



KU series relays

KUP ENCLOSED RELAY
KUIP VDE 8 mm COIL TO CONTACTS
KUGP VDE 8 mm 3 mm GAP COIL TO CONTACTS
KUEP 10 AMP 150VDC LOAD SWITCHING
KUMP 15 AMP 277VAC

File E22575

File LR15734

0435 Registration 1792 (KUIP)

0435 Registration 1792 (KUGP)

License 81.12102.01

FEATURES

- AC coils: 6-240VAC, 50/60 Hz. DC: 6-110VDC.
- Contact arrangement up to 4PDT.
- Wide selection of termination and mounting styles.
- PC terminals available.
- Push to test button and indicator lamps.
- KUEP incorporates a blow out magnet for high voltage DC switching.
- KUIP/KUGP are VDE approved.
- Complete line of sockets and DIN rail.
- Class B coil insulation.

CONTACT DATA @ 25 C

Arrangements: See respective ordering information table.
Materials: Fine silver (5 amp) silver-cadmium oxide (10 amp).
 Gold flash available as standard.
 Gold diffused and gold alloy on special order.
Expected Mechanical Life:

CONTACT RATINGS

Material	Arrangement	UL/CSA Ratings	Expected Life
Fine Silver	All	5 amps @ 28VDC or 240VAC 80% PF, 2.5 amp tungsten @120VAC, 1/2 amp @ 120VDC.	100,000
		1/6 HP @120VAC, 1/3 HP @ 240VAC, 5 FLA, 15 LRA @ 250VAC (FLA covered by 30,000 operations).	
Silver-Cadmium Oxide	1-2 Pole KUP KUIP KUGP KUEP All KUMP	10 amps @ 28VDC or 240VAC, 80% PF, 5 amp tungsten @ 120VAC, 3A 600VAC, 1/2 amp @ 120VDC.	100,000
		1/3 HP @ 120VAC, 1/2 HP @ 240, 480, and 600VAC, 10 FLA 30 LRA @ 120VAC, 5 FLA, 15 LRA @ 250VAC. (FLA ratings covered by 30,000 operations)	
	KUMP	15 amp @ 277VAC, 80% PF KUM KUMP	100,000
	3 Pole KUP KUIP	10 amp @ 28VDC or 120VAC, 80% PF, 6 2/3 amp @ 240VAC, 80% PF	100,000
	4 Pole	10 amp per pole not to exceed 30 amp total @ 28VDC, 120VAC, 80% PF, 6 2/3 amp @ 240VAC, 80% PF	100,000
	KUEP SPST-NO KUEP 2PST-NO KUEP 2PDT	10 amp @ 150VDC 5 amp @ 150VDC 3 amp @ 150VDC	100,000

(All other AC ratings apply KUEP)

INITIAL DIELECTRIC STRENGTH

Between Open Contacts: 1,200V rms; KUGP, 3,500V rms.
Between Adjacent Contacts: 2,200V rms.
Between Contacts and Coils: 2,200V rms; KUGP, KUIP, 3,750V rms.

COIL DATA @ 25 C

Voltage: 6 to 110VDC and 6 to 240VAC.

Nominal Coil Power:

DC Coils: 1.2 Watts - KUP, KUIP, KUMP, 1 - 3 pole; KUEP, 1 pole.

DC Coils: 1.8 Watts - KUP, 4 pole; KUEP, 2 pole; KUGP.

AC Coils: 2.0VA - KUP, KUIP, 1 - 2 pole; KUEP, 1 pole.

AC Coils: 2.7VA - KUP, KUIP, 3 pole; KUEP, 2 pole; KUGP, KUMP.

COIL DATA

DC Volts Nominal	1.2 Watt		1.8 Watt	
	DC Ohms ± 10%	Nom. I ma	DC Ohms ± 10%	Nom. I ma
5	21	238	14	360
6	32.1	187	20	300
12	120	100	80	150
24	472	51	320	75
48	1,800	26.7	1,260	38
110	10,000	11	6,720	16

AC Volts Nominal	2VA		2.7VA	
	DC Ohms ± 15%	Nom. I ma	DC Ohms ± 15%	Nom. I ma
6	6	335	4.2	460
12	24	168	18	230
24	85	84	72	115
120	2,250	17.5	1,700	24
240	9,110	8.75	7,200	12

OPERATE DATA @ 25 C

Must Operate Voltage:

DC Coils: 75% of nominal voltage or less.

AC Coils: 85% of nominal voltage or less.

Operating Time (Excluding Bounce):

15 milliseconds, typical, at nominal voltage.

Release Time (Excluding Bounce):

10 milliseconds, typical, at nominal voltage.

ENVIRONMENTAL DATA

Temperature Range:

Operating: Enclosed Relays: -45°C to maximum listed in table below.

Open Relays: Add 15°C to maximum listed.

Max C°	+45°C	+50°C	+55°C	+70°C	+75°C	+80°C	+95°C
KUP	AC	DC	AC	DC			
	3-4 pole	4 pole	1-2 pole	1-3 pole			
KUIP				AC		AC	DC
				3 pole		1-2 pole	1-3 pole
KUGP				AC	DC		
				2 pole	2 pole		
KUEP	AC	DC	AC	DC			
	2 pole	2 pole	1 pole	1 pole			
KUMP	AC		AC	DC			
	3 pole		1-2 pole	1-3 pole			