

## D3 Series Relay



## D3RR/D3RF Series

## Product Description

The D3 Series of relays provides excellent functionality in a popular octal base design. Rigid pins and guide allow for quick and easy installation with little risk of damage.

## Features

**D3RR**

- Compact relay capable of breaking relatively large load currents
- Panel and DIN rail mounting
- 8- or 11-pin octal plug-in

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## Standards and Certifications



When used with accompanying Eaton screw terminal socket (for D3RF only)

**D3RF**

- The contact operation can be easily checked by Push-to-Test button
- Flag indicator shows relay status in manual or powered condition
- LED status lamp shows coil ON or OFF status—ideal for use in low light applications
- Push-to-Test button allows for manual operation of relay without the need for coil power
- Lock-down door holds pushbutton and contacts in the operate position when activated
- Finger-grip cover allows operator to remove relays from sockets easily
- ID tag/write label to identify relays in multiple-relay circuits
- Bipolar LED allows for reverse polarity applications

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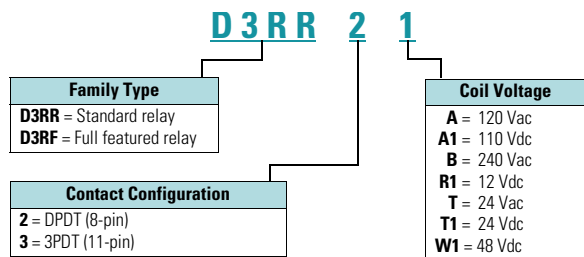
## Control Relays and Timers

### General Purpose Plug-In Relays

#### Catalog Number Selection

##### D3RR/D3RF Series ①

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#### Product Selection

##### D3 Relay/Socket Quick Reference

Relay Type	Socket	Clip	Module Type	ID Tag	Jumper
D3RR2, D3RF2	D3PA6	PQC-1332	A	—	D3PJ1
	D3PAL8	PQC-1351	A	PWF-D3D5	—
	D3PA2	PQC-1351	None	—	—
D3RR3, D3RF3	D3PA7	PQC-1332	A	—	D3PJ1
	D3PAL11	PQC-1351	A	PWF-D3D5	—
	D3PA3	PQC-1351	None	—	—

#### Notes

① For deciphering catalog numbers. Do not use for ordering as not all combinations are readily available.

## D3 Series Relay



## D3RR/D3RF Series

Coil Voltage	Contact Configuration	Coil Resistance (Ohms)	Catalog Number
<b>Full Featured Style</b>			
120 Vac	DPDT	1700	<b>D3RF2A</b>
240 Vac	DPDT	7200	<b>D3RF2B</b>
12 Vdc	DPDT	120	<b>D3RF2R1</b>
24 Vdc	DPDT	470	<b>D3RF2T1</b>
120 Vac	3PDT	1700	<b>D3RF3A</b>
220/240 Vac	3PDT	7200	<b>D3RF3B</b>
24 Vac	3PDT	72	<b>D3RF3T</b>
24 Vdc	3PDT	470	<b>D3RF3T1</b>
<b>Plain Cover Style</b>			
120 Vac	DPDT	1700	<b>D3RR2A</b>
110/125 Vdc	DPDT	10,000	<b>D3RR2A1</b>
220/240 Vac	DPDT	7200	<b>D3RR2B</b>
12 Vdc	DPDT	120	<b>D3RR2R1</b>
24 Vac	DPDT	72	<b>D3RR2T</b>
24 Vdc	DPDT	470	<b>D3RR2T1</b>
48 Vdc	DPDT	1800	<b>D3RR2W1</b>
120 Vac	3PDT	1700	<b>D3RR3A</b>
110/125 Vdc	3PDT	10,000	<b>D3RR3A1</b>
220/240 Vac	3PDT	7200	<b>D3RR3B</b>
12 Vdc	3PDT	120	<b>D3RR3R1</b>
24 Vac	3PDT	72	<b>D3RR3T</b>
24 Vdc	3PDT	470	<b>D3RR3T1</b>

