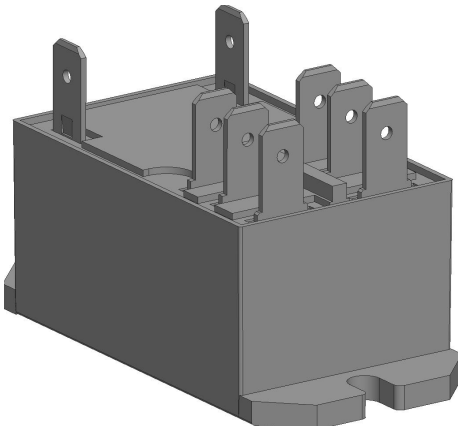
40 AMP MINIATURE POWER RELAY



Features:

- ◇DPST-NO and DPDT configuration
- ◇Meets 8mm creepage, 4kV dielectric
- ◇Epoxy sealed versions available
- ◇UL Class F (155°C) standard
- ◇UL

Product Model

PR60 -2A -5D -F

- Product family
- Contact type: 2A、2B、2C
- Coil voltage: See table
- Coil pin specifications: F、KF、PF

Product family	Contact type	Coil voltage	Coil pin specifications	illustrate
PR60	2A 2B 2C	5D 6D 12D 24D 48D 110D 12A5 24A5 120A5 220A5 240A5 277A5 12A6 24A6 120A6 220A6 240A6 277A6	F KF PF	Contact Type: 2A: 2 groups of normally open contacts 2B: 2 groups of normally closed contacts 2C: 2 groups of conversion contacts Coil voltage: 24D: DC 24V 24A5: AC 24V 50Hz 24A6: AC 24V 50/60Hz Coil pin specifications: F: The coil pin specification is 6.35×0.8 KF: The coil pin specification is 4.75×0.5 PF: The coil pin specification is PCB pin type

High-protection type: Add the letter "E" after the coil voltage. For example: PR60-2A-24DF changed to PR60-2A-24DEF
The coil pin specification is 4.75×0.5: replace "F" with "KF". For example: PR60-2C-24A6F changed to PR60-2C-24A6KF
The coil pin specification is PCB pin type: replace "F" with "PF". For example: PR60-2C-24A5F changed to PR60-2C-24A6PF

CONTACTS

Arrangement	DPST(2 Form A) DPDT(2 Form C)
Ratings	Resistive load: Max. switched power: 1200 W or 11080 VA Max. switched current: 40A (N.O), 3A (N.C.) Max.switchedvoltage:30VDC*or600VAC *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
Rated Load UL	Normally open contacts (N.O.) 40A at 277VAC, Resistive, 30k cycles [1][2] 30A at 277VAC, General Use, 100k cycles [1][2] 10A at 600VAC, General Use, 6k cycles [1] 1HP at 120VAC, 100k cycles [1][2] 2.5HP at 240VAC, 100k cycles [1][2] 8FLA / 26LRA at 277/480/600VAC, 30k cycles [1] Normally open contacts (N.O.), DC Coils only 25.3FLA / 110LRA at 240VAC, 30k cycles [1][2] Normally closed contacts (N.C.) 3A at 277VAC, General Use, 100k cycles [1][2] 2A at 480VAC, General Use, 6k cycles [1] 1A at 600VAC, General Use, 6k cycles [1] 3FLA / 3LRA at 240VAC, 30k cycles [1] 2FLA / 2LRA at 277/480VAC, 30k cycles [1] 1FLA / 1LRA at 600VAC, 30k cycles [1]
VDE	Normally open contacts (N.O.) 20A at 250VAC, Resistive, 50k cycles [2] Normally closed contacts (N.C.) 3A at 250VAC, Resistive, 50k cycles [2]
Material	Silver cadmium [1], silver tin oxide [2]
Resistance	<50 milliohms initially (24V, 1A voltage drop method)

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 5 x 10^6 1 x 10^5 at 30A, 277VAC Res. (N.O.)
Operate Time	15ms typical 25ms maximum with bounce
Release Time	10ms typical 25ms maximum with bounce (with no coil suppression)
Dielectric Strength （at sea level for 1 min.）	1500Vrms contact to contact 4000Vrms contact to coil 2000Vrms between contact sets
Insulation Resistance	10^9 ohms minimum at 500VDC
Dropout	DC:Greater than 10%of nominal coil voltage AC: Greater than 20%of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage DC: -40°C (-40°F) to 85°C (185°F) AC: -40°C (-40°F) to 65°C (149°F) -40°C (-40°F) to 105°C (221°F)
Vibration	0.062" (1.65mm) DA at 10–55Hz
Shock	Operational, 10g for 11ms 1/2 sine pulse (no contact opening > 100usec) Non-destructive, 100g for 11ms 1/2 sine pulse
Enclosure	P.B.T. polyester
Terminals	Quick connect tabs Note: Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	86 grams
Packing unit in pcs	20 per plastic tray / 100 per carton box

Coil

Power	
At Pickup Voltage	925mw.DCcoil
（typical）	2.6VA AC coil
Max. Continuous	5.0Wat20°C(68F）ambient DC oo
Dissipation	7.0VA at 20°C（68°F）ambient AC coil
Temperature Rise	48C86°Fatnominal coilvoltage，DCcoil 68C(122F）atnominal coi voltage,AC coil
Temperature	Max. 155°C (311°F)

NOTES

1. All values at 20°C (68°F).
2. Relay may pull in with less than “Must Operate” value.
3. Specifications subject to change without notice.

