

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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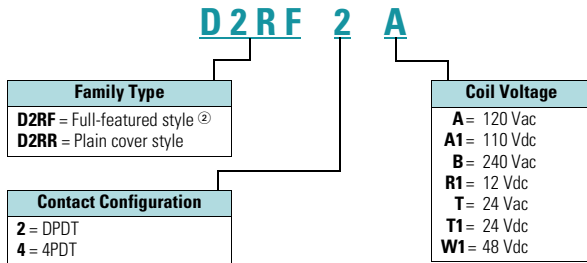
Control Relays and Timers

General Purpose Plug-In Relays

Catalog Number Selection

D2RF/D2RR ①

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

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Control Relays and Timers

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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 ²	Elevator	1	D2PAL ^①
	None	300	10	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm ²	Screw clamping	10	D2PA6
	B	300	10	DIN rail/panel	14/16 (2) AWG, 2.5/1.5 (2) mm ²	Elevator	1	D2PAP ^①
	B	300	10	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm ²	Screw clamping	10	D2PA7 ^①
	None	300	10	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm ²	Screw clamping	5	D2PA4
Flange mount adapter	—	—	—	Flange	—	—	25	PFC-D2D72
Plastic ejector clip	—	—	—	—	—	—	10	PWC-D24
Metal spring clip	—	—	—	—	—	—	25	PQC-1782
	—	—	—	—	—	—	25	PQC-1342
Hold-down spring	—	—	—	—	—	—	100	PYC-A1
Protection diode	B	6 to 250 Vdc	—	—	—	—	20	MOD-BD250
LED indicator	B	24 Vac/Vdc	—	—	—	—	20	MOD-BLG24
	B	120/240 Vac/Vdc	—	—	—	—	20	MOD-BLG240
MOV suppressor	B	120 Vac/Vdc	—	—	—	—	20	MOD-BMV120
	B	24 Vac/Vdc	—	—	—	—	20	MOD-BMV24
	B	240 Vac/Vdc	—	—	—	—	20	MOD-BMV240
Coil bus jumpers	—	—	—	—	—	—	10	D2PJ1
Plastic DIN rail end stop	—	—	—	—	—	—	25	PPF-P

Note

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

Technical Data and Specifications

D2RF/D2RR Relay Specifications

Description	D2RR2/D2RR4	D2RF
Contact Characteristics		
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)
Coil Characteristics		
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)
Performance		
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
Environment		
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
Features		
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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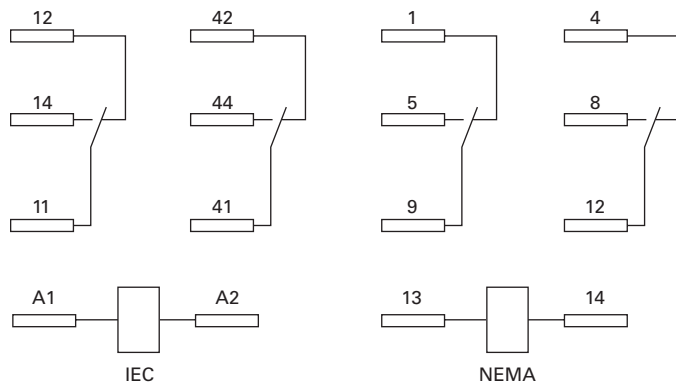
Control Relays and Timers

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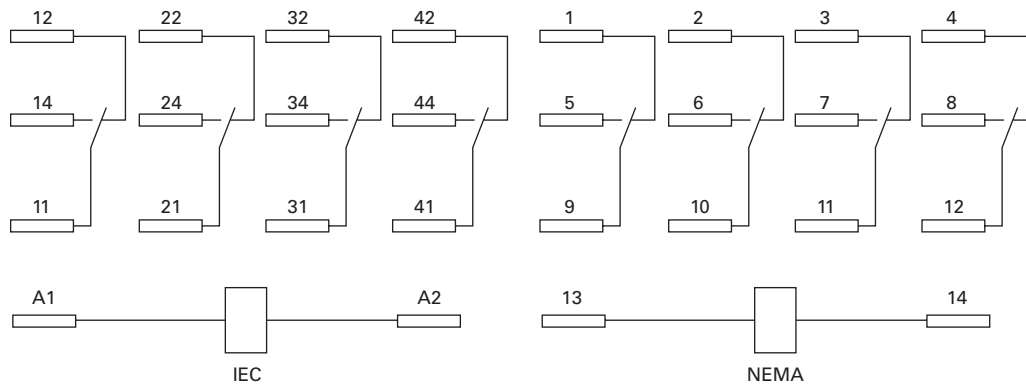
Wiring Diagrams

