

D3 Series Relay



D3PR/D3PF 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

D3PR

- 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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D3PF

- 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

Standards and Certifications



 (CSA approval not applicable to D3PR5 Relays)

 When used with accompanying Eaton screw terminal socket (for D3PF only)

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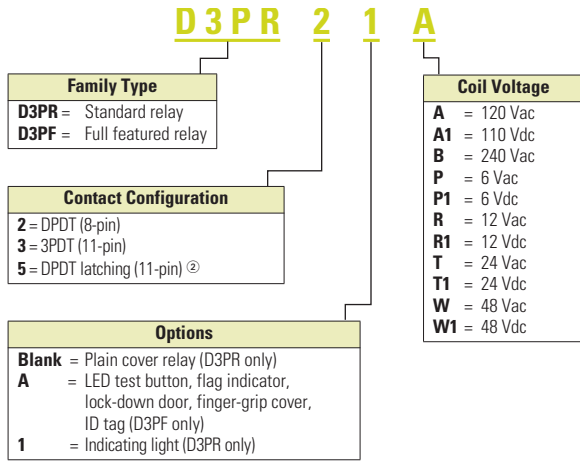
Control Relays and Timers

General Purpose Plug-In Relays

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Catalog Number Selection

D3PR/D3PF Series ①



Product Selection

D3 Relay/Socket Quick Reference

Relay Type	Socket	Clip	Module Type	ID Tag	Jumper
D3PR2, D3PF2	D3PA6	PQC-1332	A	—	D3PJ1
	D3PAL8	PQC-1351	A	PWF-D3D5	—
	D3PA2	PQC-1351	None	—	—
D3PR3, D3PF3	D3PA7	PQC-1332	A	—	D3PJ1
	D3PAL11	PQC-1351	A	PWF-D3D5	—
	D3PA3	PQC-1351	None	—	—
D3PR5	D3PA7	PQC-1351	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.
- ② D3PR only.

D3 Series Relay



D3PR/D3PF Series

Coil Voltage	Contact Configuration	Coil Resistance (Ohms)	Catalog Number
Full Featured Style			
120 Vac	DPDT	1700	D3PF2AA
240 Vac	DPDT	7200	D3PF2AB
12 Vdc	DPDT	120	D3PF2AR1
24 Vdc	DPDT	470	D3PF2AT1
48 Vdc	DPDT	1800	D3PF2AW1
120 Vac	3PDT	1700	D3PF3AA
220/240 Vac	3PDT	7200	D3PF3AB
6 Vdc	3PDT	32	D3PF3AP1
24 Vac	3PDT	72	D3PF3AT
24 Vdc	3PDT	470	D3PF3AT1
48 Vdc	3PDT	1800	D3PF3AW1
Latching Style			
120 Vac	DPDT	10,000	D3PR5A
110/125 Vdc	DPDT	9000	D3PR5A1
240 Vac	DPDT	36,000	D3PR5B
12 Vdc	DPDT	90	D3PR5R1
24 Vac	DPDT	470	D3PR5T
24 Vdc	DPDT	350	D3PR5T1
48 Vdc	DPDT	1400	D3PR5W1
Plain Cover with LED Indicator			
120 Vac	DPDT	1700	D3PR21A
24 Vac	DPDT	72	D3PR21T
24 Vdc	DPDT	470	D3PR21T1
220/240 Vac	3PDT	7200	D3PR31B
24 Vac	3PDT	72	D3PR31T
24 Vdc	3PDT	470	D3PR31T1
Plain Cover Style			
120 Vac	DPDT	1700	D3PR2A
110/125 Vdc	DPDT	10,000	D3PR2A1
220/240 Vac	DPDT	7200	D3PR2B
6 Vac	DPDT	4.2	D3PR2P
6 Vdc	DPDT	32	D3PR2P1
12 Vac	DPDT	18	D3PR2R
12 Vdc	DPDT	120	D3PR2R1
24 Vac	DPDT	72	D3PR2T
24 Vdc	DPDT	470	D3PR2T1
48 Vac	DPDT	290	D3PR2W
48 Vdc	DPDT	1800	D3PR2W1
120 Vac	3PDT	1700	D3PR3A
110/125 Vdc	3PDT	10,000	D3PR3A1
220/240 Vac	3PDT	7200	D3PR3B
12 Vac	3PDT	18	D3PR3R
12 Vdc	3PDT	120	D3PR3R1
24 Vac	3PDT	72	D3PR3T
24 Vdc	3PDT	470	D3PR3T1
48 Vdc	3PDT	1800	D3PR3W1

