



# ACD-14-PRO-EUR Dual Display 600 A TRMS Clamp Multimeter

### Test Voltage and Amperage Simultaneously

The ACD-14-PRO-EUR offers a complete range of measuring functions for both HVAC and electrical applications. This modern clamp meter features a large backlit dual LC-Display and is capable of simultaneously displaying voltage and amps. The ACD-14-PRO-EUR is packed with features including TRMS, low pass filter, in-rush current, frequency, resistance, capacitance, temperature, DC micro-amps, Amp-Tip and non-contact voltage detection.

The Amp-Tip function allows for precise measurement of current down to the tenth of an amp for reliable, accurate current measurement of both large and small diameter wires. The low pass filter allows measurement of current and voltage on variable frequency drives (motors with speed controlled by frequency). The meter features a rubber over-mold enclosure that provides extra durability and is safety rated to measurement category CAT III 600 V.

# ACD-14-PRO-EUR Features

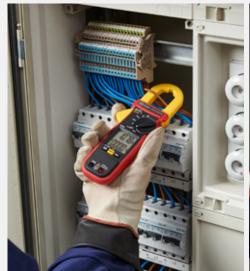
- Large LCD with dual display that can display voltage and amps concurrently
- True-RMS for accurate voltage measurements in noisy environments
- Low pass filter for current and voltage measurements on variable frequency drives
- Amp-Tip function for precise low current measurement down to 0.1 Amp
- HVAC applications with Temperature, DC Micro-amps and Capacitance
- In-rush current
- Temperature
- Non-contact voltage detection (NCV)
- Audible continuity and diode test
- Data hold
- Auto ranging
- Auto Power Off
- Low Battery indicator
- Safety rated, measurement category CAT III 600 V







### **ACD-14-PRO-EUR Key Applications**



The Beha-Amprobe ACD-14-PRO-EUR features low profile jaws to test in tight spaces with TRMS for accurate measurements.



The ACD-14-PRO-EUR has a full set of functions to cover a variety of professional applications.



The ACD-14-PRO-EUR can test and display voltage and current measurements simultaneously with the large backlit LCD dual display, for voltage drop tests and other applications.

**Voltage drop test - dual display** allows user to view voltage and current simultaneously to assess voltage drop for current changing from zero to a maximum value.

Voltage drop test is required by international standards (IEC/HD 60364-6) to ensure normal operation and efficiency. It defines the maximum percentage of the voltage drop between maximum voltage at zero current and minimum voltage at maximum current. This assures that electrical equipment and motors are working within specified voltage to avoid potential damage to electrical components.

**Functions for core HVAC applications:** Temperature measurement (with included thermocouple), capacitance for start-up and run capacitors, and DC micro-amps for flame sensors testing.

**Accurate measurement of current, voltage and frequency** on all electrical systems including distorted, non-sinusoidal signals (True-RMS function).

**Amp-Tip** is a small wire guide that is built into the tip of the main clamp meter jaws. It allows for precise measurement of low-current down to the tenth of an amp on small diameter wires, to provide reliable, accurate measurements.

#### Testing variable frequency drives with low pass filter.

Variable frequency drives are energy efficient motors where speed is controlled by frequency. These motor drives generate high frequency noise, which may cause standard meters to provide erroneous readings when measuring voltage and current. The low pass filter will remove this noise and provide accurate measurements.

**Capacitance measurement** for motor capacitors or compensation capacitors.

**Resistance and continuity** functions to verify quality of electrical connections and to check if motor and transformer coils are working properly.

**In-rush current measurement** to verify maximum current surge during motor start-up. Too high of in-rush current can cause gradual damage of components and may cause fuses or circuit breakers to trip.

**DC micro-amps** range for measurement of flame sensors. Test the proper operation of the flame sensor safety system in gas appliances. A broken sensor in a gas appliance will prevent the safety valve from opening and the appliance will not work.

All Beha-Amprobe tools, including the Beha-Amprobe ACD-14-PRO-EUR, are rigorously tested for safety, accuracy, reliability, and ruggedness in our state-of-the-art test lab. In addition, Beha-Amprobe products that measure electricity are listed by a 3rd party safety lab. This system assures that Beha-Amprobe products meet or exceed safety regulations and will perform in a tough, professional environment for many years to come.



