

## D2 Series Relay



## D2RR/D2RF Series

## Product Description

The D2 Series is a compact line of relays with quick response time and long life. Available in DPDT and 4PDT configurations.

## Features

**D2RR**

- Ultra-high sensitivity relay with quick response
- High reliability, long life
- Panel, DIN rail and flange mounting
- Small size

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## Standards and Certifications



When used with accompanying Eaton screw terminal socket.

**D2RF**

- Flag indicator shows relay status in manual or powered condition
- Bipolar LED status lamp allows for reverse polarity applications
  - Shows coil ON or OFF status
  - Ideal in low light conditions
- Color-coded pushbutton identifies AC coils with red or DC coils with blue pushbuttons
  - Allows for manual operation of relay without the need for coil power
  - Ideal for field service personnel to test control circuits
- Lock-down door, when activated, holds pushbutton and contacts in the operate position
  - Excellent for analyzing circuit problems
- Finger-grip cover allows operator to remove relays from sockets more easily than conventional relays
- White plastic ID tag/write label used for identification of relays in multi-relay circuits

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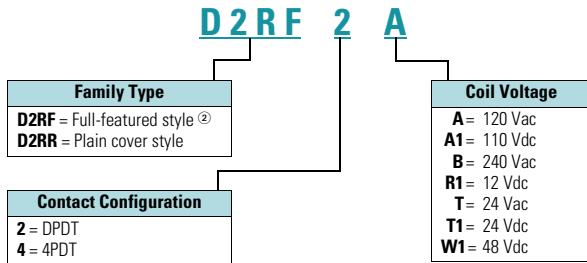
## Control Relays and Timers

### General Purpose Plug-In Relays

#### Catalog Number Selection

##### D2RF/D2RR <sup>①</sup>

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#### Product Selection

##### D2RF/D2RR Relay/Socket Quick Reference

Relay Type	Socket	Clip	Module Type	ID Tag	Jumper
D2RR2, D2RF2	D2PAL	PWC-D24	B	PWF-D2P	D2PJ1
		PQC-1782	—	—	—
	D2PA6	PQC-1342	None	—	—
D2RR4, D2RF4	D2PAP	PWC-D24	B	PWF-D2P	D2PJ1
		PQC-1782	—	—	—
	D2PA7	PWC-D24	B	—	—
		PQC-1782	B	—	—
	D2PA6	PQC-1342	None	—	—

#### Notes

- ① For deciphering catalog numbers. Do not use for ordering as not all combinations are readily available.
- ② Full-featured, LED test button, flag indicator, lock-down door, finger-grip cover, ID tag.

## D2RF Series Relay



## D2RF/D2RR Series

Coil Voltage	Contact Configuration	Coil Resistance (Ohms)	Catalog Number
<b>Full Featured Style</b>			
12 Vdc	DPDT	160	<b>D2RF2R1</b>
24 Vac	DPDT	180	<b>D2RF2T</b>
24 Vdc	DPDT	650	<b>D2RF2T1</b>
48 Vdc	DPDT	2600	<b>D2RF2W1</b>
110/125 Vdc	DPDT	11,000	<b>D2RF2A1</b>
120 Vac	DPDT	4430	<b>D2RF2A</b>
220/240 Vac	DPDT	15,720	<b>D2RF2B</b>
12 Vdc	4PDT	160	<b>D2RF4R1</b>
24 Vac	4PDT	180	<b>D2RF4T</b>
24 Vdc	4PDT	650	<b>D2RF4T1</b>
48 Vdc	4PDT	2600	<b>D2RF4W1</b>
110/125 Vdc	4PDT	11,000	<b>D2RF4A1</b>
120 Vac	4PDT	4430	<b>D2RF4A</b>
220/240 Vac	4PDT	15,720	<b>D2RF4B</b>
<b>Plain Cover Style</b>			
12 Vdc	DPDT	160	<b>D2RR2R1</b>
24 Vac	DPDT	180	<b>D2RR2T</b>
24 Vdc	DPDT	650	<b>D2RR2T1</b>
120 Vac	DPDT	4430	<b>D2RR2A</b>
220/240 Vac	DPDT	15,720	<b>D2RR2B</b>
12 Vdc	4PDT	160	<b>D2RR4R1</b>
24 Vac	4PDT	180	<b>D2RR4T</b>
24 Vdc	4PDT	650	<b>D2RR4T1</b>
110/125 Vdc	4PDT	11,000	<b>D2RR4A1</b>
120 Vac	4PDT	4430	<b>D2RR4A</b>
220/240 Vac	4PDT	15,720	<b>D2RR4B</b>