Accessories

D3PR/D3PF 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 ²	Screw clamping	1	D3PA6 ①
	A	300	12	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm ²	Elevator	10	D3PAL8 ①
	None	300/600	15/10	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm ²	Screw clamping	10	D3PA2
	A	600	5	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm ²	Screw clamping	1	D3PA7 ①
	A	300	12	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm ²	Elevator	10	D3PAL11 ①
	None	300/600	15/5	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm ²	Screw clamping	10	D3PA3
Metal spring clip	—	—	—	—	—	—	25	PQC-1332
	—	—	—	—	—	—	10	PQC-1351
Protection diode	A	120 Vac/Vdc	—	—	—	—	20	MOD-AD250
LED indicator	A	24 Vac/Vdc	—	—	—	—	20	MOD-ALG24
	A	120/240 Vac/Vdc	—	—	—	—	20	MOD-ALG240
MOV suppressor	A	120 Vac/Vdc	—	—	—	—	20	MOD-AMV120
	A	24 Vac/Vdc	—	—	—	—	20	MOD-AMV24
	A	240 Vac/Vdc	—	—	—	—	20	MOD-AMV240
R/C suppressor	A	6 to 24 Vac/Vdc	—	—	—	—	20	MOD-RC24
	A	110 to 240 Vac/Vdc	—	—	—	—	20	MOD-RC240
Write-on plastic labels	—	—	—	—	—	—	10	PWF-D3D5
Coil bus jumpers	—	—	—	—	—	—	10	D3PJ1
Plastic DIN rail end stop	—	—	—	—	—	—	25	PPF-P

Note

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

Technical Data and Specifications

D3PR/D3PF Series Relay Specifications

Description	D3PR	D3PF	D3PR5 (Latching)
Contact Characteristics			
Contact rating	16A	16A	16A
Terminal style	Octal	Octal	11-pin octal
Contact materials	Silver alloy	Silver alloy	Silver alloy
Maximum switching voltage	300V	300V	300V
Switching current at voltage—resistive	16A at 277 Vac 50/60 Hz	16A at 277 Vac 50/60 Hz	16A at 277 Vac 50/60 Hz
	16A at 120 Vac 50/60 Hz	16A at 120 Vac 50/60 Hz	—
	16A at 28 Vdc	16A at 28 Vdc	16A at 28 Vdc
Switching current at voltage	1/2 hp at 240 Vac	1/2 hp at 240 Vac	1/2 hp at 240 Vac
	1/3 hp at 120 Vac	1/3 hp at 120 Vac	1/3 hp at 120 Vac
Pilot duty	B300	B300	B300
Minimum switching requirement	100 mA at 5 Vdc (0.5W)	100 mA at 5 Vdc (0.5W)	100 mA at 5 Vdc (0.5W)
Coil Characteristics			
Operating range			
% of nominal (AC)	85 to 110%	85 to 110%	85 to 110%
% of nominal (DC)	80 to 110%	80 to 110%	80 to 110%
Average consumption	3 VA	3 VA	2 VA
	1.4W	1.4W	1.64W
Dropout voltage threshold	15% (AC)	15% (AC)	15% (AC)
	10% (DC)	10% (DC)	10% (DC)
Performance			
Electrical life (UL 508) operations at rated current	100,000 operations	100,000 operations	100,000 operations
Mechanical life operations unpowered	5,000,000 operations	5,000,000 operations	10,000,000 operations
Response time	20 ms	20 ms	30 ms
Dielectric strength			
Between coil and contact Vac (rms)	1500V (rms)	1500V (rms)	2500V (rms)
Between poles Vac (rms)	1500V (rms)	1500V (rms)	1500V (rms)
Environment			
Ambient air temperature around the device			
Storage	−40° to 185°F (−40° to 85°C)	−40° to 185°F (−40° to 85°C)	−40° to 185°F (−40° to 85°C)
Operation	−40° to 131°F (−40° to 55°C)	−40° to 131°F (−40° to 55°C)	−40° to 131°F (−40° to 55°C)
Vibration resistance—operational	3 g-n at 10–55 Hz	3 g-n at 10–55 Hz	3 g-n at 10–55 Hz
Shock resistance	10 g-n	10 g-n	10 g-n
Degree of protection	IP40	IP40	IP40
Features			
Cover options	Plain cover	Full Featured	Latching
Features	Mechanical flag indicator	Bipolar LED/ Locking pushbutton/ Removable ID tag/ Mechanical flag indicator	—
Product certifications	RoHS/UL/CE/CSA	RoHS/UL/CE/CSA	RoHS/UL/UR

