDC**

**P2-A-FP .... VDC**

**P2-A-FPW .... VDC**

**P2-A-FPZ .... VAD**

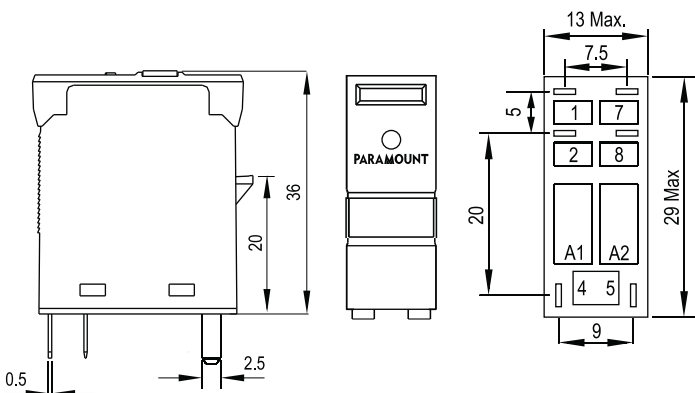
**P2-A-FPB .... VAD**

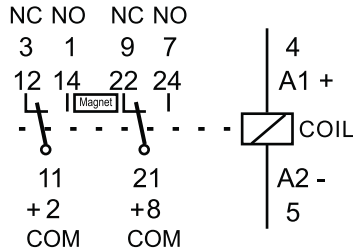
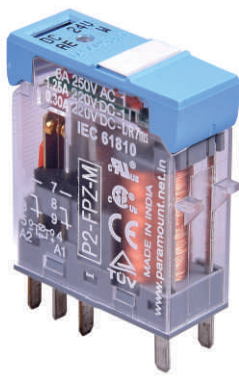
## Suitable Sockets : S2D-A, S2LD-A, S2P

## Approvals



## Dimensions in mm.





# P2...M

## MAGNETIC BLOW OUT

### Two Poles, Change-Over Contact

**6A 250V AC1 1.25A 110V DC1**

**6A 30V DC1 0.30A 220V DC L/R 7ms**

### Contacts

Materials:	Standard	AgNi
Max. switching current		6 A
Max. Peak inrush current (20 ms.)		30 A
Max. Switching voltage		250 V
Max. AC load (Graph 1)*		1.5 KVA
Max. DC load		See Graph 4*

### Coils (Ohms ± 10% @ 20°C)

Pull-in voltage	≤ 0.8 x <b>V<sub>in</sub></b>
Drop-out voltage	≥ 0.1 x <b>V<sub>in</sub></b>
Nominal coil power	1.1 VA (AC) / 0.7 W (DC)

VAC	Ω	mA	VDC	Ω	mA
24	290	45.0	12	224	53.0
48	1,200	23.0	24	742	32.0
115	7,300	9.5	48	3,500	13.7
120	7,091		110	19,900	5.5
230	28,800	4.7			
240	27,800				

### Insulation

Dielectric strength (1 minute):	
Open Contacts	1 KV
Between Adjacent Poles	3 KV
Between Contacts & Coil	5 KV
Insulation resistance at 500VDC	>3GΩ
Isolation, IEC 61810-5:	4 KV / 3

### Specifications

Operate Time + Bounce Time	10 ms.
Release Time + Bounce Time	8 ms.
Ambient Temperature	-40°C (no ice)... +70°C
Mechanical life ops.	10 Million AC, 20 Million DC relays
Electrical life at nominal load	> 100,000 ops.
Operating frequency at nominal load	1,200 / hour
Protection grade	IP40 / RT1
Weight Approx.	21 gms.

### Standard types

**AC 50 Hz : 24, 48, 115, 230**

**AC 60 Hz : 120, 240**

**M** = Magnetic Blow Out

**F** = Mechanical Flag Indicator

**P** = LED

**P2-FM** .... VAC  
**P2-FPM** .... VAC

**DC : 12, 24, 48, 110**

**F** = Mechanical Flag Indicator

**P** = LED

**W** = Free Wheeling Diode

**Z** = Polarity & Free Wheeling Diode

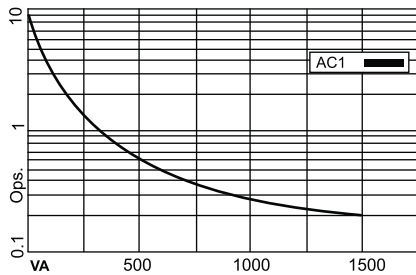
**P2-FM** .... VDC  
**P2-FPM** .... VDC  
**P2-FPWM** .... VDC  
**P2-FPZM** .... VDC

### Suitable Sockets : S2D, S2LD, S2P

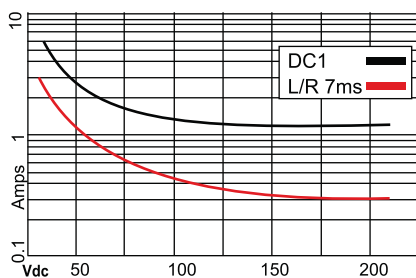
### Approvals



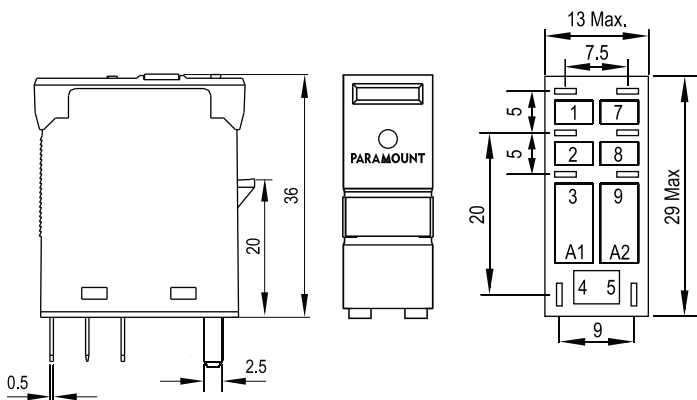
**Graph 1** Electrical life, ops x 10<sup>6</sup>

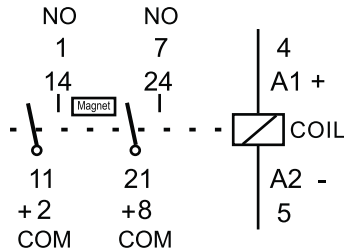
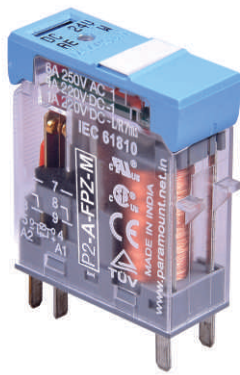


**Graph 4** Max. DC load



### Dimensions in mm.





# P2-A...M

## MAGNETIC BLOW OUT

Two Poles, Normally Open Contact

**6A 250V AC1 4A 220V DC1**  
**6A 30V DC1 1A 220V DC L/R 7ms**

### Contacts

Materials: Standard	AgNi
Optional, code 1	AgNi + Au 0.2μ
Optional, code 2	AgNi + Au 5.0μ
Max. switching current	6 A
Max. Peak inrush current (20 ms.)	15 A
Max. Switching voltage	250 V
Max. AC load (Graph 1)*	1.5 KVA
Max. DC load	See Graph 5*

### Coils (Ohms ± 10% @ 20°C)

Pull-in voltage	≤ 0.8 x <b>V<sub>UN</sub></b>
Drop-out voltage	≥ 0.1 x <b>V<sub>UN</sub></b>
Nominal coil power	1.1 VA (AC) / 0.7 W (DC)

VAC	Ω	mA	VDC	Ω	mA
24	290	45.0	12	224	53.0
48	1,200	23.0	24	742	32.0
115	7,300	9.5	48	3,500	13.7
120	7,091		110	19,900	5.5
230	28,800	4.7			
240	27,800				

### Insulation

Dielectric strength (1 minute):	
Open Contacts	1 KV
Between Adjacent Poles	3 KV
Between Contacts & Coil	5 KV
Insulation resistance at 500VDC	>3GΩ
Isolation, IEC 61810-5:	4 KV / 3

### Specifications

Operate Time + Bounce Time	10 ms.
Release Time + Bounce Time	8 ms.
Ambient Temperature	-40°C (no ice)... +70°C
Mechanical life ops.	10 Million AC, 20 Million DC relays
Electrical life at nominal load	> 100,000 ops.
Operating frequency at nominal load	1,200 / hour
Protection grade	IP40 / RT1
Weight Approx.	21 gms.

