


D7PR Series — Standard


D7PR Series

Features

- Arc barrier equipped relay with high dielectric strength
- Panel, DIN rail and flange mounting

Standards and Certifications

 File # E37317, E65657

 File # LR217017, LR217069





D7 Series Relay

Technical Data and Specifications

Table 49-73. D7PR Coil Resistance

Coil Voltage	Ohms				Milliamps							
	D7PR1	D7PR2	D7PR3	D7PR4	D7PR1	D7PR1	D7PR2	D7PR2	D7PR3	D7PR3	D7PR4	D7PR4
					50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
6V AC	11	11	6.5	5	222.3	190	234	200	326	278	393	336
12V AC	41	41	25.5	20	111.2	95	95.9	82	148	126	202	173
24V AC	180	180	102	80	58.5	50	48	41	77	66	91	78
48V AC	788	788	735	735	21	18	21	18	21.5	18.4	24	20
120V AC	4430	4430	2700	2000	12.9	11	12.9	11	14.7	12.6	17.3	14.8
240V AC	15700	15700	10000	8000	5.9	5	7	6	9.7	8.3	11.4	9.7
6V DC	47	40	25	24	—	127.7	—	150	—	240	—	250
12V DC	188	160	100	96	—	63.8	—	75	—	120	—	125
24V DC	750	650	400	360	—	32	—	36.9	—	60	—	67
48V DC	2600	2600	1600	1600	—	18.5	—	18.5	—	18.5	—	18.5
110V DC	13800	11000	8400	6800	—	8	—	10	—	13	—	16.2

Table 49-74. D7PR Relay Specifications

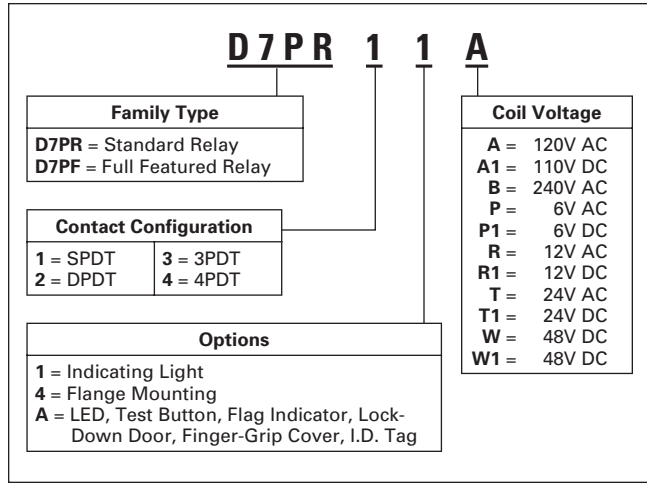
	D7PR1		D7PR2/D7PR3/D7PR4	
	Resistive Load (p.f. = 1)	Inductive Load (p.f. = 0.4, L/R = 7 ms)	Resistive Load (p.f. = 1)	Inductive Load (p.f. = 0.4, L/R = 7 ms)
Rated Load	120/240V AC 15A 30V DC 15A	120/240V AC 10A 30V DC 7A	120/240V AC 10A (D7PR2 only) 30V DC 10A (D7PR2 only) 250V AC 10A (D7PR3/D7PR4 only) 120V AC 15A (D7PR2 only) 28V DC 10A (D7PR3/D7PR4 only)	120/240V AC 7.5A 30V DC 5A
Carry Current	15A	15A	10A	10A
Max. Operating Voltage	250V AC/125V DC	250V AC/125V DC	250V AC/125V DC	250V AC/125V DC
Max. Operating Current	15A	15A	10A	10A
Contact Material	AgCdO	AgCdO	AgCdO	AgCdO
Max. Switching Capacity	1700 VA 360W	1100 VA 170W	1100 VA 240W	830 VA 120W
Min. Permissible Load	100 mA, 5V DC	100 mA, 5V DC	100 mA, 5V DC	100 mA, 5V DC
Pickup Voltage (max.)	80%	80%	80%	80%
Drop Out Voltage (min.)	30% AC, 10% DC	30% AC, 10% DC	30% AC, 10% DC	30% AC, 10% DC
Voltage (max.)	110%	110%	110%	110%
Mechanical Life (min.)	10,000,000 AC 100,000,000 DC	10,000,000 AC 100,000,000 DC	10,000,000 AC 100,000,000 DC	10,000,000 AC 100,000,000 DC
Electrical Life @ All Contact Ratings (min.)	200,000	200,000	200,000	200,000
Maximum hp Rating	1/3 hp (120V AC)	1/2 hp (240V AC)	1/3 hp (120V AC) (D7PR2 only)	1/2 hp (240V AC) (D7PR2 only)

