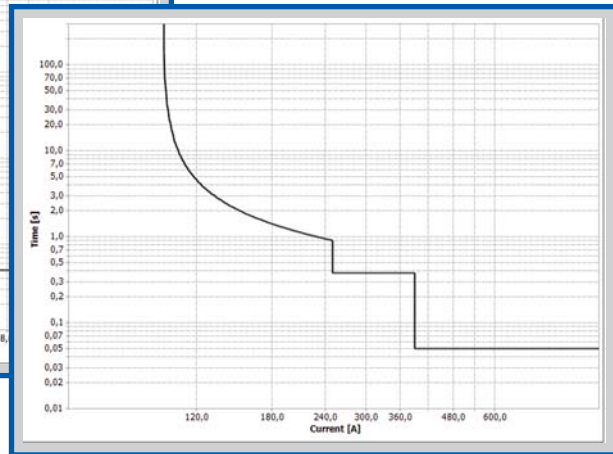
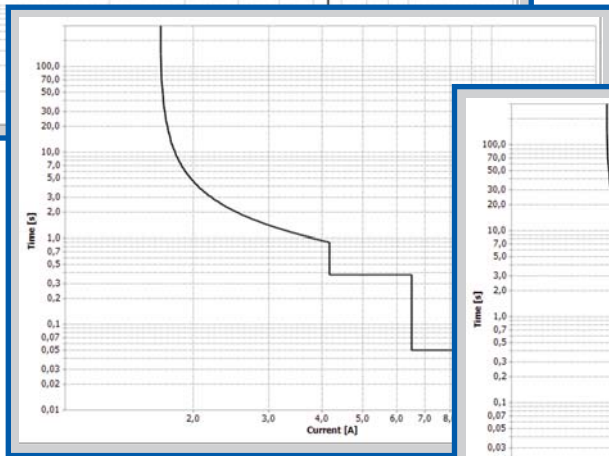
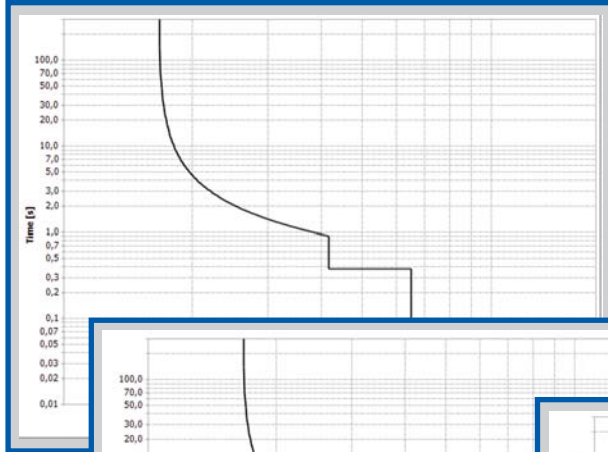