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## Control Relays and Timers

### General Purpose Plug-In Relays

#### Accessories

##### D3RR/D3RF Series Sockets and Accessories

Type	Module Size	Nominal Voltage (Max. for Sockets)	Nominal Current	Mounting Style	Wire Size	Wire Connection	Standard Pack	Catalog Number
Socket	A	300	16	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm <sup>2</sup>	Screw clamping	1	<b>D3PA6</b> <sup>①</sup>
	A	300	12	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm <sup>2</sup>	Elevator	10	<b>D3PAL8</b> <sup>①</sup>
	None	300/600	15/10	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm <sup>2</sup>	Screw clamping	10	<b>D3PA2</b>
	A	600	5	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm <sup>2</sup>	Screw clamping	1	<b>D3PA7</b> <sup>①</sup>
	A	300	12	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm <sup>2</sup>	Elevator	10	<b>D3PAL11</b> <sup>①</sup>
	None	300/600	15/5	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm <sup>2</sup>	Screw clamping	10	<b>D3PA3</b>
Metal spring clip	—	—	—	—	—	—	25	<b>PQC-1332</b>
	—	—	—	—	—	—	10	<b>PQC-1351</b>
Protection diode	A	6 to 250 Vdc	—	—	—	—	20	<b>MOD-AD250</b>
LED indicator	A	24 Vac/Vdc	—	—	—	—	20	<b>MOD-ALG24</b>
	A	120/240 Vac/Vdc	—	—	—	—	20	<b>MOD-ALG240</b>
MOV suppressor	A	120 Vac/Vdc	—	—	—	—	20	<b>MOD-AMV120</b>
	A	24 Vac/Vdc	—	—	—	—	20	<b>MOD-AMV24</b>
	A	240 Vac/Vdc	—	—	—	—	20	<b>MOD-AMV240</b>
R/C suppressor	A	6 to 24 Vac/Vdc	—	—	—	—	20	<b>MOD-RC24</b>
	A	110 to 240 Vac/Vdc	—	—	—	—	20	<b>MOD-RC240</b>
Write-on plastic labels	—	—	—	—	—	—	10	<b>PWF-D3D5</b>
Coil bus jumpers	—	—	—	—	—	—	10	<b>D3PJ1</b>
Plastic DIN rail end stop	—	—	—	—	—	—	25	<b>PPF-P</b>

#### Note

<sup>①</sup> Protection category (finger safe), EN 60529: IP20.

## Technical Data and Specifications

### D3RR/D3RF Series Relay Specifications

Description	D3RR	D3RF
<b>Contact Characteristics</b>		
Contact rating	10 A	10 A
Terminal style	Octal	Octal
Contact materials	Silver alloy	Silver alloy
Maximum switching voltage	300 V	300 V
Switching current at voltage—resistive	16 A at 277 Vac 50/60 Hz	16 A at 277 Vac 50/60 Hz
	16 A at 120 Vac 50/60 Hz	16 A at 120 Vac 50/60 Hz
	16 A at 28 Vdc	16 A at 28 Vdc
Switching current at voltage	1/2 hp at 240 Vac	1/2 hp at 240 Vac
	1/3 hp at 120 Vac	1/3 hp at 120 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	3 VA	3 VA
	1.4 W	1.4 W
Dropout voltage threshold	15% (AC)	15% (AC)
	10% (DC)	10% (DC)
<b>Performance</b>		
Electrical life (UL 508) operations at rated current	100,000 operations	100,000 operations
Mechanical life operations unpowered	5,000,000 operations	5,000,000 operations
Response time	20 ms	20 ms
Dielectric strength		
Between coil and contact Vac (rms)	1500 V (rms)	1500 V (rms)
Between poles Vac (rms)	1500 V (rms)	1500 V (rms)
<b>Environment</b>		
Ambient air temperature around the device		
Storage	−40 °F to +185 °F (−40 °C to +85 °C)	−40 °F to +185 °F (−40 °C to +85 °C)
Operation	−40 °F to +131 °F (−40 °C to +55 °C)	−40 °F to +131 °F (−40 °C to +55 °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	Bipolar LED/ Locking pushbutton/ Removable ID tag/ Mechanical flag indicator
Product certifications	RoHS/UL/CE/CSA	RoHS/UL/CE/CSA