Table 49-75. D7PR Socket Specifications

Catalog Number	Electrical Ratings	Mounting Torque	Hook-Up Wire Range
D7PA2	15A, 250V	.785 Nm – 1.18 Nm	AWG 14 Max.
D7PA3	10A, 300V	7 – 8 in-lbs	AWG 12 to 22 Solid or Stranded
D7PA4	10A, 300V	7 – 8 in-lbs	AWG 12 to 22 Solid or Stranded
D7PA5	15A, 250V	N/A	AWG 14 Max.

Catalog Number Structure

Table 49-76. D7 Series Catalog Numbering System ①



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

Table 49-77. Relay/Socket Quick Reference

Relay Type	Socket	Hold Down Spring
D7PR1	D7PA2/D7PA5	PMC-A1
D7PR2	D7PA2/D7PA5	PMC-A1
D7PR3	D7PA3	PYC-B2
D7PR4	D7PA4	PYC-B2
D7PF1/D7PF2	D7PA9/D7PA5	PQC-1342
D7PF1/D7PF2	D7PAA	PQC-1349
D7PF3	D7PA3	N/A
D7PF4	D7PA4	N/A
D7PF3	D7PAB	PQC-1350
D7PF4	D7PAD	PQC-1351

Product Selection

Table 49-78. D7 Product Selection ②

	Catalog Number	Price U.S. \$
Standard SPDT		
Coil Voltage: 24V AC 120V AC 240V AC	D7PR1T D7PR1A D7PR1B	
6V DC 12V DC 24V DC	D7PR1P1 D7PR1R1 D7PR1T1	
SPDT with Indicating Light		
24V AC 120V AC	D7PR11T D7PR11A	
24V DC	D7PR11T1	
SPDT Flange Mount		
120V AC	D7PR14A	
SPDT Full Featured Relay		
120V AC 110V DC 12V DC 24V AC 24V DC	D7PF1AA D7PF1AA1 D7PF1AR1 D7PF1AT D7PF1AT1	

Table 49-78. D7 Product Selection, continued ②

	Std. Pack	Catalog Number	Price U.S. \$
Standard DPDT			
24V AC 120V AC 240V AC		D7PR2T D7PR2A D7PR2B	
12V DC 24V DC 48V DC 110V DC		D7PR2R1 D7PR2T1 D7PR2W1 D7PR2A1	
DPDT Full Featured Relay			
Coil Voltage: 120V AC 110V DC 240V AC 12V DC 24V AC 24V DC		D7PF2AA D7PF2AA1 D7PF2AB D7PF2AR1 D7PF2AT D7PF2AT1	
DPDT Flange Mount			
24V AC 120V AC		D7PR24T D7PR24A	
Standard 3PDT			
120V AC 12V DC 24V DC		D7PR3A D7PR3R1 D7PR3T1	
3PDT with Indicating Light			
120V AC 12V DC 24V DC		D7PR31A D7PR31R1 D7PR31T1	
3PDT Flange Mount			
120V AC		D7PR34A	
3PDT Full Featured Relay			
120V AC 110V DC 240V AC 12V DC 24V AC 24V DC		D7PF3AA D7PF3AA1 D7PF3AB D7PF3AR1 D7PF3AT D7PF3AT1	
Standard 4PDT			
Coil Voltage: 24V AC 120V AC 24V DC 110V DC		D7PR4T D7PR4A D7PR4T1 D7PR4A1	
4PDT Full Featured			
Coil Voltage: 120V AC 240V AC 12V AC 12V DC 24V AC 24V DC 48V DC		D7PF4AA D7PF4AB D7PF4AR D7PF4AR1 D7PF4AT D7PF4AT1 D7PF4AW1	
4PDT Flange Mount			
120V AC 24V DC		D7PR44A D7PR44T1	
DIN Rail Mount Sockets			
1- and 2-Pole 1- and 2-Pole Finger-Safe ③ 3-Pole 3-Pole Finger-Safe ③ 4-Pole 4-Pole Finger-Safe ③	10 10 10 10 10 10	D7PA2 D7PAA D7PA3 D7PAB D7PA4 D7PAD	
Panel Mount Sockets			
1- and 2-Pole	10	D7PA5	
Accessories			
Spring Clip DIN Rail End Stop Hold Down Spring	100 100 100	PMC-A1 PPF-M PYC-B2	

