AMP-200-EUR Series TRMS Clamp Meters

The Modern Evolution of the Professional Clamp Meter

Beha-Amprobe's AMP-210-EUR and AMP-220-EUR 600 A TRMS Clamp Meters offer a complete range of measuring functions for today's modern electrical environments. Both models feature True-RMS sensing, low pass filters and fast response processors for quick, error-free measurements. The Amp-Tip function allows for precise measurement of current down to the tenth of an Amp, enabling accurate current measurement of both large and small diameter wires.

AMP-200-EUR Series Features

- **True-RMS**
- **Low Pass Filter**
- **Amp-Tip Functions**
- **Non-Contact Voltage Detection (NCV)**
- **Audible Continuity and Diode Test**
- **Data Hold, Relative Zero**
- **Large LCD Backlit Display**
- **Safety Rated:** CAT III 600 V

AMP-210-EUR
AC Clamp Meter

AMP-220-EUR
AC/DC Clamp Meter

BEHA·AMPROBE®

AMP-200-EUR Series Product Details

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 of small diameter wires down to 0.1 Amp to help with electrical system troubleshooting.

Non-contact voltage detection (NCV)

Audible continuity and diode test

Data hold, relative zero, MAX/MIN/AVG mode

Large LCD backlit display

Safety rated
CAT III 600 V

Measurements:

Voltage
Up to 600 V AC/DC

AC current
Up to 600 A

DC Current
Up to 600 A
(AMP-220-EUR only)

Frequency
5.00 to 999.9 Hz

Resistance
Up to 60.00 kΩ

Capacitance
Up to 2500 µF

AMP-200-EUR Series Applications

AMP-210-EUR AC Clamp Meter

AMP-220-EUR AC/DC Clamp Meter

- **Accurate measurement of current, voltage and frequency** on all electrical systems including distorted, non-sinusoidal signals (True-RMS function) and variable frequency drives (low-pass filter).
- **Capacitance measurement** for start and run motor capacitors.
- **Resistance and continuity** functions to verify quality of electrical connections and to check if motor and transformer coils are working properly.
- **Low pass filter** allows measurement of current and voltage on variable frequency drives (motors with speed controlled by frequency). Without this feature, the meter would provide erroneous readings when measuring voltage and current.