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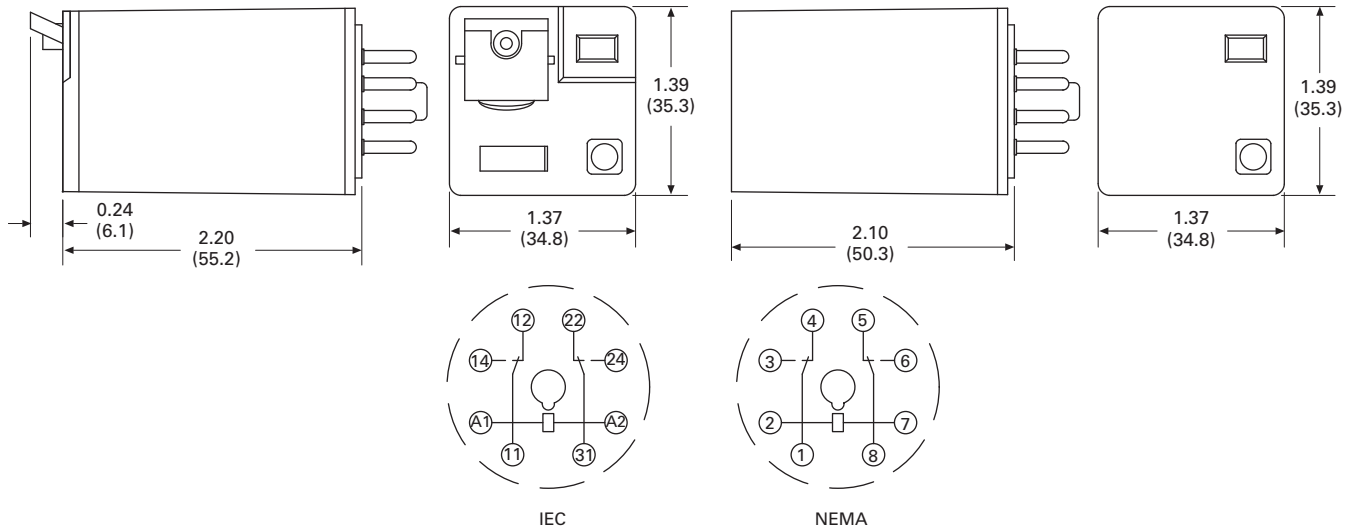
## Control Relays and Timers