② Additional coil voltages available — consult Sales Office or Customer Support Center.

③ IP20 rated.

Dimensions

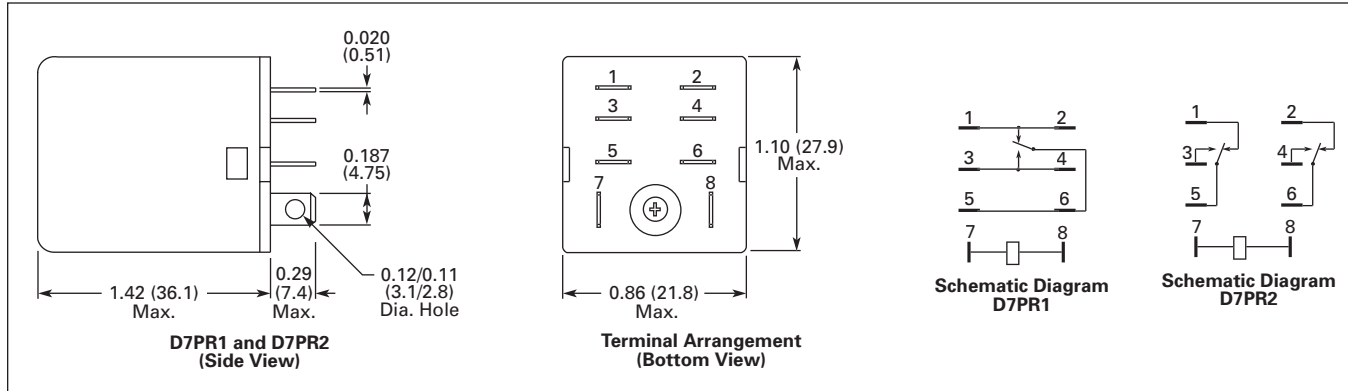


Figure 49-77. D7PR1 and D7PR2 — Approximate Dimensions in Inches (mm)

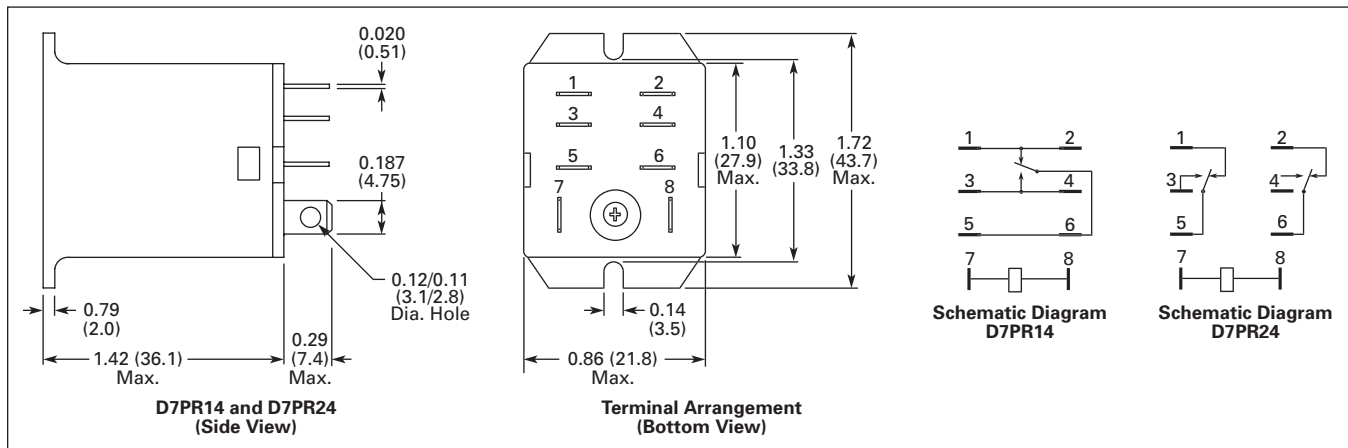


Figure 49-78. D7PR14 and D7PR24 — Approximate Dimensions in Inches (mm)

