

D5 Series Relay



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D5RR/D5RF Series

Product Description

The D5 Series is rated at 10 A and is available in full-featured and plain cover styles.

Features

D5RR

- Industrial rated 300 V, 10 A relay in two-pole and three-pole configurations
- Compact design can be panel or DIN rail mounted

D5RF

- 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

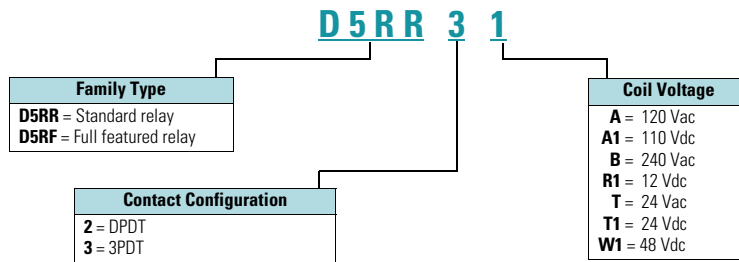
Standards and Certifications



When used with accompanying Eaton screw terminal socket (D5RF only)

Catalog Number Selection

D5 Series



Product Selection

D5 Relay/Socket Quick Reference

Relay Type	Socket	Clip	Module Type	ID Tag	Jumper
D5RR2, D5RF2, D5RR3, D5RF3	D5PAL	PQC-1351	A	PWF-D3D5	D3PJ1
	D5PA2	PQC-1351	None	—	—
	D5PA3L	PQC-1351	None	—	—
	D5PA3S	PQC-1351	None	—	—

D5 Series Relay



D5 Series

Coil Voltage	Contact Configuration	Coil Resistance (Ohms)	Catalog Number
Full Featured			
120 Vac	DPDT	1700	D5RF2A
110/125 Vdc	DPDT	10,000	D5RF2A1
220/240 Vac	DPDT	7200	D5RF2B
12 Vdc	DPDT	120	D5RF2R1
24 Vac	DPDT	72	D5RF2T
24 Vdc	DPDT	470	D5RF2T1
120 Vac	3PDT	1700	D5RF3A
110/125 Vdc	3PDT	10,000	D5RF3A1
220/240 Vac	3PDT	7200	D5RF3B
12 Vdc	3PDT	120	D5RF3R1
24 Vac	3PDT	72	D5RF3T
24 Vdc	3PDT	470	D5RF3T1
Side Flange Cover			
220/240 Vac	DPDT	7200	D5RB2B
12 Vdc	DPDT	120	D5RB2R1
24 Vac	DPDT	72	D5RB2T
24 Vdc	DPDT	470	D5RB2T1
Plain Cover			
120 Vac	DPDT	1700	D5RR2A
110/125 Vdc	DPDT	10,000	D5RR2A1
220/240 Vac	DPDT	7200	D5RR2B
24 Vac	DPDT	72	D5RR2T
24 Vdc	DPDT	470	D5RR2T1
120 Vac	3PDT	1700	D5RR3A
110/125 Vdc	3PDT	10,000	D5RR3A1
220/240 Vac	3PDT	7200	D5RR3B
12 Vdc	3PDT	120	D5RR3R1
24 Vac	3PDT	72	D5RR3T
24 Vdc	3PDT	470	D5RR3T1

Accessories**D5 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	25	DIN rail	10 /14 (2) AWG, 6/2.5 (2) mm ²	Elevator	10	D5PAL ①
	None	300	15	DIN rail/panel	12/14 (2) AWG, 4/2.5 (2) mm ²	Screw clamping	10	D5PA2
	None	300	15	Chassis	(Output): 16 AWG, 1 mm ²	Solder	10	D5PA3L
	None	300	15	Chassis	(Output): 16 AWG, 1 mm ²	Solder	10	D5PA3S
Metal spring clip	—	—	—	—	—	—	10	PQC-1351
Protection diode	A	6 to 250 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	PFP-P

