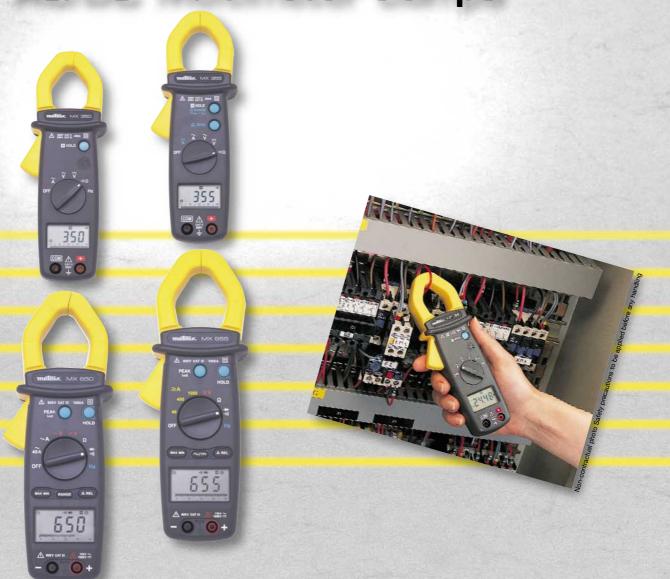
## AC/DC Multimeter clamps



### When great design combines with measurement

- AC and/or DC current up to 400 A and 1000 A
- → AC/DC voltage up to 1000 V (RMS technology for MX 655)
- Resistance measurement, continuity test and diode test
- Current and voltage frequency measurement
- 4,000-count display with bargraph
- Automatic or manual calibre selection
- Complementary functions: Hold, Max/min, Peak,...



## 4 clamps for all your clamping diameters

Dedicated to measurement of high voltages and currents, the MX 655 and MX 650 clamps can handle large cables up to 40 mm (MX 655) and 36 mm (MX 650) in diameter!

With the same wide jaw opening range, despite their small dimensions, the MX 355 and MX 350 models can be used to clamp both small conductors and large cables with diameters of up to 30 mm (MX 355) or 26 mm (MX 350).

## Compliance with the professional standards

Our measuring instruments comply with the strictest safety standards (IEC 61010-1 and IEC 61010-2-032) and manufacturing standards to ensure protection of the users and reliable products.

## Excellent value for money

Particular care has been taken with the ergonomics of these clamps, as witnessed by their excellent handling. Each detail has been studied carefully: the rotary knob is flexible and accurate, enabling precise selection of functions; the keys give a tactile sensation when touched; the battery compartment is locked by a single screw.



#### Accessories and ordering information

#### **Accessories included**

Each clamp is delivered with a set of measuring leads, a carrying bag, a user's manual and one 9 V alkaline battery (MX 655/650) or two 1,5 V alkaline batteries (MX 355/350).

To order	
MX0655-Z	MX 655 multimeter clamp
MX0650-Z	MX 650 multimeter clamp
MX0355-Z	MX 355 multimeter clamp
MX0350-7	MX 350 multimeter clamp





#### General use or high-level measurements: something for everyone

The MX 655 and MX 650, are specially recommended for measurement of high voltages and currents (up to 1000 A and 750 V), completed by an RMS converter for AC signals (MX 655). For currents, the MX 655, which uses a Hall-effect measurement system, is capable of measuring AC or DC currents on cables up to 40mm in diameter.

The MX 650 uses the transformer measurement principle and measures AC currents in cables up to 36mm in diameter.

The small size of the MX 355 and MX 350 will make them particularly appreciated for their ease of operation and excellent handling. As well as their numerous measurement functions, they also have a little "extra": the automatic zero DC adjustment for DC current measurement can also be used for differential measurements.





#### **Delivered complete**

As soon as you receive them, the MX 655, MX 650, MX 355 and MX 350 multimeter clamps are ready to use. Simply install the batteries and you can start measuring! No additional programming is necessary.

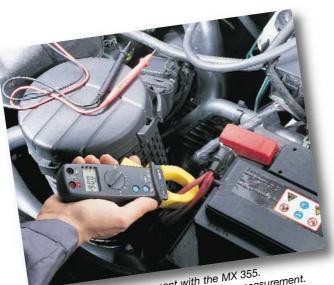


#### Indispensable test tools

Combining all the functionalities of an ammeter clamp and a complete AC/DC multimeter, the MX 355, MX 350, MX 655 and MX 650 clamps provide the measurement solutions that every electrician needs: AC/DC current, voltagesC, resistance measurement, continuity and frequency. They also have a wide range of functionalities which make them safe, handy and ergonomic tools.

#### Frequency measurements

The MX 655, MX 650 and MX 350 clamps measure current frequencies up to 10 kHz and voltage frequencies up to 10 kHz (1MHz for MX 350), with an automatic range change function.

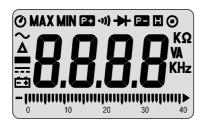


Battery current measurement with the MX 355.
This can also be completed by DC voltage measurement.

### Measurement display

The bargraph instantly shows all the variations of the signal measured by refreshing ten times faster than the digital display.

Lastly, as well as the symbol showing the units, the 4,000-count display is completed by a battery charge LED indicating the status of the batteries.





### Resistance / continuity measurement and diode test

By simply turning the knob, the four clamp models test continuity (indicated by a buzzer) and measure the resistance of the circuit.

Furthermore, the MX 655 and MX 650 can also perform the diode test very simply.



