

LFE Analog Optical Meter Relays

- 3 1/2" & 4 1/2" Sizes
- Plug-In Control Module
- Plastic Front and Base
- Proven Optical Setpoints
- On/Off or Alarm Control

Plug-in control module mounts directly on rear of meter relay or may be remotely mounted with accessory cable.



▲ 195 Series

SPECIFICATIONS

Accuracy	±2% DC, ±3% AC
Ranges	see table
Power	120V AC, 50/60Hz
Setpoint	High, Low or Double
Relay	DPDT per setpoint 5A @ 120VAC resistive 2A @ 28VDC resistive
Size (H x W x D)	1953: 3.5" x 3.5" x 2.9" 1954: 4.41" x 4.48" x 2.9" add 3.85" depth for control module

RANGES AVAILABLE

DC Ranges	
DC Microamps	50 to 1000
DC Milliamps	1 to 1000
DC Amps	1 to 50
DC Millivolts	20 to 1000
DC Volts	1 to 750
Process Ranges	
DC Milliamps	1-5 4-20 10-50
DC Volts	1-5 0-10
AC Ranges (Rectifier type)	
AC Microamps	100 to 1000
AC Milliamps	1 to 50
AC Amps	5
AC Volts	1 to 500

196 Series also available. Made in USA

More information online at weschler.com/LFE

ANALOG METERS

Hioki Meter Relays

NEW



▲ 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

A	Model	2103	3" meter relay
		2104	4" meter relay
B	Contact Type	H	One relay, activate above setpoint
		L	One relay, activate below setpoint
		HL	One H relay and one L relay
C	Power Supply	120	120VAC ±10% 12 12VDC
		240	240VAC ±10% 24 24VDC
D	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