### Standard types

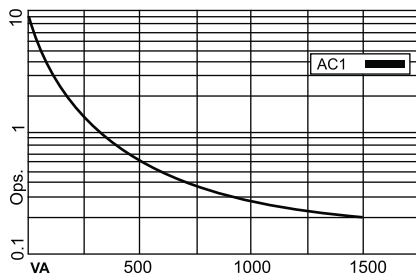
<b>AC 50 Hz : 24, 48, 115, 230</b>	
<b>AC 60 Hz : 120, 240</b>	
<b>M</b> = Magnetic Blow Out	
<b>F</b> = Mechanical Flag Indicator	<b>P2-A-FM</b> .... VAC
<b>P</b> = LED	<b>P2-A-FPM</b> .... VAC
<b>DC : 12, 24, 48, 110</b>	
<b>F</b> = Mechanical Flag Indicator	<b>P2-A-FM</b> .... VDC
<b>P</b> = LED	<b>P2-A-FPM</b> .... VDC
<b>W</b> = Free Wheeling Diode	<b>P2-A-FPWM</b> .... VDC
<b>Z</b> = Polarity & Free Wheeling Diode	<b>P2-A-FPZM</b> .... VDC

**Suitable Sockets : S2D-A, S2LD-A, S2P**

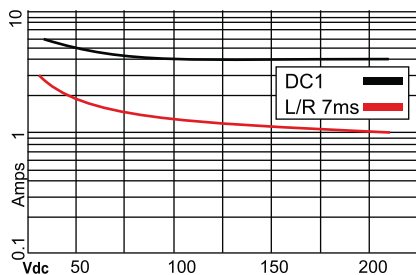
### Approvals



**Graph 1** Electrical life, ops x 10<sup>6</sup>

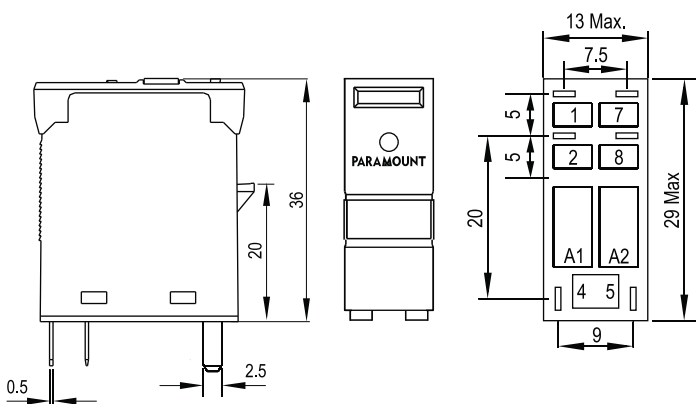


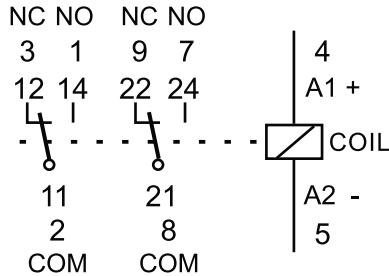
**Graph 5**



### Dimensions

in mm.





# P2...H

## HEAVY RATING RELAY

### Two Poles, Change-Over Contact

**8A 250V AC1 0.5A 110V DC1**  
**8A 30V DC1 0.2A 220V DC1**

### Contacts

Materials: Standard	AgNi
Optional, code 1	AgNi + Au 0.2μ
Optional, code 2	AgNi + Au 5.0μ
Max. Switching current	8 A
Max. Peak inrush current (20 ms.)	30 A
Max. Switching voltage	250 V
Max. AC load ( Graph 6 ) *	2.0 KVA
Max. DC load	See Graph 7*

### Coils (Ohms ± 10% @ 20°C)

Pull-in voltage	≤ 0.8 x Un
Drop-out voltage	≥ 0.1 x Un
Nominal coil power	1.1 VA (AC) / 0.7 W (DC)

VAC	Ω	mA	VDC	Ω	mA
24	290	45.0	12	224	53.0
48	1.200	23.0	24	742	32.0
115	7.300	9.5	48	3.500	13.7
120	7.091		110	19.900	5.5
230	28.800	4.7			
240	27.800				

### Insulation

Dielectric strength (1 minute):	
Open contacts	1.000 V
Between Adjacent poles	3.000 V
Between contacts & Coil	5 KV
Insulation resistance at 500VDC	>3GΩ
Isolation, IEC 61810-5:	4 KV / 3

### Specifications

Operate Time + Bounce Time	10 ms.
Release Time + Bounce Time	8 ms.
Ambient Temperature	-40°C (no ice)... +70°C
Mechanical life ops.	10 Million AC, 20 Million DC relays
Electrical life at nominal load	> 100,000 ops.
Operating frequency at nominal load	1,200 / hour
Protection grade	IP40 / RT1
Weight Approx.	21 gms.

### Standard types

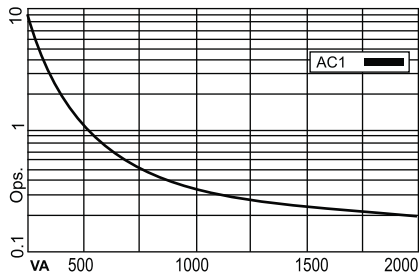
<b>AC 50 Hz : 24, 48, 115, 230</b>	
<b>AC 60 Hz : 120, 240</b>	
F = Mechanical Flag Indicator	<b>P2-FH .... VAC</b>
P = LED	<b>P2-FPH .... VAC</b>
I = Lockable & Manual Push Button	<b>P2-FPIH .... VAC</b>
R = RC Snubber circuit (115 or 230V)	<b>P2-FPIRH .... VAC</b>
<b>DC : 12, 24, 48, 110</b>	
F = Mechanical Flag Indicator	<b>P2-FH .... VDC</b>
P = LED	<b>P2-FPH .... VDC</b>
W = Free Wheeling Diode	<b>P2-FPWH .... VDC</b>
Z = Polarity & Free Wheeling Diode	<b>P2-FPZH .... VDC</b>
I = Lockable & Manual Push Button	<b>P2-FPIZH .... VDC</b>
B = AC/DC Bridge Rectifier (24/48V)	<b>P2-FPIBH .... VDC</b>

### Suitable Sockets : S2D, S2LD, S2P

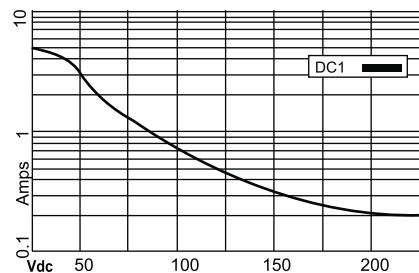
### Approvals



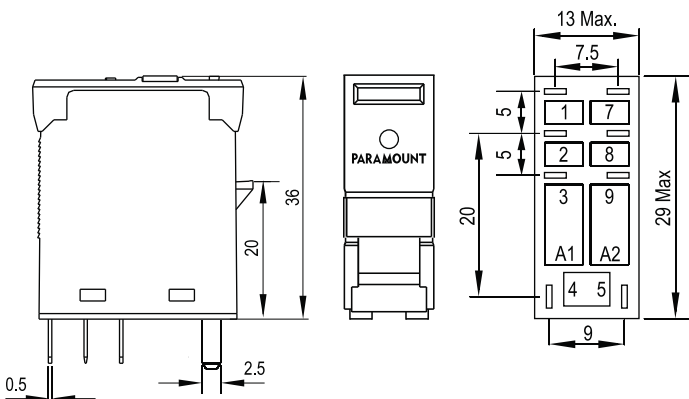
**Graph 6** Electrical life, ops x 10<sup>6</sup>



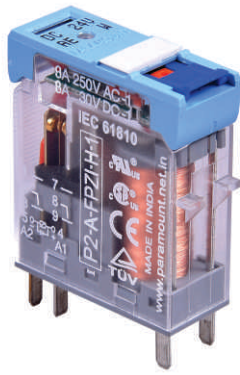
**Graph 7** Max. DC load



### Dimensions in mm.





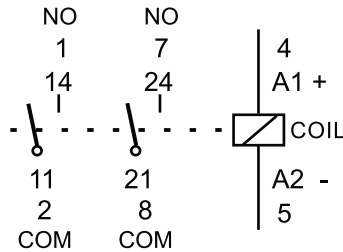


# P2-A...H

## HEAVY RATING RELAY

### Two Poles, Change-Over Contact

**8A 250V AC1 1.0A 110V DC1**  
**8A 30V DC1 0.5A 220V DC1**



### Contacts

Materials: Standard	AgNi
Optional, code 1	AgNi + Au 0.2μ
Optional, code 2	AgNi + Au 5.0μ
Max. Switching current	8 A
Max. Peak inrush current (20 ms.)	30 A
Max. Switching voltage	250 V
Max. AC load ( Graph 6) *	2.0 KVA
Max. DC load	See Graph 8*