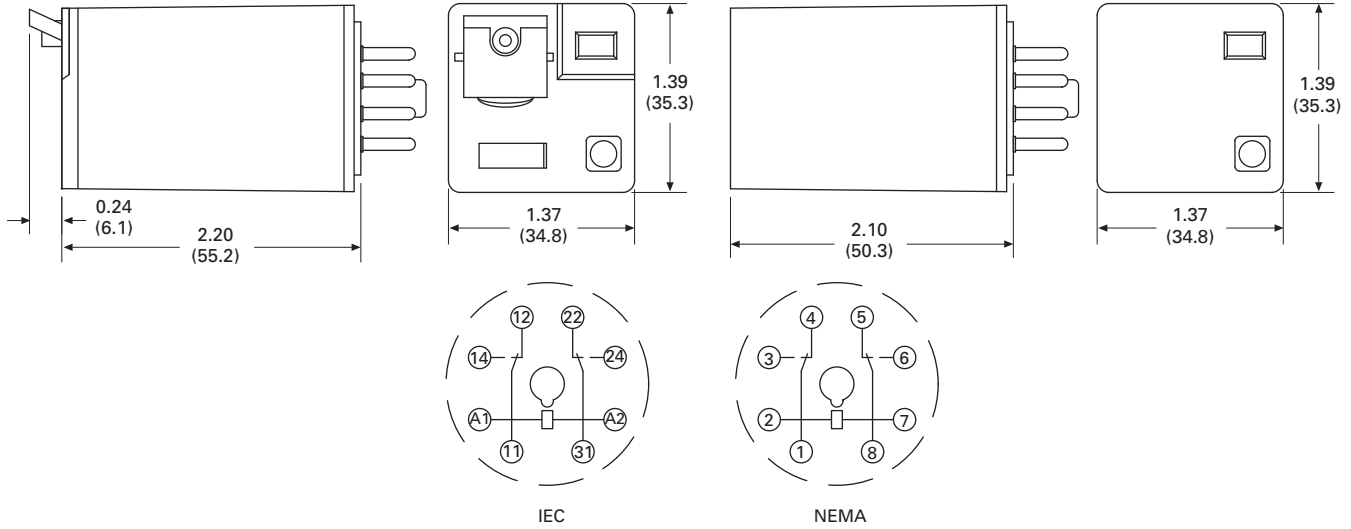
40.4 Control Relays and Timers

General Purpose Plug-In Relays

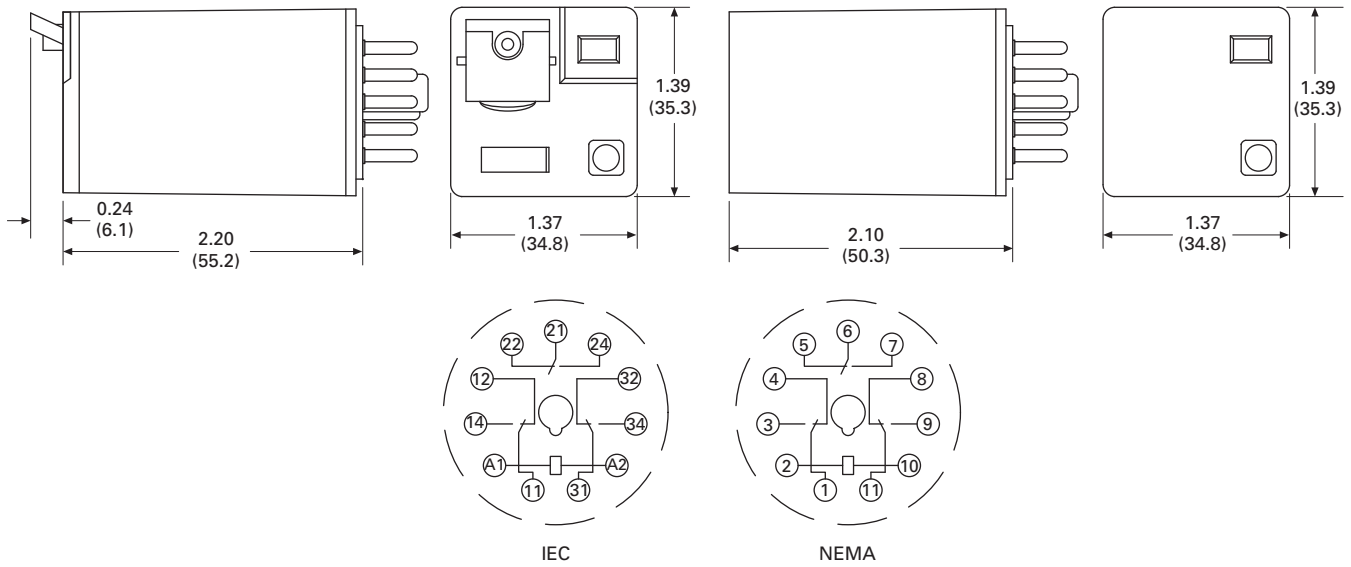
Dimensions

Approximate Dimensions in Inches (mm)

