

D2PF Series

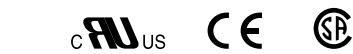


D2PF Series Relay

Features

- Flag indicator shows relay status in manual or powered condition
- Bi-polar LED status lamp allows for reverse polarity applications
 - Shows coil ON or OFF status
 - Ideal in low light conditions
- Colour 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 I.D. tag/write label used for identification of relays in multi-relay circuits

Standards and Certifications



When used with accompanying Cutler-Hammer® screw terminal socket.

Technical Data and Specifications

Table 3-18. D2PF Coil Resistance

Coil Voltage	Ohms	mA ①
		50 Hz
6V AC	9.6	200
6V DC	40	150
12V AC	46	100
12V DC	160	75

24V AC	180	50
24V DC	650	37
48V DC	2600	18
110V DC	11000	10
120V AC	4430	10
240V AC	15700	5

① At 60 Hz for AC Coils.

Table 3-19. D2PF2 and D2PF4 Relay Specifications

	D2PF2	D2PF4
	Resistive Load (p.f. = 1.0)	Inductive Load (p.f. = 1.0)

Coil

Pickup Voltage (Max.)	85% AC; 80% DC (% of nominal)
Drop Out Voltage (Min.)	10% AC; 10% DC (% of nominal)
Maximum Voltage	110% of nominal
Insulation System per UL Standard 1446	Class B 266°F (130°C)

Contacts

Rated Load	120V AC – 10A 277V AC, 28V DC – 8A (UL), 10A (CSA)	120V AC – 3A 277V AC, 28V DC – 3A
Maximum hp Ratings	1/3 hp, 120V AC 1 hp, 277V AC	1/10 hp, 120V AC 1/10 hp, 277V AC
Contact Material	Silver Tin Oxide (Gold Flashed)	Fine Silver, Gold Diffused
Pilot Duty	B300	
Utilization Category (IEC)	AC-15	
Min. Permissible Load	100mA @ 5V DC or 0.5W	
Contact Resistance	100 Milliohms Max. @ 6V, 1A	

Dielectric Strength

Coil to Contacts	1500V RMS
Across Open Contacts	1000V RMS
Contacts to Frame	1500V RMS
Insulation Resistance	100 Megohms Min. @ 500V DC

Temperature

Operating	-40 – 158°F (-40 – 70°C)
Storage	-40 – 221°F (-40 – 105°C)

Life Expectancy

Electrical at Rated Resistive Load	200,000 Operations
Mechanical at No Load	10 Million Operations

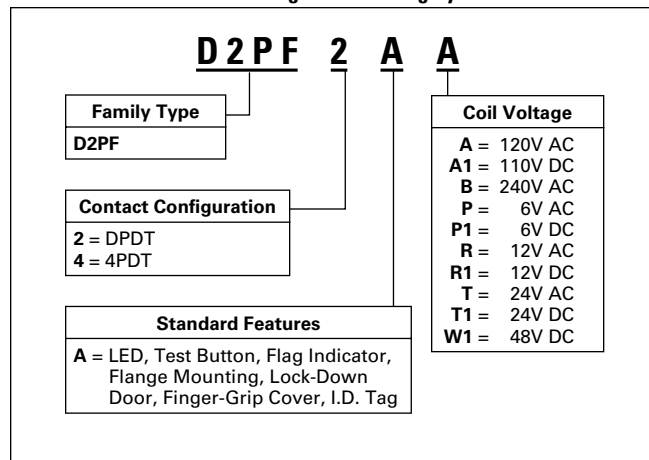
Weight

Approximate Weight	0.079 lbs. (36G)	0.081 lbs. (37G)
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Catalogue Number Structure

Table 3-20. D2PF Series Catalogue Numbering System ①



① For deciphering Catalogue Numbers. Do not use for ordering as not all combinations are readily available.

