



File No.:E75887



File No.:R 50261062



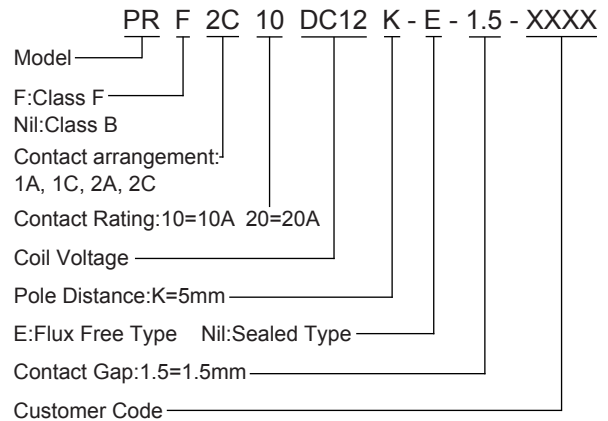
FEATURES

- High breakdown voltage (4000VAC between coil and contact)
- Large switching capacity (20A 277VAC)
- Typical Applications:
  - General electronic controls or systems, Machine tool controls, Energy control circuits, Industrial machinery controls, Consumer controls (Air-conditioner, Refrigerator, Microwave Oven, etc.), Vending machine, Office machine, etc.

CONTACT RATINGS

Contact Arrangement	1A, 1C	2A, 2C	
Contact Resistance	50mΩ(1A 24VDC)		
Contact Material	Silver Alloy		
Contact Rating(Resistive)	10A/277VAC 10A/30VDC	20A/277VAC 20A/30VDC	10A/277VAC 5A/30VDC
Max. Switching Voltage	277VAC/30VDC		
Max. Switching Current	10A	20A	10A
Max. Switching Power	2770VA/300W	5540VA/600W	2770VA/150W
Mechanical Life	1×10 <sup>7</sup> operations		
Electrical Life	1×10 <sup>5</sup> operations		

ORDERING INFORMATION



CHARACTERISTICS

Insulation Resistance	1000MΩ (at 500VDC)	
Dielectric Strength	Between coil & contacts	5000VAC 1min
	Between open contacts	1000VAC 1min
	Between contact sets	3000VAC 1min
Operate time (at nomi. volt.)	≤15ms	
Release time (at nomi. volt.)	≤5ms	
Humidity	98% RH,40°C	
Ambient temperature	Class B:-40°C to 85°C Class F:-40°C to 105°C	
Shock Resistance	Functional	98m/s <sup>2</sup>
	Destructive	980m/s <sup>2</sup>
Vibration resistance	10Hz ~ 55Hz 1.5mm DA	
Unit weight	Approx. 18g	
Construction	Sealed Type, Flux Free Type	

Notes: The data shown above are initial values

COIL DATA

at 23°C

Nominal Voltage VDC	Pick-up Voltage (Max.) VDC	Drop-out Voltage (Min.) VDC	Max. Allowable Voltage VDC	Coil Resistance Ω±10%	
				Normal	1.5mm
5	4.0	0.5	6.0	47	31.25
6	4.8	0.6	7.2	68	45
9	7.2	0.9	10.8	155	101.25
12	9.6	1.2	14.4	275	180
24	19.2	2.4	28.8	1100	720
48	38.4	4.8	57.6	4400	2880
110	80.0	11.0	120.0	14400	

COIL

Coil Power	Normal Contact Gap: Approx. 530mW 1.5mm Contact Gap: 800mW 110V: 840mW
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This datasheet is for customers' reference. All the specifications are subject to change without notice.