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## Control Relays and Timers

### General Purpose Plug-In Relays

#### Accessories

##### D2RF/D2RR Sockets and Accessories

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Type	Module Size	Nominal Voltage (Max. for Sockets)	Nominal Current	Mounting Style	Wire Size	Wire Connection	Standard Pack	Catalog Number
Socket	B	300	12	DIN rail/panel	14/16 (2) AWG, 2.5/1.5 (2) mm <sup>2</sup>	Elevator	1	<b>D2PAL</b> ①
	None	300	10	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm <sup>2</sup>	Screw clamping	10	<b>D2PA6</b>
	B	300	10	DIN rail/panel	14/16 (2) AWG, 2.5/1.5 (2) mm <sup>2</sup>	Elevator	1	<b>D2PAP</b> ①
	B	300	10	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm <sup>2</sup>	Screw clamping	10	<b>D2PA7</b> ①
	None	300	10	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm <sup>2</sup>	Screw clamping	5	<b>D2PA4</b>
Flange mount adapter	—	—	—	Flange	—	—	25	<b>PFC-D2D72</b>
Plastic ejector clip	—	—	—	—	—	—	10	<b>PWC-D24</b>
Metal spring clip	—	—	—	—	—	—	25	<b>PQC-1782</b>
	—	—	—	—	—	—	25	<b>PQC-1342</b>
Hold-down spring	—	—	—	—	—	—	100	<b>PYC-A1</b>
Protection diode	B	6 to 250 Vdc	—	—	—	—	20	<b>MOD-BD250</b>
LED indicator	B	24 Vac/Vdc	—	—	—	—	20	<b>MOD-BLG24</b>
	B	120/240 Vac/Vdc	—	—	—	—	20	<b>MOD-BLG240</b>
MOV suppressor	B	120 Vac/Vdc	—	—	—	—	20	<b>MOD-BMV120</b>
	B	24 Vac/Vdc	—	—	—	—	20	<b>MOD-BMV24</b>
	B	240 Vac/Vdc	—	—	—	—	20	<b>MOD-BMV240</b>
Coil bus jumpers	—	—	—	—	—	—	10	<b>D2PJ1</b>
Plastic DIN rail end stop	—	—	—	—	—	—	25	<b>PPF-P</b>

**Note**

① Protection category (finger safe), EN 60529: IP20.

## Technical Data and Specifications

### D2RF/D2RR Relay Specifications

Description	D2RR2/D2RR4	D2RF
<b>Contact Characteristics</b>		
Contact rating	12 A / 6 A	6 A
Terminal style	Plug-in	Plug-in
Contact materials	Silver alloy	Silver alloy
Maximum switching voltage	300 V	300 V
Switching current at voltage—resistive	10 A at 120 Vac 50/60 Hz	10 A at 277 Vac 50/60 Hz
	8 A at 277 Vac 50/60 Hz	8 A at 120 Vac 50/60 Hz
	8 A at 28 Vdc	8 A at 28 Vdc
Switching current at voltage	1/3 hp at 120 Vac 1 hp at 277 Vac	1/3 hp at 120 Vac 1 hp at 277 Vac
Pilot duty	B300	B300
Minimum switching requirement	100 mA at 5 Vdc (0.5 W)	100 mA at 5 Vdc (0.5 W)
<b>Coil Characteristics</b>		
Operating range		
% of nominal (AC)	85 to 110%	85 to 110%
% of nominal (DC)	80 to 110%	80 to 110%
Average consumption	1.2 VA	1.2 VA
	0.9 W	0.9 W
Dropout voltage threshold	15% (AC)	15% (AC)
	10% (DC)	10% (DC)
<b>Performance</b>		
Electrical life (UL 508) operations at rated current	200,000	200,000
Mechanical life operations unpowered	10,000,000	10,000,000
Response time	20 ms	20 ms
Dielectric strength		
Between coil and contact Vac (rms)	1500 rms	1500 rms
Between poles Vac (rms)	1500 rms	1500 rms
<b>Environment</b>		
Ambient air temperature around the device		
Operation	−40 °F to +131 °F (−40 °C to +55 °C)	−40 °F to +131 °F (−40 °C to +55 °C)
Storage	−40 °F to +185 °F (−40 °C to +85 °C)	−40 °F to +185 °F (−40 °C to +85 °C)
Vibration resistance—operational	3 g-n at 10–55 Hz	3 g-n at 10–55 Hz
Shock resistance	10 g-n	10 g-n
Degree of protection	IP40	IP40
<b>Features</b>		
Cover options	Plain cover	Full featured
Features	Mechanical flag indicator	Locking pushbutton/ Bipolar LED/ Removable ID tag/ Mechanical flag indicator
Product certifications	RoHS/UL/CE/CSA	RoHS/UL/CE/CSA

