

## Mercury Relays

### Mercury Displacement Relays — 35 & 60 Amp Resistive Loads



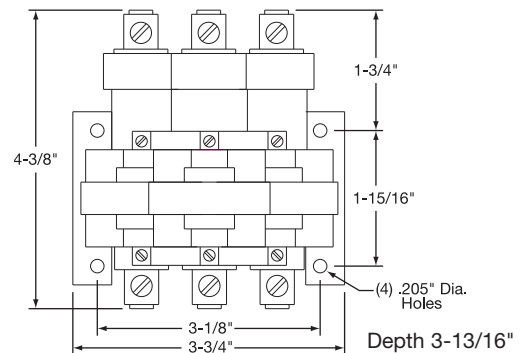
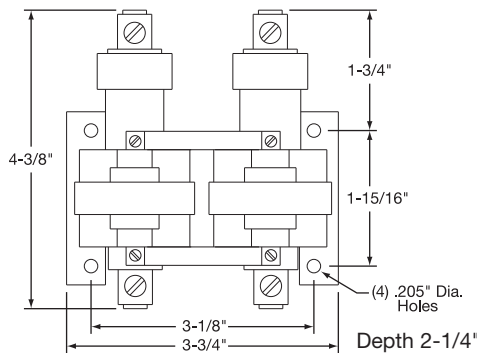
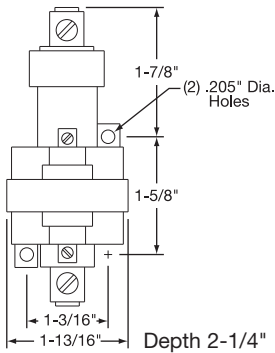
Tempco's Mercury Displacement Relays are specifically designed for resistive loads typical of heating and process equipment. These mercury relays are available in 35 and 60 amp models with single, double and triple pole configurations. Coil voltages range from 24 to 480 Volts AC at 50/60 Hz and 24 Volts DC.

#### Features

Mercury contact action relays are superior to open contact electro-mechanical relays. Mercury relays do not contain springs or button contacts, which tend to wear, weld and burn out. Mercury contacts are capable of rapid on-off cycling in excess of 6 times per minute under resistive loads. This provides more precise process temperature control, and eliminates the noise from the on-off operating cycles of electro-mechanical relays and contactors.

#### Typical Applications

- ➔ Industrial Process Equipment Utilizing Resistive Loads
- ➔ Industrial Ovens
- ➔ Duct Heaters
- ➔ Plastic Injection and Extrusion Machinery
- ➔ Food Processing Equipment



### Standard (Non-Stock) and Stock Mercury Relay Specifications

**Stock Items Are Shown In RED**

Type	Coil Volts	35 AMP RELAYS			Coil Resistance (ohms)	60 AMP RELAYS		TEMPCO Part Number
		Coil Current	Cross Reference MDI	TEMPCO Part Number		Coil Current	Cross Reference MDI	
1 Pole Normally Open	24 VDC	136 mA	35NO-24D	RLY01355	176	136 mA	60NO-24D	RLY01605
	24 VAC	242 mA	35NO-24A	RLY01353	50	259 mA	60NO-24A	RLY01603
	120 VAC	53 mA	35NO-120A	<b>RLY01351</b>	1250	48 mA	60NO-120A	<b>RLY01601</b>
	220 VAC	28 mA	35NO-220A	RLY01352	4800	27 mA	60NO-220A	RLY01602
	277 VAC	20 mA	35NO-277A	RLY01356	7900	19 mA	60NO-277A	RLY01606
	480 VAC	12 mA	35NO-480A	RLY01354	20000	12 mA	60NO-480A	RLY01604
2 Poles Normally Open	24 VDC	272 mA	235NO-24D-18	RLY02355	88	272 mA	260NO-24D-18	RLY02605
	24 VAC	484 mA	235NO-24A-18	RLY02353	25	518 mA	260NO-24A-18	RLY02603
	120 VAC	106 mA	235NO-120A-18	<b>RLY02351</b>	625	96 mA	260NO-120A-18	<b>RLY02601</b>
	220 VAC	56 mA	235NO-220A-18	RLY02352	2400	54 mA	260NO-220A-18	RLY02602
	277 VAC	40 mA	235NO-277A-18	RLY02356	3950	38 mA	260NO-277A-18	RLY02606
	480 VAC	24 mA	235NO-480A-18	RLY02354	10000	24 mA	260NO-480A-18	RLY02604
3 Poles Normally Open	24 VDC	408 mA	335NO-24D-18	RLY03355	59	408 mA	360NO-24D-18	RLY03605
	24 VAC	726 mA	335NO-24A-18	RLY03353	17	777 mA	360NO-24A-18	RLY03603
	120 VAC	159 mA	335NO-120A-18	<b>RLY03351</b>	417	144 mA	360NO-120A-18	<b>RLY03601</b>
	220 VAC	84 mA	335NO-220A-18	RLY03352	1600	81 mA	360NO-220A-18	RLY03602
	277 VAC	60 mA	335NO-277A-18	RLY03356	2633	57 mA	360NO-277A-18	RLY03606
	480 VAC	36 mA	335NO-480A-18	RLY03354	6667	36 mA	360NO-480A-18	RLY03604

NOTE: The 220 VAC coil is used from 208 to 240 VAC.

#### Specifications

- Operate Time:** 50 mSec **Release Time:** 80 mSec
- Contact Rating:** 35 Amp – 600 VAC, 60 Amp – 480 VAC
- Contact Resistance:** 35 Amp – .003Ω, 60 Amp – .002Ω
- Temperature Range:** -31 to 185°F (-35 to 85°C)
- Dielectric Strength:** 2500 VAC RMS
- Agency Approvals:** UL, CSA

**⚠ WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### Ordering Information

Choose the **Part Number** of the relay from the table above that matches the needs for your application. We also offer other styles of Mercury Relays—consult Tempco with your requirements.

**Standard lead time is stock to 5 days.**