

Programs

AR5-L

Portable single and three-phase power analyzer

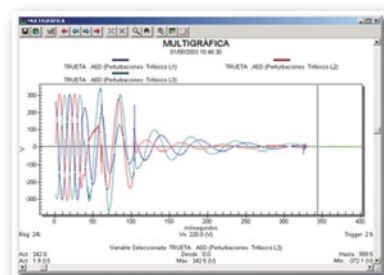
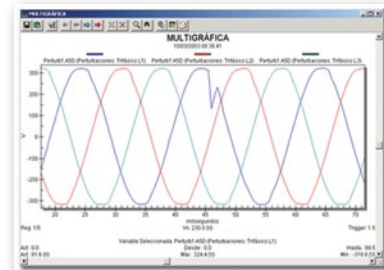


Network quality - Disturbances

Program applications:

- Detection of interruptions, gaps, micro-cuts, peaks, etc.
- Adjustment of the sensitivity for the capture of different types of disturbances
- Information about the number of disturbances detected
- Applications
- Check the effect of switching a load over various points of the installation
- Take "x-rays" of any installation with an AR5-L unit and a PC, in order to know everything about a supply network:
 - Evolution of the wave shape
 - Display of an alterationChecking the three phases during the alteration

Type	Code
PERTURB Program	M80224

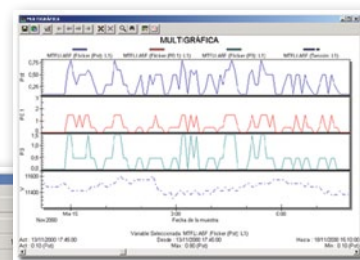
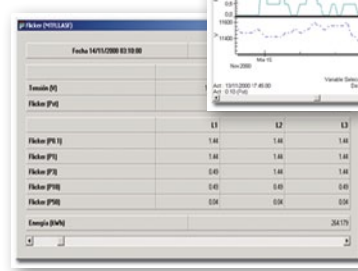
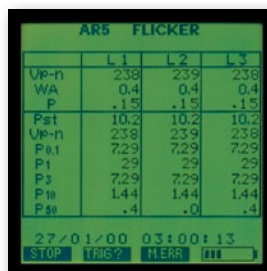


Flicker

The flicker program can be used to:

- Study the flicker present in the installation, whether it is instantaneous, PST or PLT (the latter via software)
- Carry out the same operations executed by the energy program
- Configuration of the times for the calculation of the flicker and energy
- Flicker parameters on a single screen
- Applications
- Determine the level of visual disturbance that can lead to a decrease in the performance of workers
- Study voltage fluctuations

Type	Code
FL Program	M80223

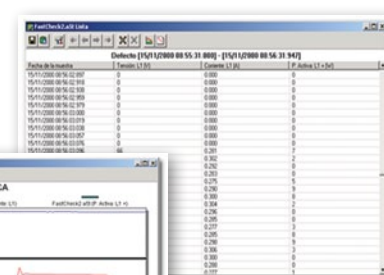
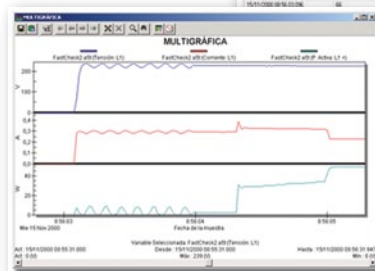


Motor start-up (Fast check)

This program can be used to:

- Perform studies on single or three-phase networks to capture the voltage, current, power and power factor during cycle periods
- Capture short voltages (for ex.: motor start-up, welding machines, etc.)
- Potential recording with a trigger
- Fixed or rotating memory

Type	Code
Fast Program	M80226



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Check-Meter

The program can be used to:

- Check the measurements of electronic and mechanical meters
- Carry out the tests with no energy cuts
- Carry out 30-second long tests
- Determine the error in active energy or power factor meters
- Programmed setup and percentage error on a single screen
- Up to 4000 records can be created
- Numerical table
- Export to .bmp format or to the clamp-board.