BEHA·AMPROBE®

AMP-200-EUR and AMP-300-EUR
Detailed Specifications

Model	AMP-210-EUR	AMP-220-EUR	AMP-310-EUR	AMP-320-EUR	AMP-330-EUR
	AC Clamp Meter **Electrical**	AC/DC Clamp Meter **Electrical**	AC Clamp Meter **HVAC**	AC/DC Clamp Meter **Electrical Motor Maintenance**	AC/DC 1000 A Clamp Meter **Industrial Motor Maintenance**
Safety Rating	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT IV 600 V, CAT III 1000 V
Jaw Opening	1.18 in (30 mm)	1.37 in (35 mm)	1.18 in (30 mm)	1.37 in (35 mm)	2.0 in (51 mm)
AC Voltage (True-RMS)	**Range:** 0 to 600.0 V **Accuracy:** ±1.0% + 5LSD (50 to 60 Hz)		**Range:** 0 to 600.0 V **Accuracy:** ±1.0% + 5LSD (50 to 60 Hz)		**Range:** 0 to 1000 V **Accuracy:** ±0.8% + 5LSD (50 to 60 Hz) ±1.5% + 5LSD (20 to 200 Hz) ±10% + 5LSD (200 to 400 Hz)
DC Voltage	**Range:** 0 to 600.0 V **Accuracy:** ±1.0% + 5LSD		**Range:** 0 to 600.0 V **Accuracy:** ±1.0% + 5LSD		**Range:** 0 to 1000 V **Accuracy:** ±0.8% + 5LSD
AC+DC Voltage	–	**Range:** 0 to 600.0 V **Accuracy:** 1.2% ± 7LSD (DC, 50 to 60 Hz)	–	**Range:** 0 to 600.0 V **Accuracy:** 1.2% ± 7LSD (DC, 50 to 60 Hz)	**Range:** 0 to 1000 V **Accuracy:** ±1.0% + 7LSD (50 to 60 Hz) ±1.8% + 7LSD (DC, 40 to 200 Hz) ±12% + 7LSD (200 to 400 Hz)
AC Current (True-RMS)	**Range:** 0 to 600.0 A **Accuracy:** ±1.8% + 5LSD (50 to 100 Hz) ±2.0% + 5LSD (100 to 400 Hz)		**Range:** 0 to 600.0 A **Accuracy:** ±1.8% + 5LSD (50 to 100 Hz) ±2.0% + 5LSD (100 to 400 Hz)		**Range:** 0 to 1000 A **Accuracy:** ±1.8% + 5LSD (40 to 100 Hz) ±2.2% + 5LSD (100 to 400 Hz)
DC Current	–	**Range:** 0 to 600.0 A **Accuracy:** ±2.0% + 5LSD	–	**Range:** 0 to 600.0 A **Accuracy:** ±2.0% + 5LSD	**Range:** 0 to 1000 A **Accuracy:** ±1.8% + 5LSD
AC+DC Current	–	**Range:** 0 to 600.0 A **Accuracy:** ±2.2% + 7LSD (DC, 50 to 100 Hz) ±2.7% + 7LSD (100 to 400 Hz)	–	**Range:** 0 to 600.0 A **Accuracy:** ±2.2% + 7LSD (DC, 50 to 100 Hz) ±2.7% + 7LSD (100 to 400 Hz)	**Range:** 0 to 1000 A **Accuracy:** ±2.2% + 7LSD (DC, 40 to 100 Hz) ±2.5% + 7LSD (100 to 400 Hz)
Precise Low Current AC	**Range:** 0 to 60.00 A **Accuracy:** ±1.5% + 5LSD (50 to 60 Hz)		**Range:** 0 to 60.00 A **Accuracy:** ±1.5% + 5LSD (50 to 60 Hz)		**Range:** 0 to 60.00 A **Accuracy:** ±1.5% + 5LSD (0.00 to 20.00 A, 40 to 100 Hz) ±2.0% + 5LSD (0.00 to 20.00 A, 100 to 400 Hz) ±3.0% + 5LSD (20.00 to 60.00 A, 40 to 100 Hz) ±3.0% + 5LSD (20.00 to 60.00 A, 100 to 400 Hz)
