



Series D, Series HV

High Voltage Reed Relays

- Normally Open or Normally Closed Contacts
- PCB or Panel Mount Packages

The Series D Relays are PCB mount High Voltage Relays capable of switching up to 8kV (dc or ac Peak). They have a dielectric strength of 10kV. The DAR Series has very low contact resistance, useful in minimizing errors in instrumentation systems.

The Series HV Relays are panel mount High Voltage Reed Relays capable of switching 10kV (dc or ac Peak) with a dielectric strength of 12.5kV. They are all available Normally Open or Normally Closed and have a life expectancy of millions of operations.

MODEL NUMBERS	FORM A (Normally OPEN)	6HV1A100	12HV1A100	24HV1A100	DAR70510	DAR71210	DAT70510	DAT71210
	FORM B (Normally CLOSED)	6HV1B100	12HV1B100	24HV1B100	DBR70510	DBR71210	DBT70510	DBT71210

COIL PARAMETERS ①

Nominal Working Voltage [Vdc]	6	12	24	5	12	5	12
Working Voltage Range [Vdc]	4.2-7.8	10.5-15.6	18.5-31.2	4-6	10-15	4-6	40-15
Pull-In Voltage (Contact Opens, Form B) [Vdc]	4.2	10.5	18.5	3.7	9	3.7	9
Drop Out Voltage (Contact Closes, Form B) [Vdc]	0.6	1.2	2.4	0.5	1.25	0.5	1.25
Nominal Coil Resistance [Ohms]	25	100	400	28	150	28	150

CONTACT PARAMETERS ①

Maximum Switching Voltage ②	10 kV	10 kV	10 kV	24 Vdc	8000 Vdc
Maximum Switching Current ②	3 A	3 A	3 A	2 Adc	3 Adc
Maximum Contact Rating (peak)	50 W	50 W	50 W	25 W	50 W
Maximum Carry Current	3 A	3 A	3 A	6 Adc	5 Adc
Isolation Between Contacts	12.5 kV	12.5 kV	12.5 kV	10 kVdc	15 kVdc (10 kVdc, DBT7)
Contact Resistance (initial; max.)	0.1 Ohms	0.1 Ohms	0.1 Ohms	0.05 Ohms	0.25 Ohms

RELAY PARAMETERS ①

Operate Time (including bounce)	3 msec.	3 msec. max (2 msec. max. DBR7/DBT7)
Release Time (including bounce)	2 msec.	2 msec. max (3 msec. max. DBR7/DBT7)
Contact to Coil Isolation	12.5 kV	>10 kVdc
Insulation Resistance (@ 500Vdc):		
- Across Contact (typical)	10 ¹³ Ohms	10 ¹³ Ohms
- Across Contact (minimum)	10 ¹⁰ Ohms	10 ¹⁰ Ohms
- Contact to Coil (typical)	10 ¹³ Ohms	10 ¹³ Ohms
- Contact to Coil (minimum)	10 ¹⁰ Ohms	10 ¹⁰ Ohms

GENERAL NOTES

- ① All parameters at 25°C unless otherwise specified.
 ② Cannot exceed max. contact rating.

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For recommended applications and more information contact:

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WEB SITE: <http://www.crydom.com> FASTFAX Product Information: (888) 267-9191

UK: (44)1202 812300 • fax (44)1202 812340 Crydom International Ltd., 85, Condor Close, Woolsbridge Industrial Estate, Three-Legged Cross, Wimborne, Dorset, England BH21 6SU

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GENERAL SPECIFICATIONS

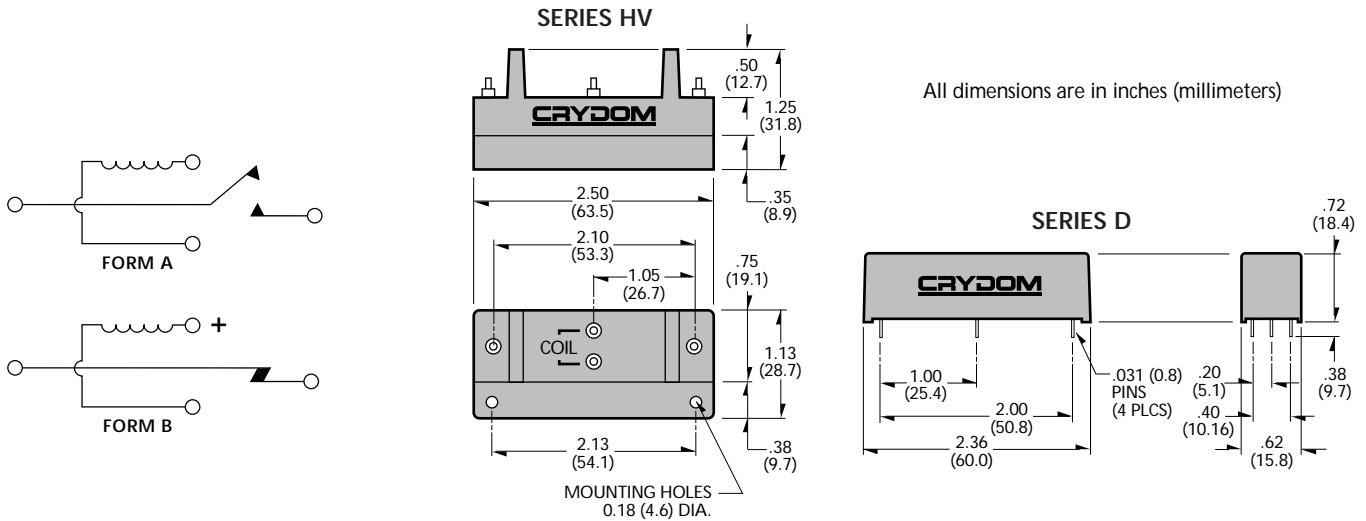
Ambient Operating Temperature Range -20 to 70°C

Ambient Storage Temperature Range -20 to 80°C

MECHANICAL SPECIFICATIONS

	HV	D
Weight: (typical)	2.0 oz. (58g)	1.0 oz. (30g)
Encapsulation:	Thermally Conductive Epoxy	

Encapsulation: Thermally Conductive Epoxy



RELAY LIFE

		DAR/DBR	DAT/DBT	HVIA	HVIB
Mechanical	Operations >	10 ⁹	10 ⁹	10 ⁹	10 ⁹
Dry Circuit	Operations >	10 ⁸	N/A	10 ⁸	N/A
Rated Load	Operations >	10 ⁷	10 ⁶	10 ⁷	10 ⁶

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CONTACT MATERIAL

DBR	-	Rhodium
DBT	-	Tungsten
HVIA	-	Tungsten
HVIB	-	Tungsten

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