Applications Meter verification studies, creation of detailed reports in each measurement point

- Detection of errors that exceed 1 % (with the AR5-L-shunts calibrated set) in electricity meters
- Detect potential fraud situations

Type	Code
CM Program	M80225

Optical reader kit

- For electronic meters or meters with verification LED
- Optic fibre cable used to check meters
- Communications and power supply cable connected to AR5-L
- Measures impulses with a longitude that exceeds 1 us
- Shock-proof plastic
- Reduced dimensions: 64x41x26 mm

Type	Code
CM optical kit (includes sensor, shunts, program and software)	M806C3



Leak

- Measurement of leakage current, up to 10 A, with a transformer
- Measurement with current sensing clamp
- Measurement with earth leakage transformers
- Measurement scales with 2 mA ... 1 A clamp and 20 mA ... 10 A clamp
- Filtering of high frequencies to avoid the effect of switching systems
- Measurement of the true root mean square value during each period (20 ms)
- Continuous measurement with a record of each period of the programmed time
- Programmable record time 1 s ... 100 s
- Detection of the trip moment due to a voltage drop
- Detection of the trip moment, depending on the programmed leakage level

Applications Detection of the trip level of protection relays

- Checking leakages with no need for manual analysis on the site

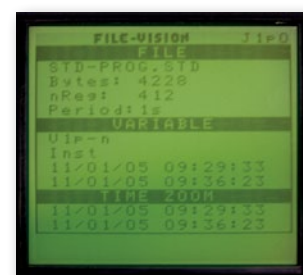
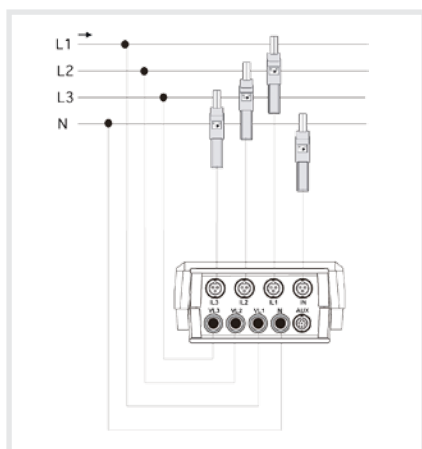
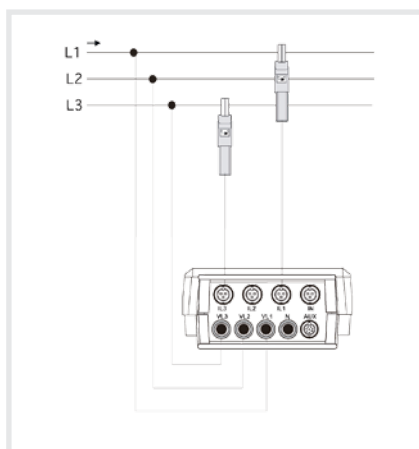
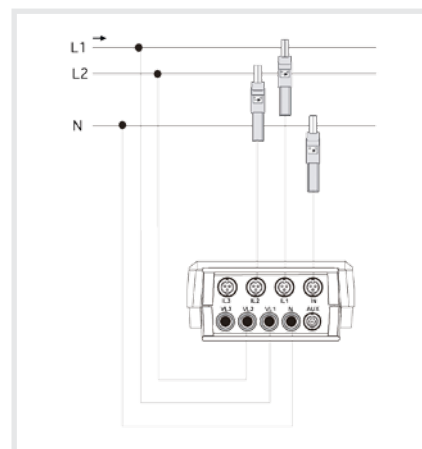
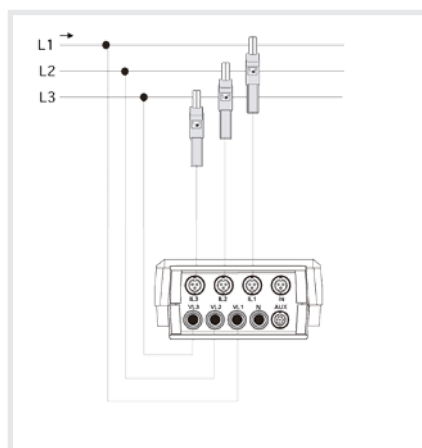
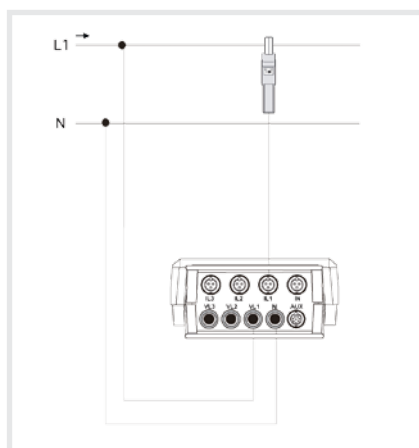
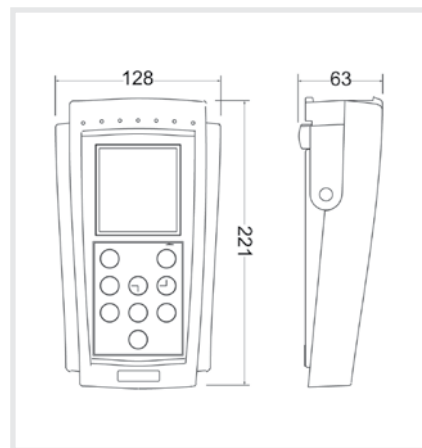
Type	Code
Leak Meter Program	M80229

