

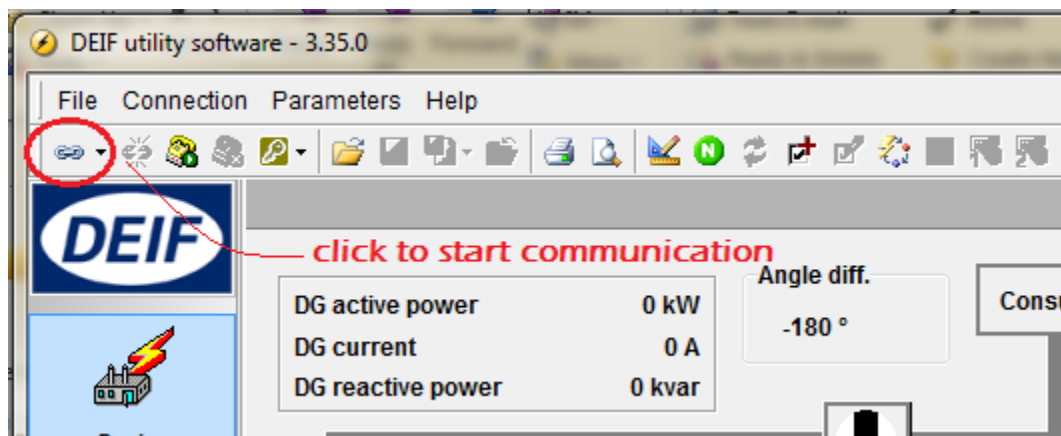
Trend in PPM using Utility Software

Please do following:

BT current value is initially high for some time, when BT is started. We need to find out this peak value of current and time period, during which it remains high.

Good option is to use Trending or graph in Utility Software...

Start communication with device...



In Protection, check the value of over-current and time. Initially, set Trip GB to Warning, and keep a watch on current when BT is just started.

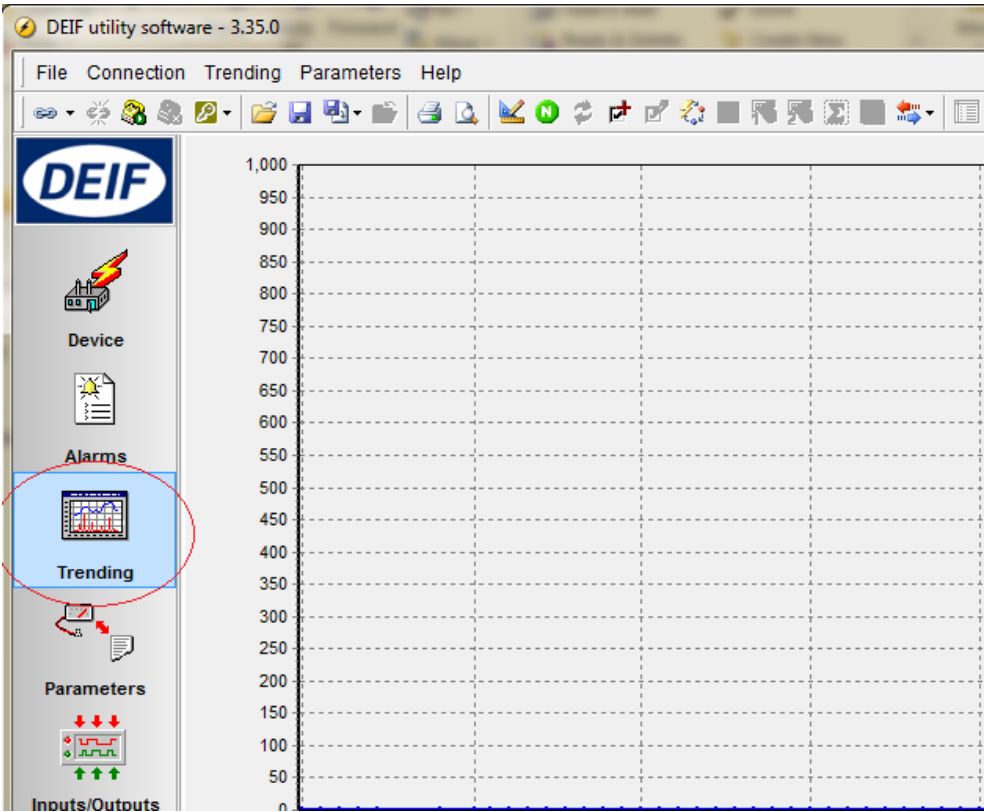
Category	Channel	Text	Address	Value	Unit	Timer	OutputA	OutputB	Enabled	HighAlarm	Level	FailClass	Inhibits
Prot	1000	G -P> 1	1	-5	%	5	Not used	Not used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	customer	Warning	<input checked="" type="checkbox"/>
Prot	1010	G -P> 2	2	-5	%	2	Not used	Not used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	customer	Trip GB	<input checked="" type="checkbox"/>
Prot	1030	G > 1	4	100	%	10	Not used	Not used	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	customer	Warning	<input type="checkbox"/>
Prot	1040	G > 2	5	110	%	5	Not used	Not used	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	customer	Trip GB	<input type="checkbox"/>
Prot	1050	G > 3	6	130	%	30	Not used	Not used	<input type="checkbox"/>	<input checked="" type="checkbox"/>	customer	Trip GB	<input type="checkbox"/>
Prot	1060	G > 4	7	150	%	10	Not used	Not used	<input type="checkbox"/>	<input checked="" type="checkbox"/>	customer	Trip GB	<input type="checkbox"/>
Prot	1101	Volt dep > 1	1251	110	%	N/A	N/A	N/A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	customer	N/A	<input type="checkbox"/>