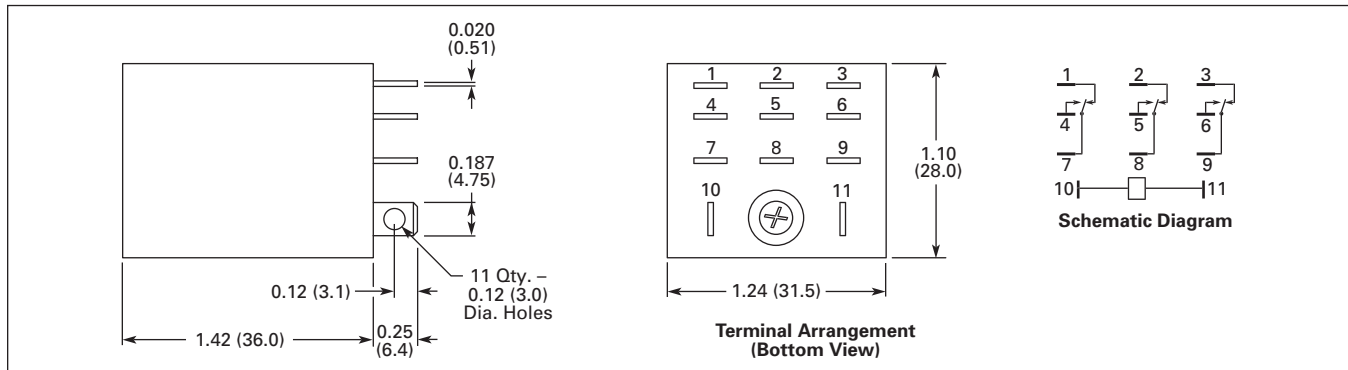


Figure 49-79. D7PR3 — Approximate Dimensions in Inches (mm)

D7PR Series — Standard

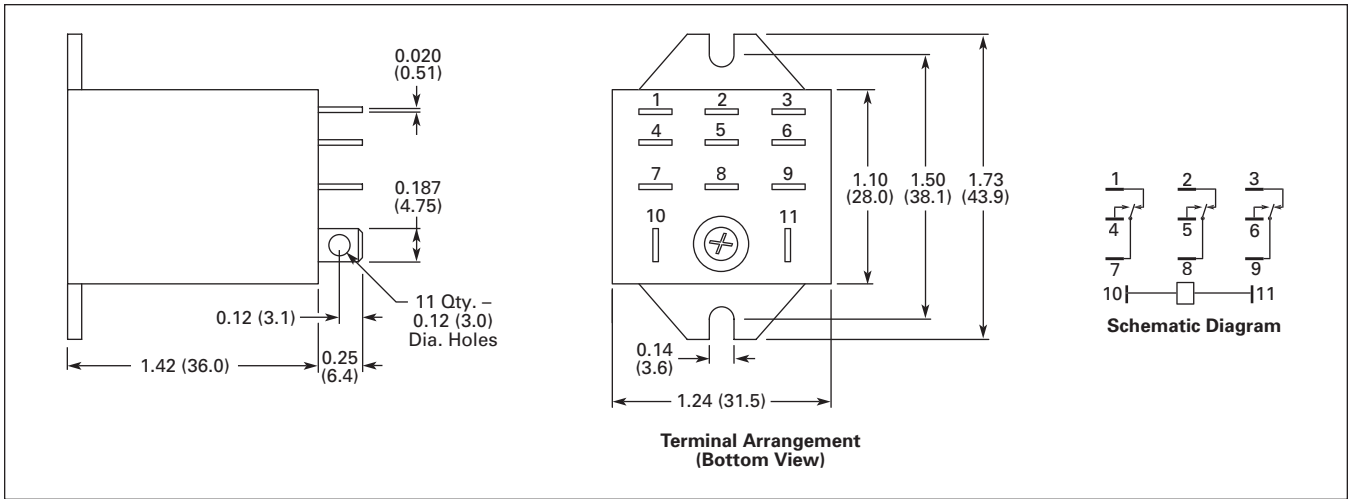


Figure 49-80. D7PR34 — Approximate Dimensions in Inches (mm)