Note

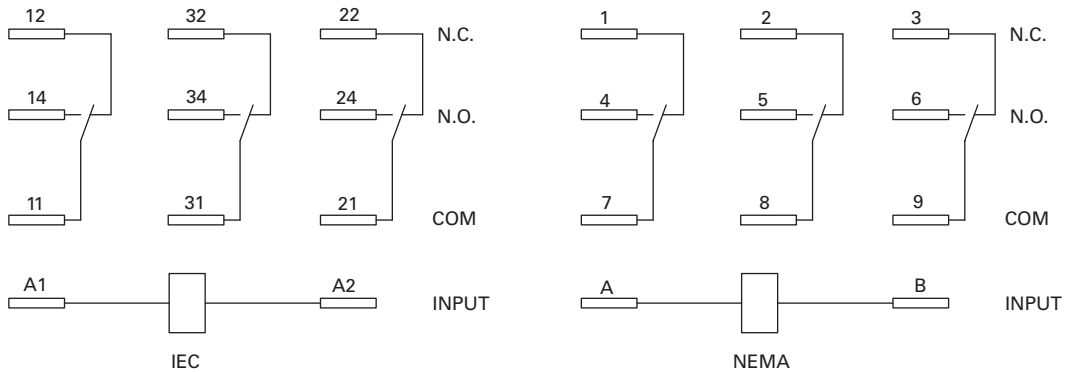
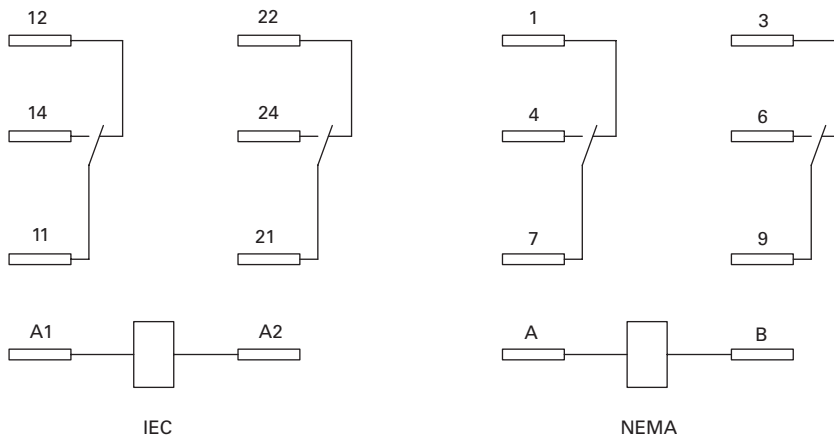
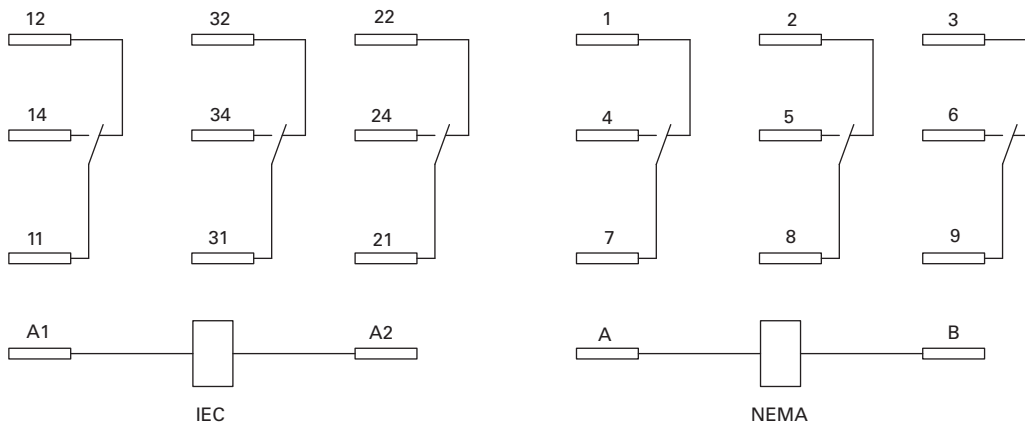
① Protection category (finger safe), EN 60529: IP20.