Table 3-21. D2PF Relay/Socket Quick Reference

Relay Type	Socket	Socket Type	Hold Down Clip
D2PF2	D2PA6	Screw Terminal	PQC-1342
	D2PA7	Screw Terminal, Finger-Safe	Included with Socket
D2PF4	D2PA6	Screw Terminal	PQC-1342
	D2PA7	Screw Terminal, Finger-Safe	Included with Socket

Table 3-22. D2PF Socket Specifications

Catalogue Number	Electrical Ratings	Mounting Torque	Hook-up Wire Range
D2PA6	10A, 300V	7 – 8 in-lbs. (0.79 – 0.90 Nm)	AWG 14 to 28 Solid or Stranded
D2PA7	10A, 300V	7 – 8 in-lbs. (0.79 – 0.90 Nm)	AWG 14 to 20 Solid or Stranded

Product Selection

Table 3-23. D2PF Product Selection

	Std. Pack	Catalogue Number
DPDT		
6V AC 6V DC		D2PF2AP D2PF2AP1
12V AC 12V DC		D2PF2AR D2PF2AR1
24V AC 24V DC		D2PF2AT D2PF2AT1
48V DC		D2PF2AW1
110V DC		D2PF2AA1
120V AC		D2PF2AA
240V AC		D2PF2AB
4PDT		
6V AC		D2PF4AP
12V AC 12V DC		D2PF4AR D2PF4AR1
24V AC 24V DC		D2PF4AT D2PF4AT1
48V DC		D2PF4AW1
110V DC		D2PF4AA1
120V AC		D2PF4AA
240V AC		D2PF4AB
Sockets and Accessories		
4-Pole DIN or Panel Mount Socket	10	D2PA6
Hold Down Clip	10	PQC-1342
4-Pole DIN or Panel Mount Socket — Finger-Safe	10	D2PA7
DIN Rail End Stop ②	200	PPF-M

② Additional end stop options available in CA08102001E on Page 55-74.

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Dimensions

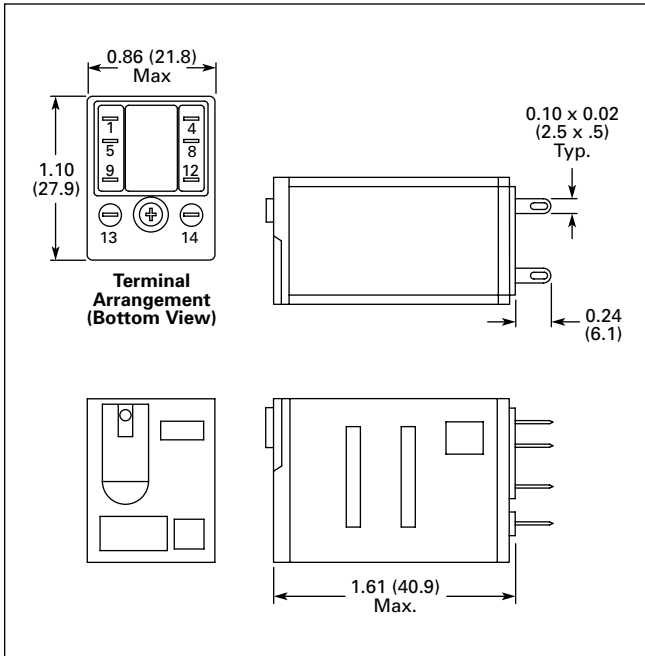


Figure 3-18. D2PF2 — Approximate Dimensions in Inches (mm)