D3PR2/D3PF2

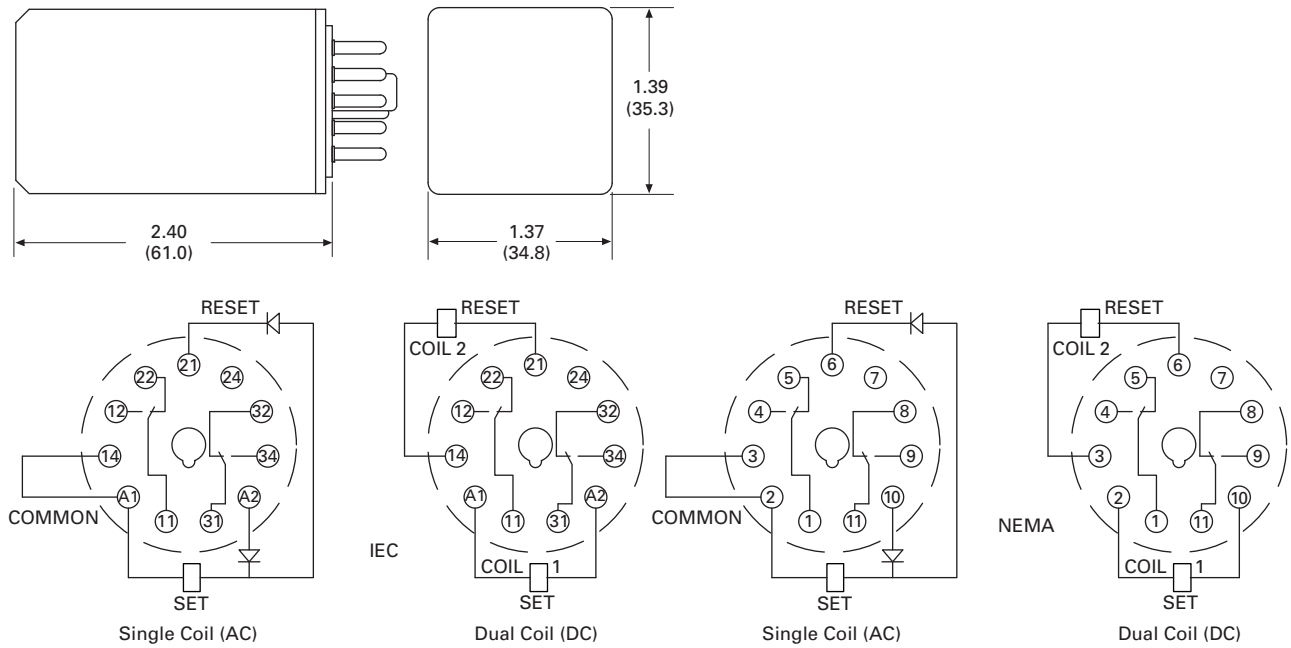


D3PR3/D3PF3

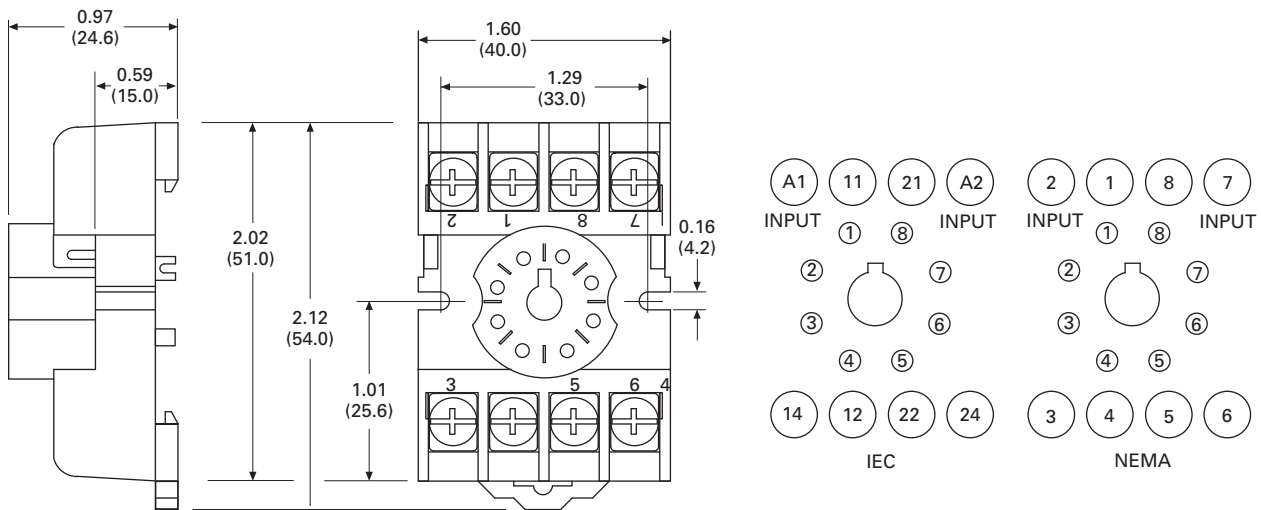


Approximate Dimensions in Inches (mm)