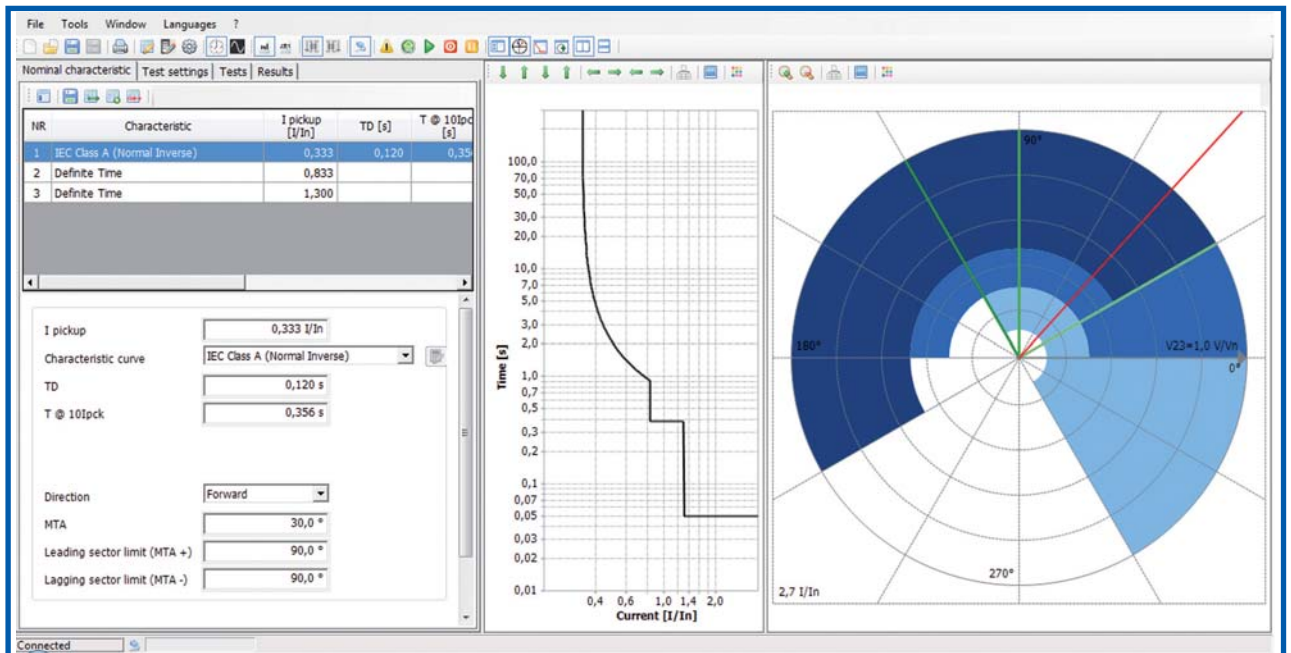
### NEW OVERCURRENT RELAY TEST SOFTWARE - A NEW EXPERIENCE



The overcurrent relays testing has never been so easy, as the new overcurrent test software is designed to allow to enter exactly the same parameters as you can read on the relay.

The **overcurrent characteristic** can be expressed as primary, secondary or relative values, and time expressed in seconds or cycles.

Relative values, secondary and primary values.

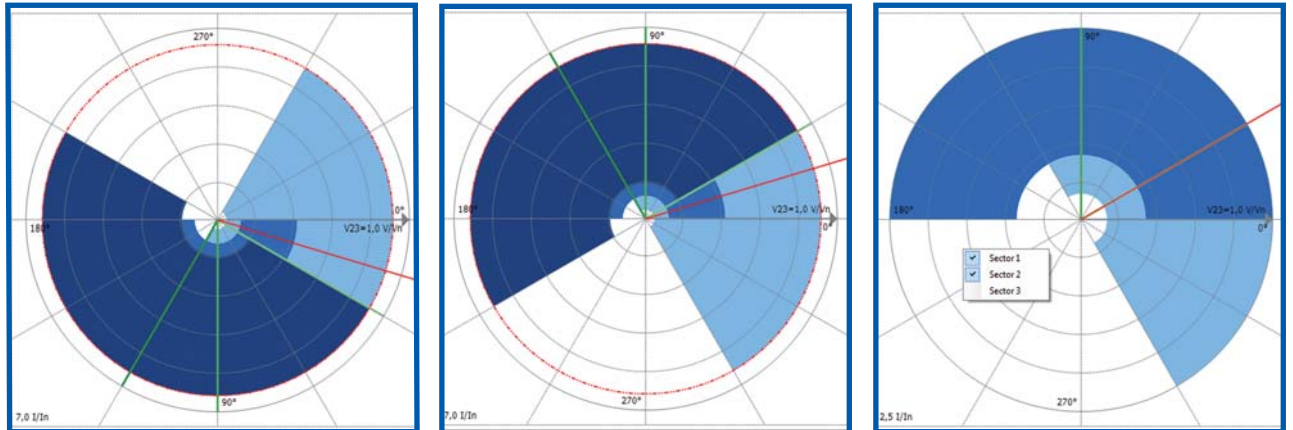


NR	Characteristic	I pickup [I/In]	TD [s]	T @ 10Ipc [s]
1	IEC Class A (Normal Inverse)	0,333	0,120	0,35
2	Definite Time	0,833		
3	Definite Time	1,300		

I pickup: 0,333 I/In  
 Characteristic curve: IEC Class A (Normal Inverse)  
 TD: 0,120 s  
 T @ 10Ipc: 0,356 s  
 Direction: Forward  
 MTA: 30,0 °  
 Leading sector limit (MTA +): 90,0 °  
 Lagging sector limit (MTA -): 90,0 °

Example of general overview

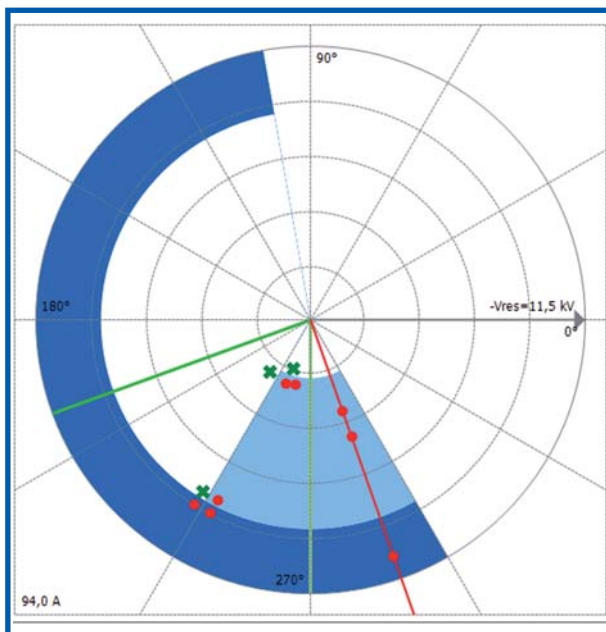
The **setting of the directional characteristic** is extremely flexible, just choose the clockwise or counter-clockwise positive angle convention, the phase sequence, enter the angle limits and the sectors will be ready to be tested. You even decide to show or hide one or more sectors without change the nominal characteristic.