Programs
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File Vision

- On-site verification of records
 - Display of records, with no need for a PC
 - The screen has a cursor that indicates the position of the value of the variable selected, in terms of record time and parameter
 - Auto-scalable axis of the parameter (adapted to the maximum and minimum values of all records)
 - Permanent display of 32 records on the screen
 - Display of the maximum and minimum value of the records
 - You can browse through records easily and quickly
 - Variables represented by the different programs:
- Harmonics: V_{pp} , V_{pn} , A, W, var L, var C, PF, Hz, $V \cdot A$, I_N , kW·h
 - Check-Phase: V_{pp} , V_{pn} , A, W, var L, var C, PF, Hz, $V \cdot A$, I_N , kW·h
 - Flicker: V_{pp} , V_{pn} , A, W, var L, var C, PF, Hz, $V \cdot A$, I_N , kW·h, Pst
 - Fast-Check: V_{pp} , V_{pn} , A, W, var L, var C, PF, Hz, $V \cdot A$, I_N








Type	Code
File Vision	M8022A


Connections
Three-phase system, 4 wires

Three-phase system, 3 wires, ARON

Two-phase System

Three-phase system, 3 wires

Single-phase system

Dimensions


Clamps

AR5-L

Portable single and three-phase power analyzer

Clamps	CF-5	CF-10	CP-5	CP-100	CPR-500	CPR-1000	CP-2000/200
							
Measurement range	1...1000 A ac	0.2 mA...10 A ac	0.05...0.5 A ac	1...100 A ac	1...500 A ac	1...1000 A ac	1...200 A ac 10...2000 A ac
Nominal frequency	48...65 Hz	48...65 Hz	48...65 Hz	48...65 Hz	48...65 Hz	48...65 Hz	48...65 Hz
Output voltage	2 V ac	2 V ac	2 V ac	2 V ac	2 V ac	2 V ac	2 V ac
Dielectric rigidity	5200 V, 50 Hz, 1 min	5200 V, 50 Hz, 1 min	5200 V, 50 Hz, 1 min	5200 V, 50 Hz, 1 min	5200 V, 50 Hz, 1 min	5200 V, 50 Hz, 1 min	5200 V, 50 Hz, 1 min
Scale base error	1 % (up to 0.1 A) 0.5 % (Up to 5 A)	-0,35 %	1 %	0,5 %	0,7 %	0,7 %	Scale 200: 0.5 % (+70 mA) Scale 2000: 0.5% (+100 mA)
Maximum conductor diameter	20 mm	100 mm	20 mm	20 mm	52 mm	52 mm	64 mm
Maximum busbar	1 - 50 x 5 mm or 4 - 30 x 5 mm	5 - 80 x 5 mm or 3 - 80 x 10 mm	20 x 5 mm	20 x 5 mm	1 - 50 x 5 mm or 4 - 30 x 5 mm	1 - 50 x 5 mm or 4 - 30 x 5 mm	5 - 125 x 5 mm or 3 - 100 x 10 mm