D3PR5—Octal Base Latching Relay



D3PA2



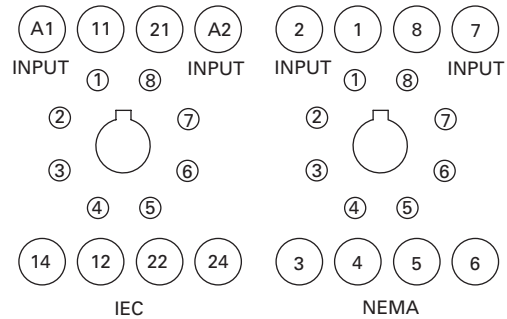
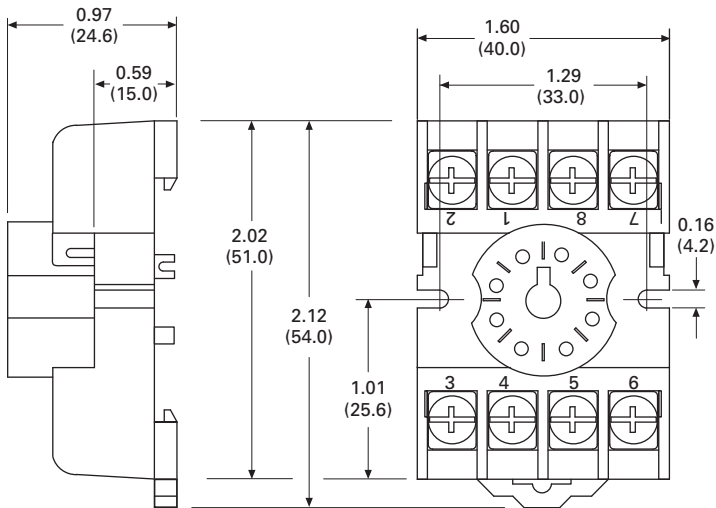
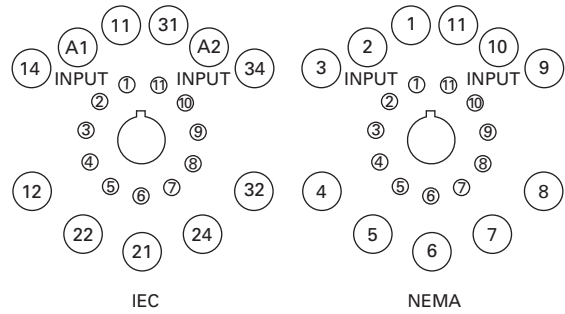
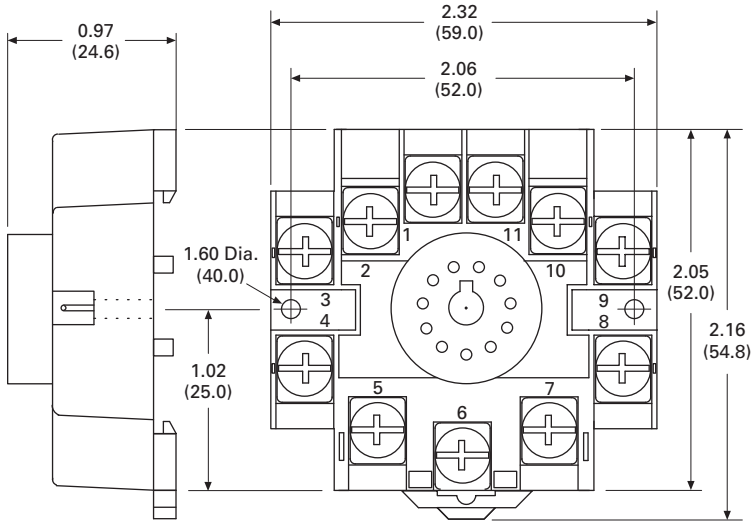
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Approximate Dimensions in Inches (mm)