### General Purpose Plug-In Relays

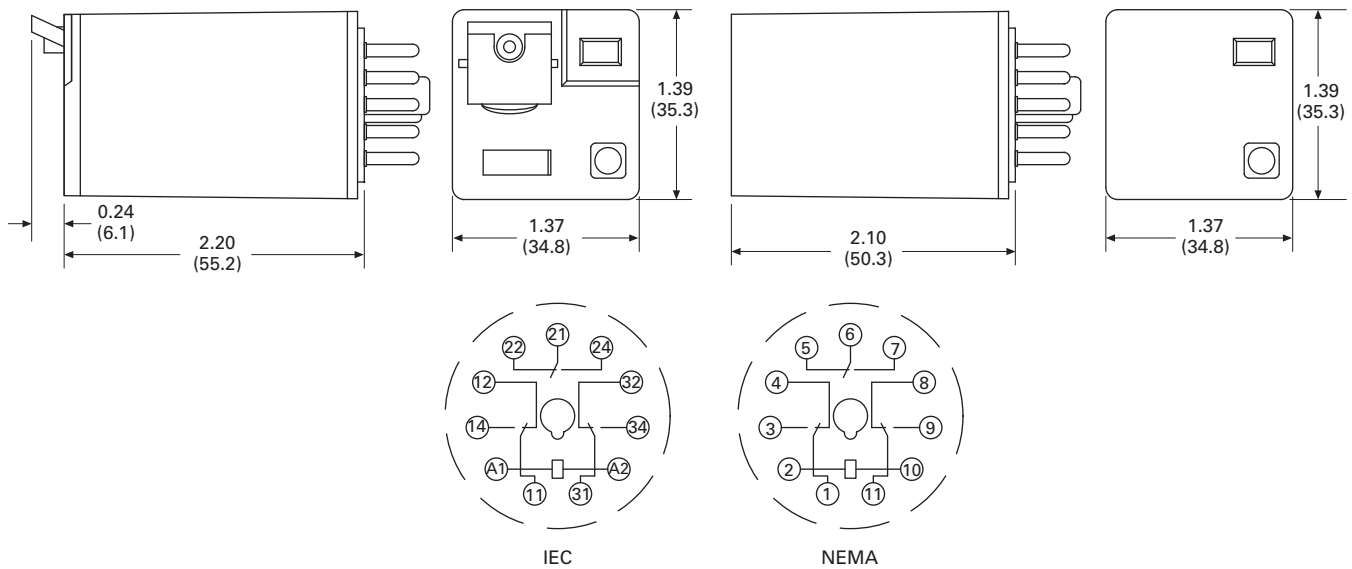
#### Dimensions

Approximate Dimensions in Inches (mm)

#### D3RR2/D3RF2

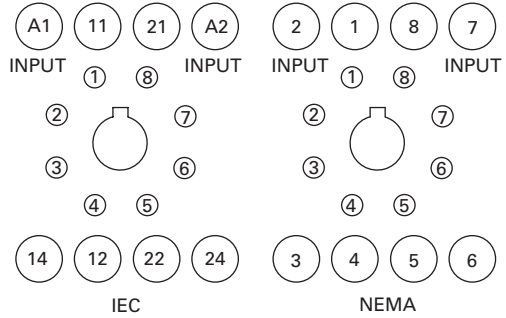
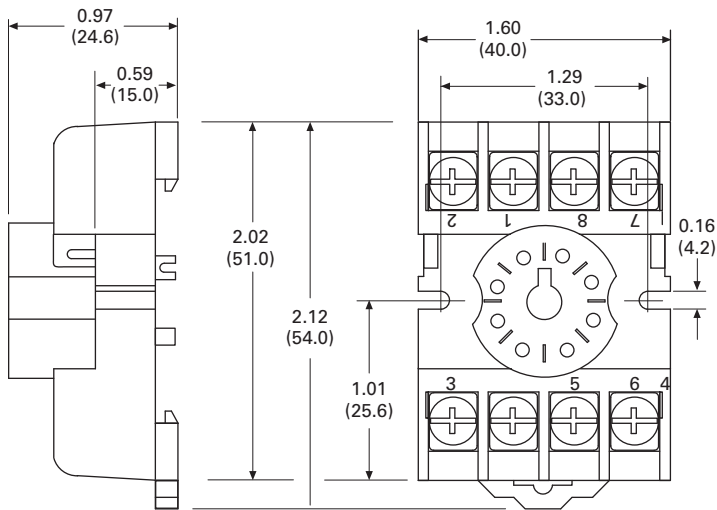


