

Small 4PDT

Medium 24PDT

# MDR series

## 10 Amp Rotary Relay For Demanding Shock & Vibration Applications

### Features

- AC and DC coils, latching and non-latching.
- 4PDT through 24PDT contact arrangements.
- Contacts will not chatter when relays are subjected to high-impact shock blows of 2000 ft.-lbs.

### Contact Data

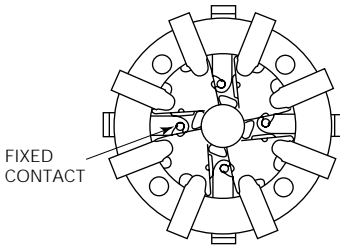
Arrangements: 4 Form C (4PDT) through 24 Form C (24PDT).

### Contact Ratings

Single Contacts	Two Contacts in Series
10A, 115VAC	3A, 440VAC
3A, 28VDC	15A, 115VAC
0.8A, 125VDC	1.5A, 125VDC

The above AC contact ratings are based on contact loads having a 50% power factor. The DC contact ratings are based on resistive loads.

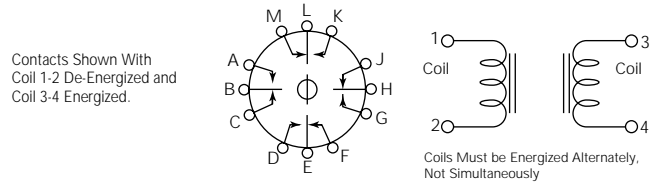
### Contact Section



### Operate Data @ 25°C

Type	Typ. Operate Time (ms)	Typ. Release Time (ms)
Small AC Non-Latching	5 to 12	5 to 18
Small DC Non-Latching	15 to 30	5 to 15
Small AC Latching	6 to 12	N/A
Small DC Latching	10 to 16	N/A
Medium AC Non-Latching	6 to 12	6 to 20
Medium DC Non-Latching	65 to 90	10 to 30
Medium AC Latching	8 to 14	N/A
Medium DC Latching	30 to 80	N/A

**Latching Two-Position Types:** Except for the latching feature, MDR latching relays utilize the same general construction as non-latching types. They have two sets of coils and provide a latching two-position operation.



### Environmental Data

Temperature Range: **Standard models:** 0°C to +65°C.  
**Special order models:** 0°C to +90°C.

### Mechanical Data

Termination: #5-40 screw terminals supplied.  
**Weight (Approx.):**  
**Small** – 4 & 8PDT: 32 oz. (0.914 kg); 12PDT: 33 oz. (0.943 kg).  
**Medium** – 16PDT: 72 oz. (2.04 kg); 24PDT: 74 oz. (2.10 kg).

