

FEATURES

- Broad range of coil options provide sensitivity ranging from 25 to 750mW.
- Various contacts switch from dry circuit to 7.5 amps.
- Many mounting and termination options.
- LED indicator available as an option.

CONTACT DATA @ 25 C

Arrangements: 1 Form A (SPST - NO) through 8 Form C (8PDT) See Ordering Information tables for more details regarding availability.

CONTACT MATERIALS, STYLES & RATINGS @ 25°C+

Contact Code	Contact Material	Contact Style	Coil Codes Available	Contact Ratings		
				Min.	Typ.	Max.
W	Silver-Cadmium Oxide	Single Button	V, Q, S, J	500mA	-	7.5A†
X	Silver-Cadmium Oxide	Single Button	V, Q, S, J	500mA	-	5A‡
M	Silver-Cadmium Oxide	Bifurcated	V, Q, S, J	500mA	-	5A‡
Y	Fine Silver	Single Button	All	100mA	2A	3A
Z	Fine Silver	Bifurcated	All	1mA	100mA	2A
P	Gold overlay on Silver	Bifurcated Crossbar	All	Dry Circuit	1mA	3A
L	Gold-Platinum-Silver	Bifurcated Crossbar	All	Dry Circuit	500µA	250mA

- † Ratings are at 28VDC or 155VAC unless otherwise specified. Total load must not exceed 30A per relay.
- ‡ Use ungrounded frame for AC loads of 5A or greater. Max. ratings are 7.5A at 115VAC and 4A at 28VDC for coil codes S and J.
- § Use ungrounded frame for AC loads of 5A or greater. Max. ratings are 5A at 115VAC and 3A at 28VDC for coil codes S and J.

UL HORSEPOWER CONTACT RATINGS (COIL CODE V ONLY)

Contact Code	No. of Poles	At 110-120VAC	At 220-240VAC
W	1, 2, 4	1/8 HP (3.8A)	1/6 HP (2.2A)
X	1, 2, 4, 6	1/20 HP (1.5A)	1/10 HP (1.5A)

Expected Mechanical Life: 100 million operations, typical. (Except contact code W: 1,000,000 operations, typical.)

TYPICAL EXPECTED LIFE FOR RESISTIVE LOADS @ 25°C

Type	Current	Voltage	Contact Style	Coil Code	Operations††
R10	7.5A	120VAC, 60 Hz.	W	V,S,J	7.5 · 10 ⁴
R10	7.5A	28VDC	W	V	7.5 · 10 ⁴
R10	5.0A	120VAC, 60 Hz.	X,M	V,S,J	5 · 10 ⁴
R10	5.0A	28VDC	X,M	V	5 · 10 ⁴
R10	4.0A	28VDC	W	S,J	2 · 10 ⁴
R10	3.0A	28VDC	X,M	S,J	2 · 10 ⁴
R10	3.0A	28VDC or 120VAC	P	V,S,J	3 · 10 ⁴
R10	2.0A	28VDC	P,Y,Z	V	1.5 · 10 ⁶
R10	2.0A	28VDC	P,Y,Z	S,J	6 · 10 ⁵
R10S	2.0A	28VDC	P,Y,Z	J	5 · 10 ⁵
R10	1.0A	28VDC	P,Y,Z	V,S,J	12 · 10 ⁶
R10	1.0A	28VDC	P,Y,Z	SS,JJ	5 · 10 ⁵
R10S	1.0A	28VDC	P,Y,Z	J	1 · 10 ⁶
R10	500mA	28VDC	P,Y,Z	SS,JJ	5 · 10 ⁶
R10	250mA	48VDC	L	SS,JJ	5 · 10 ⁵
R10	100mA	28VDC or 120VAC	P,Y,Z	V,S,J	1 · 10 ⁸
R10	100mA	48VDC	P,Z	SS,JJ	5 · 10 ⁶
R10	100mA	6VDC	P,L	SS,JJ	5 · 10 ⁷
R10S	100mA	28VDC or 120VAC	P,Y,Z	J	1 · 10 ⁶
R10	50mA	6VDC	P,Z	V,S,J	5 · 10 ⁷
R10S	30mA	6VDC	P,Z	J	5 · 10 ⁶
R10	1mA	6VDC	P,L	SS,JJ	5 · 10 ⁷
R10	10µA	10mV	L	V,S,J	5 · 10 ⁷
R10S	10µA	10mV	L	J	5 · 10 ⁶

†† Relay operated at rated coil voltage or 133% of pick-up current or higher.

INITIAL DIELECTRIC STRENGTH

Between Open Contacts: 500V rms, for contact codes P, Z and L.
1,000V rms for contact codes W, X, M and Y with coil code V.

Between All Other Conductors: 1,000V rms.

R10 series

**GENERAL PURPOSE
DRY CIRCUIT TO 7.5 AMP
MULTICONTACT AC OR DC RELAY**

- R10-E – Clear Dust Cover Version
- R10-R – Sealed, Immersion Cleanable Type
- R10S – Super Sensitive, Logic Compatible
- R10-T – Octal-style Plug-in Base

File E22575 (E29244 for R10S & R10-T)

File LR15734 (except 8 pole types)

CAPACITANCE

Between Contacts: 2 pf, typ.
Between Contacts and Coil: 2 pf, typ.
Between Coil and Frame: 30 pf, typ.

INITIAL INSULATION RESISTANCE

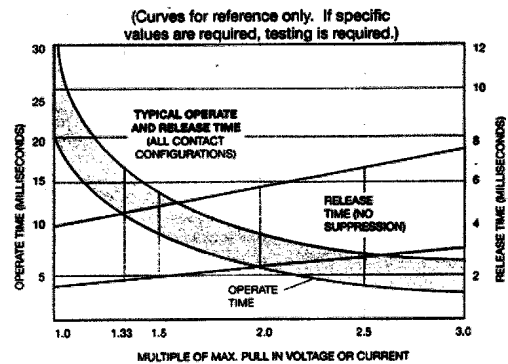
Between Mutually Insulated Elements: 10¹⁰ ohms @ 25°C, 50% RH.
Consult factory for optional acetal resin material rated 10¹² ohms.

COIL DATA @ 25 C (also see Coil Data Tables)

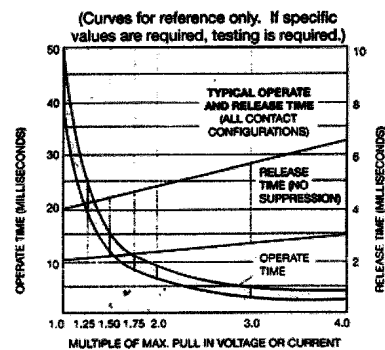
Voltage: 3 to 115VDC and 6 to 115VAC.
Maximum Coil Power: 2.2 Watts.
Coil Temperature Rise: 30°C per Watt.
Maximum Coil Temperature: 105°C

OPERATE DATA @ 25 C

R10 RELAYS (DC ONLY) TYPICAL RANGES OF OPERATIONS



R10 ULTRA-SENSITIVE "SS" AND "JJ" TYPICAL RANGES OF OPERATION



ENVIRONMENTAL DATA

Storage Temperature Range: -55°C to +105°C.
Operating Temperature Range: -55°C to +75°C (except R10L: -55°C to +55°C).

MECHANICAL DATA

Terminal Finish: Tin plating standard.
Weight: 0.8 to 1.4 oz. (23 to 40 g) approximately.