### Coils (Ohms ± 10% @ 20°C)

Pull-in voltage	≤ 0.8 x <b>Un</b>
Drop-out voltage	≥ 0.1 x <b>Un</b>
Nominal coil power	1.1 VA (AC) / 0.7 W (DC)

VAC	Ω	mA	VDC	Ω	mA
24	290	45.0	12	224	53.0
48	1,200	23.0	24	742	32.0
115	7,300	9.5	48	3,500	13.7
120	7,091		110	19,900	5.5
230	28,800	4.7			
240	27,800				

### Insulation

Dielectric strength (1 minute):	
Open contacts	1,000 V
Between Adjacent poles	3,000 V
Between contacts & Coil	5 KV
Insulation resistance at 500VDC	>3GΩ
Isolation, IEC 61810-5:	4 KV / 3

### Specifications

Operate Time + Bounce Time	10 ms.
Release Time + Bounce Time	8 ms.
Ambient Temperature	-40°C (no ice)... +70°C
Mechanical life ops.	10 Million AC, 20 Million DC relays
Electrical life at nominal load	> 100,000 ops.
Operating frequency at nominal load	1,200 / hour
Protection grade	IP40 / RT1
Weight Approx.	21 gms.

### Standard types

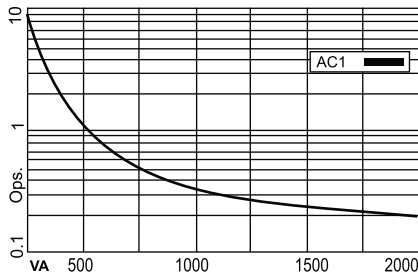
<b>AC 50 Hz : 24, 48, 115, 230</b>	
<b>AC 60 Hz : 120, 240</b>	
H = Heavy Duty Relays	
F = Mechanical Flag Indicator	<b>P2-A-FH .... VAC</b>
P = LED	<b>P2-A-FPH .... VAC</b>
I = Lockable & Manual Push Button	<b>P2-A-FPIH .... VAC</b>
R = RC Snubber circuit (115 or 230V)	<b>P2-A-FPIRH .... VAC</b>
<b>DC : 12, 24, 48, 110</b>	
F = Mechanical Flag Indicator	<b>P2-A-FH .... VDC</b>
P = LED	<b>P2-A-FPH .... VDC</b>
W = Free Wheeling Diode	<b>P2-A-FPWH .... VDC</b>
Z = Polarity & Free Wheeling Diode	<b>P2-A-FPZH .... VDC</b>
B = AC/DC Bridge Rectifier (24/48V)	<b>P2-A-FPBH .... VAD</b>

### Suitable Sockets : S2D-A, S2LD-A, S2P

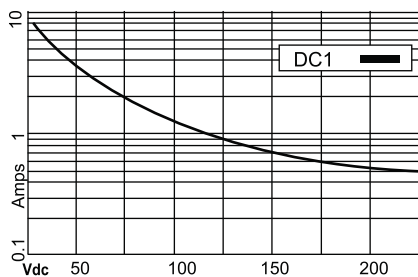
### Approvals



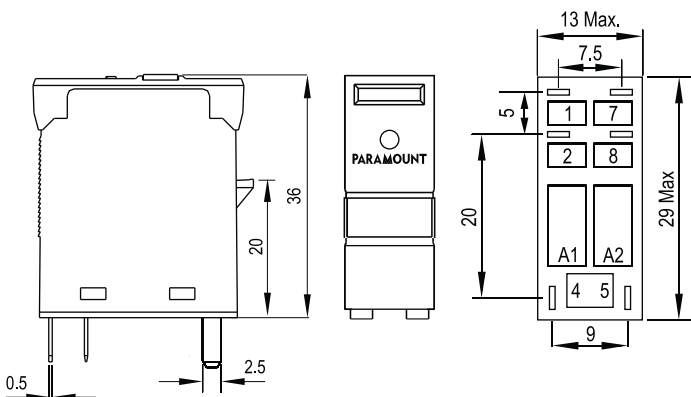
**Graph 6** Electrical life, ops x 10<sup>6</sup>

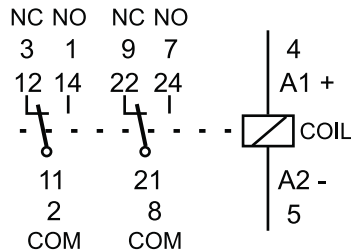


**Graph 8** Max. DC load



### Dimensions in mm.





# P2-E2

**Two Poles, Change-Over Contact**

**6A 250V AC1 0.5A 110V DC1**  
**6A 30V DC1 0.2A 220V DC1**

## Contacts

Materials: Standard, AgNi  
Optional, code 1 AgNi + 0.2μ Au  
Optional, code 2 AgNi + 5.0μ Au  
Max. switching current 6 A  
Max. Peak inrush current (20 ms.) 30 A  
Max. Switching voltage 250 V  
Max. AC load (Graph 1)\* 1.5 KVA  
Max. DC load See Graph 2\*

## Coils (Ohms ± 10% @ 20°C)

Pull-in voltage ≤ 0.8 x Un  
Drop-out voltage ≥ 0.1 x Un  
Nominal coil power 1.1 VA (AC) / 0.7 W (DC)

VAC	Ω	mA	VDC	Ω	mA
24	290	45.0	12	224	53.0
48	1,200	23.0	24	742	32.0
115	7,300	9.5	48	3,500	13.7
120	7,091		110	19,900	5.5
230	28,800	4.7			
240	27,800				

## Insulation

Dielectric strength (1 minute): Open contacts 1,000 V  
Between adjacent poles 3,000 V  
Between contacts & coil 5 KV  
Isolation resistance at 500VDC > 3GΩ  
Isolation, IEC 61810-5 : 4 KV / 3

## Specifications

Operate Time + Bounce Time 10 ms.  
Release Time + Bounce Time 8 ms.  
Ambient Temperature -40°C (no ice)... +70°C  
Mechanical life ops. 10 Million AC, 20 Million DC relays  
Electrical life at nominal load > 100,000 ops.  
Operating frequency at nominal load 1,200 / hour  
Protection degree IP40 / RT1  
Weight Approx. 21 gms.

## Standard types

**AC 50 Hz : 24, 48, 115, 230**  
**AC 60 Hz : 120, 240**

F = Mechanical Flag Indicator  
P = LED  
R = RC, (Snubber Circuit)

**P2-F-E2 .... VAC**  
**P2-FP-E2 .... VAC**  
**P2-FPR-E2 .... VAC**

**DC : 12, 24, 48, 110**

F = Mechanical Flag Indicator  
P = LED  
W = Free Wheeling Diode  
Z = Polarity & Free-Wheeling Diodes  
I = Lockable & Manual Push Button  
B = AC/DC Bridge Rectifier (24/48V)

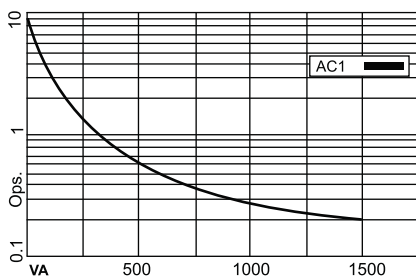
**P2-F-E2 .... VDC**  
**P2-FP-E2 .... VDC**  
**P2-FPW-E2 .... VDC**  
**P2-FPZ-E2 .... VDC**  
**P2-FPZI-E2 .... VDC**  
**P2-FPB-E2 .... ADC**

