

date 02/14/2024

page 1 of 6

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 (Ω±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

PR25 - XX - S - 360 - XX - X X

Base Number

Coil Voltage (Vdc):

Contact Form:

Sealing: "blank" 3 = Flux Protection

E = Epoxy Sealed

Coil Insulation: "blank" = Class B

F = Class F

5V = 5 9V = 9

6V = 6

12V = 12 18V = 18

1A = 1 Form A

1C = 1 Form C

24V = 24 36V = 36 48V = 48

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

COIL SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
coil power	nominal		360		mW
coli powei	at pickup voltage		203		mW
	Class B models at 20°C			1.8	W
coil power continous dissipation	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	AgSnO₂ (silver tin oxide)			
	1 Form A 10 A @ 277 Vac 15 A @ 125 Vac			
contact rating	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 30	Vac Vdc
max switching current	Vac Vdc		15 10	A A
max switching power	Vac Vdc		2,770 300	VA W
life	electrical: at 277 Vac, resistive mechanical	100,000 1,000,000		operations operations

GENERAL SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
insulation resistance	at 500 Vdc, 20 °C, 50% RH	100			МΩ
dielectric strength	between open contacts at sea level for 1 minute between coil and contacts at sea level for 1 minute		1,000 1,500		Vrms 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 Class F models at nominal coil voltage	-40 -40		70 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

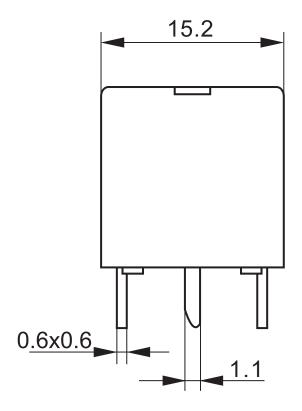
parameter	conditions/description	min	typ	max	units
wave soldering	for max 5 seconds			270	°C
washable	only on epoxy sealed models max imersion time of 30 seconds			80	 °C

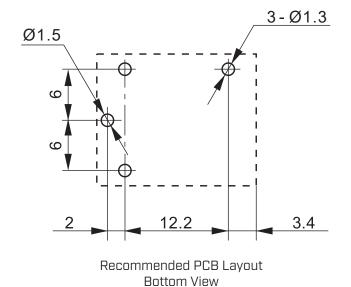
MECHANICAL DRAWING (1A = 1 FORM A)

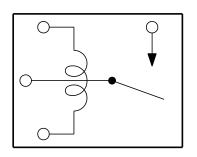
units: mm [inch] tolerance: ±0.254 mm unless otherwise noted

19	-	
		15.5
0.4	0	3.5 ^{+0.4*} -8x0.3

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







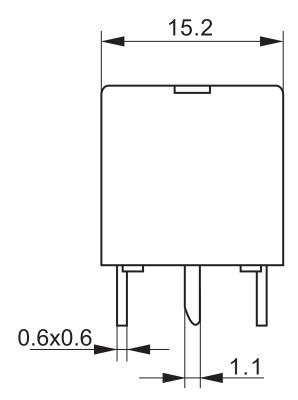
Wiring Diagram Bottom View

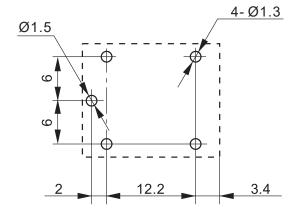
MECHANICAL DRAWING (1C = 1 FORM C)

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

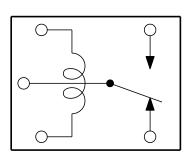
19	-	
		15.5
0.4	0	3.5 ^{+0.4*} .8x0.3

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





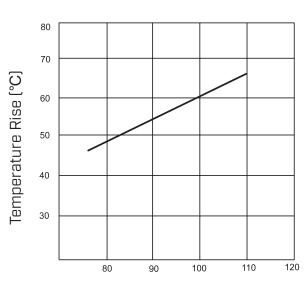
Recommended PCB Layout Bottom View



Wiring Diagram Bottom View

CHARACTERISTIC CURVES

Coil Temperature Rise

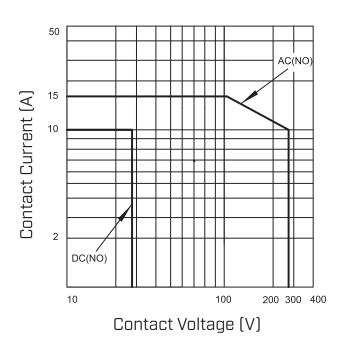


Percentage of Nominal Coil Voltage (%)

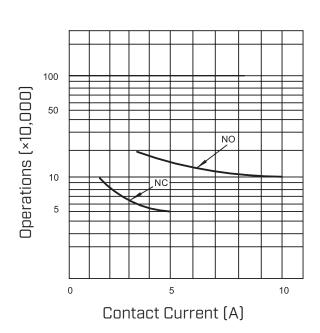
Test Conditions: 10 A at 85°C

Mounting Distance: 10 mm

Maximum Switching Power



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

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.

CUI Devices reserves the right to make changes to the product at any time without notice. Information provided by CUI Devices is believed to be accurate and reliable. However, no responsibility is assumed by CUI Devices for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI Devices products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.