



DynAmp

# MODEL COP

## Digital Clamp-on Portable Ammeter



### Description

The Model COP combines high current measurement capability, durability, and portability in a single system. The system is comprised of a lightweight, rugged, measurement head and a digital metering unit. Each system provides two user selectable full-scale current ranges.

The model COP is designed to operate in corrosive chemical atmospheres, under wide temperature variations and high magnetic fields. It provides dc current measurement in dual ranges up to 100 kA. Versions are available to measure ac RMS current. Accuracy is  $\pm 2.5\%$ . The measurement head is available in variety of sizes and are interchangeable with a single metering unit.

The COP meter runs on a rechargeable 20-hour nominal use battery. A battery recharging unit is supplied with every COP. Recharging time is 8 to 10 hours.

The Model COP system is intended for use where the operator is either totally electrically isolated or essentially at the same potential as the bus.

### Application

The Model COP is a lightweight, battery powered, portable instrument used to perform spot checks of dc current. This instrument is particularly useful for measurements in very high current environments. The model COP is often used to measure the division of currents in parallel anode or cathode paths. It can be used to verify power rectifier current. The sensor contains no iron, and remains linear even when used in the huge magnetic fields found in electrochemical plants.

### Specifications\*

#### Metering Unit )

##### Input

Full Scale ranges	0-2 kA / 0 - 20 kA 0 - 10 kA / 0 - 100 kA
Accuracy	$\pm 2.5\%$
Linearity error	$\pm 1.0\%$ (10 - 100% F.S.)
Position error	$\pm 1.5\%$
Stray field error (Identical bus 6" away)	$\pm 1.5\%$
Drift rate error (30 second interval)	$\pm 1\%$
Isolation (System)	30 Vac or 60 Vdc peak

#### Output (Optional)

Analogue output signal	
Model 2kA / 20 kA	2.000 V
Model 10 kA / 100 kA	1.000 V

#### Battery Charger

120 Vac (+/- 15%, 50-60Hz)	Specify item no. 045833
230 Vac (+/- 15%, 50-60Hz)	Specify item no. 045834
Battery Pack	Specify item no. 045386

#### Meter unit weight

4.5 lb  
2 kg

#### Storage Temperature

-40 to 70°C  
-40 to 158°F

#### Storage Humidity

85%, non-condensing

\*Expressed in percent of full scale  
Specifications subject to change without notice

### Ordering Information

Please specify:

1. Metering Unit Item No. from table below

Type – FS Range	Mains	Item No.
DC - 2kA / 20kA	120 Vac	045380
	220 Vac	045381
(with analog out)	100 Vac	045439
DC – 10ka / 100kA	120 Vac	045383
	220 Vac (Euro)	045384
	220 Vac (India)	045440
RMS – 2kA / 20kA	120 Vac	045441
	220 Vac	045442
RMS – 10kA / 100kA	120 Vac	045443
	220 Vac	045444

2. Measuring Head Item Number (from page 2)/  
Locate required head size and handle length, specify corresponding item number.
3. Optional spare battery pack and/ or charge

Mode COP Measurement Heads are available in a combination of aperture sizes and handle lengths as shown below. Construction material is high impact high temperature compound that provides electrical isolation and corrosion resistance.