Beha-Amprobe® ©2015 Beha-Amprobe® 13521-eng





# ACD-14-PRO-EUR Dual Display Detailed Specifications

Detailed bpecific	
Features	ACD-14-PRO-EUR
	600 A TRMS Clamp Multimeter
Safety rated, Measurement category	CAT III 600 V
AC Voltage	Range: 0.0 to 600.0 V
(with Digital Low-Pass Filter and True-RMS)	Accuracy: ±1.0% + 5LSD (50 to 60 Hz)
DC Voltage	Range: 0.0 to 600.0 V
-	Accuracy: ±1.0% + 5LSD Range: 0.00 to 600.0 A
AC Current (True-RMS)	Accuracy: ±1.8% + 5LSD (50 to <100 Hz)
,	±2.0% + 5LSD (100 to 400 Hz)
Precise Low Current AC (Amp-Tip)	Range: 0.00 to 60.00 A Accuracy: ±1.5% + 5LSD (50 to 60 Hz)
( I I I I	Range: 0.0 to 2000 µA
DC micro amps	Accuracy: ±1.0% + 5LSD
_	Range: 5.00 to 999.9 Hz
Frequency	Accuracy: ±1.0% + 5LSD (600 V range)
	Range: 0.0 Ω to 60.00 kΩ
Resistance	Accuracy: $\pm 1.0\% + 5$ LSD Range: $> 60.00 \text{ k}\Omega$
	Accuracy: ±1.2% + 5LSD
Capacitance	Range: 200.0 µF, 2500 µF
	Accuracy: ± (2.0 % + 4 LSD)
Diode Test	Range: 0.0 to 3.000 V Accuracy: ± (1.5 % + 5 LSD)
Continuity Boomer	ON ≤ 10 Ω
Continuity Beeper	OFF > 250 Ω
Temperature*	Range: -40.0 to +752 °F, -40.0 to +400 °C
(Type K thermocouple)	Accuracy: ±1.0% + 1.5 °F (-40.0 to +99.9 °F) ±1.0% + 2 °F (+100 to +752 °F)
*K-type thermocouple accuracy tolerances not included	±1.0% + 0.8 °C (-40.0 to +99.9 °C)
not included	±1.0% + 1 °C (+100 to +400 °C)
Non-Contact Voltage	10 to 550 V, 50/60 Hz
Jaw opening	1.18 in (30 mm)
Dual Display	•
True-RMS Low Pass Filter	•
Autoranging	•
Inrush Current	•
Data Hold	•
Backlight	•
Auto Power Off	•
Low battery indication	•
General Specifications	
Polarity	Automatic
Dual Display	Dual-LCD 33/4 -digit, 6000 counts
Update rate	5 per second nominal
Operating temperature	32 to 104 °F (0 to 40 °C)
Relative humidity	80 %RH up to 88 °F (31 °C) decreasing linearly to 50 %RH at 104 °F (40 °C)
Operating altitude	6,562 ft (0 to 2000 m)
Pollution degree	2
Storage temperature	-4 °F to 140 °F (-20 °C to 60 °C), < 80 % RH
Temperature coefficient	Nominal 0.15 x (specified accuracy)/ °C @ (0 °C to 18 °C or 28 °C to 40 °C)
Battery	Two AAA (IEC LR 03) 1.5 V battery
EMC	Meets EN 61326-1
Safety compliance	UL/IEC/EN 61010-1 ed. 3.0, UL/IEC/EN 61010-2-033 ed. 1.0, CAN/CSA C22.2 NO. 61010-1 ed. 3.0, UL/IEC/EN 61010-2-032 ed. 3.0 & IEC/EN 61010-031 ed. 1.1
Certification	C€ ፟
Dimensions (L x W x H):	8.62 x 3.03 x 1.46 in (219 x 77 x 37 mm)
Weight:	approx. 0.46 lb (208 g)
Assessories included: User Manual T	

Accessories included: User Manual, Test leads, Carrying Case, Batteries AAA (2x), Banana Plug K-type Thermocouple

