

SERIES: PR25 | **DESCRIPTION:** POWER RELAY

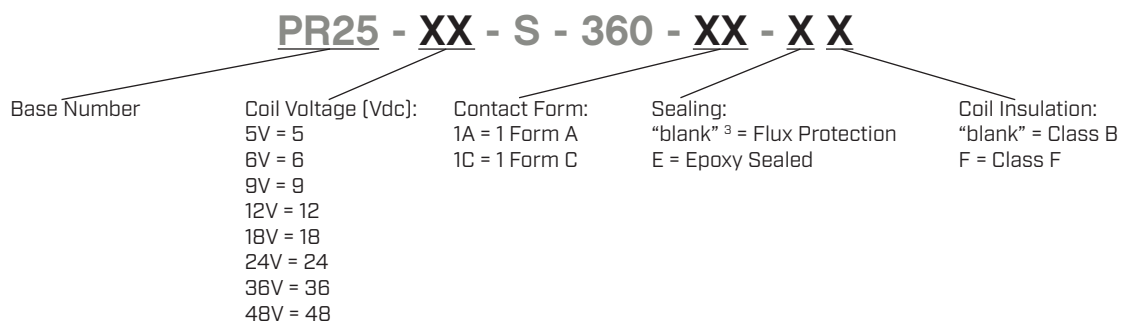
FEATURES

- 15 amp
- 1 form A
- 1 form C
- Class B & Class F


MODEL

	coil voltage typ (Vdc)	coil resistance ($\Omega \pm 10\%$)	operating voltage ¹ min (Vdc)	release voltage max (Vdc)	continuous voltage max (Vdc)	coil power max (mW)
PR25-5V-S-360	5	70	3.8	0.5	11.2	360
PR25-6V-S-360	6	100	4.5	0.6	13.4	360
PR25-9V-S-360	9	225	6.8	0.9	20.1	360
PR25-12V-S-360	12	400	9.0	1.2	26.8	360
PR25-18V-S-360	18	900	13.5	1.8	40.2	360
PR25-24V-S-360	24	1,600	18.0	2.4	53.4	360
PR25-36V-S-360	36	3,600	27.0	3.6	80.1	360
PR25-48V-S-360	48	6,400	36.0	4.8	107.3	360

Notes: 1. Relay may pull in with less than operating voltage.
2. All specifications are measured at 20°C unless otherwise specified.

PART NUMBER KEY


Notes: 3. Flux protection only available on 1 Form A models.

COIL SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
coil power	nominal at pickup voltage		360		mW
			203		mW
coil power continuous dissipation	Class B models at 20°C			1.8	W
	Class F models at 20°C			2.4	W
temperature rise	at nominal coil voltage		32		K

CONTACT SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
contact form	1 Form A, 1 Form C				
contact material	AgSnO ₂ (silver tin oxide)				
contact rating	1 Form A 10 A @ 277 Vac 15 A @ 125 Vac				
	1 Form C 10 A @ 277 Vac NO/NC 5 A @ 250 Vac NC				
contact resistance	at 1 A, 24 V, voltage drop method			100	mΩ
max switching voltage				300	Vac
				30	Vdc
max switching current	Vac			15	A
	Vdc			10	A
max switching power	Vac			2,770	VA
	Vdc			300	W
life	electrical: at 277 Vac, resistive	100,000			operations
	mechanical	1,000,000			operations

GENERAL SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
insulation resistance	at 500 Vdc, 20 °C, 50% RH	100			MΩ
dielectric strength	between open contacts at sea level for 1 minute		1,000		Vrms
	between coil and contacts at sea level for 1 minute		1,500		Vrms
operate time	at nominal coil voltage			10	ms
release time	at nominal coil voltage, without coil suppression			5	ms
shock resistance			10		G
vibration resistance	10-55 Hz, 1.5 mm double amplitude				
operating temperature	Class B models at nominal coil voltage	-40		70	°C
	Class F models at nominal coil voltage	-40		85	°C
weight			10		g
safety approvals	UL/cUL 508				
flammability rating	UL94V-0				
RoHS	yes				
packaging	tube: 20 pcs per tube carton QTY: 1,000 pcs per carton				