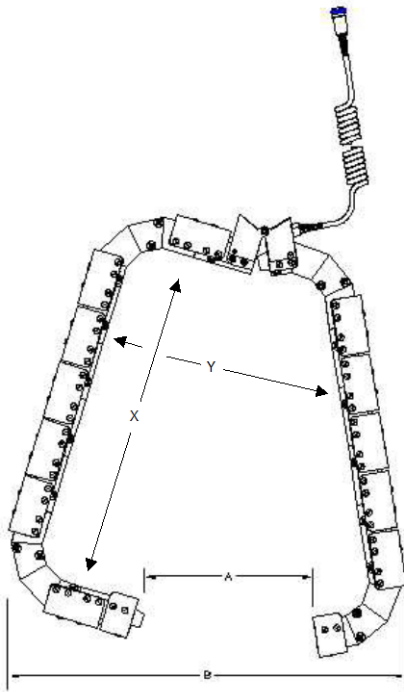


Fig. 1

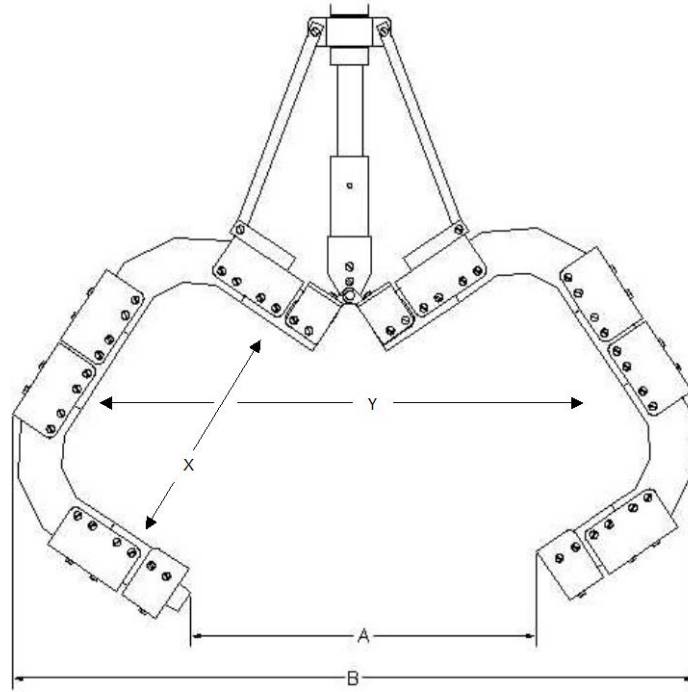


Fig. 2

Note: Add 4.0 inches (2.0 in. per side) to aperture size for total outside dimensions when head is closed, thickness is 2.0 inches.  
X dimension is parallel to handle, Y dimension is perpendicular to handle.

Head Size X x Y	Handle Length				Fig.	Dim A	Dim B
Aperture Dim. (inches)	No Handle	24 in. (610 mm)	48 in. (1220 mm)	72 in. (1829 mm)		(In.)	(In.)
5 x 5	09810	06734	Contact DynAmp	24584	2	5.8	14.0
5 x 8	06735	10008	06920	Contact DynAmp	2	9.0	18.0
5 x 11	15110	40687	17233	Contact DynAmp	2	12.0	21.0
5 x 14	06736	Contact DynAmp	08154		2	12.5	23.5
5 x 17	Contact DynAmp				2	14.5	23.7
8 x 5	09738	06451	06443	09757	1	9.0	17.0
8 x 8	07091	06785	06751	07609	1	8.5	19.5
8 x 11	08335	08332	08972	Contact DynAmp	1	12	23.5
8 x 14	06724	06562	10747		1	15.0	28.0
8 x 17	13327				1	18.0	29.6
11 x 5	Contact DynAmp	09763	13694	09758	2	6.0	15.0
11 x 8	15415	25158	10027	15169	2	9.0	20.2
11 x 11	08069	41474	06412	Contact DynAmp	2	12.0	25.0
11 x 14	09893	Contact DynAmp	16230		2	15.0	29.1
11 x 17	Contact DynAmp				2	18.0	33.1
14 x 5	Contact DynAmp	Contact DynAmp	11580		1	6.0	15.1
14 x 8	09012	Contact DynAmp	26987		1	8.5	20.0
14 x 11	11357	09816	Contact DynAmp		1	15.0	27.8
14 x 14	08199	13140	07799		1	15.0	31.0
14 x 17	Contact DynAmp				1	18.0	35.0
17 x 5	Contact DynAmp	Contact DynAmp			2	6.0	15.20
17 x 8	16167	Contact DynAmp			2	8.6	20.1
17 x 11	Contact DynAmp	Contact DynAmp			2	12.0	26.2
17 x 14	Contact DynAmp	Contact DynAmp			2	15.0	31.2