I think, initial ampere start value of BT will also be printed on BT panel, or can ask vessel staff, or any service engineer from BT side.

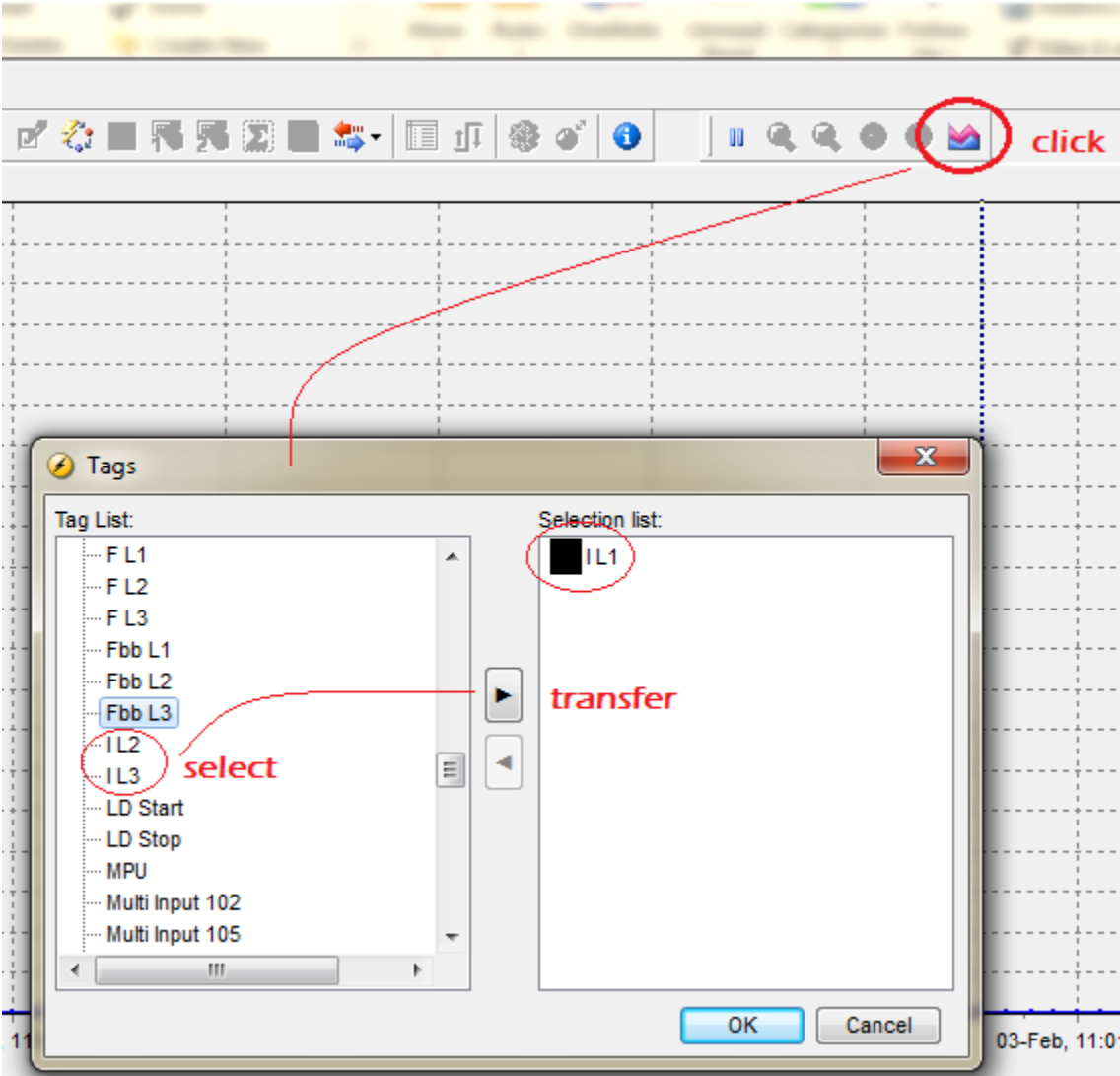
You can set the value in Protection for over-current in percentage, and also set time if given on BT panel.