Technical Data and Specifications

D5 Series

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Description	D5RR	D5RF
Contact Characteristics		
Contact rating	10 A	10 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		
	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)
Coil Characteristics		
Operating range		
% of nominal (AC)	85 to 110%	85 to 110%
% of nominal (DC)	80 to 110%	80 to 110%
Average consumption	3 VA 1.4 W	3 VA 1.4 W
Drop-out voltage threshold	10%/15% (AC) 10% (DC)	10%/15% (AC) 10% (DC)
Performance		
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)
Environment		
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
Features		
Cover options	Flange/plain cover with LED	Full featured
Features	Mechanical flag indicator (LED optional)	Bipolar LED/ Mechanical flag indicator/ Locking pushbutton/ Removable ID tag
Product certifications	RoHS/UL/CE/CSA	RoHS/UL/CE/CSA

Wiring Diagrams**D5PA3L and D5PA3S****D5RR2/D5RF2 DPDT****D5RR3/D5RF3 3PDT**

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Control Relays and Timers

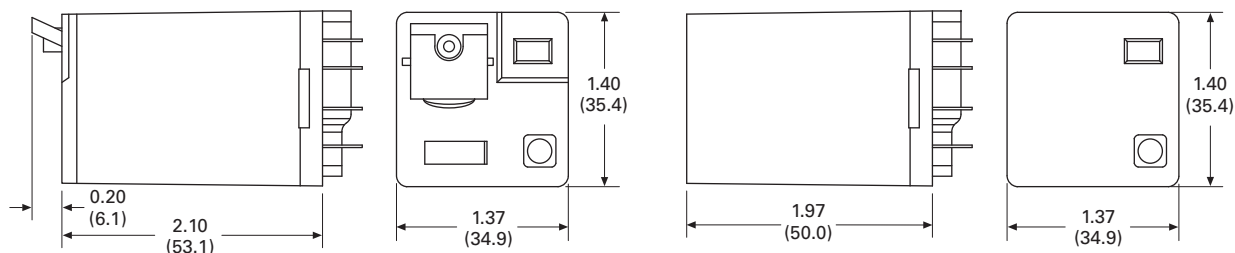
General Purpose Plug-In Relays

Dimensions

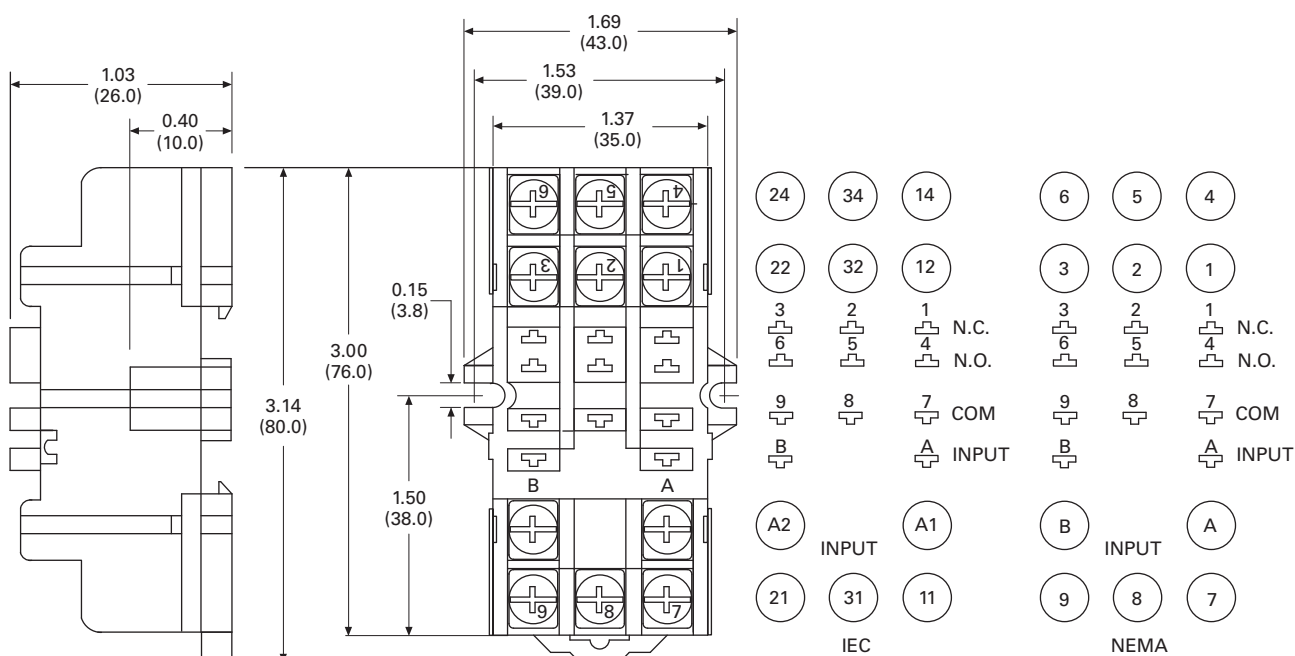
Approximate Dimensions in Inches (mm)