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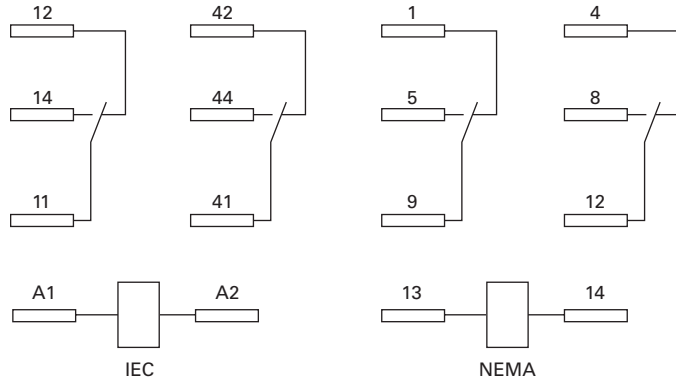
## Control Relays and Timers

### General Purpose Plug-In Relays

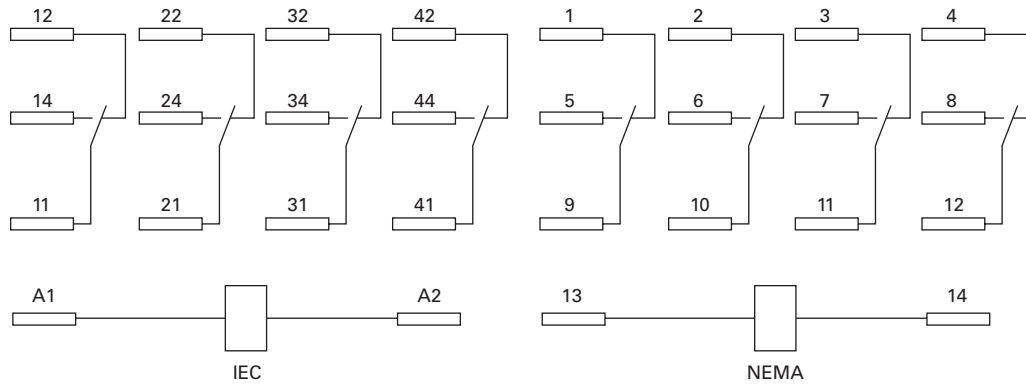
#### Wiring Diagrams

##### D2RF2/D2RR2

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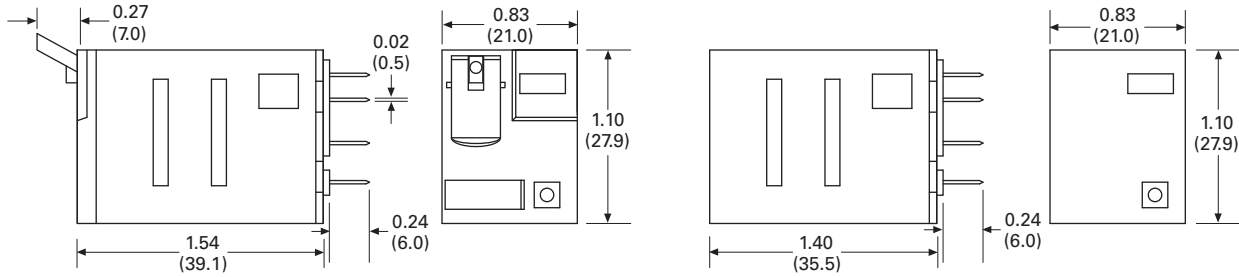
##### D2RF4/D2RR4