Else go to Trending, as shown below...

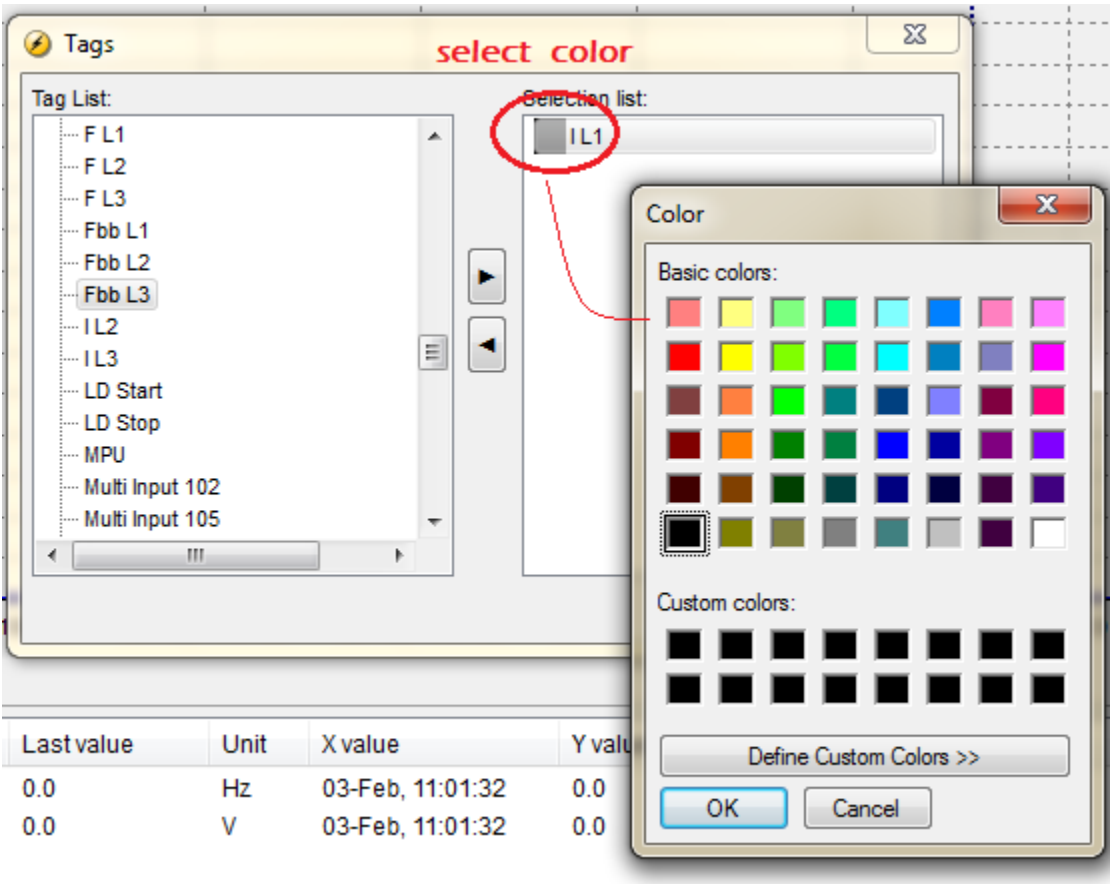
You need to click on 'Trending'...



