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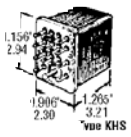
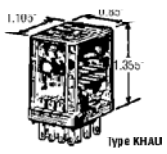
KH Series Miniature 4PDT Relays





Coil Data for Series KH Relays

DC Coils (0.5-2 Watts)			AC Coils (1.20 VA)		
V	Resistance in Ohm ±10% @ 25°C	Induct in H (approx.)	V	Resistance in Ohm ±10% @ 25°C	Induct in H (approx.)
6	40	0.08	12	43	100.00
12	160	0.28	24	160	52.00
24	650	1.00	120	2900	11.00
110	11 K	17.00	—	—	—

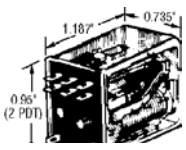
► **Small, Rugged Relays for AC and DC Operations**

KHAU relays are manufactured using automated techniques to provide dependable, low cost switching in a package only slightly larger than a cubic inch. KHAU has smoke-grey polycarbonate dust cover. KHS, hermetically sealed with metal cover. All models U.L. Recognized. KHS is recognized for class 1 division 2 hazardous environments. Silver contacts, rated 3 amps at 28 VDC, or 120 VAC res. Solder term, 3-48 mtg. stud. 2 oz. (57 g). All fit KH series sockets.

Stock No.	Mfr.'s Type	Coil Volts	EACH			
			1-24	25-49	50-99	100-249
886-0567	KHS-17D11-12	12 DC	**45.52**	**42.40**	**40.15**	**38.78**
886-0563	KHS-17A11-24	24 AC	**48.94**	**46.52**	**44.06**	**42.60**
886-0568	KHS-17D11-24	24 DC	**46.61**	**42.37**	**38.84**	**35.86**
886-0564	KHS-17A11-120	120 AC	**51.12**	**46.47**	**42.62**	**39.32**
886-0302	KHAU-17A11-12	12 VAC	**7.51**	**7.13**	**6.88**	**5.82**
886-0303	KHAU-17A11–24	24 VAC	**7.74**	**6.96**	**6.32**	**5.84**
886-0304	KHAU-17A11–120	120 VAC	**8.52**	**7.68**	**6.98**	**6.43**
886-0305	KHAU-17D11–6	6 VDC	**7.41**	**6.67**	**6.06**	**5.59**
886-0306	KHAU-17D11–12	12 VDC	**7.41**	**6.67**	**6.06**	**5.59**
886-0307	KHAU-17D11–24	24 VDC	**6.54**	**5.77**	**5.24**	**4.84**
886-0308	KHAU-17D11–110	110 VDC	**7.82**	**7.04**	**6.39**	**5.90**

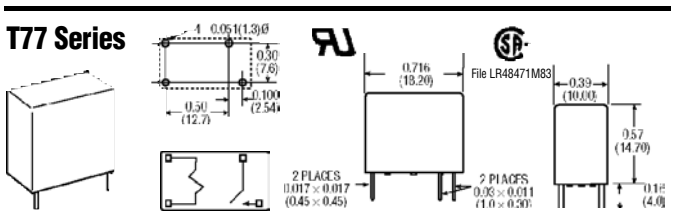
S87 20-Amp Power Relays

Contact Rating: 20 amps, 277 VAC; 60 LRA, 12 FLA, 1 HP at 125 VAC; 48 LRA, 8 FLA, 2 HP at 250 VAC; pilot duty, 360 VA, 125-250 VAC. **Life Expectancy:** 50,000 operations at full load; 1 million operations, mechanical. **Operating Temperature Range:** –10° to +65°C. **Mounting:** One 0.166" (4.21 mm) diameter mounting hole and 0.160" (4.06 mm) diameter boss. **Termination:** 0.250" (6.35 mm) quick-connect. UL Recognized.



Stock No.	Mfr.'s Type	Coil Volts	Contacts	EACH			
				1-24	25-49	50-99	100-249
886-1291	S87R5A2B1D1-120	120 AC	SPDT	**14.01**	**13.21**	**12.37**	**11.75**
886-1292	S87R5D2B1D1-12	12 DC	SPDT	**13.74**	**13.05**	**12.25**	**11.67**
886-1293	S87R5D2B1D1-24	24 DC	SPDT	**13.71**	**13.18**	**12.18**	**11.73**
886-1295	S87R11A2B1D1-24	24 AC	DPDT	**26.74**	**24.32**	**22.07**	**20.37**
886-1294	S87R11A2B1D1-120	120 AC	DPDT	**21.19**	**20.14**	**18.88**	**17.14**

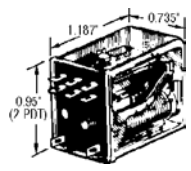
T77 Series



Up to 10 amp miniature PCB relay. Small size for high density PC Board mounting. 1 form A (SPST-NO) contact arrangement. Creepage spacings of 6.5 mm between contact and coil. **Contact Material:** Contact Rating 3 — Silver; Contact Rating 10 — Silver alloy. **Enclosure:** V = Vented (flux-tight not suitable for immersion cleaning); S = Plastic epoxy resin sealed. Ideal for appliance and office equipment.