D2RF2/D2RR2

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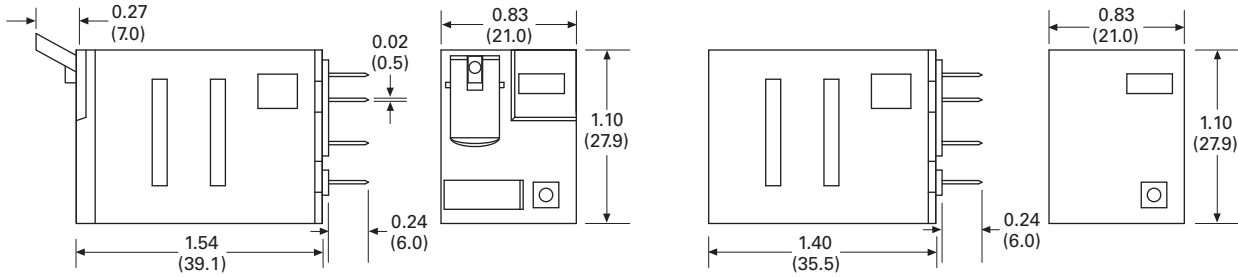
D2RF4/D2RR4



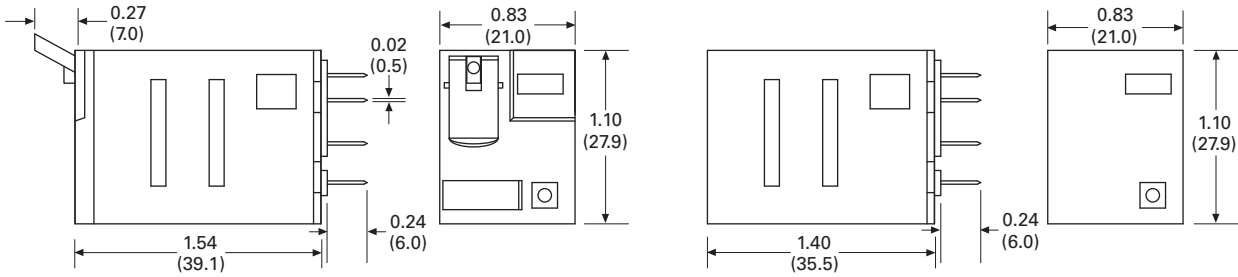
Dimensions

Approximate Dimensions in Inches (mm)