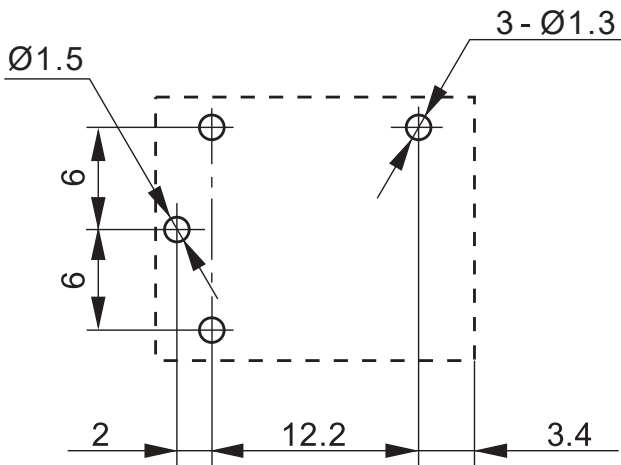
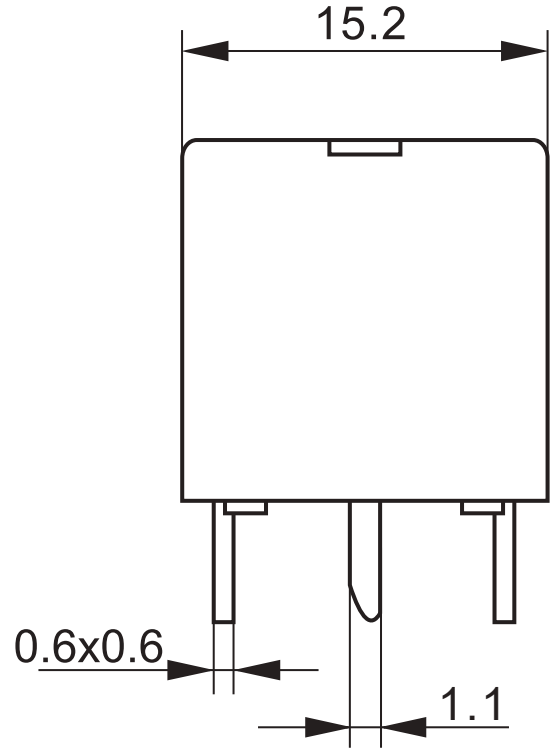
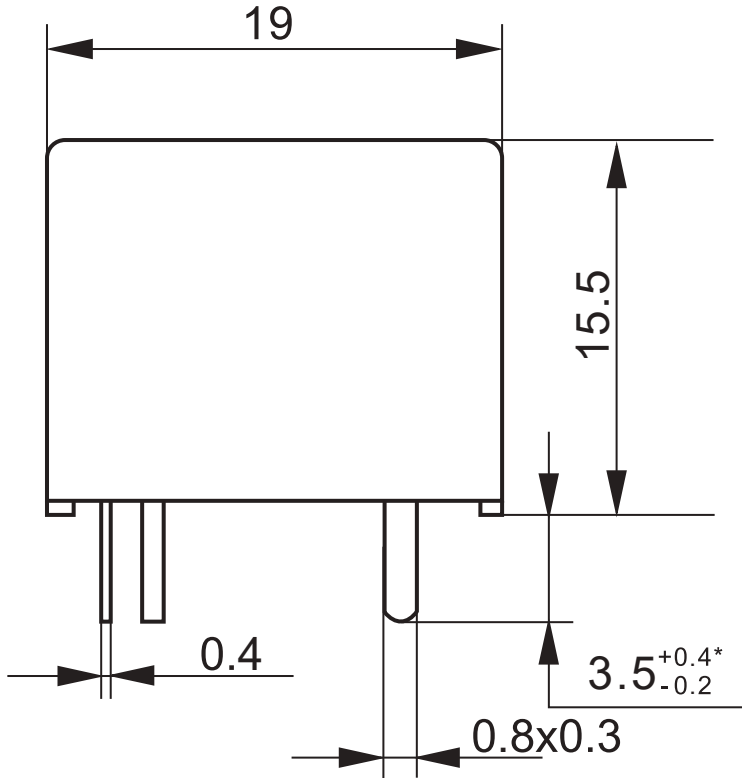
SOLDERABILITY

parameter	conditions/description	min	typ	max	units
wave soldering	for max 5 seconds			270	°C
washable	only on epoxy sealed models max immersion time of 30 seconds			80	°C

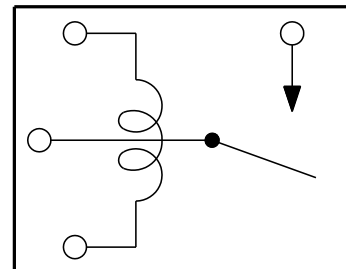
MECHANICAL DRAWING (1A = 1 FORM A)

units: mm [inch]
 tolerance: ± 0.254 mm
 unless otherwise noted

DESCRIPTION	MATERIAL	PLATING/COLOR
housing	PBT [UL94V-0]	black
terminals	copper alloy	tin