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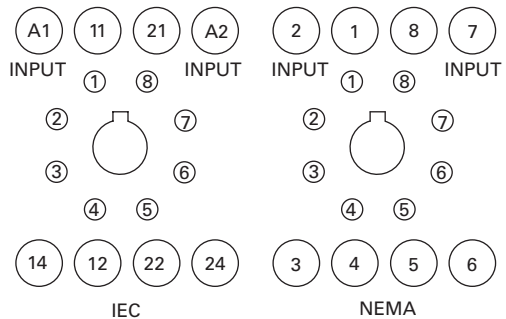
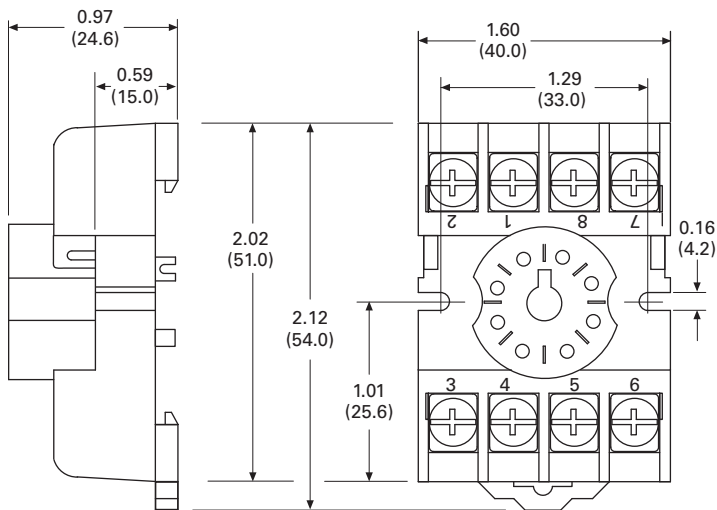
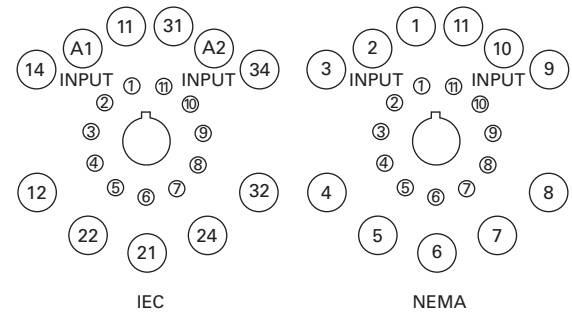
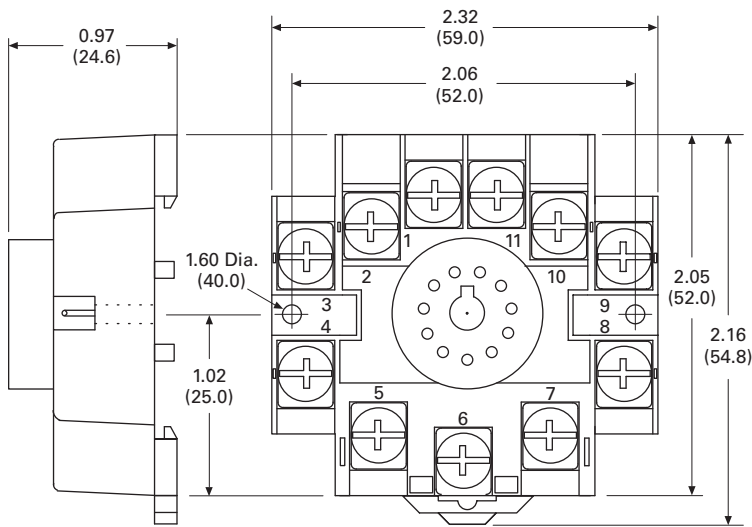


Approximate Dimensions in Inches (mm)