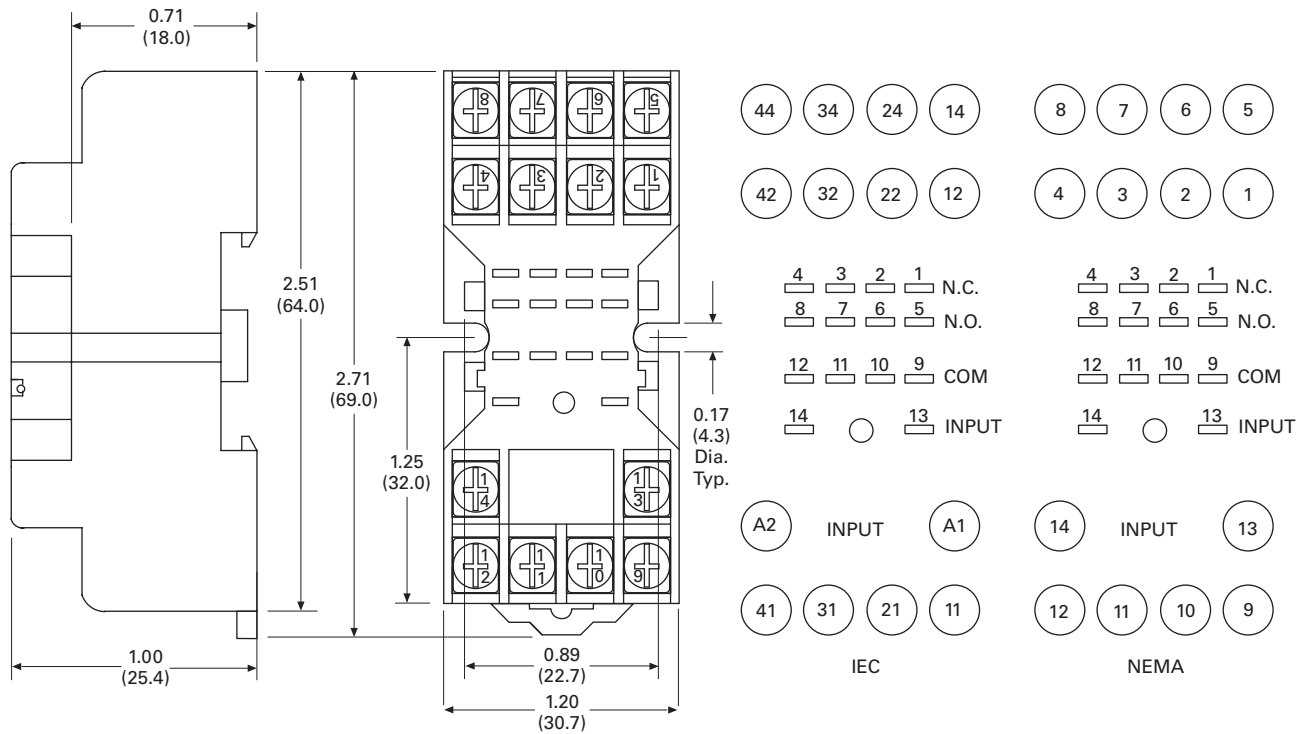
D2RF2/D2RR2



D2RF4/D2RR4



D2PA6



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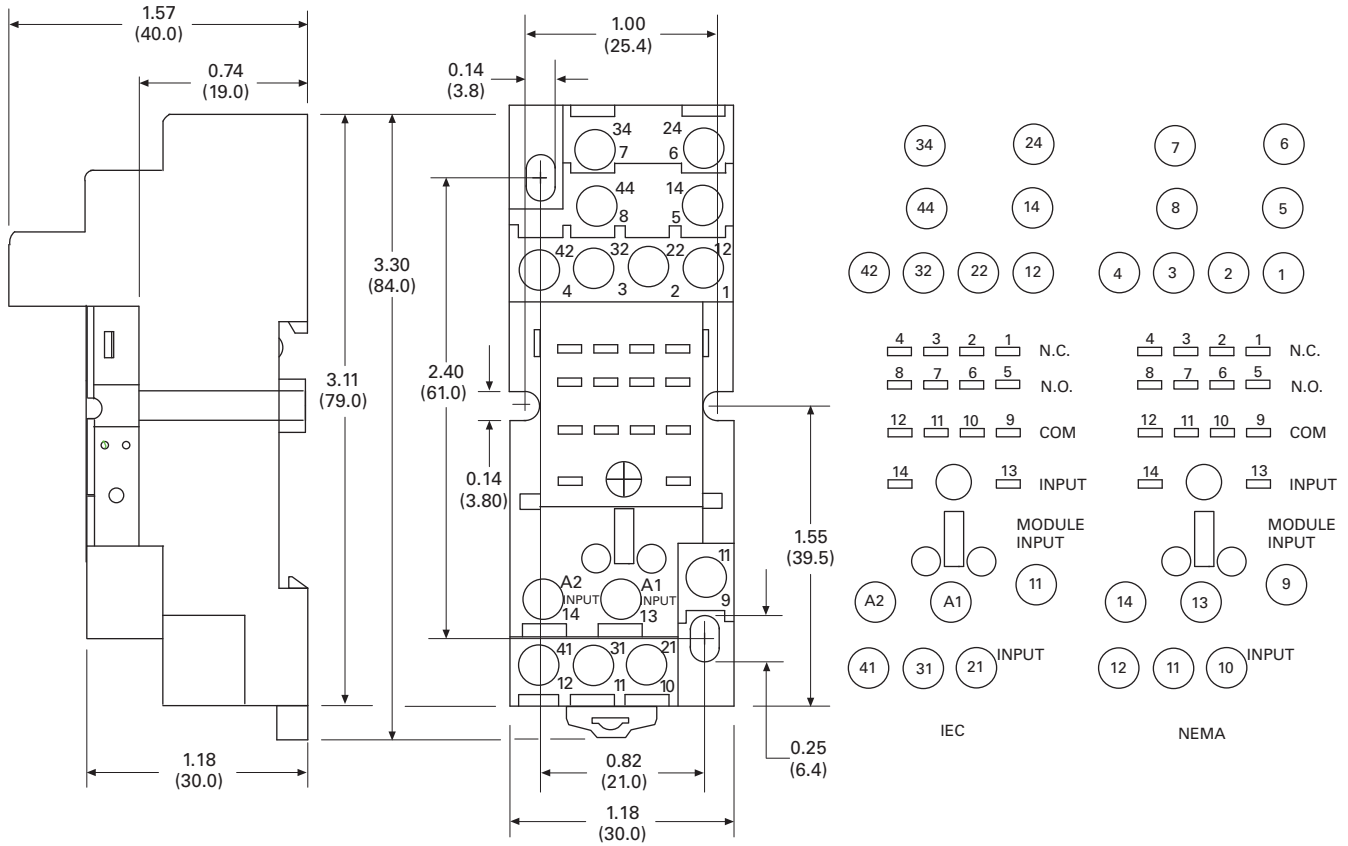
Control Relays and Timers

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Approximate Dimensions in Inches (mm)

D2PA7

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Approximate Dimensions in Inches (mm)

D2PAP