Description / Code	CF-5 Code M81331	CF-10 Code M81334	3 CP-5 Kit Code M81041	3 CP-100 Kit Code M81042 1 CP-100 Neutral clamp (blue) Code M81036	3 CPR500 Kit Code M81043 1 CPR-500 Neutral clamp (blue) Code M81037	3 CPR-1000 Kit Code M81044 1 CPR-1000 - Neutral clamp (blue) Code M81038	3 CP-2000/200 Kit Code M81045

Clamps
AR5-L

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Clamps C-FLEX 20000 / 2000 / 200 A-45

Longitude sensor	45 cm
Scales	200 A / 2000A / 20000 A or 100 A / 1000 A / 10000 A
Sensitivity in mV	Scale 200 or 100: 10 mV / A Scale 2000 or 1000: 1 mV / A Scale 20k or 10k: 0,1 mV / A
Measurement amplitude	5 A...20 kA
Bandwidth	10...20 kHz
Accuracy	1 %
Electrical safety	Double insulation IEC 1010 - 100 V - Cat III - Degree of contamination 2
Admissible output overvoltage	600 V (peak factor 1.5)
Ambient conditions	
Temperature	-10 ... +55 °C
Humidity	90 % HR (a 50 °C)

Scales	Type kit	Code
20 kA / 2000 A / 200 A	Kit 3 C-FLEX 20000/2000/200 A-45	M81141

Clamps C-FLEX 20000 / 2000 / 200 A-80

Longitude sensor	80 cm
Scales	200 A / 2000 A / 20000 A or 100 A / 1000 A / 10000 A
Sensitivity in mV	Scale 200 or 100: 10 mV / A Scale 2000 or 1000: 1 mV / A Scale 20k or 10k: 0,1 mV / A
Measurement amplitude	5 A...20 kA
Bandwidth	10...20 kHz
Accuracy	1 %
Electrical safety	Double insulation IEC 1010 - 100 V - Cat III - Degree of contamination 2
Admissible output overvoltage	600 V (peak factor 1.5)
Ambient conditions	
Temperature	-10 ... +55 °C
Humidity	90 % HR (a 50 °C)

Scales	Type kit	Code
20 kA / 2000 A / 200 A	Kit 3 C-FLEX 20000/2000/200 A-80	M81142

Clamps C-FLEX 20000 / 2000 / 200 A-120

Longitude sensor	120 cm
Scales	200 A / 2000 A / 20000 A or 100 A / 1000 A / 10000 A
Sensitivity in mV	Scale 200 or 100: 10 mV / A Scale 2000 or 1000: 1 mV / A Scale 20k or 10k: 0,1 mV / A
Measurement amplitude	5 A...20 kA
Bandwidth	10...20 kHz
Accuracy	1 %
Electrical safety	Double insulation IEC 1010 - 100 V - Cat III - Degree of contamination 2
Admissible output overvoltage	600 V (peak factor 1.5)
Ambient conditions	
Temperature	-10 ... +55 °C
Humidity	90 % HR (a 50 °C)

Scales	Type kit	Code
20 kA / 2000 A / 200 A	Kit 3 C-FLEX 20000/2000/200 A-120	M81143