## Suitable Sockets : S2D-E, S2LD-E, S2P

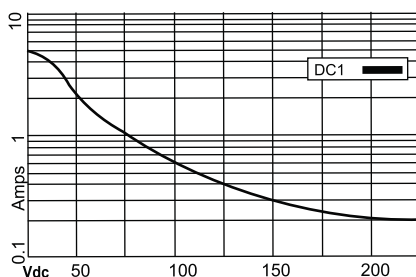
## Approvals



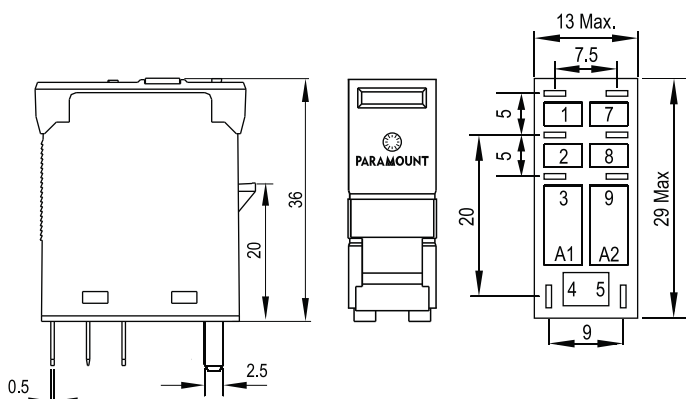
**Graph 1** Electrical life, ops x 10<sup>6</sup>

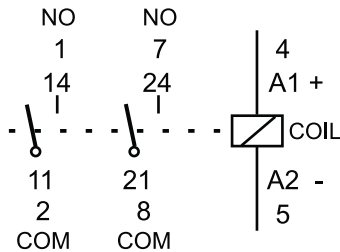
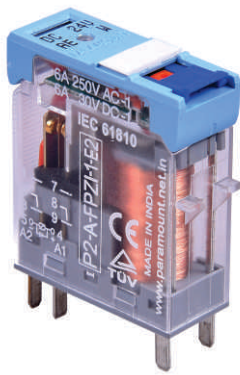


**Graph 2** Max. DC load



## Dimensions in mm.





# P2-A-E2

**Two Poles, Normally Open Contact**

**6A 250V AC1 0.8A 110V DC1**  
**6A 30V DC1 0.4A 220V DC1**

## Contacts

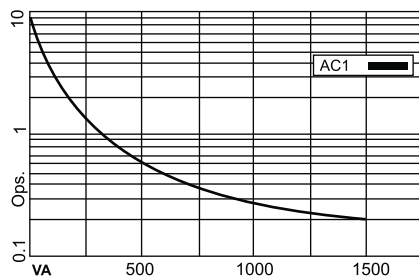
Materials: Standard,	AgNi
Optional, code 1	AgNi + 0.2μ Au
Optional, code 2	AgNi + 5.0μ Au
Max. switching current	6 A
Max. Peak inrush current (20 ms.)	15 A
Max. Switching voltage	250 V
Max. AC load (Table 1)	1.5 KVA
Max. DC load	See Table 3

## Coils (Ohms ± 10% @ 20°C)

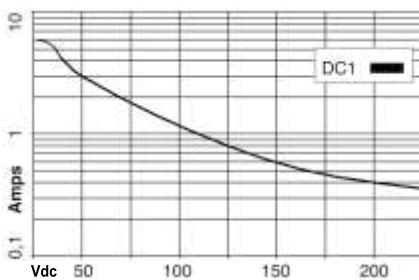
Pull-in voltage	≤ 0.8 x Un
Drop-out voltage	≥ 0.1 x Un
Nominal coil power	1.1 VA (AC) / 0.7 W (DC)

VAC	Ω	mA	VDC	Ω	mA
24	290	45.0	12	224	53.0
48	1.200	23.0	24	742	32.0
115	7.300	9.5	48	3.500	13.7
120	7.091		110	19.900	5.5
230	28.800	4.7			
240	27.800				

**Graph 1** Electrical life, ops x 10<sup>6</sup>



**Graph 3** Max. DC load



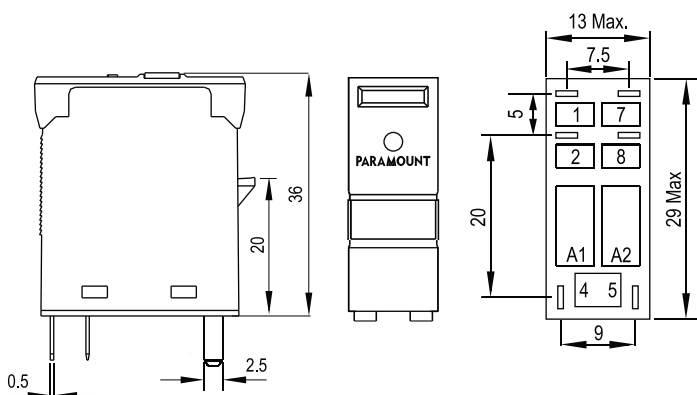
## Insulation

Dielectric strength (1 minute): Open contacts	1.000 V
Between adjacent poles	3.000 V
Between contacts & coil	5 KV
Isolation resistance at 500VDC	> 3GΩ
Isolation, IEC 61810-5 :	4 KV / 3

## Specifications

Operate Time + Bounce Time	10 ms.
Release Time + Bounce Time	8 ms.
Ambient Temperature	-40°C (no ice)... +70°C
Mechanical life ops.	10 Million AC, 20 Million DC relays
Electrical life at nominal load	> 100,000 ops.
Operating frequency at nominal load	1,200 / hour
Protection degree	IP40 / RT1
Weight Approx.	21 gms.

## Dimensions in mm.



## Standard types

**AC 50 Hz : 24, 48, 115, 230**

**AC 60 Hz : 120, 240**

**F** = Mechanical Flag Indicator

**P** = LED

**R** = RC, (Snubber Circuit)

**P2-A-F-E2** .... VAC

**P2-A-FP-E2** .... VAC

**P2-A-FPR-E2** .... VAC

**DC : 12, 24, 48, 110**

**F** = Mechanical Flag Indicator

**P** = LED

**W** = Free-Wheeling Diodes

**Z** = Polarity & Free-Wheeling Diodes

**B** = AC/DC Bridge Rectifier (24/48V)

**P2-A-F-E2** .... VDC

**P2-A-FP-E2** .... VDC

**P2-A-FPW-E2** .... VDC

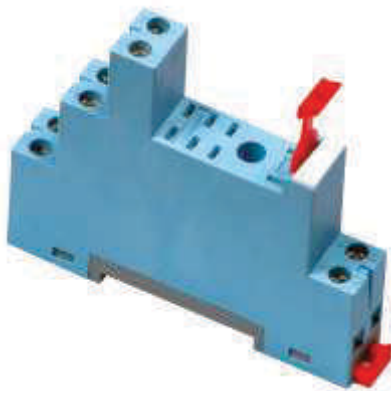
**P2-A-FPZ-E2** .... VAD

**P2-A-FPB-E2** .... VAD

## Suitable Sockets : S2D-A-E, S2LD-A-E, S2P

## Approvals





# S2D

Only  
**15 mm**  
WIDE

**Input / Output Socket (6A / 8A)  
for P2 CO Relays  
DIN Rail or Panel Mountable**

## Specifications

Poles: 2 Change Over Contact  
Nominal load: 6A / 8A @ 250V

**Insulation:** Di- electric strength, 1munitu 5 KV  
Between contact and coil 5 KV  
Between all terminals and DIN Rail 3 KV  
Between adjacent terminals

1.2 Nm  
Brass Tin Plated Screw M3, Pozi

Max. Screw torque  
Screw dimensions 4 mm<sup>2</sup> or 2 x 2.25 mm<sup>2</sup>

22 14 AWG

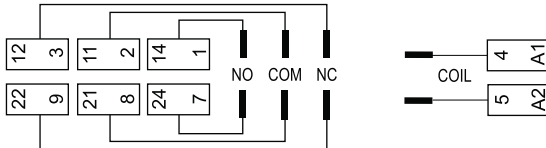
4 mm<sup>2</sup>

38 gms.