Select IL1 (R-Phase ampere value) as shown below...



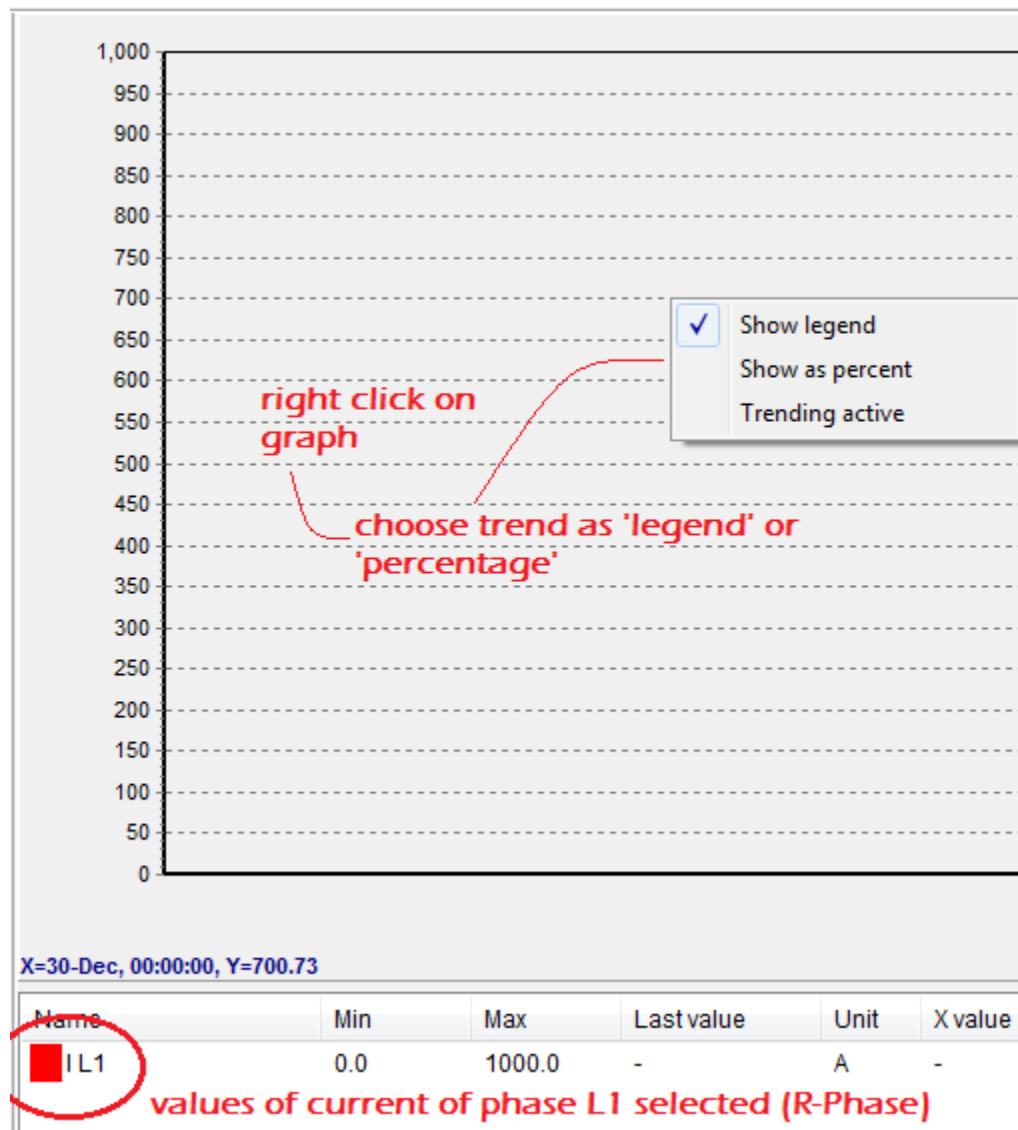
Select color, if you desire, by double-click on IL1...



