

## Weschler Meter Relays

**NEW**

- 3 1/2" & 4 1/2" sizes
- Variety of control, alarm & limit uses
- Direct input immune to RF interference
- Long life LED & phototransistor detector
- Adjustable time delay:  
0-2 or 0-20 seconds
- Single or double control points:  
Jumper selectable high or low acting



▲ **CMT-Y**

Economical replacement for 3.5" and 4.5" meter relays from Beede, LFE and Simpson. Also replaces the Crompton 4.5" meter relays.

### ORDERING INFORMATION

CMT-Y4	4.5" Meter Relay
CMT-Y3	3.5" Meter Relay

Specify range, scale, number of setpoints and type\* (hi or low) when ordering.

\*Failsafe operation is standard.

Made in USA

### SPECIFICATIONS

Accuracy	AC: ±3% of full scale; DC: ±2% of full scale
Movement	Core type, self-shielding with taut band suspension
Tracking	±3%
Repeatability	Within 0.5% of full scale
Relay	DPDT per setpoint 5A @ 120/240VAC resistive
Power	100-132VAC, 50-400Hz, or 8-32DC
Size (W x H x D)	CMT-Y3: 3.25" x 3.25" x 3.4" behind panel CMT-Y4: 4.7" x 4.0" x 3.4" behind panel
Case	Phenolic

Setpoint Adjustment	Front panel knob; Internal jumper selectable Hi/Lo. Single: high limit, 0-100% of arc; Double: high limit 5-100% of arc, low limit 0-95% of arc, adjustable to within 4° of each other
Switching	Within 2% of indication
Auto/Manual Reset	Latching function enabled independently for each relay by removing jumpers on terminal block. Add and replace with a normal open pushbutton switch.
Operating Temperature	+41°F to 122°F (5°C to +50°C)
Dial	90° flattened arc

ANALOG METERS

## Hioki Meter Relays



▲ **2104**

- Electronic Design for High Accuracy and Repeatability
- Ultra-sensitive 1 µA, 10 mV DC Movements
- Illuminated Dial
- One or Two Form C (SPDT) Relays
- Relay Operation Delayed at Power-up

### SPECIFICATIONS

Meter class:	±2.5% class on 2103; ±1.5% class on 2104
Setting accuracy:	±1.5% of scale length
Sensitivity:	DC & AC ammeters: 50mV DC Voltmeters: 10kΩ/V, except 100kΩ/V below 500mV FS AC Voltmeters: 1kΩ/V, except 10kΩ/V below 500mV FS
Type:	AC meters are rectifier type
Minimum H/L interval:	Within 3% of scale length
Relay power up delay:	Approx. 2 second
Relay output response:	Approx. 0.5 second
Contact rating:	5A@250V AC, 30V DC, resistance load
Power supply:	120 or 240V AC ±10%
Dimensions:	2103: 3.31" W x 2.83" H x 4.63" D (84 x 72 x 118 mm) 2104: 4.12" W x 3.48" H x 4.63" D (105 x 89 x 118 mm)
Panel cutout:	2.8" W x 2.53" H (71 x 64mm)

### ORDERING INFORMATION

To Order—Insert Code for Each Letter to Select Catalog Number .

**A** **B** - **C** - **D** Example: 2103HL-120-500mVDC

<b>A</b>	Model	2103	3" meter relay
		2104	4" meter relay
<b>B</b>	Contact Type	H	One relay, activate above setpoint
		L	One relay, activate below setpoint
		HL	One H relay and one L relay
<b>C</b>	Power Supply	120	120VAC ±10%      12      12VDC
		240	240VAC ±10%      24      24VDC
<b>D</b>	Range (self-contained):	DC	1, 10, 20, 50, 100, 200, 500µA 1, 2, 5, 10, 20, 50, 100, 200, 500mA & 4-20mA 1, 2, 5, 10, 20A 10, 30, 50, 100, 150, 300, 500mV 1, 3, 5, 10, 15, 30, 50, 100, 150, 300V & 1-5V
		AC	200, 500µA 1, 2, 5, 10, 20, 50, 100, 200, 500mA 1, 2, 5A 50, 100, 150, 300, 500mV 1, 3, 5, 10, 15, 30, 50, 100, 150, 300V

Full scale >300V available on request.

For full scale >20A DC, use external shunt with 50mV DC meter.

For full scale >5A AC, use external CT with 1A or 5A AC meter.

**Options:** Zero center, expanded scale