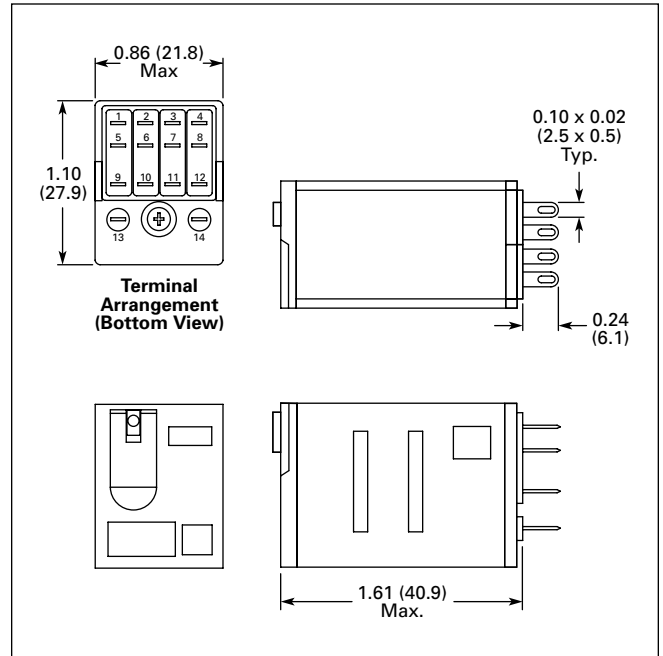


Figure 3-19. D2PF4 — Approximate Dimensions in Inches (mm)

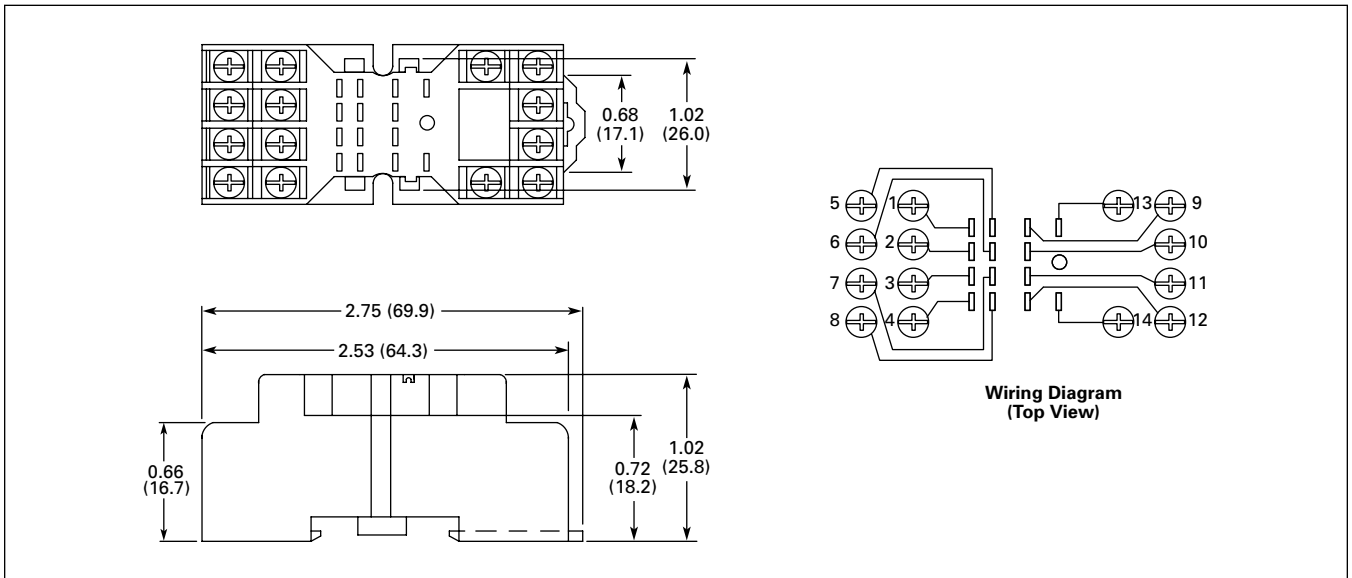


Figure 3-20. D2PA6 — Approximate Dimensions in Inches (mm)