RELAY ORDERING DATA

COIL SPECIFICATIONS – DC Coil					ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA ± 10%	Coil Resistance Ohm ± 10%	
5	3.8	8.0	326.7	15.3	PR60–2C–5D
6	4.5	10.5	272.0	22	PR60–2C–6D
12	9.0	20.7	140.0	86	PR60–2C–12D
24	18.0	41.8	68.5	350	PR60–2C–24D
78	36.0	83.4	34.5	1390	PR60–2C–48D
110	82.5	190.5	15.2	7255	PR60–2C–110D

COIL SPECIFICATIONS – AC Coil						ORDER NUMBER*
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Nominal Current mA ± 10%	50Hz Coil Resistance Ohm ± 10%	60Hz Coil Resistance Ohm ± 10%	
12	9.6	15.6	340.0	9.5	8	PR60–2C–12A6
24	19.2	31.2	166.0	45	35.7	PR60–2C–24A6
120	96.0	156.0	33.3	1125	830	PR60–2C–120A6
220	176.0	286.0	18.2	3800	2870	PR60–2C–220A6
240	192.0	312.0	16.7	4500	3800	PR60–2C–240A6
277	221.6	360.1	14.4	5960	4700	PR60–2C–277A6

* Substitute “2A” in place of “2C” to indicate 2 Form A contacts.

“2A” or “2C” denotes silver cadmium contacts.

Add suffix “E” to “2A” or “2C” for silver tin oxide contacts.

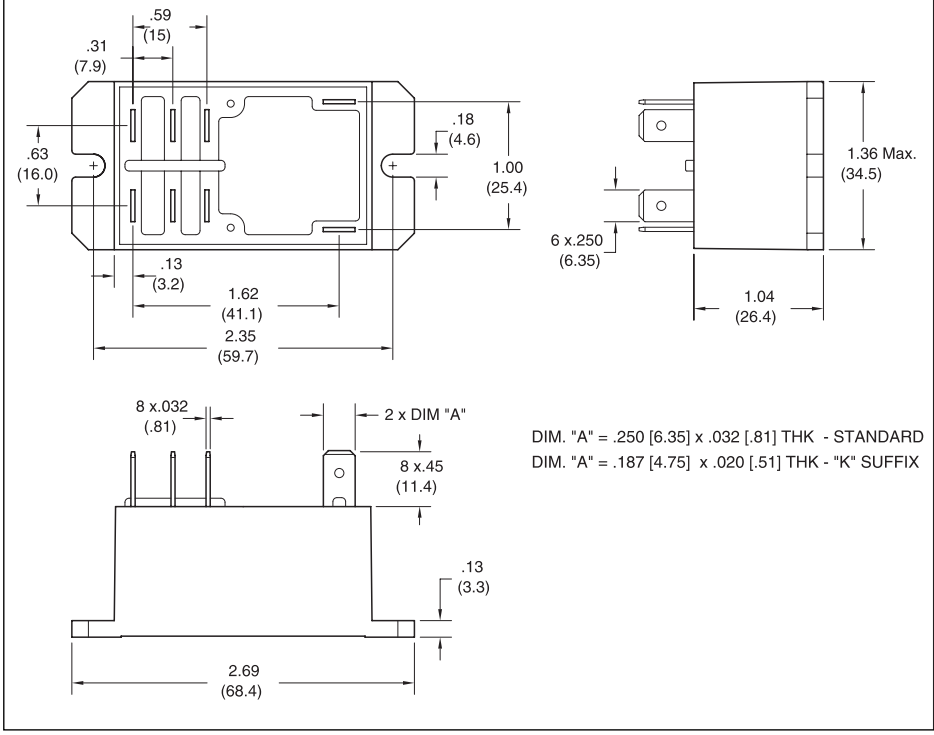
Add suffix “5” for 50Hz coil, AC coils only. (Example: PR60-2C-24A5).

Add suffix "6" for 50/60Hz coil, AC coils only. (Example: PR60-2C-24A6).

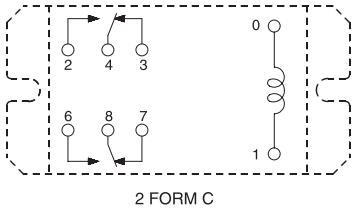
Add suffix “E” at the end of order number for sealed version.

Add suffix “K” for 0.187” x 0.020” (4.8mm x 0.5mm) coil terminals

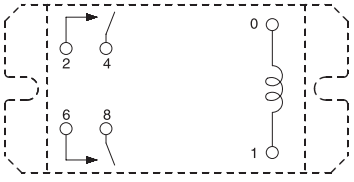
MECHANICAL DATA



WIRING DIAGRAM



2 FORM C



2 FORM A

VIEWED TOWARD TERMINALS