The pictures refers to: clockwise convention, counterclockwise convention and show/hide sector function.

All parameters can be tested with **powerful test functions**:

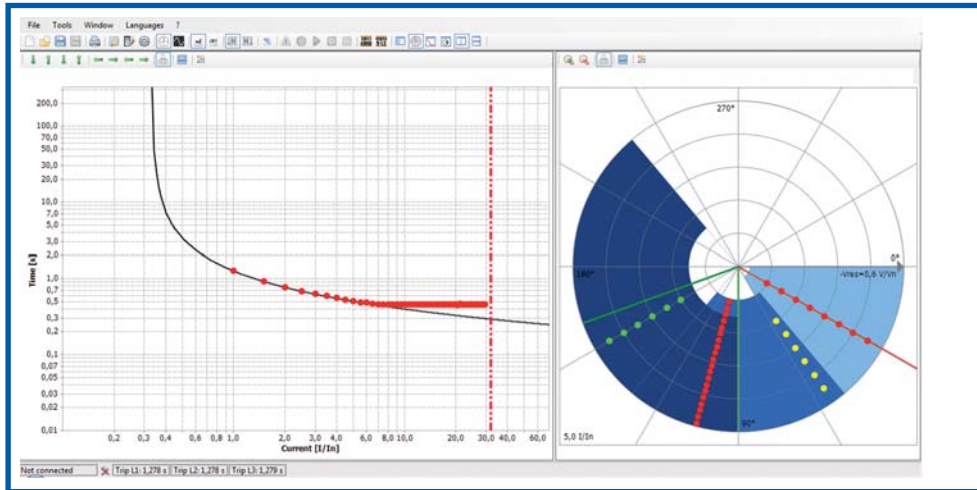
- **Click and Test**: just click on the characteristic and the fault will be generated accordingly.
- **The automatic test** of the overcurrent characteristic.
- **The verification** of the sector limits and the drop-out-ratio.



Example of click & test function

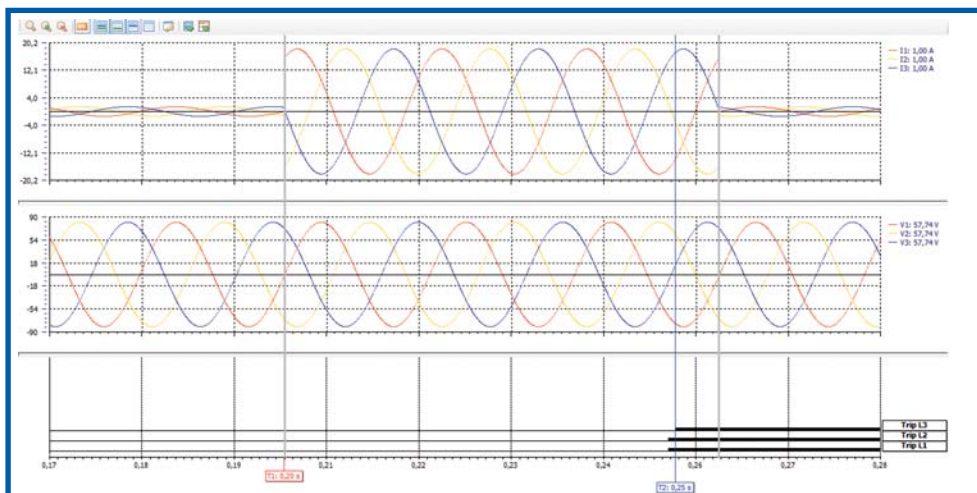
**APPLICATION NOTE**  
 TDMS SOFTWARE: THE NEW  
 OVERCURRENT MODULE TO TEST  
 RELAYS - A NEW EXPERIENCE





Example of automatic test of the overcurrent characteristic

With the **Waveform Viewer tool** is possible to check what will be generated before the test, and in the end to analyze the status the monitored contacts.



Waveform Viewer

In case of earth fault protection, the polarizing quantities as residual current and residual voltage are automatically calculated accordingly with the number of measuring inputs used by the relay.

The standards **IEC 61850-8**, **IEC 61850-9** and **RIO files** are fully supported.

**The new overcurrent module is included in the latest release of TDMS -Test & Data Management Software and can be download by ISA customers from the download area of ISA web site.**



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**APPLICATION NOTE**  
**TDMS SOFTWARE: THE NEW**  
**OVERCURRENT MODULE TO TEST**  
**RELAYS - A NEW EXPERIENCE**

October 2014