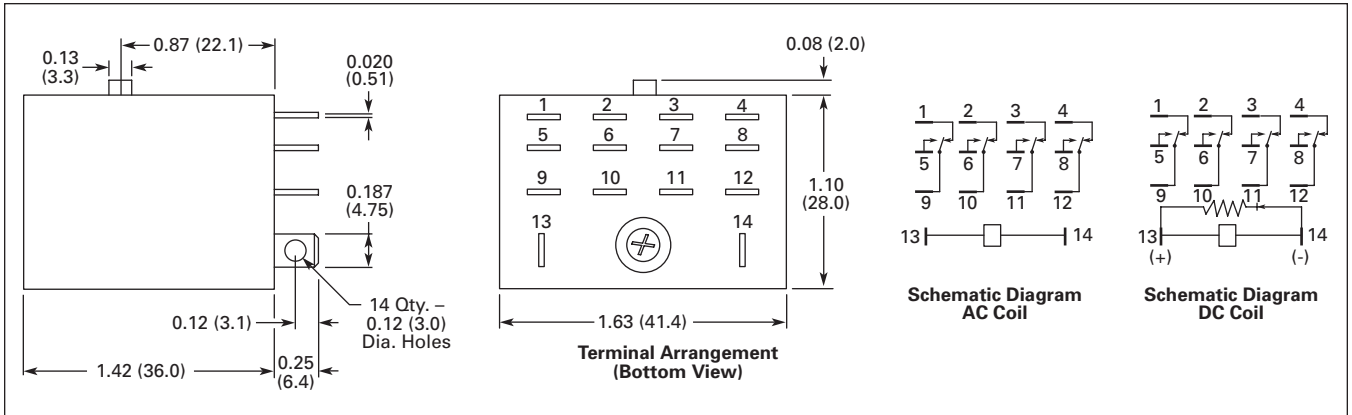


Figure 49-81. D7PR43 — Approximate Dimensions in Inches (mm)

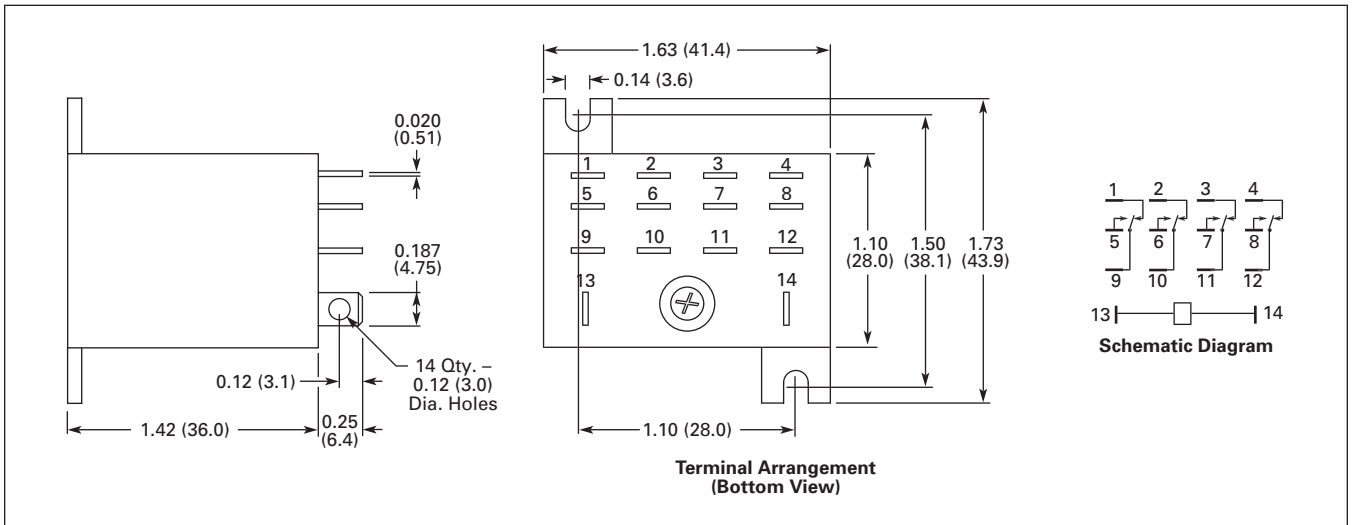


Figure 49-82. D7PR44 — Approximate Dimensions in Inches (mm)