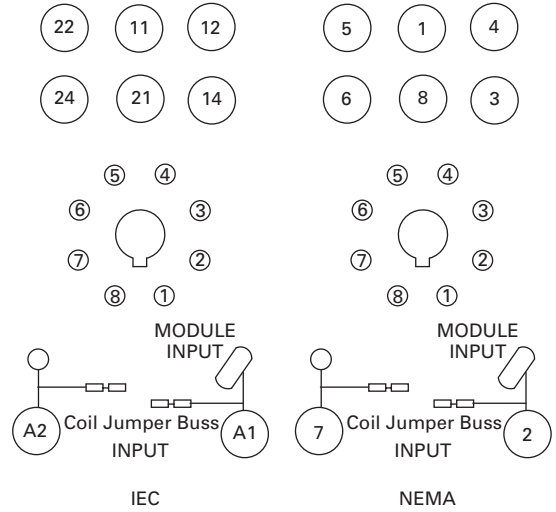
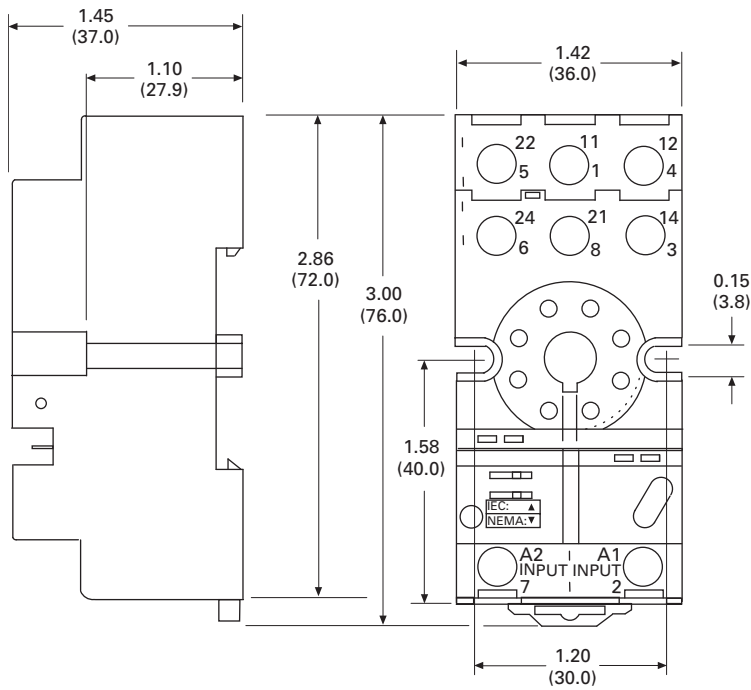
D3PA3