Recommended PCB Layout
 Bottom View

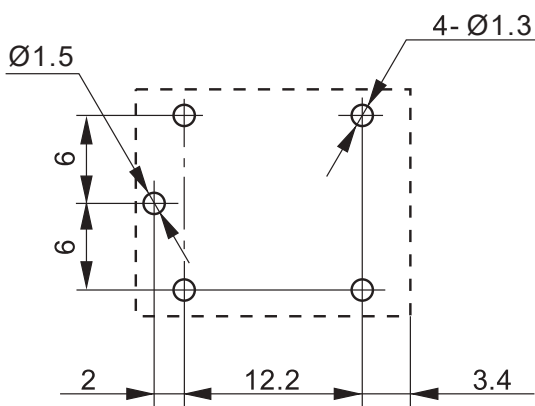
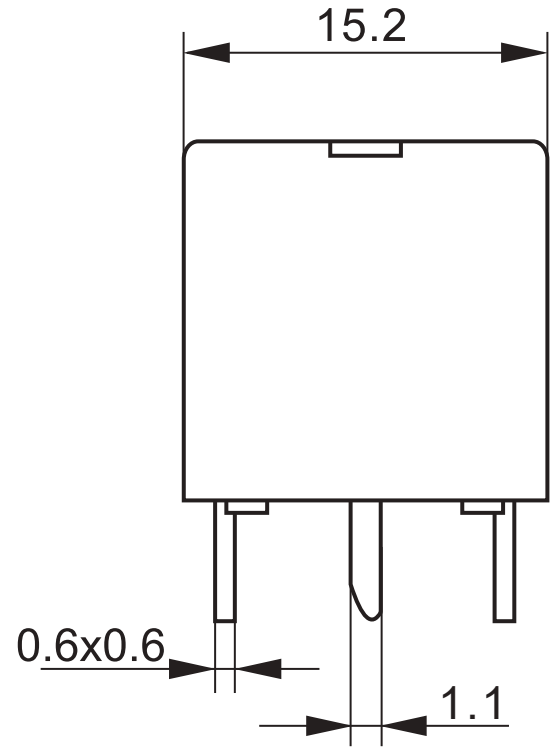
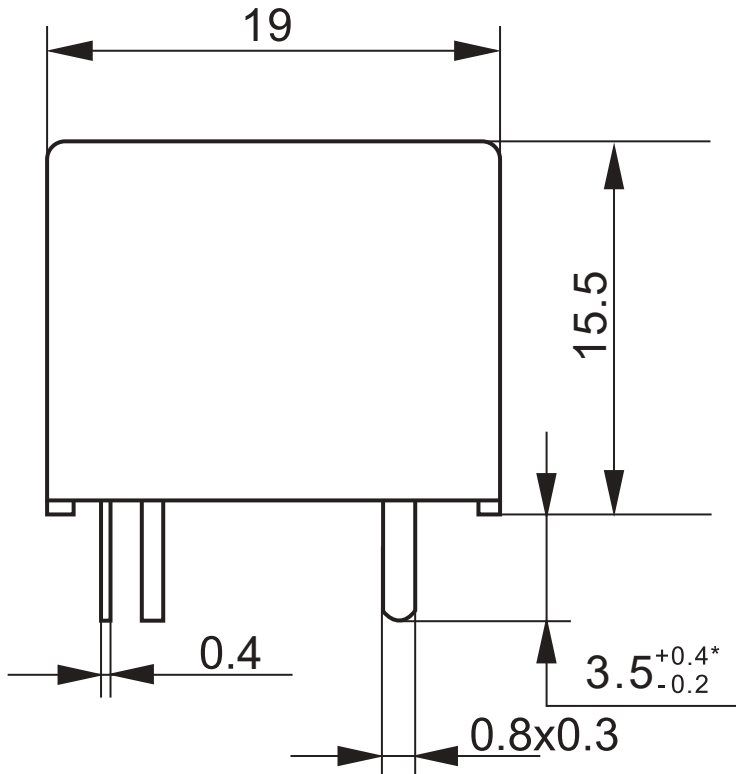


Wiring Diagram
 Bottom View

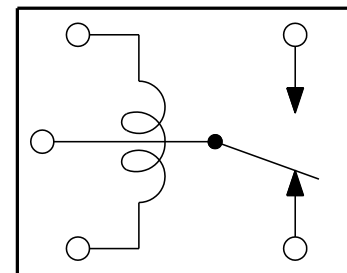
MECHANICAL DRAWING (1C = 1 FORM C)

units: mm [inch]
 tolerance: ± 0.254 mm
 unless otherwise noted

DESCRIPTION	MATERIAL	PLATING/COLOR
housing	PBT (UL94V-0)	black
terminals	copper alloy	tin



