



Scope I²t for CMMP

How to scope the I²t value for a CMMP motorcontroller

CMMP-...-M0/M3

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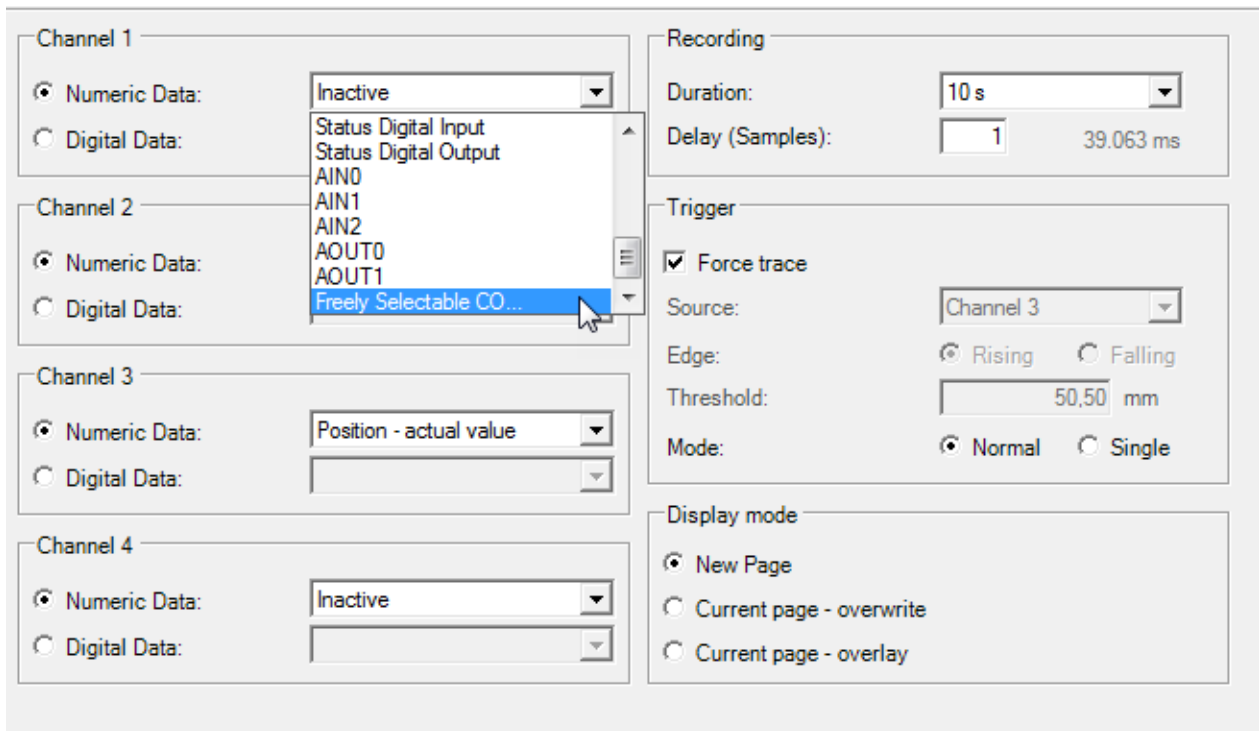
1 Components/Software used

Type/Name	Version Software/Firmware	Date of manufacture
CMMP-...-M0/M3	4.0.150.2.3	--

Table 1.1: 1 Components/Software used

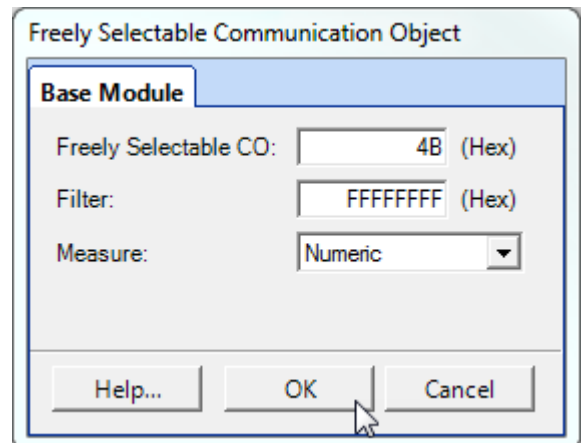
2 How to Scope the I²t for a CMMP controller

Go to the tab 'Trace' and select 'Freely selectable CO' for one of the Channels. It is located under the 'Numeric Data'.