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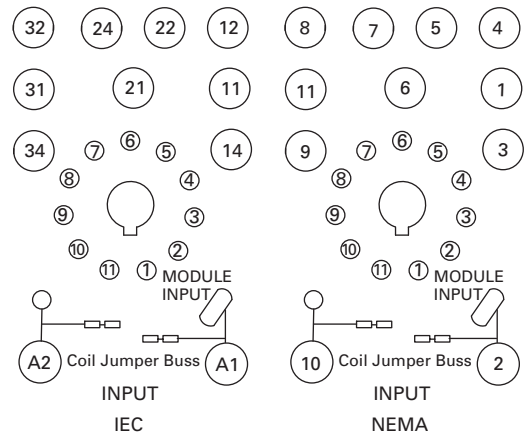
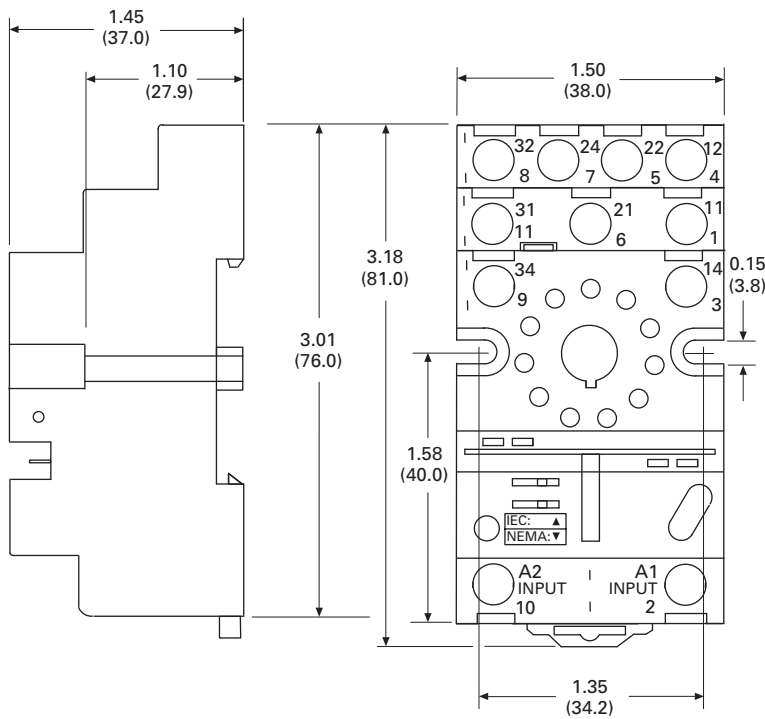