D7PR Series — Standard

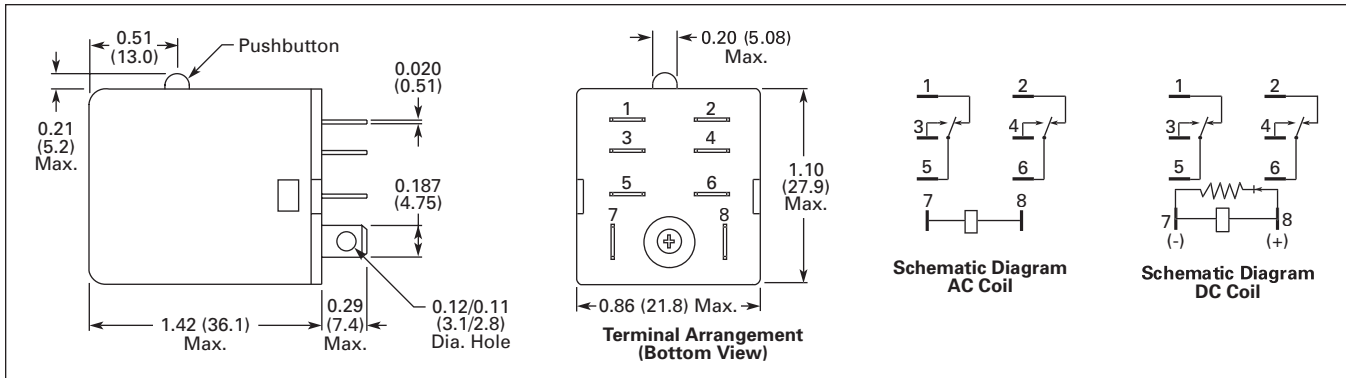


Figure 49-83. D7PR23 — Approximate Dimensions in Inches (mm)

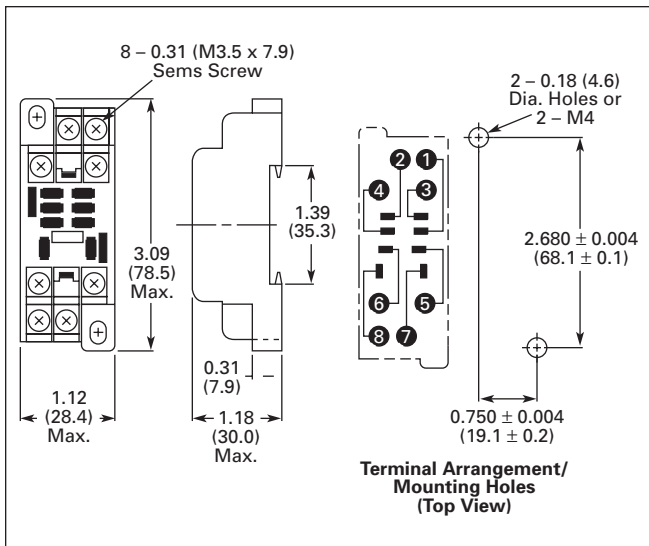


Figure 49-84. D7PA2 — Approximate Dimensions in Inches (mm)