Precise Low Current DC	–	**Range:** 0 to 60.00 A **Accuracy:** ±2.0% + 5LSD	–	**Range:** 0 to 60.00 A **Accuracy:** ±2.0% + 5LSD	**Range:** 0 to 60.00 A **Accuracy:** ±1.5% + 5LSD (0.00 to 20.00 A) ±3.0% + 5LSD (20.00 to 60.00 A)
Precise Low Current AC+DC	–	**Range:** 0 to 60.00 A **Accuracy:** ±2.0% + 5LSD (DC, 50 to 60 Hz)	–	**Range:** 0 to 60.00 A **Accuracy:** ±2.0% + 5LSD (DC, 50 to 60 Hz)	**Range:** 0 to 60.00 A **Accuracy:** ±2.0% + 7LSD (0.00 to 20.00 A, DC, 40 to 100 Hz) ±2.2% + 7LSD (0.00 to 20.00 A, 100 to 400 Hz) ±3.0% + 7LSD (20.00 to 60.00 A, DC, 40 to 100 Hz) ±3.0% + 7LSD (20.00 to 60.00 A, 100 to 400 Hz)
Frequency	**Range:** 5.00 to 999.9 Hz **Accuracy:** ±1.0% + 5LSD (600 V range) **Range:** 50.0 to 400.0 Hz **Accuracy:** ±1.0% + 5LSD (600 A range)		**Range:** 5.00 to 999.9 Hz **Accuracy:** ±1.0% + 5LSD (600 V range) **Range:** 50.0 to 400.0 Hz **Accuracy:** ±1.0% + 5LSD (600 A range)		**Range:** 5.00 to 999.9 Hz **Accuracy:** ±1.0% + 5LSD (1000 V range) **Range:** 40.0 to 400.0 Hz **Accuracy:** ±1.0% + 5LSD (1000 A range)
Resistance	**Range:** 0.0 to 60.00 kΩ **Accuracy:** ±1.0% + 5LSD		**Range:** 0.0 to 60.00 kΩ **Accuracy:** ±1.0% + 5LSD		
Capacitance	**Range:** 0.0 to 2500 µF **Accuracy:** ±2.0% + 4LSD		**Range:** 0.0 to 2500 µF **Accuracy:** ±2.0% + 4LSD		
Continuity Beeper	ON ≤ 10 Ω OFF > 250 Ω		ON ≤ 10 Ω OFF > 250 Ω		
Non-Contact Voltage	20 to 440 V, 50/60 Hz		20 to 440 V, 50/60 Hz		
True-RMS	•	•	•	•	•
Low Pass Filter	•	•	•	•	•
Autoranging	•	•	•	•	•
Relative Zero	•	•	•	•	•
MAX/MIN/AVG	•	•	•	•	•
Diode Test	•	•	•	•	•
Data Hold	•	•	•	•	•
Backlight	•	•	•	•	•
Auto Power Off	•	•	•	•	•
AMP-300-EUR Series:					
DC Microamps	–	–	**Range:** 0.0 to 2000 µA **Accuracy:** ±1.0% + 5LSD		
Temperature* **(Type K thermocouple)** *Error does not include Type-K thermocouple errors	–	–	**Range:** -40.0 to 752°F, -40.0 to 400°C **Accuracy:** -40.0 to 14.0°F (±1.0% +3.0°F), >14.0 to 99.9°F (±1.0% +1.5°F) 100 to 752°F (±1.0% +2°F), -40.0 to -10.0°C (±1.0% +1.5°C) >-10.0 to 99.9°C (±1.0% +0.8°C), 100 to 400°C (±1.0% + 1°C)		
3-Phase and Motor Rotation Indication	–	–	Rotation-R for mains supply Rotation-M for motors		
Inrush Current	–	–	•	•	•
Peak Hold (Crest)	–	–	–	–	•
Work Light	–	–	–	–	•