D5RR and D5RF

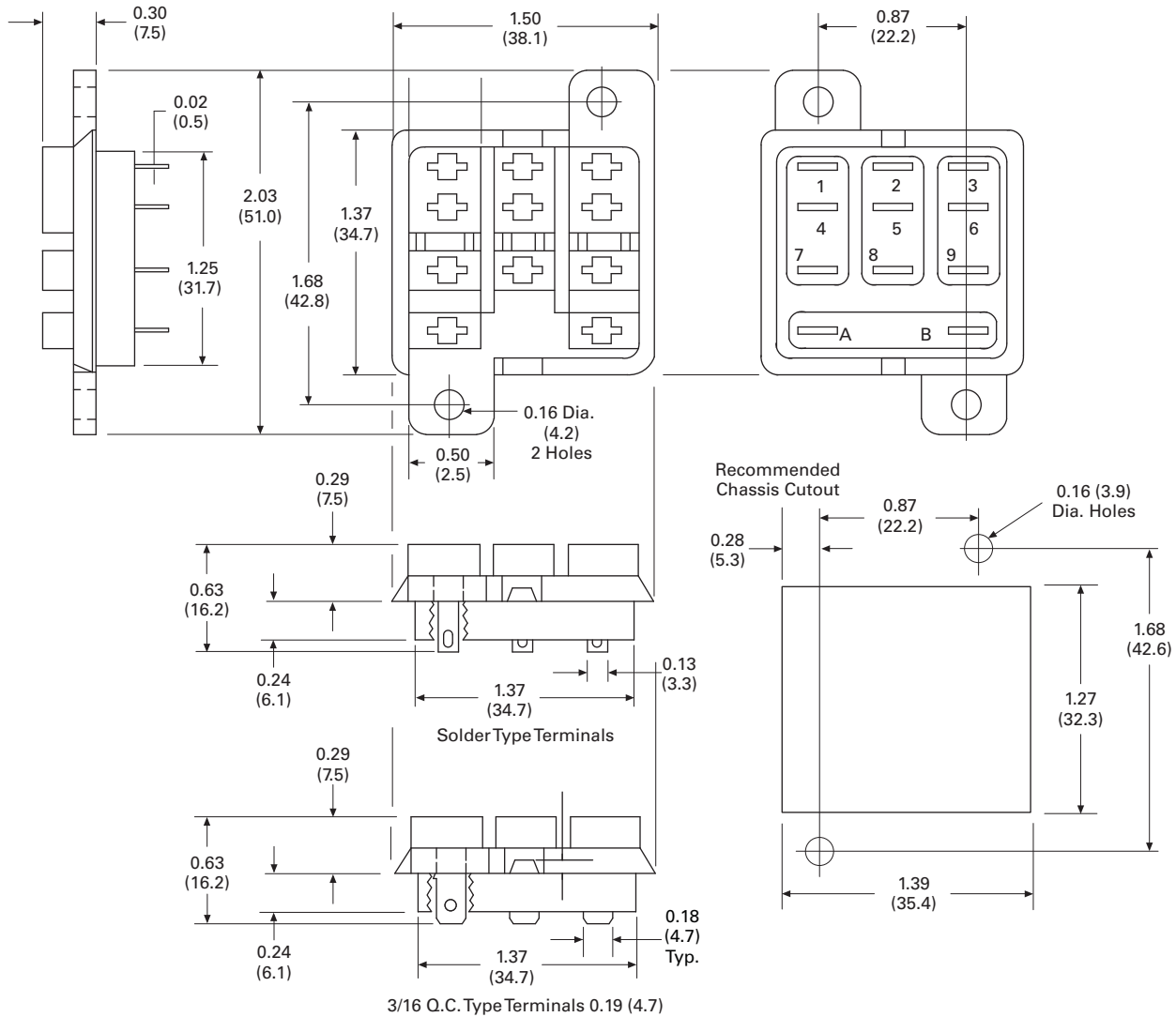
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D5PA2



Approximate Dimensions in Inches (mm)

D5PA3L and D5PA3S

3.4

Control Relays and Timers

General Purpose Plug-In Relays

Approximate Dimensions in Inches (mm)

D5PAL

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