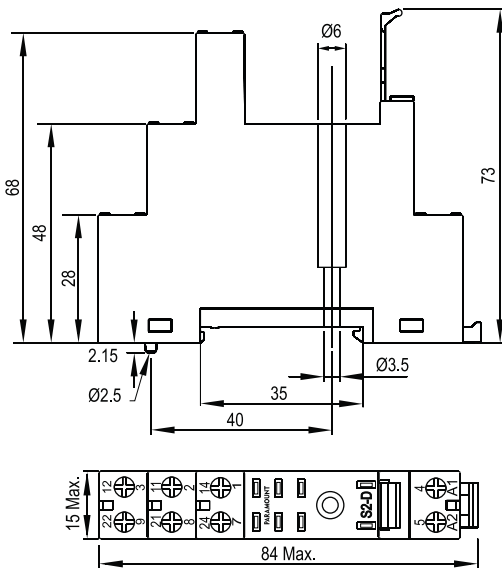
**Wire in-lets capacity:**  
Solid wire  
Multi core  
Ferrule tip terminals

Weight Approx.  
DIN Rail / Panel Mountable  
Integrated Relay Hold Down Clip  
Removable White Marking Label  
EN / DIN Sequential Numbering according to  
EN 60947 & IEC 61810

## Wiring Diagram



## Dimensions in mm.



## Accessories

S2D-B1



S2D-B4



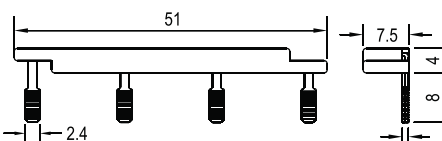
## Accessories

Bridge Bar S2D-B1 & S2D-B4 for Coil Terminal (A2 / 5 )

## Dimensions in mm.



S2D-B1, 10A @ 250 VAC, 1 Way Bridge for Coil



S2D-B4, 10A @ 250 VAC, 4 Way Bridge for Coil

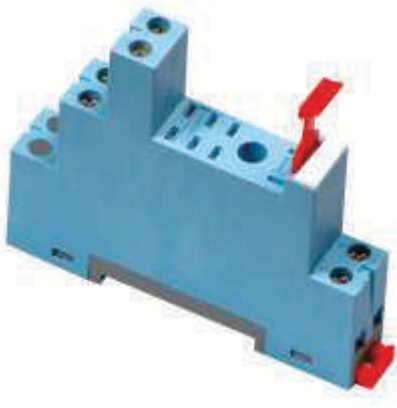
## Suitable Relays : P2, P2-M

## Approvals









# S2D-A

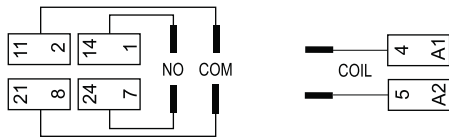
Only  
**15 mm**  
WIDE

**Input / Output Socket (6A / 8A)**

**for P2 NO Relays**

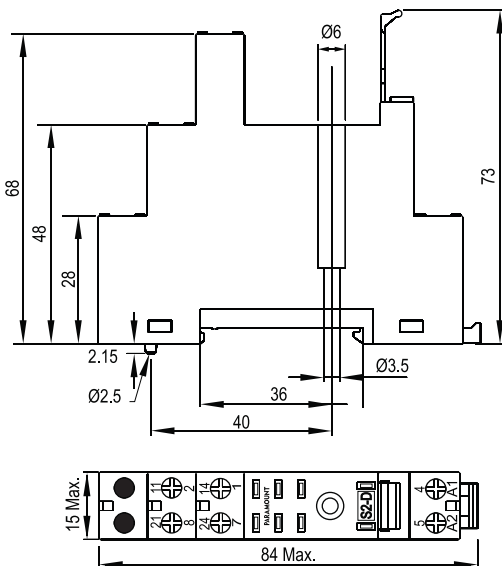
**DIN Rail or Panel Mountable**

## Wiring Diagram



## Dimensions

in mm.



## Accessories

S2D-B1



S2D-B4

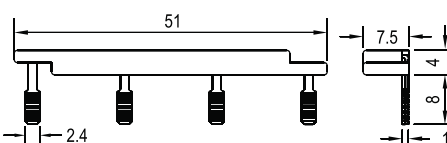


## Dimensions

in mm.



S2D-B1, 10A @ 250 VAC, 1 Way Bridge for Coil



S2D-B4, 10A @ 250 VAC, 4 Way Bridge for Coil

## Specifications

Poles: 2 Normally Open Contact  
Nominal load: 6A / 8A @ 250V

**Insulation:** Di- electric strength, 1munitu  
Between contact and coil: 5 KV  
Between all terminals and DIN Rail: 5 KV  
Between adjacent terminals: 3 KV

Brass Tin Plated Screw: 1.2 Nm  
Max. Screw torque: M3, Pozi

Screw dimensions: 4 mm<sup>2</sup> or 2 x 2.25 mm<sup>2</sup>  
22 14 AWG

**Wire in-lets capacity:** 4 mm<sup>2</sup>

Solid wire: 38 gms.  
Multi core

Ferrule tip terminals

Weight Approx.

DIN Rail / Panel Mountable

Integrated Relay Hold Down Clip

Removable White Marking Label

EN / DIN Sequential Numbering according to

EN 60947 & IEC 61810

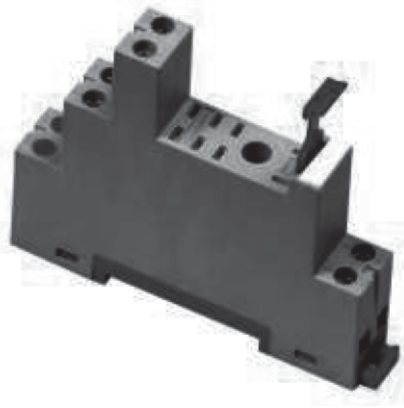
## Accessories

Bridge Bar S2D-B1 & S2D-B4 for Coil Terminal (A2 / 5 )

**Suitable Relays : P2-A, P2-A-M**

## Approvals



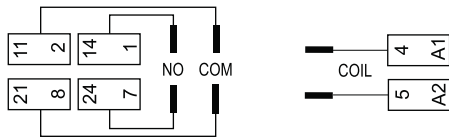


# S2D-A-E

Only  
**15 mm**  
WIDE

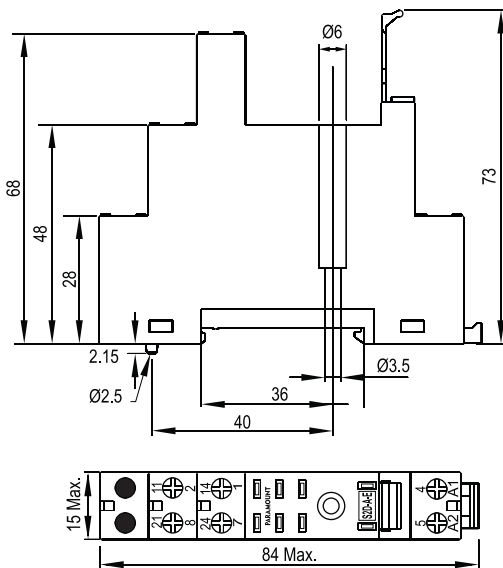
**Input / Output Socket (6A / 8A)**  
**for P2 NO Relays**  
**DIN Rail or Panel Mountable**

## Wiring Diagram



## Dimensions

in mm.



## Accessories

S2D-B1

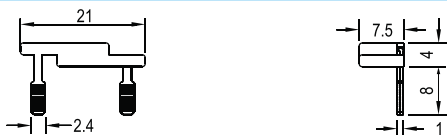


S2D-B4

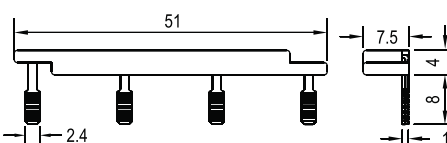


## Dimensions

in mm.



S2D-B1, 10A @ 250 VAC, 1 Way Bridge for Coil



S2D-B4, 10A @ 250 VAC, 4 Way Bridge for Coil

## Specifications

Poles: 2 Normally Open Contact  
Nominal load: 6A / 8A @ 250V

**Insulation:** Di- electric strength, 1munitu: 5 KV  
Between contact and coil: 5 KV  
Between all terminals and DIN Rail: 3 KV  
Between adjacent terminals: 3 KV

Brass Tin Plated Screw: 1.2 Nm  
Max. Screw torque: M3, Pozi

Screw dimensions: 4 mm<sup>2</sup> or 2 x 2.25 mm<sup>2</sup>  
22 14 AWG

**Wire in-lets capacity:** 4 mm<sup>2</sup>

Solid wire: 38 gms.  
Multi core: 38 gms.  
Ferrule tip terminals: 38 gms.