\* SINCE 1976 \*

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RELAYS

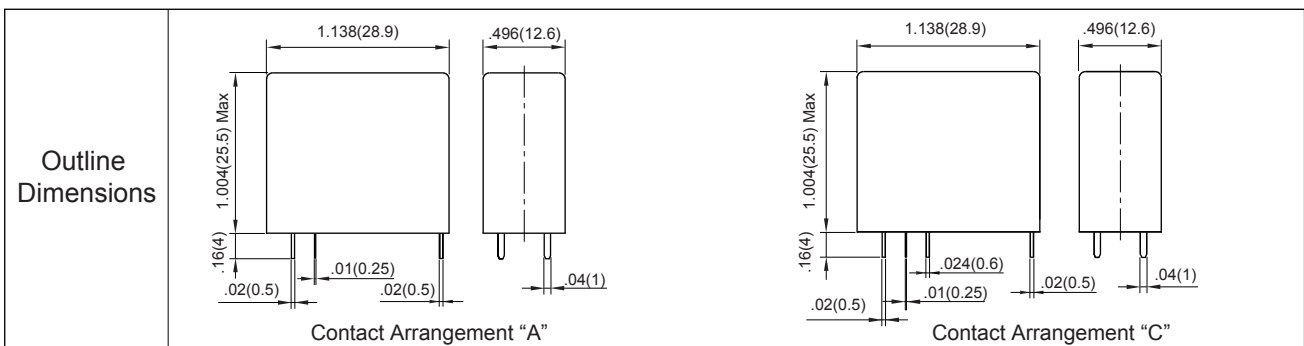
## SAFETY APPROVAL RATINGS

UL&CUL	Form 1	20A 277VAC/30VDC 1/2 HP AT 120VAC 1-1/2 HP AT 240VAC 277VAC TV-10 (NO) 10A 277VAC/30VDC 1/4 HP AT 120VAC 1/2 HP AT 240VAC
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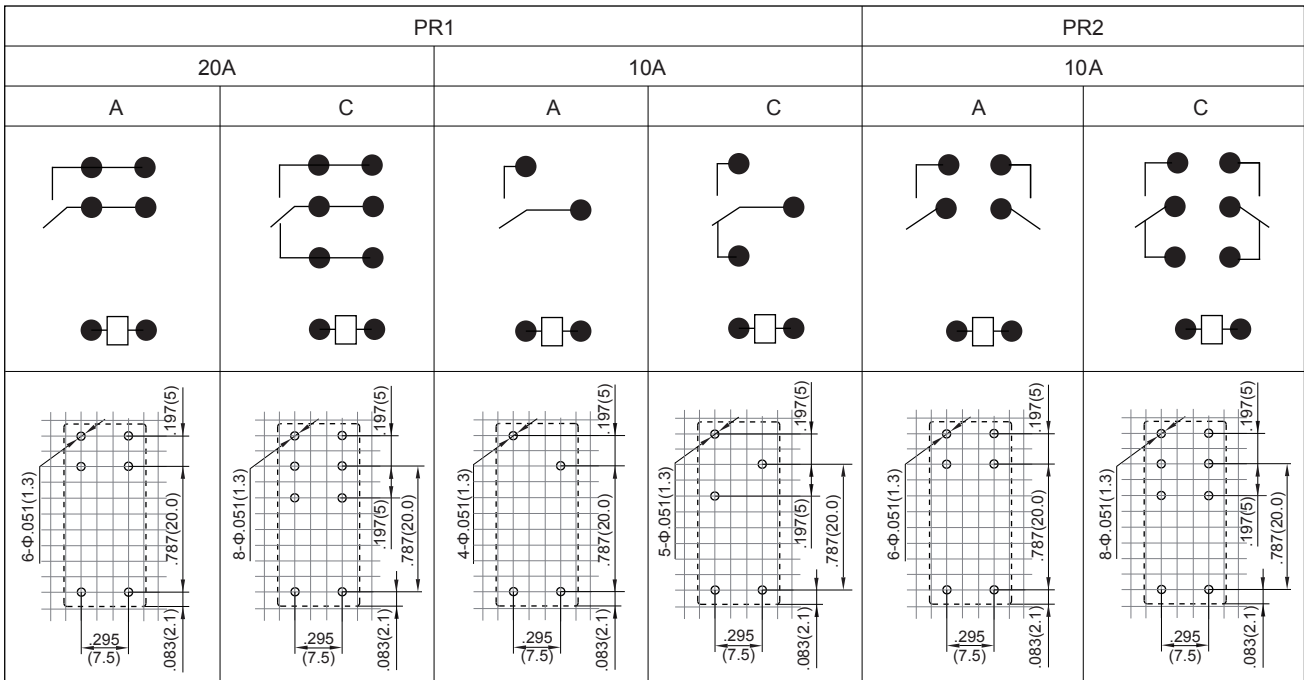
UL&CUL	Form 2	10A 277VAC 5A 30VDC 1/8 HP AT 120VAC
TüV	Form 1	10A 250VAC/14VDC
	Form 2	5A 250VAC/30VDC

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT.

Unit: inch(mm)



## Wiring Diagram and PCB Layout (Bottom view)



Remark: 1) In case of no tolerance shown in outline dimension: outline dimension  $\leq 1\text{mm}$ , tolerance should be  $\pm 0.2\text{mm}$ ; outline dimension  $> 1\text{mm}$  and  $\leq 5\text{mm}$ , tolerance should be  $\pm 0.3\text{mm}$ ; outline dimension  $> 5\text{mm}$ , tolerance should be  $\pm 0.4\text{mm}$ .

2) The tolerance without indicating for PCB layout is always  $\pm 0.1\text{mm}$ .

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