BEHA·AMPROBE®

AMP-200-EUR and AMP-300-EUR
General Specifications





Model	AMP-210-EUR	AMP-220-EUR	AMP-310-EUR	AMP-320-EUR	AMP-330-EUR
Display	3-5/6 digits 6000 counts	3-5/6 digits 6000 counts	3-5/6 digits 6000 counts	3-5/6 digits 6000 counts	3-5/6 digits 6000 counts
Polarity	Automatic	Automatic	Automatic	Automatic	Automatic
Update Rate	5 per second nominal	5 per second nominal	5 per second nominal	5 per second nominal	5 per second nominal
Operating Temperature	32 to 104°F (0 to 40°C)	32 to 104°F (0 to 40°C)	32 to 104°F (0 to 40°C)	32 to 104°F (0 to 40°C)	14 to 122°F (-10 to 50°C)
Relative Humidity	80% at 30°C, 50% at 40°C	80% at 30°C, 50% at 40°C	80% at 30°C, 50% at 40°C	80% at 30°C, 50% at 40°C	Non condensing at ≤10°C 90% at 10 to30°C 75% at 30 to 40°C 45% at 40 to 50°C
Operating Altitude	0 to 2000 m	0 to 2000 m	0 to 2000 m	0 to 2000 m	0 to 2000 m
Pollution Degree	2	2	2	2	2
Storage Temperature	-4 to 140°F (-20°C to 60°C), < 80% RH	-4 to 140°F (-20°C to 60°C), < 80% RH	-4 to 140°F (-20°C to 60°C), < 80% RH	-4 to 140°F (-20°C to 60°C), < 80% RH	-4 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)	Nominal 0.15 x (specified accuracy)/ °C @ (0°C to 18°C or 28°C to 40°C)	Nominal 0.15 x (specified accuracy)/ °C @ (0°C to 18°C or 28°C to 40°C)	Nominal 0.15 x (specified accuracy)/ °C @ (0°C to 18°C or 28°C to 40°C)	Nominal 0.10 x (specified accuracy)/ °C @ (0°C to 18°C or 28°C to 50°C)
Battery	Two AAA 1.5 V battery	Two AAA 1.5 V battery	Two AAA 1.5 V battery	Two AAA 1.5 V battery	Two AA 1.5 V battery
EMC	Meets EN 61326-1:2006	Meets EN 61326-1:2006	Meets EN 61326-1:2006	Meets EN 61326-1:2006	Meets EN 61326-1:2006
Safety Compliance	UL/IEC/EN 61010-1 ed. 3.0, IEC/EN 61010-2-033 ed. 1.0, CAN/CSA C22.2 NO. 61010-1 ed. 3.0, IEC/EN 61010-2-032 ed. 3.0 & IEC/EN 61010-031 ed. 1.1	UL/IEC/EN 61010-1 ed. 3.0, IEC/EN 61010-2-033 ed. 1.0, CAN/CSA C22.2 NO. 61010-1 ed. 3.0, IEC/EN 61010-2-032 ed. 3.0 & IEC/EN 61010-031 ed. 1.1	UL/IEC/EN 61010-1 ed. 3.0, IEC/EN 61010-2-033 ed. 1.0, CAN/CSA C22.2 NO. 61010-1 ed. 3.0, IEC/EN 61010-2-032 ed. 3.0 & IEC/EN 61010-031 ed. 1.1	UL/IEC/EN 61010-1 ed. 3.0, IEC/EN 61010-2-033 ed. 1.0, CAN/CSA C22.2 NO. 61010-1 ed. 3.0, IEC/EN 61010-2-032 ed. 3.0 & IEC/EN 61010-031 ed. 1.1	UL/IEC/EN 61010-1 ed. 3.0, IEC/EN 61010-2-033 ed. 1.0, CAN/CSA C22.2 NO. 61010-1 ed. 3.0, IEC/EN 61010-2-032 ed. 3.0 & IEC/EN 61010-031 ed. 1.1
Certification	UL (c/us) and CE	UL (c/us) and CE	UL (c/us) and CE	UL (c/us) and CE	UL (c/us) and CE
Dimensions (L x W x H):	8.62 x 3.03 x 1.46 in (219 x 77 x 37 mm)	8.82 x 3.03 x 1.46 in (224 x 77 x 37 mm)	8.62 x 3.03 x 1.46 in (219 x 77 x 37 mm)	8.82 x 3.03 x 1.46 in (224 x 77 x 37 mm)	10.16 x 3.70 x 1.73 in (258 x 94 x 44 mm)
Weight:	208 g (0.46 lb)	254 g (0.56 lb)	208 g (0.46 lb)	254 g (0.56 lb)	420 g (0.93 lb)

Accessories Included:					
User's Manual	•	•	•	•	•
Test Leads	•	•	•	•	•
Carrying Case	•	•	•	•	•
Batteries	AAA (2)		AAA (2)		AA (2)
Alligator Clip Set	–	–	•	•	•
Banana plug K-type Thermocouple	–	–	•	•	•

www.Beha-Amprobe.com

Beha-Amprobe® | In den Engematten 14 | 79286 Glottertal, Germany | Tel: +49 (0) 7684 8009-0 | info@beha-amprobe.de | www.Beha-Amprobe.com