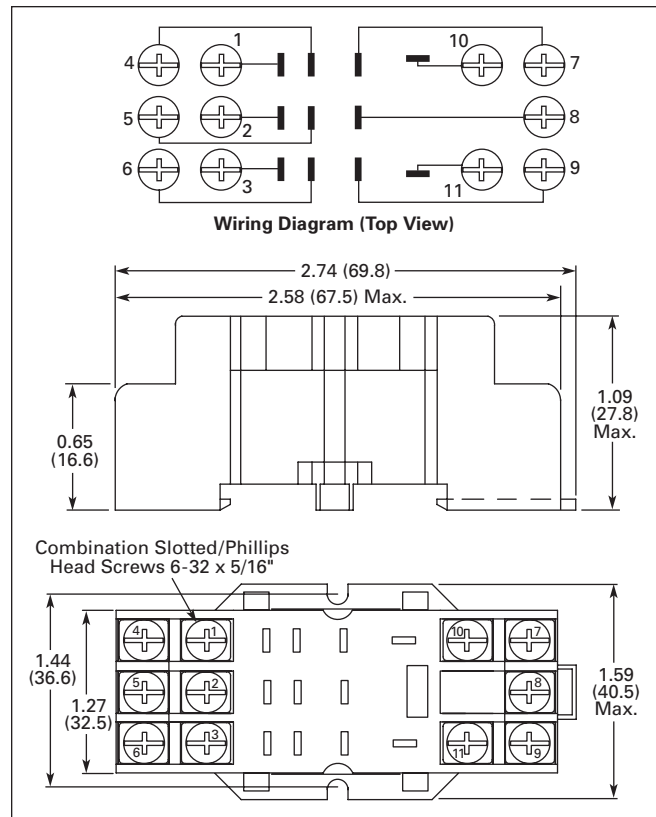


Figure 49-85. D7PA3 — Approximate Dimensions in Inches (mm)

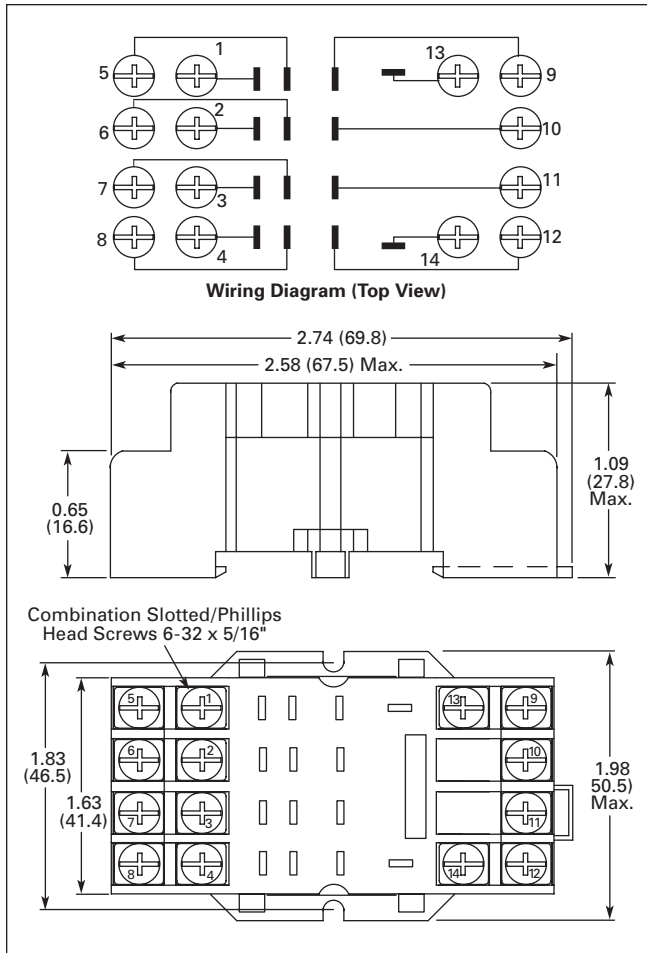


Figure 49-86. D7PA4 — Approximate Dimensions in Inches (mm)