# A few keys for higher performance!

The 4 models are equipped with a HOLD function for freezing the display so that it is easier to read, whatever the conditions of access and lighting. Thanks to the PEAK function, the MX 655 and MX 650 clamps can capture 1 ms rising-edge or falling-edge signals.

On the MX 655 and MX 650 models, the MAX/MIN key displays the highest and lowest values of the measurement scale and the  $\Delta$  REL keys (and the  $\Delta$  ZERO key on the MX 355) allow relative measurements.

To facilitate operations, the MX 655 and MX 650 clamps are equipped with automatic range selection. Thanks to its RANGE function, the range change can be forced manually on the MX 650 and MX 350. On the MX 655, the  $\sim$ /== key displays the AC or DC measurement, as required.

### AC/DC CURRENT with automatic zero function

Due to a phenomenon involving magnetization of the sensor, well-know to specialists, DC current measurement requires adjustment of the DC zero before performing each measurement. On the MX 355 model, with the " $\Delta$  Zero" function, this adjustment is done automatically by simply pressing a key.

Furthermore, this function reduces the influence of external DC parasite fields.

On the MX 655 and MX 650 models, the  $\Delta$  REL key provides this function.



Additional measurements (min./max. values) simply by pressing a key on the MX 655 and MX 650 models.

Cleverly, the "Δ Zéro" (on the MX 355) and "Δ REL" keys (on the MX 655 and MX 650) can be used to carry out differential measurements or to facilitate adjustment of the DC zero between each DC measurement and also to compensate for the resistance of the leads for Ω measurement.



On the MX 650, the RANGE key can be used to change range automatically or mannualy, and there is a HOLD/RANGE key for this on the MX355.

RANGE





GENERAL SPECIFICATIONS	MX 655	MX 650	MX 355	MX 350	
Clamping Ø	40 mm	36 mm	30 mm	26 mm	
Display	4,000 counts				
Bargraph	42 segments				
Range change	Automatic	Automatic or Manual	Automatic or Manual	Automatic	
Function keys	Hold-Peak - Max/Min - ∆Rel ~/	Hold-Peak - Max/Min - ∆Rel - Range	HOLD - ∆ Zero - Range	HOLD	
IEC 61010-1 and IEC 61010-2-032 safety norms	☐ Cat.III, 600 V		☐ Cat.III, 300 V - Cat.II, 600 V		
Operating temperature	0 to 40°C (<70% HR)		0 to 40°C (<70% HR)		
Storage temperature	-10 to 60°C (<80% HR)		-10 to 60°C (<80% HR)		
Power supply	1 x 9 V 6 LF22		2 x 1.5 V LR03		
Battery charge life	36 h 180 h		100 h		
Auto cut-off	30 min., deactivatable		30 min., deactivatable	30 min.	
Dimensions	246 x 93 x 43 mm		193 x 50 x 28 mm		
Weight	400 g		230 g		
Warranty	1 year		1 year		
				_	
FECHNICAL SPECIFICATIONS	MX 655	MX 650	MX 355	MX 350	

CHNICAL SPECIFICATIONS	MX 655	MX 650	MX 355	MX 350	
AC current					
Measuring range	0.05 to 1000 A (in 3 calibres)		0.05 to 400.0 A (in 2 calibres)		
Basic accuracy	1.9%	L + 5D	2%L + 10D	1.9%L + 5D	
Bandwidth	50 Hz	50 Hz to 1 kHz		50 to 500 Hz	
Protection	1200 Arms	1200 Arms 1000/1500 Arms		600 Arms	
DC current					
Measuring range 0.	10 to 1000 A (in 3 calibr	es) -	0.1 to 400.0 A (in 2 calibres	s) -	
Basic accuracy	2.5%L + 10D	-	2.5%L + 10D	-	
Protection	1200 Arms	-	600 Arms	-	
AC voltage					
Measuring range	0.5 V to 750 V (in 2 calibres)		0.5 V to 600 V (in 2 calibres)		
Basic accuracy	2.5%L + 10D		1.5%L + 5D		
Bandwidth	50 Hz to 1 kHz		50 to 500 Hz		
Input impedance	10 MΩ		10 MΩ	1 ΜΩ	
Protection	1000 V <sub>RMS</sub>		660 VRMS		
DC voltage					
Measuring range	0.2 to 1000 V (in 2 calibres)		0.2 to 600 V (in 2 calibres)		
Basic accuracy	1%L + 2D	0.75%L + 2D	1%L -	+ 2D	
Protection	1000 VRMS		660 VRMS		
Resistance					
Measuring range	0.2 to 4000 Ω		0.2 to 399.9 Ω		
Basic accuracy	1%L + 2D		1%L + 2D		
Max. open circuit voltage	6 VDC	3.3 VDC	1.5 \	/DC	
• Diode					
Test current	1.7 mA max.	0.6 mA	-	-	
Max. open circuit voltage	6 VDC	3.3 VDC	-	-	
Continuity with buzzer					
Detection threshold	≤1	00 Ω	≤ 40	Ω	
Frequency					
Measuring range	Current: 20 Hz to 10.00 kHz (in 2 calibres) Voltage: 10 Hz to 10 kHz (in 2 calibres)		- Current: 2 - Voltage:	20 Hz to 10.00 kHz (in 2 calib 2 Hz to 1 MHz (in 4 calibre	
Basic accuracy	0.1%L + 1D		-	0.1%L + 1D	
Sensitivity	2-5 ARMS	/ 5-10 VRMS	-	2-5 ARMS / 5-10 VRMS	

Characteristics subject to modifications according to technological developments.



#### FRANCE

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