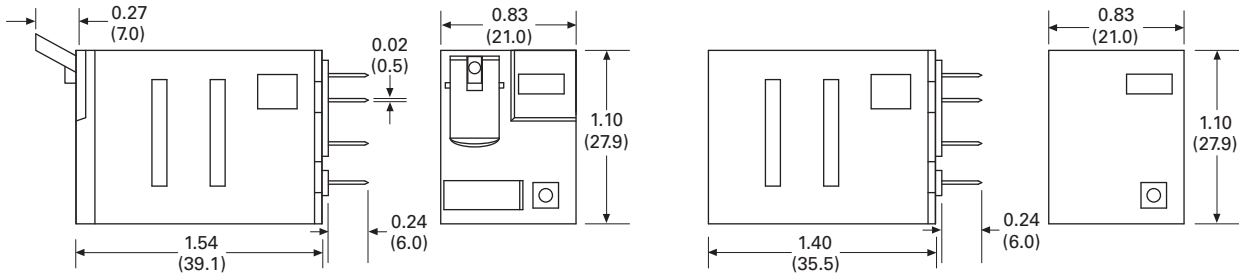
### Dimensions

Approximate Dimensions in Inches (mm)

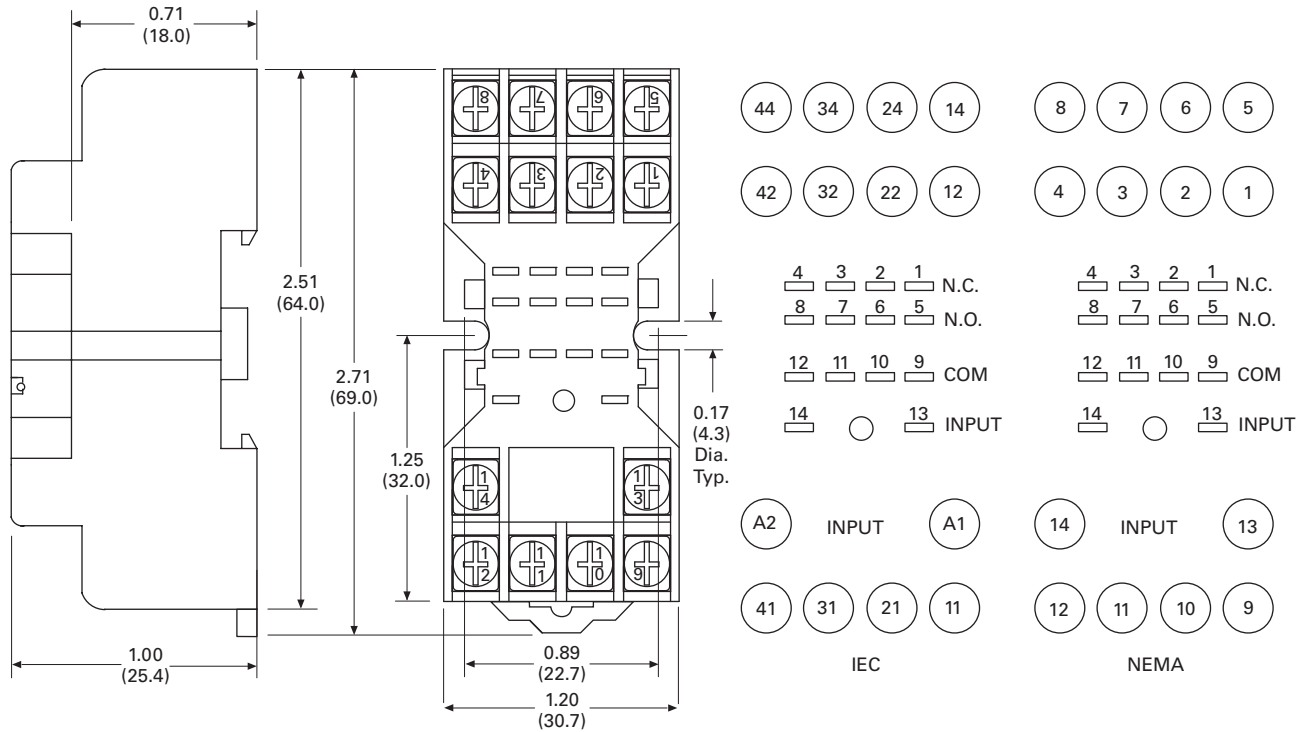