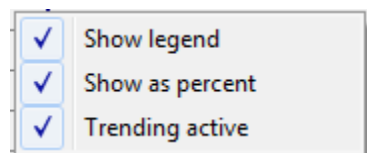
Trending can be set by two options...

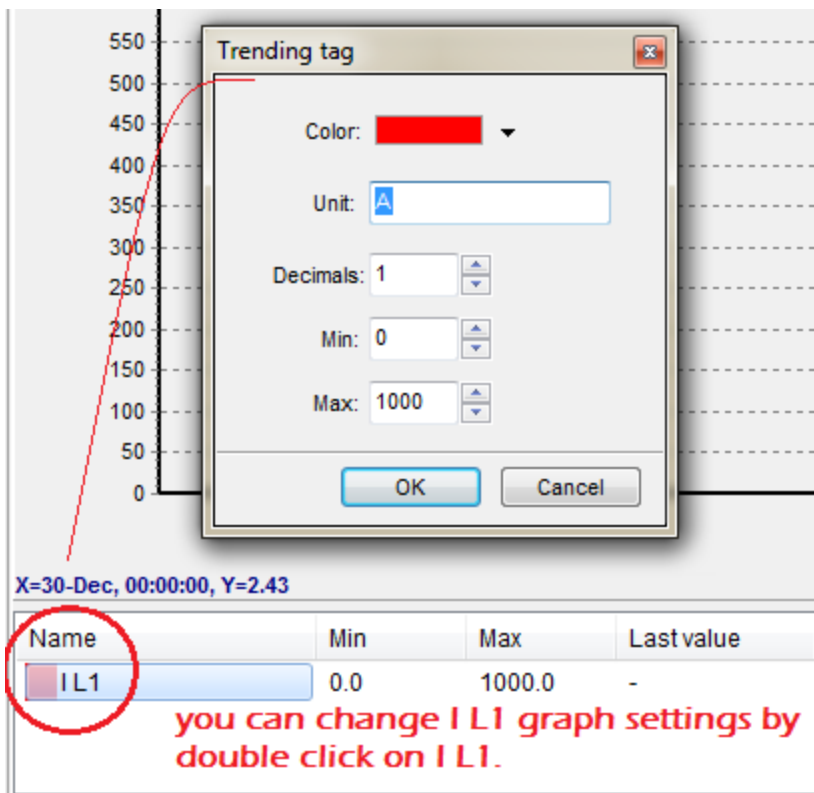
Legend (means with actual value of ampere) or

Percent (means percentage value of Nominal Current value, set at parameter 6003 in General Settings)



Please note that for switching between options, say from 'Show legend' to 'Show as percent'... You need to remove tick, by click on 'Show legend'. You again need to right-click on graph and select 'Show as percent'. As shown below, it should not be in both options.





Same way you can choose other parameters also for viewing Trend from the list...

Please note that 'Show legend' option is useful if numbers of parameters are more than one, **and**, values are more or less same...