Approximate Dimensions in Inches (mm)

D3PA6



D3PA7

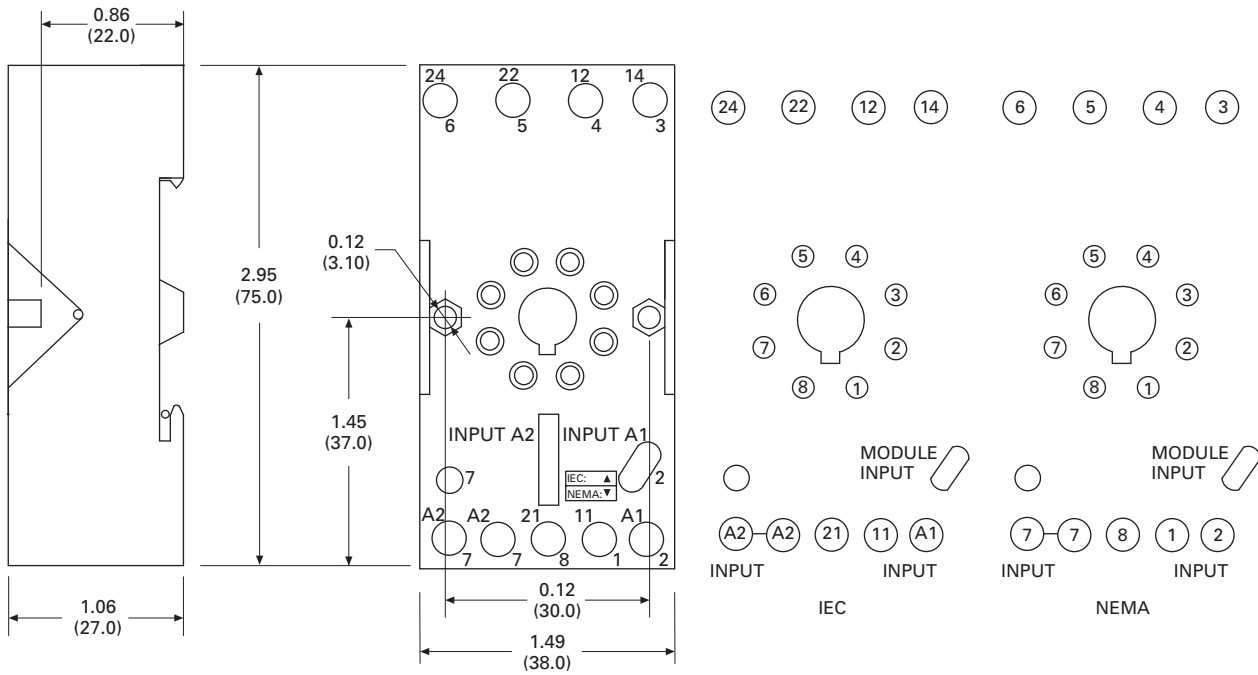


40.4 Control Relays and Timers

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Approximate Dimensions in Inches (mm)

D3PAL8



D3PAL11