#### D2RF2/D2RR2



#### D2RF4/D2RR4



#### D2PA6



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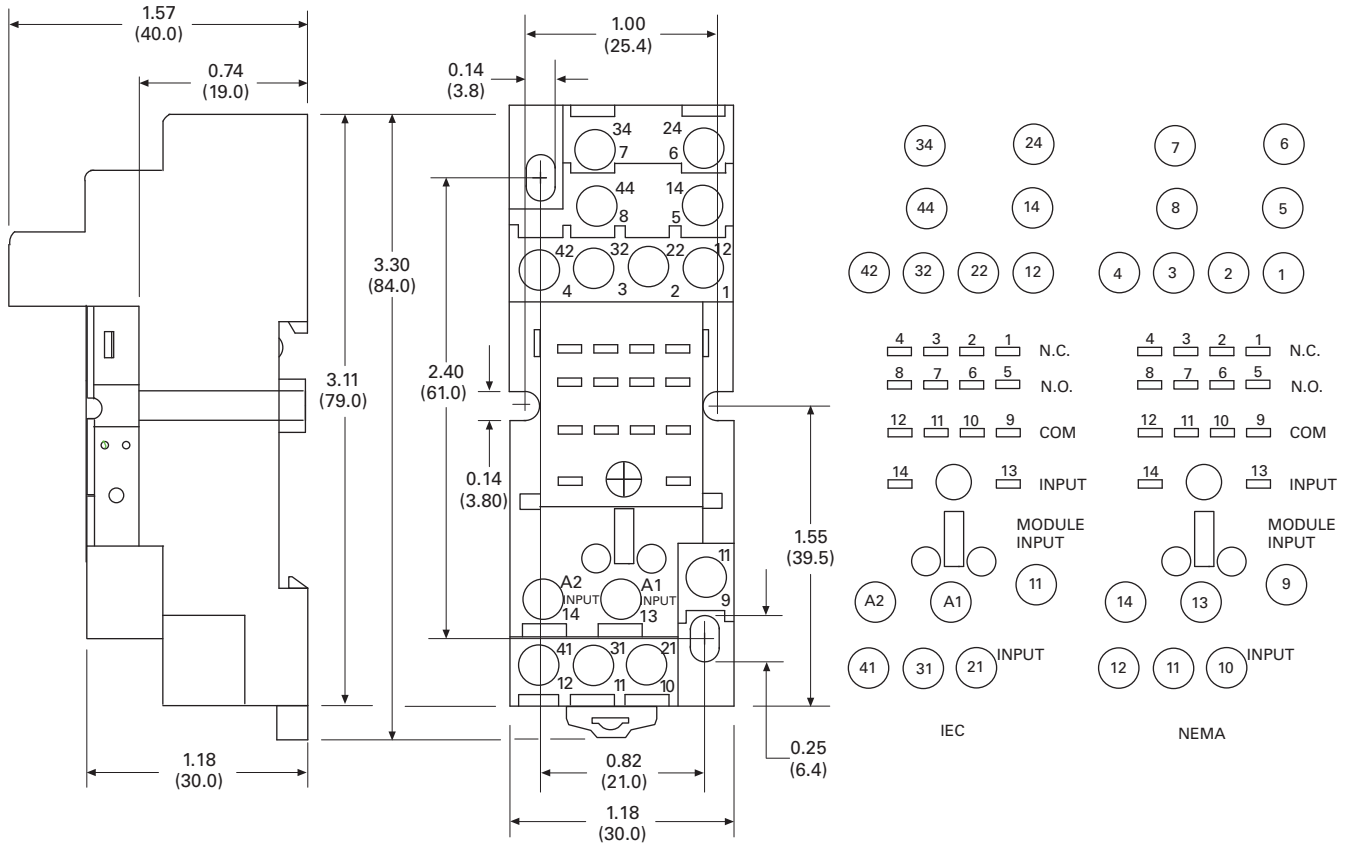
## Control Relays and Timers