Example:

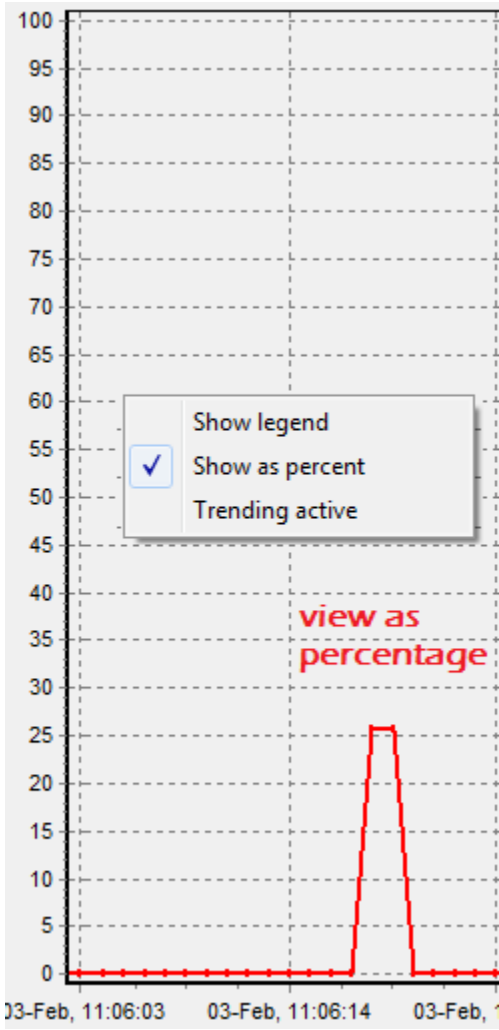
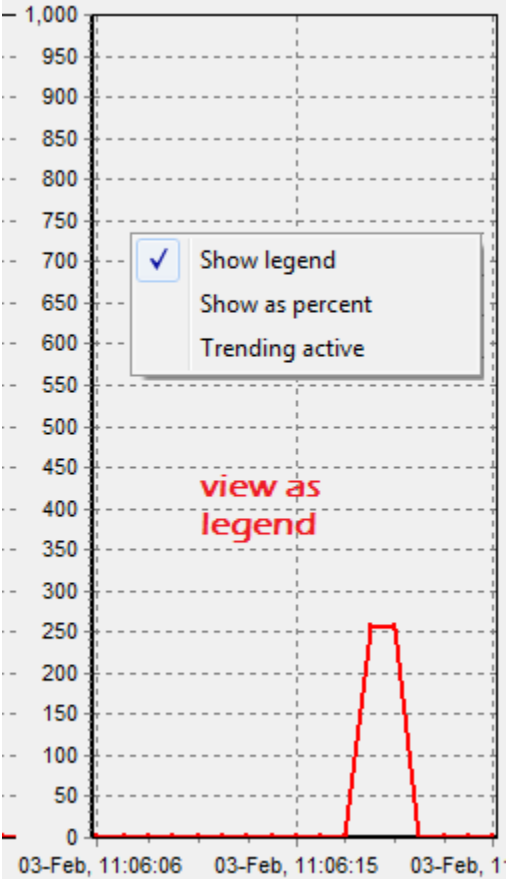
If you are viewing current values of all three phases, IL1, IL2 and IL3 then 'Show legend' will be helpful. This is because the values will be more or less same and high, like 1000 amps in each phase.

If you are viewing trend for current IL1 and frequency, then 'Show percent' will be better option. This is because, value of IL1 will be high around 1000 amps, and value of frequency will be 50 Hz. So Frequency will not be accurately visible.

You can also check values and percentage as shown below...

Name	Min	Max	Last value	Unit	X value	Y value
IL1	0.0	1000.0	23.0 (2.30%)	A	03-Feb, 12:06:25	0.0
FL1	0.0	60.0	50.0 (83.28%)	Hz	N/A	N/A

As shown below, now you can view ampere value and period for which it was high. Just run BT three times, note down ampere values and period, each time. Take average and set values in Protection accordingly.



Thank You.