

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
Dual Display 600 A TRMS Clamp
Multimeter

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.





ACD-14-PRO-EUR Dual Display Detailed Specifications

| Features | ACD-14-PRO-EUR |
|---|--|
| | 600 A TRMS Clamp Multimeter |
| | CAT III 600 V |
| Safety rated, Measurement category | |
| AC Voltage (with Digital Low-Pass Filter and True-RMS) | Range: 0.0 to 600.0 V Accuracy: $\pm 1.0\% + 5\text{LSD}$ (50 to 60 Hz) |
| DC Voltage | Range: 0.0 to 600.0 V Accuracy: $\pm 1.0\% + 5\text{LSD}$ |
| AC Current (True-RMS) | Range: 0.00 to 600.0 A Accuracy: $\pm 1.8\% + 5\text{LSD}$ (50 to <100 Hz) $\pm 2.0\% + 5\text{LSD}$ (100 to 400 Hz) |
| Precise Low Current AC (Amp-Tip) | Range: 0.00 to 60.00 A Accuracy: $\pm 1.5\% + 5\text{LSD}$ (50 to 60 Hz) |
| DC micro amps | Range: 0.0 to 2000 μA Accuracy: $\pm 1.0\% + 5\text{LSD}$ |
| Frequency | Range: 5.00 to 999.9 Hz Accuracy: $\pm 1.0\% + 5\text{LSD}$ (600 V range) |
| Resistance | Range: 0.0 Ω to 60.00 k Ω Accuracy: $\pm 1.0\% + 5\text{LSD}$ Range: > 60.00 k Ω to 6000 k Ω Accuracy: $\pm 1.2\% + 5\text{LSD}$ |
| Capacitance | Range: 200.0 μF , 2500 μF Accuracy: $\pm (2.0\% + 4\text{LSD})$ |
| Diode Test | Range: 0.0 to 3.000 V Accuracy: $\pm (1.5\% + 5\text{LSD})$ |
| Continuity Beeper | ON $\leq 10\ \Omega$ OFF > 250 Ω |
| Temperature* (Type K thermocouple) *K-type thermocouple accuracy tolerances not included | Range: -40.0 to +752 $^{\circ}\text{F}$, -40.0 to +400 $^{\circ}\text{C}$ Accuracy: $\pm 1.0\% + 1.5\ ^{\circ}\text{F}$ (-40.0 to +99.9 $^{\circ}\text{F}$) $\pm 1.0\% + 2\ ^{\circ}\text{F}$ (+100 to +752 $^{\circ}\text{F}$) $\pm 1.0\% + 0.8\ ^{\circ}\text{C}$ (-40.0 to +99.9 $^{\circ}\text{C}$) $\pm 1.0\% + 1\ ^{\circ}\text{C}$ (+100 to +400 $^{\circ}\text{C}$) |
| 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 $^{\circ}\text{F}$ (0 to 40 $^{\circ}\text{C}$) |
| Relative humidity | 80 %RH up to 88 $^{\circ}\text{F}$ (31 $^{\circ}\text{C}$) decreasing linearly to 50 %RH at 104 $^{\circ}\text{F}$ (40 $^{\circ}\text{C}$) |
| Operating altitude | 6,562 ft (0 to 2000 m) |
| Pollution degree | 2 |
| Storage temperature | -4 $^{\circ}\text{F}$ to 140 $^{\circ}\text{F}$ (-20 $^{\circ}\text{C}$ to 60 $^{\circ}\text{C}$), < 80 % RH |
| Temperature coefficient | Nominal 0.15 x (specified accuracy)/ $^{\circ}\text{C}$ @ (0 $^{\circ}\text{C}$ to 18 $^{\circ}\text{C}$ or 28 $^{\circ}\text{C}$ to 40 $^{\circ}\text{C}$) |
| 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 |  |
| 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) |

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