Stock No.	Mfr.'s Type	Voltage	Amps	EACH		
				1-99	100-249	250-Up
886-2135	T77V1D3-12	12 VDC	3	**1.66**	**1.49**	**1.40**
886-2136	T77V1D3-24	24 VDC	3	**1.26**	**1.13**	**1.06**
886-2138	T77V1D10-12	12 VDC	10	**1.66**	**1.44**	**1.31**
886-2139	T77V1D10-24	24 VDC	10	**1.73**	**1.51**	**1.42**
886-2141	T77S1D3-12	12 VDC	3	**1.73**	**1.51**	**1.42**
886-2142	T77S1D3-24	24 VDC	3	**1.52**	**1.32**	**1.24**
886-2144	T77S1D10-12	12 VDC	10	**1.78**	**1.55**	**1.46**
886-2145	T77S1D10-24	24 VDC	10	**1.75**	**1.55**	**1.46**

R10 Series DC Industrial Relays

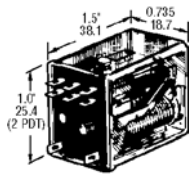


Transparent enclosures. Solder terminals for stud or plug-in mounting. **Mechanical Life:** 100 million operations. Y series contacts are fine silver. X series contacts are silver-cadmium oxide. **Operating Temperature:** –55° to 75°C. **Size:** 1.187 × 0.95 (double pole models only) × 0.735" (3.02 × 2.41 × 1.85 cm) max. **Weight:** 1½ oz. (42.5 gm). **Contact Rating:** Y series — 3 A; X series — 5 A.

Stock No.	Mfr.'s Type	Coil Watts	EACH		
			1-24	25-49	50-99
886-1075	R10-E1Y2-V185*	12 VDC	**13.12**	**12.47**	**11.68**
886-1076	R10-E1Y2-V700*	24 VDC	**13.69**	**12.33**	**11.19**
886-1070	R10-E1Y2-J2.5K*	48 VDC	**16.69**	**15.87**	**14.89**
886-1091	R10-E1X2-115V*	115 VAC	**23.35**	**22.18**	**21.00**
886-1092	R10-E1X4-115V†	115 VAC	**27.30**	**25.95**	**24.57**
886-1050	R10-E1X2-V185*	12 VDC	**14.78**	**13.44**	**12.18**
886-1051	R10-E1X2-V700*	24 VDC	**14.78**	**13.44**	**12.19**
886-1053	R10-E1X4-V185†	12 VDC	**16.72**	**15.88**	**14.89**
886-1054	R10-E1X4-V700†	24 VDC	**19.69**	**18.70**	**17.54**

*2 contacts. †4 contacts.

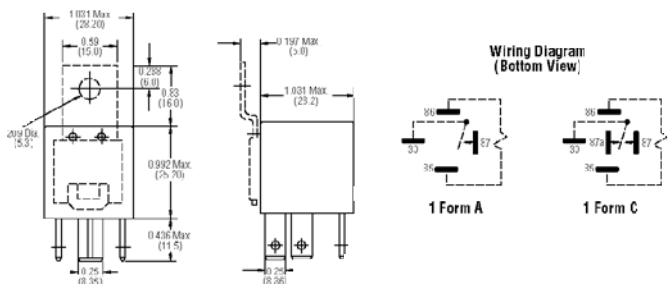
R10S Series CMOS-TTL Compatible Relays



Will accept drive directly from many CMOS and TTL ICs — no interface needed. Contacts are 0.078" in dia. made of fine silver. **Resistive Load Rating:** 28 VDC or 115 VAC form. 0.1 to 3 A max. **Insulation Resistance:** 10,000 meg. at 25°C and 50% R.H. **Typical Capacitance:** Contact-contact, 2 picofarads; coil frame, 30 picofarads; coil-contacts, 2 picofarads. **Temperature Range:** –55°C to 75°C. Has pierced solder terminals. **Weight:** 0.8 to 1.4 oz. **Rated:** 2 amps typ. (3 amps max.).

Stock No.	Mfr.'s Type	Coils			EACH		
		Input	Res. in Ohms	Nom. Power	1-24	25-49	50-Up
886-1160	R10S-E1Y1-J1.0K	3.2 mA	1000	10 mW	**23.71**	**21.56**	**19.75**
886-1170	R10S-E1Y2-J5.0K	2.0 mA	5000	20 mW	**23.47**	**22.29**	**21.11**

VF4 Automotive Relays



Plastic enclosed relay. 40 amp contact rating with 1 Form A and 1 Form C contact arrangements. Quick connect or P.C. board terminals. Standardized design for many automotive applications in the United States. **Contacts:** 1 Form A (SPST-NO) and 1 Form C (SPDT). **Contact Material:** Silver-Nickel. **Operating Voltage:** 12 VDC. **Weight:** Approx 1.1 oz.

Stock No.	Mfr.'s Type	Terminals	Contact	EACH		
				1-49	50-99	100-249
886-1111	VF4-11F11	Quick Connect	SPST-NO	**5.80**	**5.42**	**5.08**
886-0312	VF4-15F11	Quick Connect	SPDT	**4.49**	**3.97**	**3.61**
886-0313	VF4-11F13	P.C. Terminals	SPST-NO	**9.41**	**8.96**	**8.37**
886-0314	VF4-15F13	P.C. Terminals	SPDT	**9.33**	**8.42**	**6.02**
886-0315	VF4-41F11*	Quick Connect	SPST-NO	**4.43**	**3.92**	**3.57**
886-0316	VF4-45F11	Quick Connect	SPDT	**5.23**	**4.63**	**4.20**

*Dust cover with mounting bracket. All others standard dust cover.

For Local Personalized Service Call 1-800-433-5700