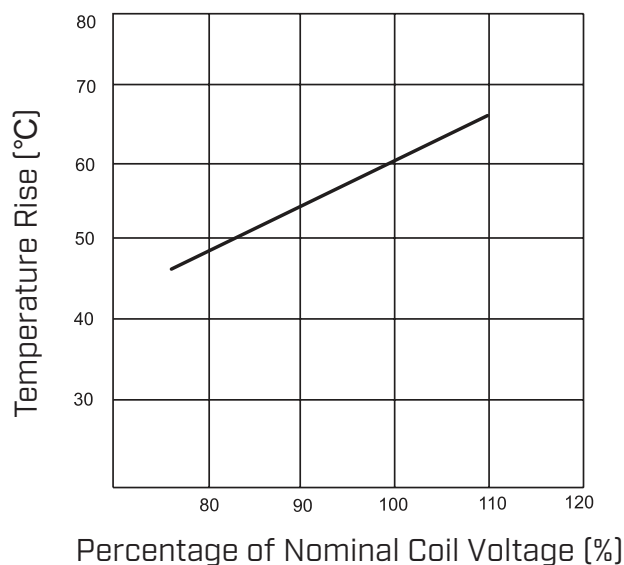
Recommended PCB Layout
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Wiring Diagram
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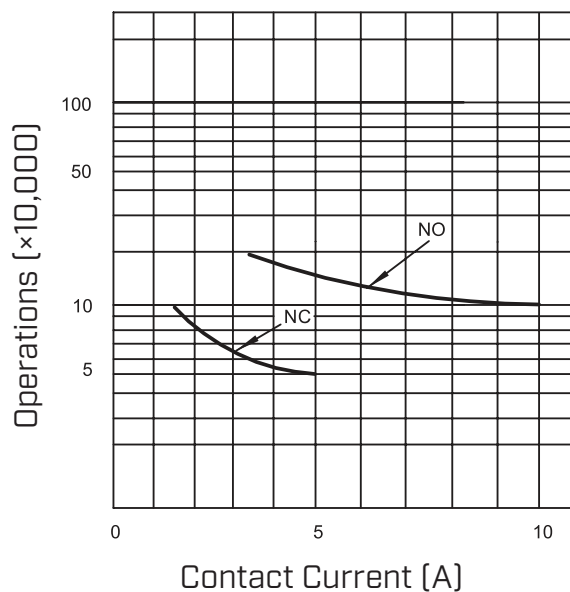
CHARACTERISTIC CURVES

Coil Temperature Rise



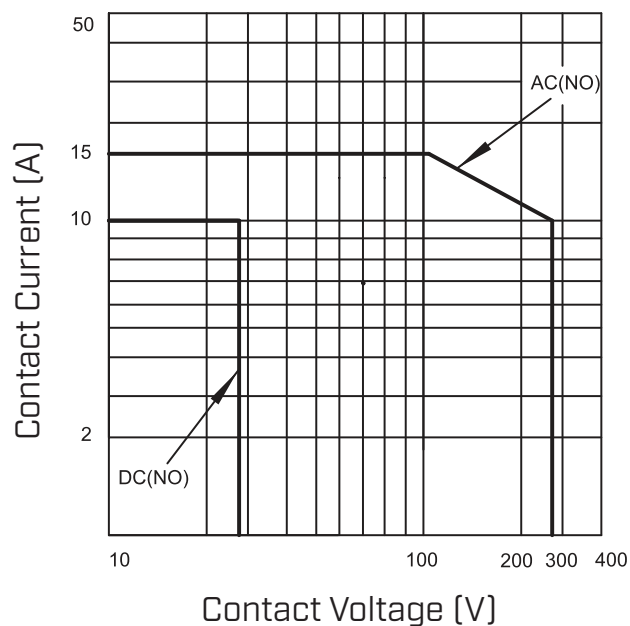
Test Conditions:
10 A at 85°C
Mounting Distance: 10 mm

Life Curve



Test Conditions:
NO, resistive load, 277 Vac/28 Vdc, flux protection, room temp, 1 second on 9 seconds off
NC, resistive load, 250 Vac, flux protection, room temp, 5 seconds on 5 seconds off

Maximum Switching Power



For plastic sealed type, the venting hole should be opened in electrical life test.

REVISION HISTORY

rev.	description	date
1.0	initial release	02/14/2024

The revision history provided is for informational purposes only and is believed to be accurate.



CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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