### D3PA2



### D3PA3



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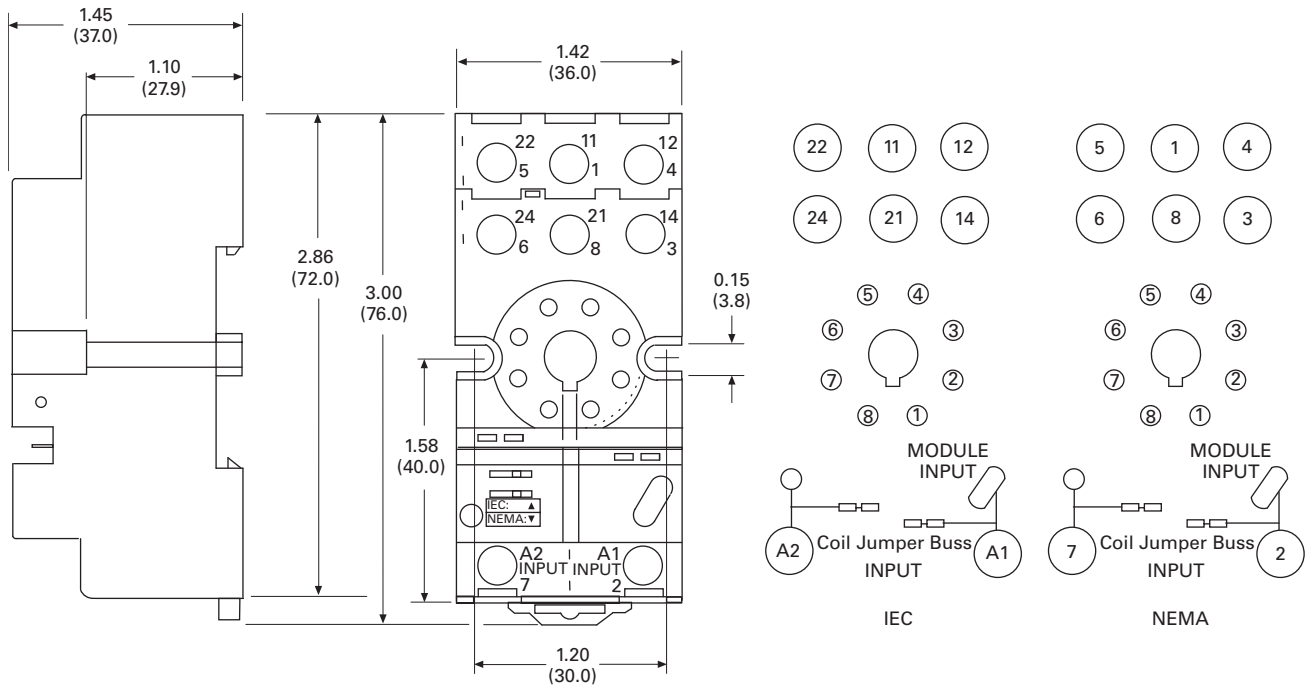
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### General Purpose Plug-In Relays

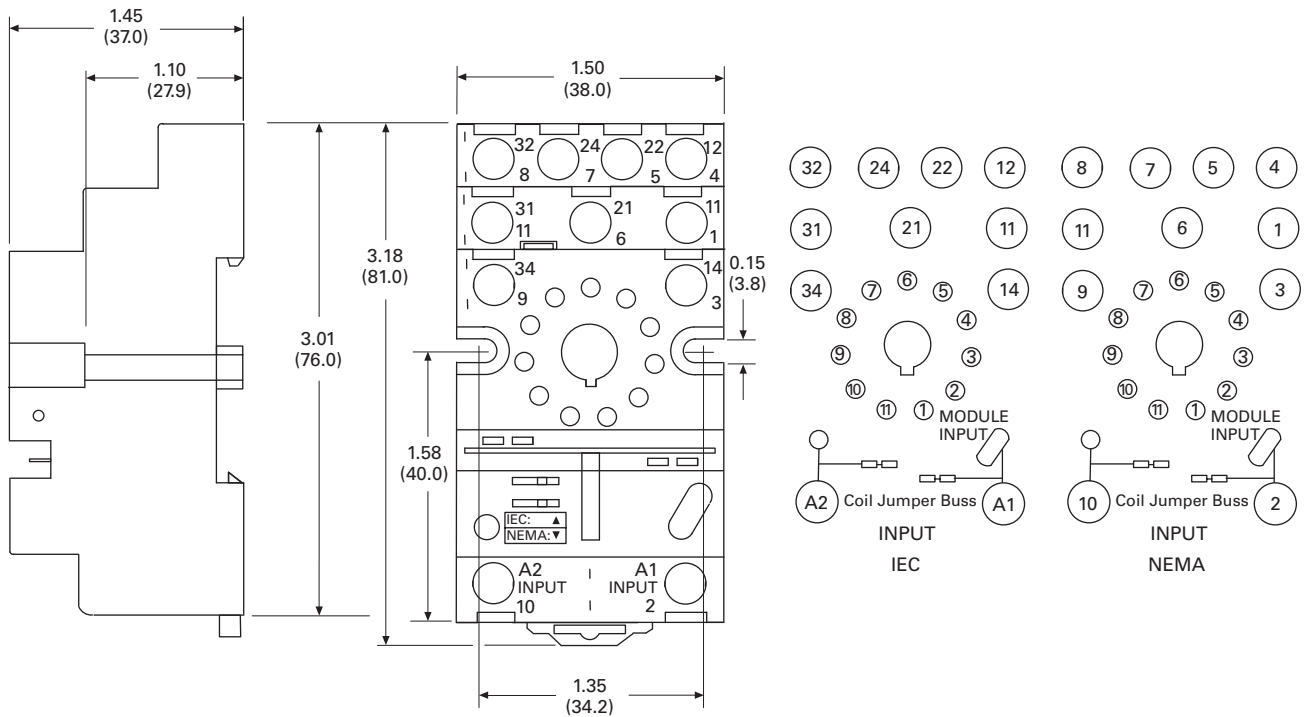
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Approximate Dimensions in Inches (mm)