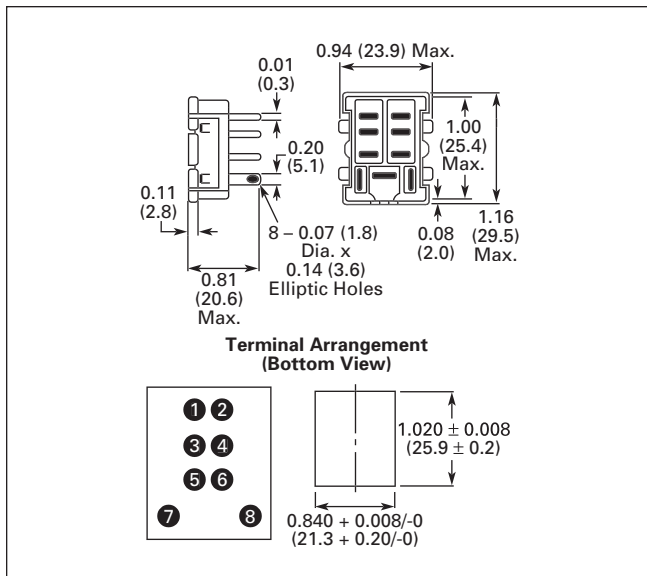


Figure 49-87. D7PA5 — Approximate Dimensions in Inches (mm)

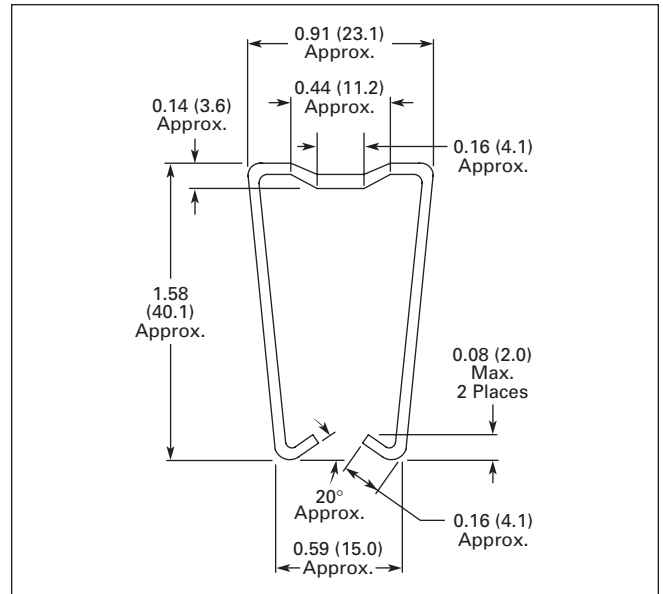


Figure 49-88. PMC-A1 Hold Down Clip — Approximate Dimensions in Inches (mm)

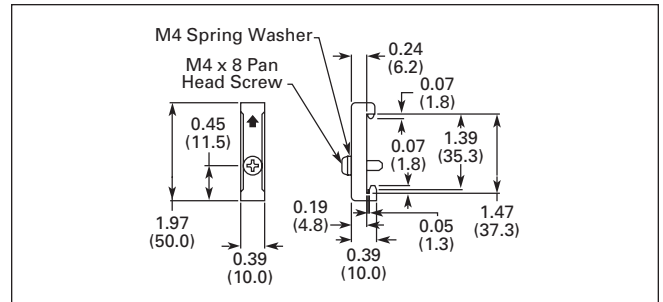


Figure 49-89. PFP-M DIN Rail End Stop — Approximate Dimensions in Inches (mm)

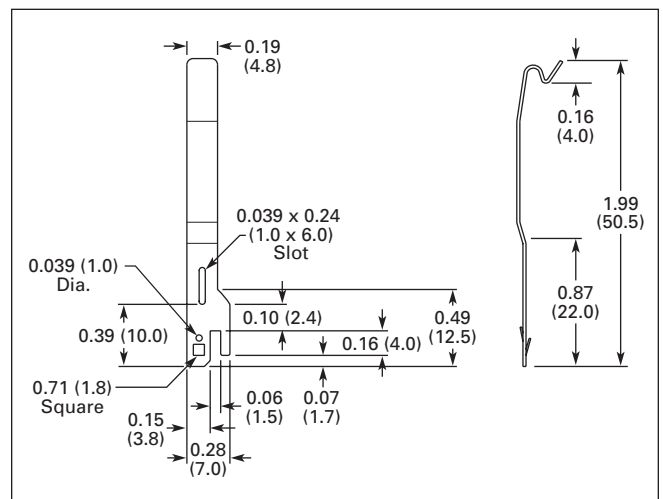


Figure 49-90. PYC-B2 Hold Down Spring — Approximate Dimensions in Inches (mm)