### Ordering Information and Coil Characteristics – No models in this series are maintained in stock.

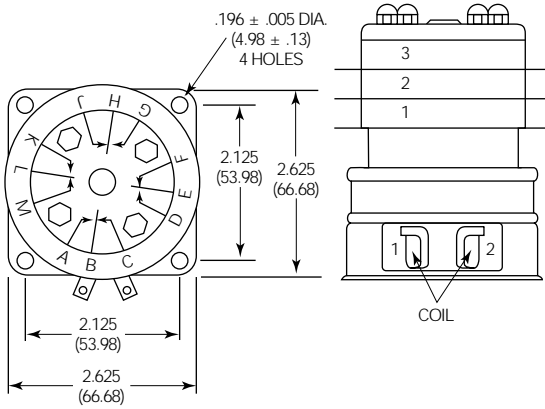
Type	Part Number	Contacts	Coil Voltage (60 Hz. for AC)	Coil Current (Amps)	DC Coil Resistance (Ohms)	Coil Power* (Watts)	Breakdown (Volts RMS)
Small Non-Latching	MDR-131-1	4PDT	115VAC	0.215	66	6.5	1,230
	MDR-131-2	4PDT	440VAC	0.045	1,256	5.1	1,880
	MDR-135-1	4PDT	28VDC	0.362	76	10.0	1,308
	MDR-137-8	4PDT	125VDC	0.082	1,520	10.3	2,375
	MDR-134-1	8PDT	115VAC	0.215	66	6.5	1,230
	MDR-134-2	8PDT	440VAC	0.045	1,256	5.1	1,880
	MDR-136-1	8PDT	28VDC	0.362	76	10.0	1,308
	MDR-138-8	8PDT	125VDC	0.082	1,520	10.3	2,375
	MDR-163-1	12PDT	115VAC	0.230	62	6.9	1,230
	MDR-163-2	12PDT	440VAC	0.055	940	6.3	1,880
Medium Non-Latching	MDR-170-1	16PDT	115VAC	0.620	8.4	17.0	1,230
	MDR-170-2	16PDT	440VAC	0.160	107	17.0	1,880
	MDR-172-1	16PDT	28VDC	0.667	42	18.7	1,308
	MDR-173-1	16PDT	125VDC	0.125	1,024	16.0	2,375
	MDR-141-1	24PDT	115VAC	0.620	8.4	17.0	1,230
	MDR-141-2	24PDT	440VAC	0.160	107	17.0	1,880
	MDR-167-1	24PDT	28VDC	0.667	42	18.7	1,308
	MDR-142-1	24PDT	125VDC	0.125	1,024	16.0	2,375
Small Latching	MDR-67-2	4PDT	115VAC	0.150	210	5.5	1,230
	MDR-4091	4PDT	440VAC	0.020	4,500	3.0	1,880
	MDR-67-3	4PDT	28VDC	0.778	36	21.8	1,308
	MDR-5060	4PDT	125VDC	0.164	760	20.6	2,375
	MDR-4076	8PDT	115VAC	0.150	210	5.5	1,230
	MDR-4092	8PDT	440VAC	0.020	4,500	3.0	1,880
	MDR-5035	8PDT	28VDC	0.778	36	21.8	1,308
	MDR-5061	8PDT	125VDC	0.164	760	20.6	2,375
Medium Latching	MDR-6064	12PDT	115VAC	0.380	24	12.0	1,230
	MDR-6065	12PDT	440VAC	0.055	540	5.7	1,880
	MDR-7020	12PDT	28VDC	0.316	88.6	8.8	1,308
	MDR-7035	12PDT	125VDC	0.083	1,500	10.4	2,375
	MDR-66-4	16PDT	115VAC	0.380	24	12.0	1,230
	MDR-6066	16PDT	440VAC	0.055	540	5.7	1,880
	MDR-7025	16PDT	28VDC	0.316	88.6	8.8	1,308
	MDR-7036	16PDT	125VDC	0.083	1,500	10.4	2,375

\* Actual Wattmeter readings

**Outline Dimensions**

Tolerances: Decimals ± .010 (± .25) Unless Otherwise Specified

**Small Models**

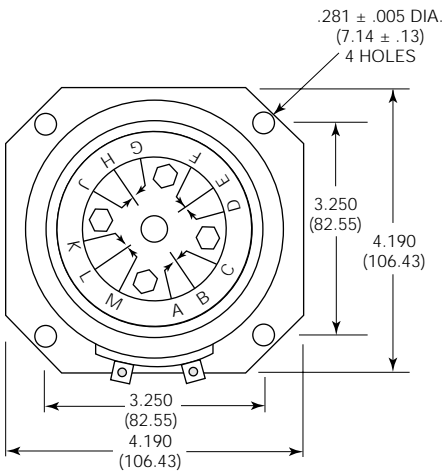


**Overall Height**

- 4PDT 3.13" (79.5mm) Max.
- 8PDT 3.53" (89.7mm) Max.
- 12PDT 3.88" (98.6mm) Max.

Coil and Contact Terminal Screws #5-40 Supplied

**Medium Models**



**Overall Height**

- 12PDT 4.63" (117.6mm) Max.
- 16PDT 5.00" (127.0mm) Max.
- 24PDT 5.75" (146.1mm) Max.

Coil and Contact Terminal Screws #5-40 Supplied

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[2](#) [MDR-173-1](#) [MDR-4040](#) [MDR-4057](#) [MDR-4096](#) [MDR-5166](#) [MDR-5170](#) [MDR-6101](#) [MDR-7033](#) [MDR-7034](#) [MDR-](#)  
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