Weight Approx.  
DIN Rail / Panel Mountable  
Integrated Relay Hold Down Clip  
Removable White Marking Label  
EN / DIN Sequential Numbering according to  
EN 60947 & IEC 61810

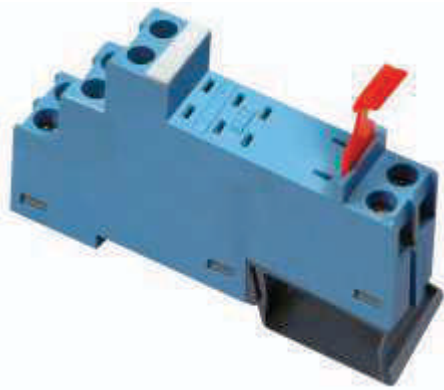
## Accessories

Bridge Bar S2D-B1 & S2D-B4 for Coil Terminal (A2 / 5 )

## Suitable Relays : P2-A-E2

## Approvals



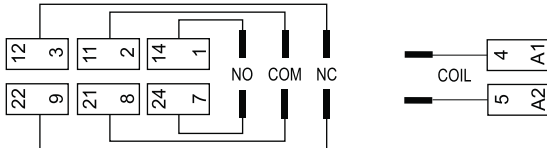


# S2LD

**Input / Output Socket (6A / 8A)  
for P2 CO Relays  
DIN Rail or Panel Mountable**

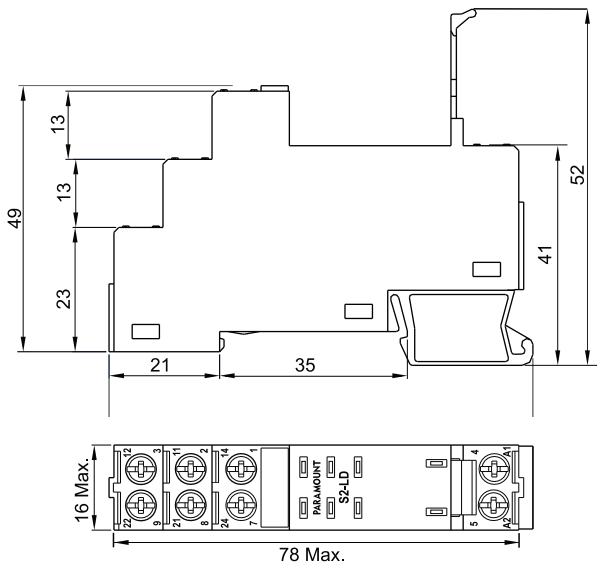
Only  
**16mm**  
WIDE

## Wiring Diagram



## Dimensions

in mm.



## Specifications

Poles: 2 Change Over Contact  
Nominal load : 6A / 8A @ 250V

**Insulation:** Di- electric strength, 1munitu  
Between contact and coil: 5 KV  
Between all terminals and DIN Rail: 5 KV  
Between adjacent terminals: 3 KV

Brass Tin Plated Screw: 1.2 Nm  
Max. Screw torque: M3, Pozi  
Screw dimensions: 4 mm<sup>2</sup> or 2 x 2.25 mm<sup>2</sup>

**Wire in-lets capacity:**  
Solid wire: 22 14 AWG  
Multi core: 4 mm<sup>2</sup>  
Ferrule tip terminals: 38 gms.

Weight Approx.  
DIN Rail / Panel Mountable  
Integrated Relay Hold Down Clip  
Removable White Marking Label  
EN / DIN Sequential Numbering according to  
EN 60947 & IEC 61810

## Accessories



S2LD-B1



C Terminal

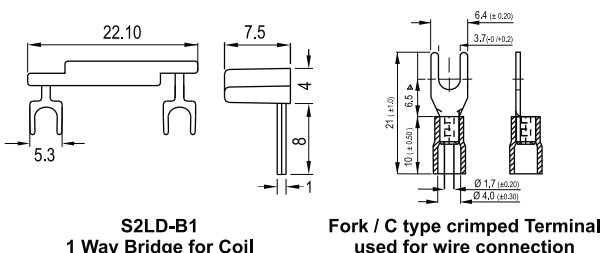
## Accessories

S2LD-B1 - 1 Way Bridge

Fork / C - Terminal for wire connection

## Dimensions

in mm.



S2LD-B1  
1 Way Bridge for Coil

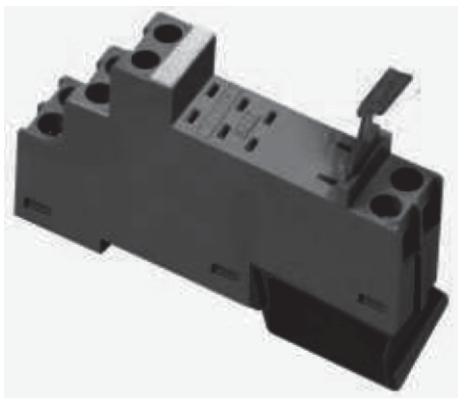
Fork / C type crimped Terminal  
used for wire connection

## Suitable Relays : P2, P2-M

## Approvals





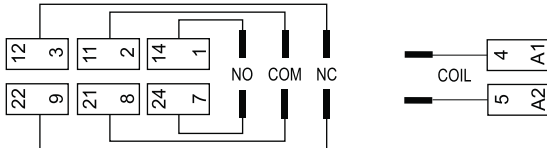


# S2LD-E

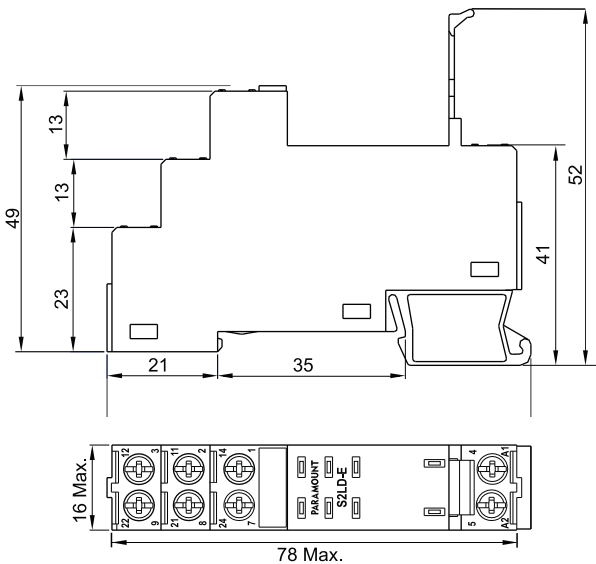
**Input / Output Socket (6A / 8A)  
for P2 CO Relays  
DIN Rail or Panel Mountable**

Only  
**16mm**  
WIDE

## Wiring Diagram



## Dimensions in mm.



## Accessories



**S2LD-B1**



**C Terminal**

## Specifications

Poles: 2 Change Over Contact  
Nominal load : 6A / 8A @ 250V

**Insulation:** Di- electric strength, 1munitu  
Between contact and coil: 5 KV  
Between all terminals and DIN Rail: 5 KV  
Between adjacent terminals: 3 KV

Brass Tin Plated Screw: 1.2 Nm  
Max. Screw torque: M3, Pozi  
Screw dimensions: 4 mm<sup>2</sup> or 2 x 2.25 mm<sup>2</sup>

**Wire in-lets capacity:**  
Solid wire: 22 14 AWG  
Multi core: 4 mm<sup>2</sup>  
Ferrule tip terminals: 38 gms.

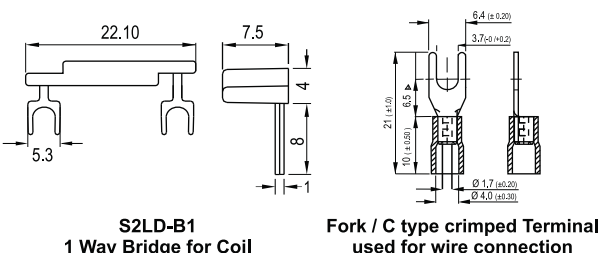
Weight Approx.  
DIN Rail / Panel Mountable  
Integrated Relay Hold Down Clip  
Removable White Marking Label  
EN / DIN Sequential Numbering according to  
EN 60947 & IEC 61810

## Accessories

S2LD-B1 - 1 Way Bridge

Fork / C - Terminal for wire connection

## Dimensions in mm.



**S2LD-B1**  
1 Way Bridge for Coil

**Fork / C type crimped Terminal**  
used for wire connection

## Suitable Relays : P2-E2

## Approvals





# S2LD-A

**Input / Output Socket (6A / 8A)  
for P2 NO Relays  
DIN Rail or Panel Mountable**

Only  
**16mm**  
WIDE

## Specifications

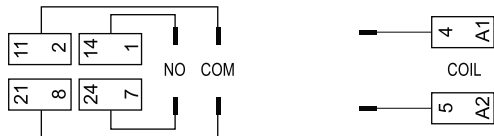
Poles: 2 Normally Open Contact  
Nominal load : 6A / 8A @ 250V

