# **100ADM mk4 200ADM-P**



# **Comparison**

The 200ADM-P is a new secondary current injection test set featuring data storage to USB key in spreadsheet format, phase-shifting auxiliary ac output, 200A maximum output current and auxiliary metering input with harmonics measurement.

The 100ADM mk4 is the latest in the line of industry standard 100ADM units, now with current limit mode.



 $\left[ \right]$ 

Feature	200ADM-P	100ADM mk4
Maximum output current	100A for 1 minute 200A for 5 seconds	100A for 1 minute
Supply voltage	115/230V auto-selecting	115/230V auto-selecting
Current limit mode for fine control	Yes	Yes
Auxiliary ac output (voltage mode)	0-130Vac 300mA 0-260Vac 150mA phase shift 0-360.0° in 0.1° steps	110Vac 300mA fixed
Auxiliary ac variable frequency	45.00-99.99Hz	No
Auxiliary ac output (current mode)	0-10A 6V	No
Stabilised dc supply	12-60Vdc 1A 60-220Vdc 230mA	24, 48, 60V, 110, 220Vdc switched 1A up to 60V, 230mA 110V, 220V
Results storage	Stored to USB key in CSV format. Results time and date stamped from internal clock and tagged with comment entered via keyboard.	No* *Possible via optional ADMlog PC software—PC must be connected at time of test
Current metering	4 selectable ranges with current tripRangeResolutionAccuracy5.000A1mA0.5% rdg±5d20.00A10mA0.5% rdg±5d50.00A10mA0.5% rdg±5d200.0A100mA0.5% rdg±5dSingle cycle RMS capture	4 selectable ranges with current tripRangeResolutionAccuracy2.000A1mA0.5% rdg±5d10.00A10mA0.5% rdg±5d20.00A10mA0.5% rdg±5d100.0A100mA0.5% rdg±5dSingle cycle RMS capture
Auxiliary metering input	RangeResolutionAccuracy5.000Aac/dc 1mA0.7% rdg±5d300.0Vac/dc 0.1V0.7% rdg±5dV, A, frequency, phase angle, impedance, power, CT ratio measurements	No
Harmonic measurement	THD, harmonics 1-31	No
Timer	Range Resolution Accuracy   0-999.999s 1ms 0.01% rdg±2d   0-9999.99s 10ms 0.01% rdg±2d   0-99999.9s 100ms 0.01% rdg±2d   With multiple re-close timing 0.01% rdg±2d	Range Resolution Accuracy   0-999.999s 1ms 0.01% rdg±2d   0-9999.99s 10ms 0.01% rdg±2d   0-99999.99s 100ms 0.01% rdg±2d
Protection	Thermal monitoring, digital duty cycle protection, overcurrent trips	Thermal monitoring, digital duty cycle protection, overcurrent trips
USB interface for memory key, keyboard & printer	Yes	No
RS232 printer/PC interface	Yes	Yes
Dimensions & Weight	380x314x221mm 19.5kg	380x314x221mm 20.0kg
Shoulder strap	Yes	Yes

T&R Test Equipment L



# **Example Applications**

## Overcurrent relay with result storage

Testing an overcurrent relay with a 200ADM-P is simple, complete with logging of results and plotting the curve on a PC.

Connect the relay coil to the main output, contact set 1 and the dc supply if required. To log the results, insert a USB key and plug in the keyboard.



Set the Store Result switch to **Comment**, and type in a comment to add to all results. Set the switch to Auto-Store.

Switch the timer off and set the required current. If testing a digital relay select current limit mode to give fine current control. Switch the timer to Internal Start and then switch the output on. The timer will stop when the relay trips, and the trip time will be recorded to the USB key with the test current, time, date and your comment. Repeat for other points on the relay curve as required.

After testing, plug the USB memory key into your PC. You'll find a folder called TRTEST on the key with your results in a subfolder named with the test date. Your results file is named with the time of the test. Open the file in Excel (or any other spreadsheet). If you're using Excel, run the macro supplied with the unit to plot the curve (see right).

#### Overcurrent relay curve plotted in MS Excel



### **Directional Relav**

Connect your directional relay as the overcurrent relay, but connect the voltage coil to the auxiliary ac output. Link the ac output to the metering input for metering.



frequency and phase angle.

63.50 50.00Hz 10.3° The aux ac adjust control first sets the voltage, and then when

the ADJ button is pressed it switches to control the phase angle. If you plug in the memory key and select internal start timer mode, results will be stored whenever the timer stops or the main output is switched off.

## For details of more applications, please visit our web site: www.trtest.com Under and Over-voltage relays — Frequency relays — Check-sync relay — CT Mag Curves

# For full specification please refer to the 200ADM-P data sheet

Note: Due to the company's continuous research programme, the information above may change at any time without prior notification. Please check that you have the most recent data on the product. T&R Test Equipment Ltd, 15-16 Woodbridge Meadows, Guildford, Surrey, GU1 1BJ, UK Tel: +44 (0)1483 207428 Fax: +44 (0)1483 511229 email: sales@trtest.com