#### D3PA6



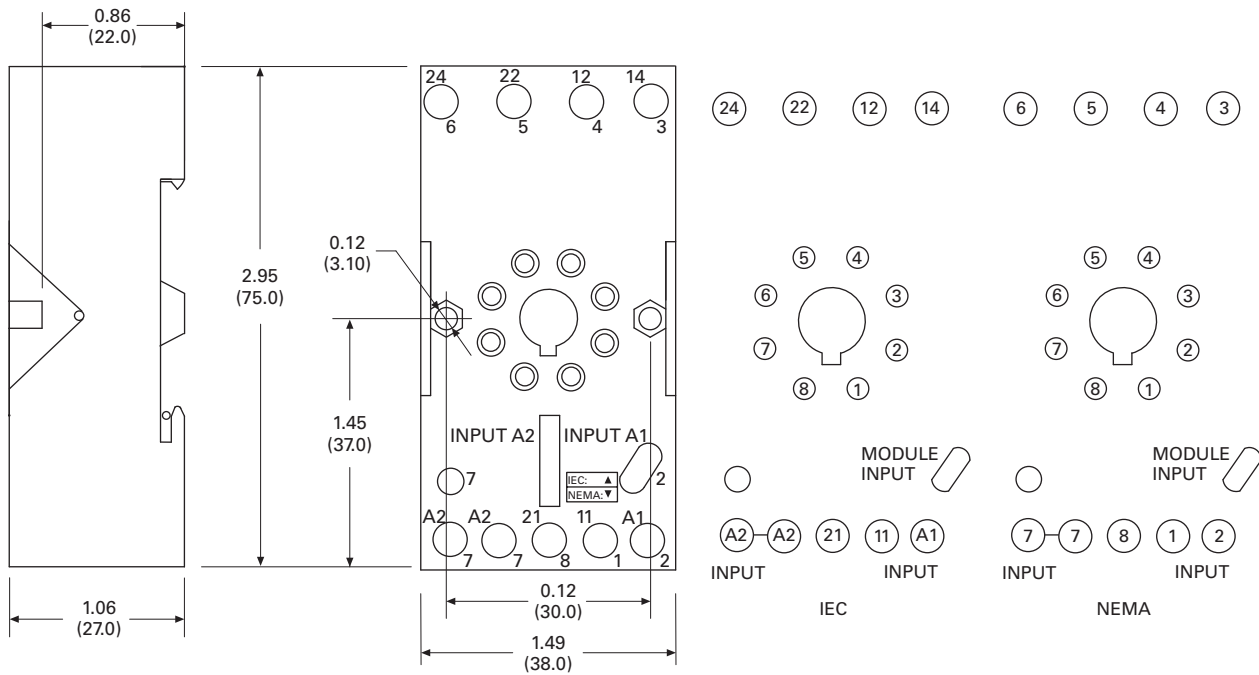
#### D3PA7





Approximate Dimensions in Inches (mm)

### D3PAL8



### D3PAL11