**Insulation:** Di- electric strength, 1munitu 5 KV  
Between contact and coil 5 KV  
Between all terminals and DIN Rail 3 KV  
Between adjacent terminals

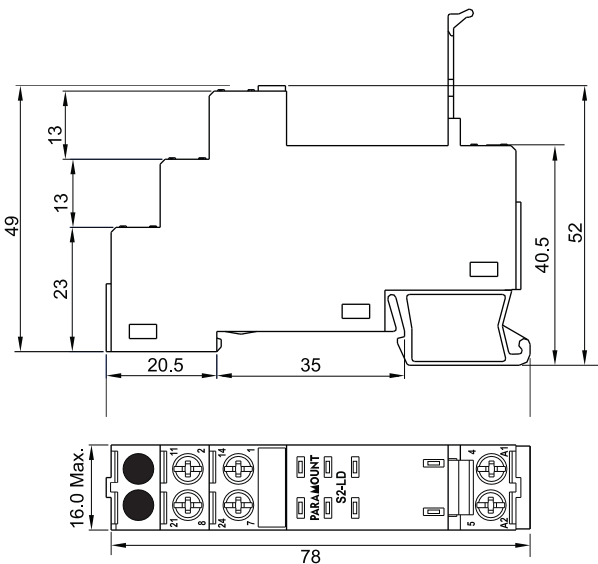
1.2 Nm  
Brass Tin Plated Screw M3, Pozi  
Max. Screw torque  
Screw dimensions 4 mm<sup>2</sup> or 2 x 2.25 mm<sup>2</sup>

**Wire in-lets capacity:** 22 14 AWG  
Solid wire 4 mm<sup>2</sup>  
Multi core 38 gms.  
Ferrule tip terminals

Weight Approx.  
DIN Rail / Panel Mountable  
Integrated Relay Hold Down Clip  
Removable White Marking Label  
EN / DIN Sequential Numbering according to  
EN 60947 & IEC 61810



## Dimensions in mm.



## Accessories



**S2LD-B1**



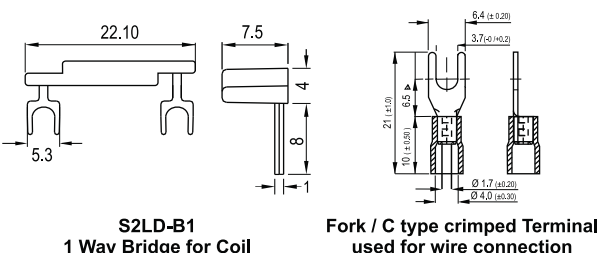
**C Terminal**

## Accessories

S2LD-B1 - 1 Way Bridge

Fork / C - Terminal for wire connection

## Dimensions in mm.



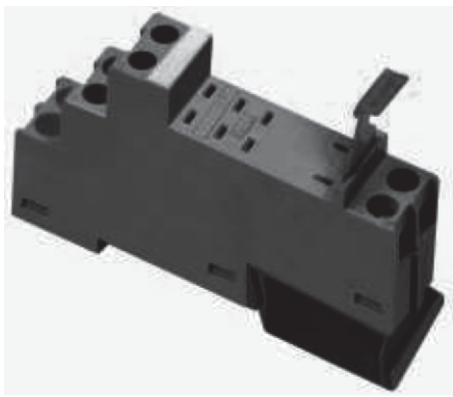
**S2LD-B1**  
1 Way Bridge for Coil

**Fork / C type crimped Terminal**  
used for wire connection

## Suitable Relays : P2-A, P2-A-M

## Approvals





# S2LD-A-E

**Input / Output Socket (6A / 8A)  
for P2 NO Relays  
DIN Rail or Panel Mountable**

Only  
**16mm**  
WIDE

## Specifications

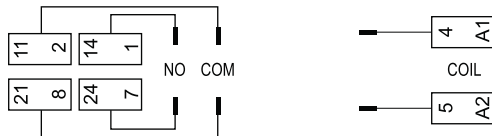
Poles: 2 Normally Open Contact  
Nominal load : 6A / 8A @ 250V

**Insulation:** Di- electric strength, 1munitu 5 KV  
Between contact and coil 5 KV  
Between all terminals and DIN Rail 3 KV  
Between adjacent terminals

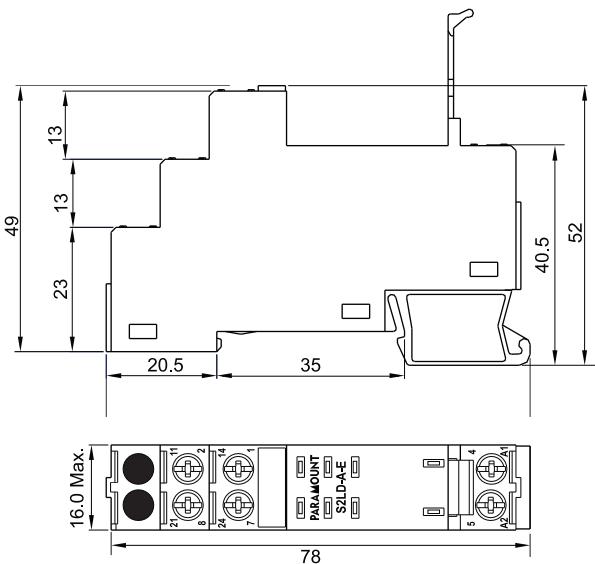
1.2 Nm  
Brass Tin Plated Screw M3, Pozi  
Max. Screw torque  
Screw dimensions 4 mm<sup>2</sup> or 2 x 2.25 mm<sup>2</sup>

**Wire in-lets capacity:** 22 14 AWG  
Solid wire 4 mm<sup>2</sup>  
Multi core 38 gms.  
Ferrule tip terminals

Weight Approx.  
DIN Rail / Panel Mountable  
Integrated Relay Hold Down Clip  
Removable White Marking Label  
EN / DIN Sequential Numbering according to  
EN 60947 & IEC 61810



## Dimensions in mm.



## Accessories



**S2LD-B1**



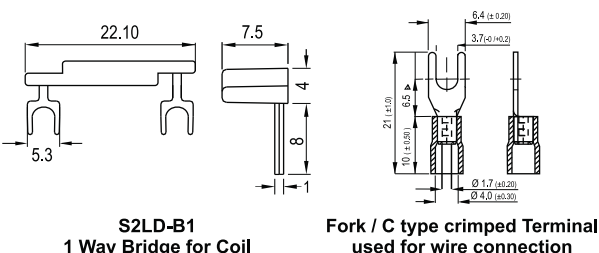
**C Terminal**

## Accessories

S2LD-B1 - 1 Way Bridge

Fork / C - Terminal for wire connection

## Dimensions in mm.



**S2LD-B1**  
1 Way Bridge for Coil

**Fork / C type crimped Terminal**  
used for wire connection

**Suitable Relays : P2-A-E2, P2-A-M-E2**

## Approvals





# S2-P

**Printed Circuit Socket  
(6A / 8A) for P2 Relays**

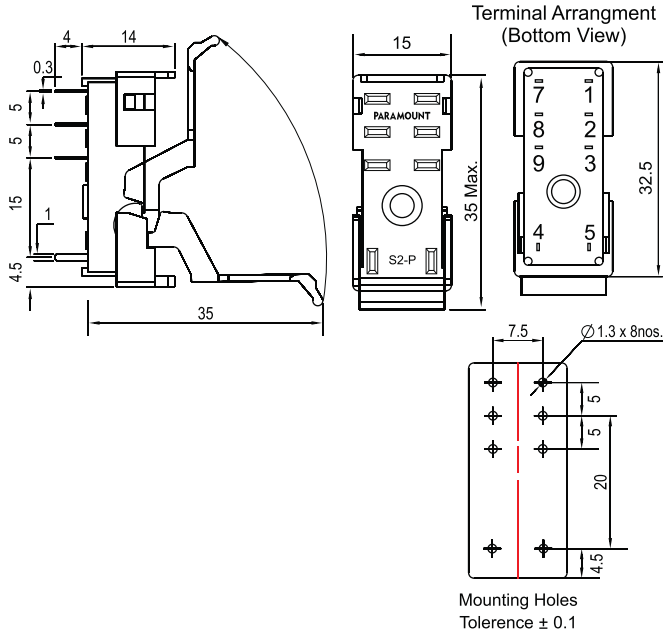
## Specifications

Nominal load	6A / BA @250V
Dielectric strength 1 min.	
Coil terminals to contacts	5 KV
Hard brass tin-plated terminals	0.3 x 1mm
Integrated Relay hold down clip	
Weight Approx.	6 gms.