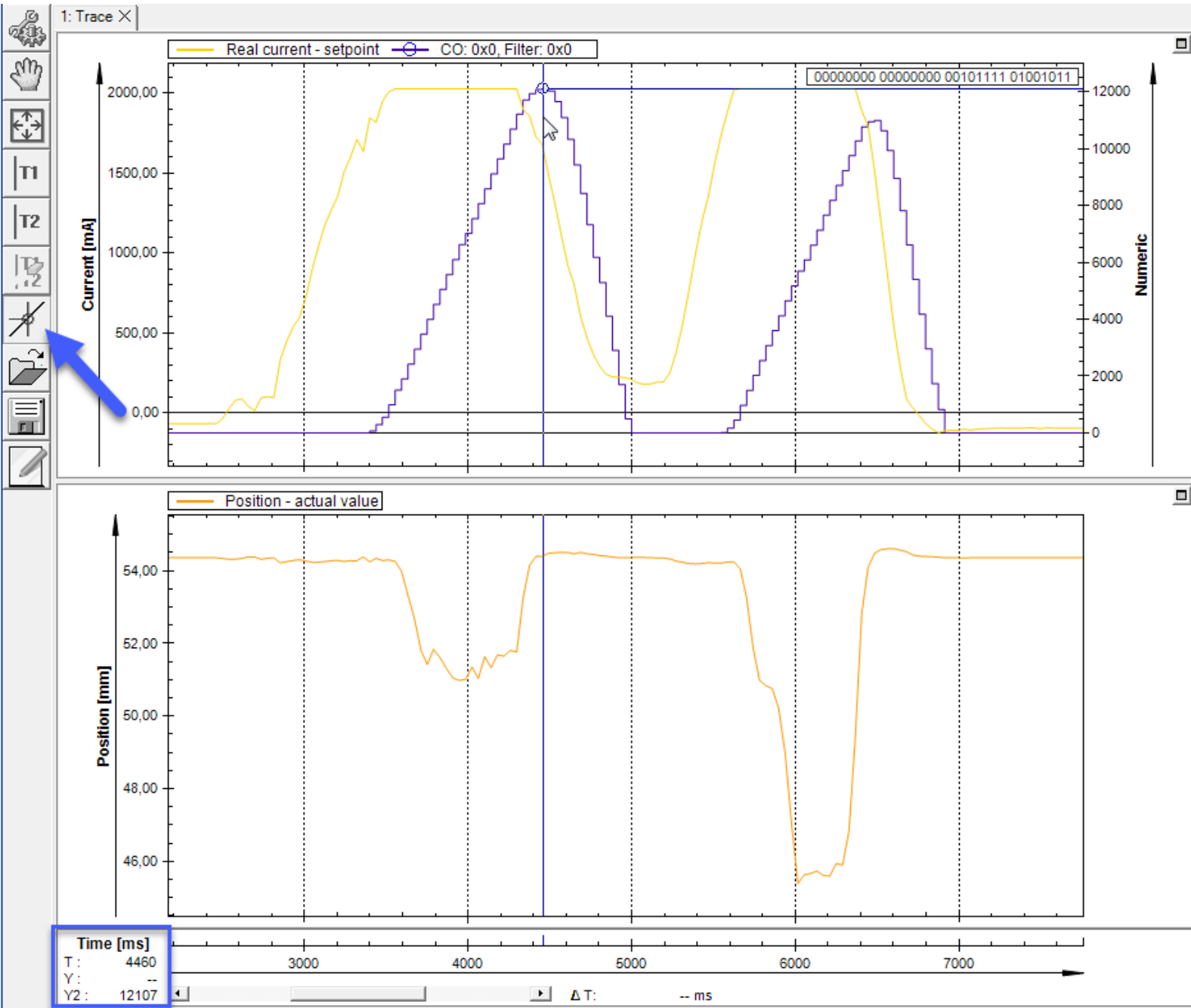
Fill in the following data:

- For scoping I²t of the Power stage: 4A
- For scoping I²t of the Motor: 4B
- Filter: FFFF
- Measure: Numeric



How to Scope the I²t for a CMMP controller

Select all other required scope data, record duration, trigger etc. and start the scope.
After the scope completed, go to the 'Diagrams' tab. In this example the I²t is shown in blue:



To read out the value, use the 'Snap Mouse Cursor to Signal' and click somewhere just below the blue line, so that it snaps. Now you can see the value in the bottom left, in this case '12107'.

This value represents the 16 bit-value of the I²t monitor. To calculate the percentage you have to divide it by 65535 and multiply by 100 (or divide by 655):

$$12107 / 65535 * 100 = 18,5\%$$