



# KUH series

## 30 AMP POWER RELAYS

File E22575  
File LR15734-123

### FEATURES

- AC coils 6-277VAC 50/60 Hz., DC 6-110VDC.
- Contact arrangement up to DPDT.
- .250" combination push-on/solder terminals or PC terminals.
- Side flange and top flange mounting.
- Designed to meet VDE space requirements.
- Class B coil insulation.

### CONTACT DATA @ 25 C

**Arrangements:** 1 Form C (SPDT) and 2 Form C (DPDT).  
**Material:** Silver or silver-cadmium oxide.  
**Expected Mechanical Life:** 10 million operations.

### CONTACT RATINGS

Contact Arrangement	UL/CSA Ratings	Expected Life
1 Form C Single Pole Double Throw	30A 120/240VAC 1 HP @ 120VAC, 1 1/2 HP @ 240VAC 25A @ 28VDC	100,000 ops.
2 Form C Double Pole Double Throw	20A @ 120/240VAC 3/4 HP @ 120VAC 1 1/2 HP @ 240VAC 20A @ 28VDC 7A @ 120VAC (Tungsten)	100,000 ops.

### INITIAL DIELECTRIC STRENGTH

**Between Open Contacts:** 1,200V rms.  
**Between Adjacent Contacts:** 3,750V rms.  
**Between Contacts and Coil:** 3,750V rms.  
**Between Coil and Frame:** 2,000V rms.

### COIL DATA @ 25 C

**Voltage:** 6-110VDC and 6-277VAC.  
**Nominal Power:**  
DC Coils: 1.2 Watts.  
AC Coils: 2.7VA.  
**Duty Cycle:** Continuous.  
**Initial Insulation Resistance:** 100 megohms, min.  
**Insulation:** Class B, 130°C.

### ORDERING INFORMATION

Typical Part No. >		KUH- 11 A 1 2 -120				
<b>1. BASIC SERIES AND TYPE:</b> KUHP = Enclosed 20/30 amp relay.						
<b>2. CONTACT ARRANGEMENT &amp; RATING:</b> 1 = 1A (SPST-NO); 30 amps.      11 = 2C (DPDT); 20 amps. 5 = 1C (SPDT); 30 amps.						
<b>3. COIL INPUT:</b> A = AC, 50/60 Hz.      D = DC						
<b>4. MOUNTINGS:</b> KUHP 1 = PLAIN CASE 5 = BRACKET MOUNT CASE T = TOP FLANGE						
<b>5. TERMINALS &amp; CONTACT MATERIALS:</b> 1 = .250" (6.35 mm) quick connect/solder; silver-cadmium oxide.      7 = .047" (1.19 mm) printed circuit; silver-cadmium oxide.						
<b>6. COIL VOLTAGE:</b> AC coils to 277VAC, 50/60 Hz.      DC coils to 110VDC.						

**STOCK ITEMS** – The following items are normally maintained in stock for immediate delivery.

- |               |               |              |               |                |               |               |
|---------------|---------------|--------------|---------------|----------------|---------------|---------------|
| KUHP-5A51-24  | KUHP-5AT1-120 | KUHP-5D51-24 | KUHP-5DT1-24  | KUHP-11AT1-120 | KUHP-11D51-24 | KUHP-11DT1-24 |
| KUHP-5A51-120 | KUHP-5D51-12  | KUHP-5DT1-12 | KUHP-11A51-24 | KUHP-11D51-12  | KUHP-11DT1-12 |               |

### COIL DATA

	Nominal Voltage	DC Resistance in Ohms ± 10%*	Must Operate Voltage	Nominal Coil Current (mA)
DC Coils	6	32.1	4.5	187
	12	120	9.0	100
	24	472	18.0	51
	48	1,800	36.0	26.7
	110	10,000	82.5	11
AC Coils	6	4.2	5.1	460
	12	18	10.2	230
	24	72	20.4	115
	120	1,700	102.0	24
	240	7,200	204.0	12
	277	10,250	235.5	9

\*±15% for AC coils.

### OPERATE DATA @ 25 C

**Must Operate Voltage:**  
DC Coils: 75% of nominal.  
AC Coils: 85% of nominal.  
**Operate Time (Excluding Bounce):** 20 milliseconds, typical, at nominal voltage.  
**Release Time (Excluding Bounce):** 20 milliseconds, typical, at nominal voltage.

### ENVIRONMENTAL DATA

**Temperature Range:**  
**Operating: DC Coils:**  
Open: -45°C to +85°C.  
Enclosed: -45°C to +70°C.  
**Operating: AC Coils:**  
Open: -45°C to +60°C.  
Enclosed: -45°C to +45°C.  
**Shock:** 15 Gs, 11 ms (non-operating).  
**Vibration:** .065" double amplitude, 10-55 Hz.

### MECHANICAL DATA

**Termination:** .250" quick connect/solder; and PC board.  
**Enclosure:** Polycarbonate dust cover.  
**Weight:** 3.2 oz. (92 g) approximately.