**Suitable Relays :**  
**P2, P2-M, P2-A, P2-A-M, P2-H, P2-A-H**

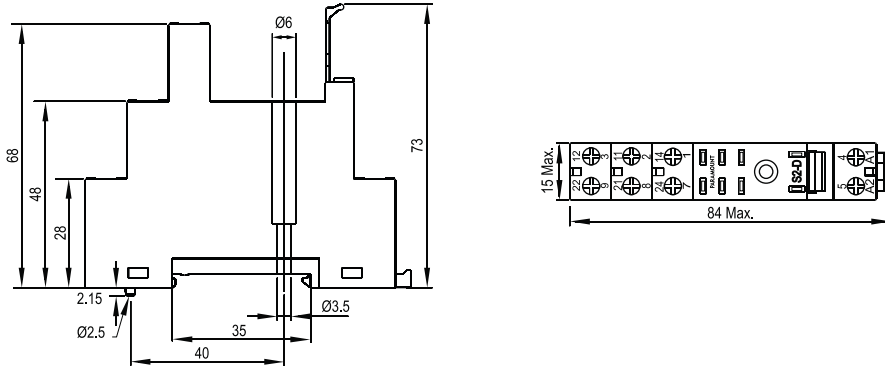
## Dimensions

in mm.





**S2D is the World's most compact (15mm width) DIN Rail Mountable Socket for the relays with the below Pitch & Pin configuration**



15mm width of the S2D DIN Rail Mountable Socket allows to mount 64 Sockets on a Standard 35 mm Din Rail with a length of 1 meter / 1000 mm length (with a provision for 5 Nos. of End stoppers each with a width of 8 mm).

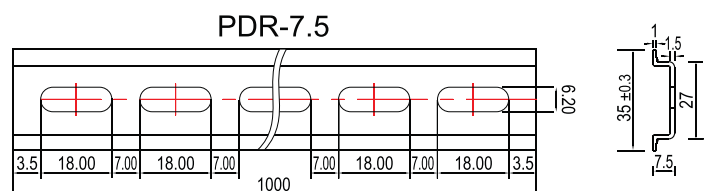
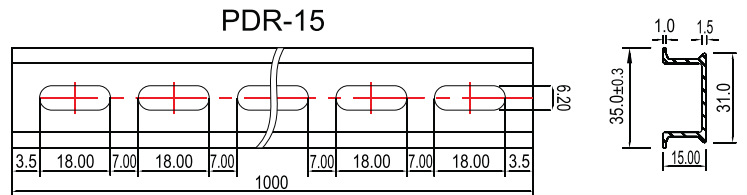
Generally the PLC (Programmable Logic Controller) / DCS (Distributed Control System) output is 64 Bit output which requires 64 Relays to drive the load.

All the 64 Relays driven by a particular PLC / DCS can be mounted on a single 35 mm standard 1 Mt / 1000 mm Din Rail.

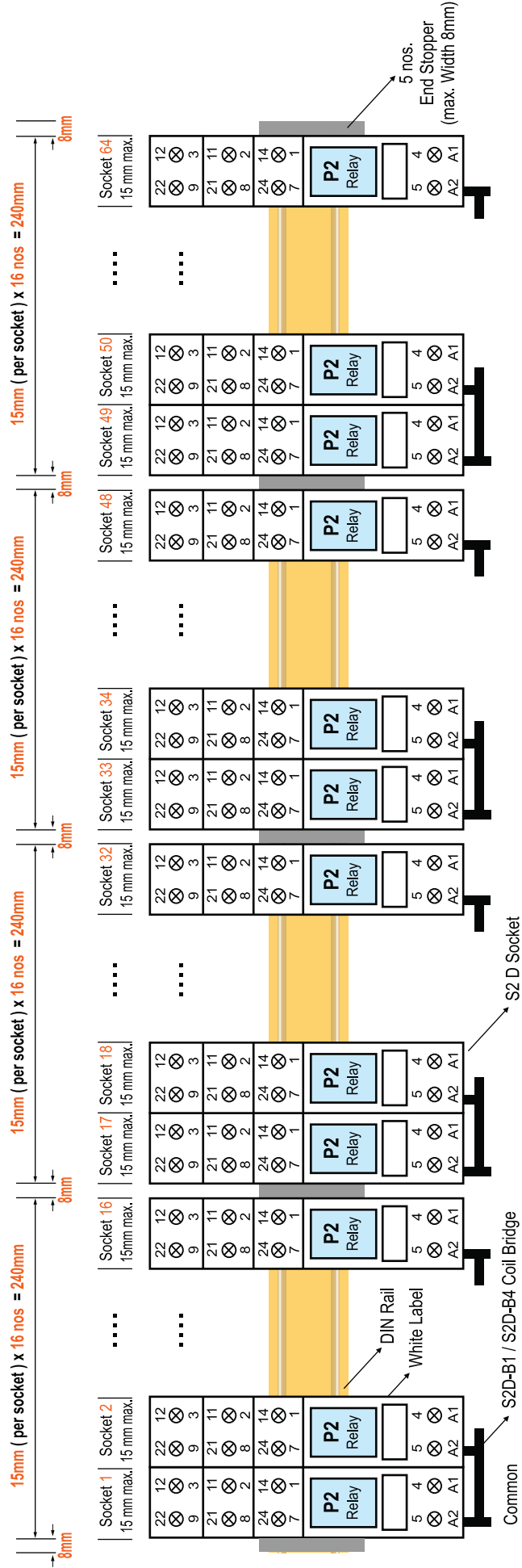
The provision to mount 64 Relays on a single 35 mm DIN Rail with 1 mt / 1000 length makes the wiring, identification of the relays from a particular PLC / DCS & maintenance very easy and convenient.

## Mounting Tracks

All Dimensions in mm



**Schematic diagram showing typical mounting of 64 Relays & Sockets on a standard 35 mm Din Rail with 1 meter (1000 mm) length**



**S2 D sockets can be interconnected through bridge bars in the coil line at the points A2 by using S2D-B1 and S2D-B4 Coil Bridges**

### Ordering Information for Relays

P2--------  
           1      2      3      4      5      6      7      8

#### 1. Relay Type

Blank : Genera Purpose / Standard

#### 2. Contact Form

Blank : DPDT (2C/O)

A : DPST- NO (2N/O)

#### 3. Contact Type

Blank : No Features / Standard

F : Mechanical Flag Indicator

P : LED Indicator across the coil

Z : Free Wheeling + Polarity Diode

I : Lockable + Manual Push Button

B : Bridge Rectifier

R : RC (Snubber Circuit)

#### 5. Features

Blank : No Features / Standard

M : Magnetic Blow Out / DC Switching

H : Heavy Rating Relays

#### 6. Contact Material

Blank : AgCuNi

1 : AgCuNi + Au 0.2 micron

2 : AgCuNi + Au 5.0 micron

#### 7. Contact Material

Blank : UL Approved (6 Amps)

E2 : NON UL Approved (6 Amps)

#### 8. Rated coil Voltage

6 / 12 / 24 / 48 / 110 VDC

6 / 12 / 24 / 48 / 115 / 230 VAC

### Ordering Information for Sockets for P1 Relays

S2D	Din Rail Mountable Socket	(UL Approved)	For General purpose 2 Pole Relays
S2D-A	Din Rail Mountable Socket	(UL Approved)	For General purpose 2 NO Relays
S2LD	Din Rail Mountable Socket	(UL Approved)	For General purpose 2 Pole Relays
S2LD-A	Din Rail Mountable Socket	(UL Approved)	For General purpose 2 NO Relays
S2D-E	Din Rail Mountable Socket	(NON UL)	For General purpose 2 Pole Relays
S2D-A-E	Din Rail Mountable Socket	(NON UL)	For General purpose 2 NO Relays
S2LD-E	Din Rail Mountable Socket	(NON UL)	For General purpose 2 Pole Relays
S2LD-A-E	Din Rail Mountable Socket	(NON UL)	For General purpose 2 NO Relays
S2P	PCB Rail Mountable Socket	(UL Approved)	For General purpose 2 Pole Relays