### General Purpose Plug-In Relays

Approximate Dimensions in Inches (mm)

#### D2PA7

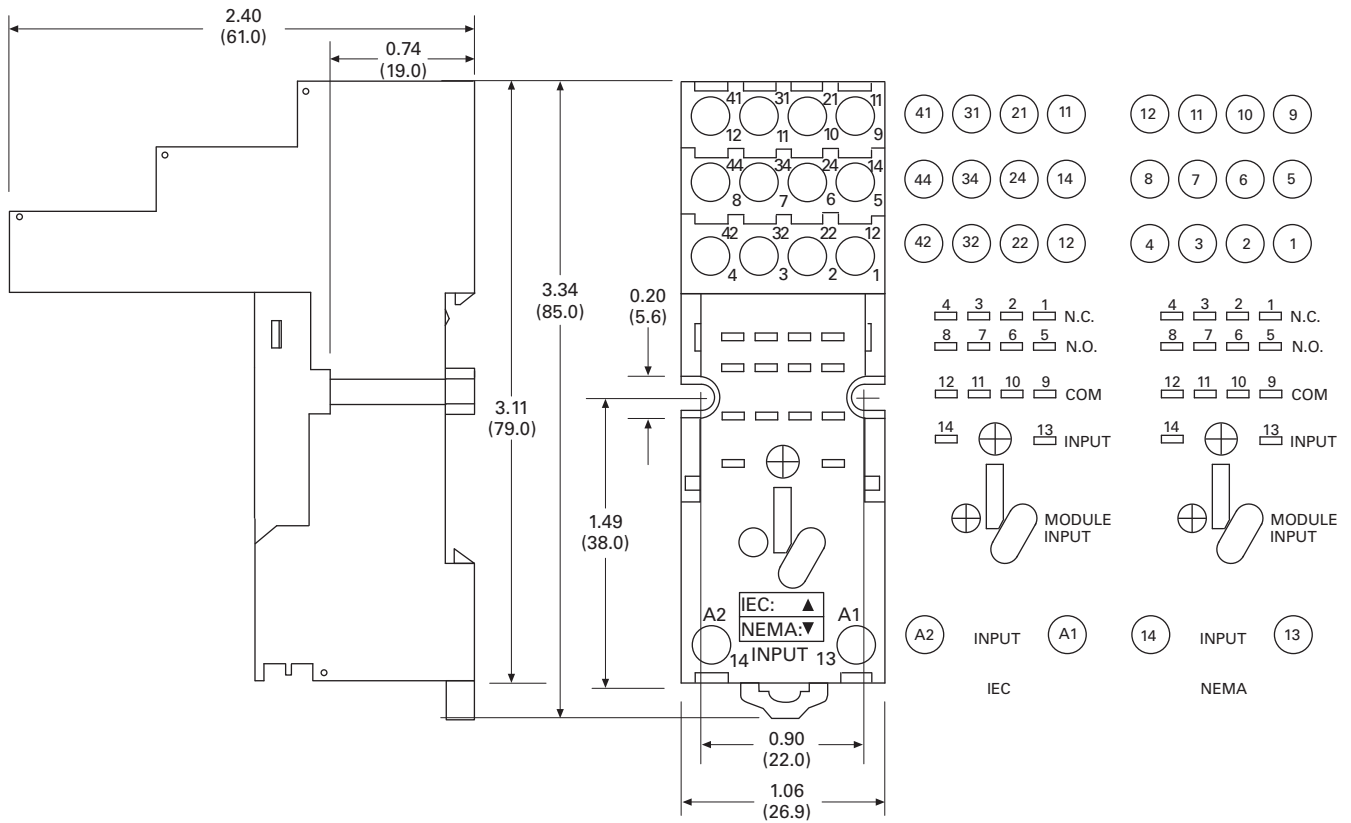
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Approximate Dimensions in Inches (mm)

### D2PAP



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## Control Relays and Timers

### General Purpose Plug-In Relays

Approximate Dimensions in Inches (mm)

#### D2PAL

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