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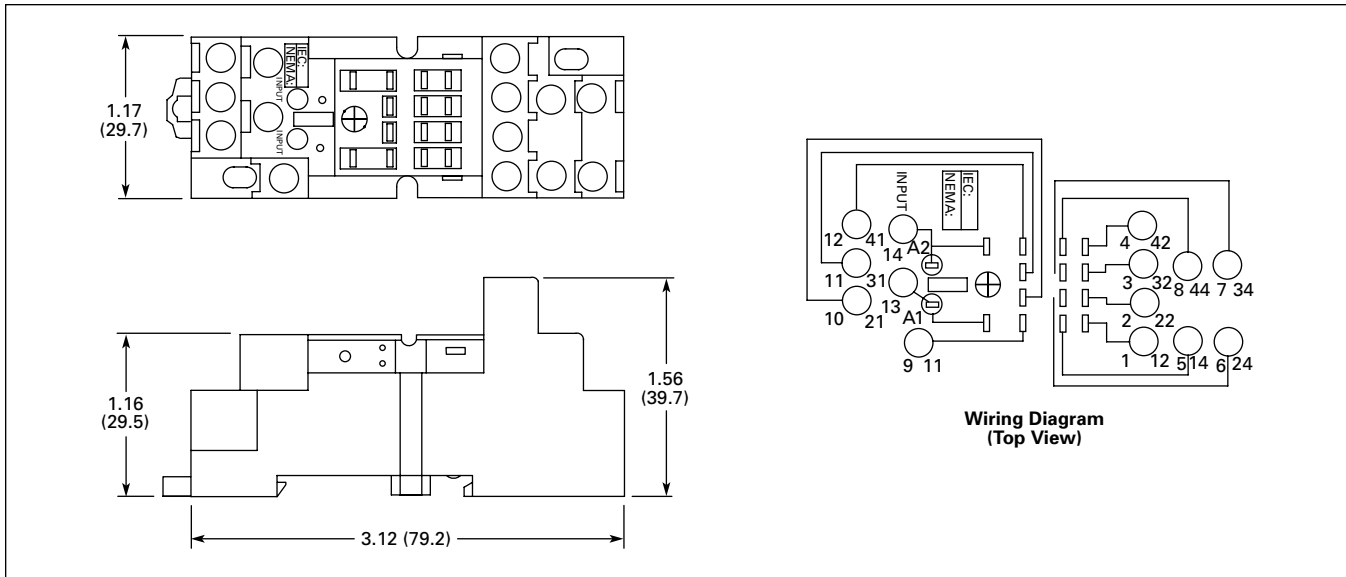


Figure 3-21. D2PA7 — Approximate Dimensions in Inches (mm)

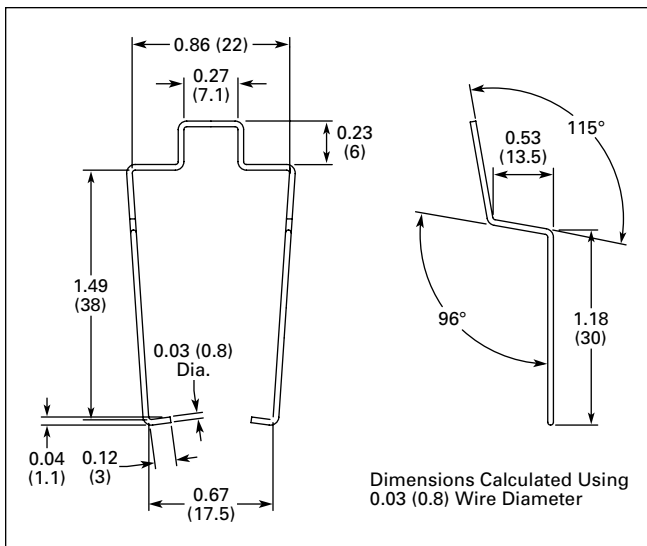


Figure 3-22. PQC-1342 — Approximate Dimensions in Inches (mm)