

From: Miroslav Miletin mirek.tem@gmail.com
Subject: Re: Proof of accuracy
Date: 10 September 2017 at 21:52
To: walter geens walter.geens@telenet.be
Cc: Zdenka DOSTÁLOVÁ zdenkadostalova@gmail.com



Hello Walter

I am sorry for the delay, hope its still not too late.

As I noticed in Hungary, now I have new firmware for MDLE4 (1.2) which offers factory calibration. I suggest factory calibration only, because in case of option of user-calibration (not important if available i.e. for national leaders, responsible persons etc. only) there still is possibility to affect the functionality by not exact calibration. However, in case of factory calibration, this should be possible to be done repeatable for free (in warranty time) or for some low fee (i.e. 10EUR).

Actually, "worst" accuracy of MDLE4 based on used parts is better than 1,5% above 40A current and better than 2% above 20A. Accuracy is worse in small current like 5-10A based on its design and in fact, it is almost impossible to design device with acceptable price able to measure high peaks (like 100-200A) and with good accuracy in very small current too. Due this, I expect in case we will use limiters also in mini classes, it will be strongly recommend to have one "mini limiter" (up to i.e. 50A) and "standard type" like we have now.

Real accuracy of new calibrated MLDE4 with FW 1.2 is much better, based on tests it is better then 1% at 30A and even better for higher currents. Each piece is now tested at 10V 30A with 53Wh limit, checked by high-grade laboratory devices.

Upgrade of limiters allready sold is possible, of course, and will be done for free (this time). But I would like to wait some time, till there will be any decision/suggestion for season 2018. Maybe we found any other ways what to do and any other FW changes will be needed. However, in case of any tests, I am able to send some pieces with new FW right now.

In case of credibility of limiters, I am afraid of that it will be necessary to find independent testing device, not designed or supported by any of us, the producers. I see this now as one of first tasks for the TC, to ask i.e. national metrology institutes for knowing more.

In few days, I will fulfill Martin´s table of limiters data, and send it to you too.

Regards
Miroslav

2017-09-02 19:44 GMT+02:00 walter geens <walter.geens@telenet.be>:

Hello my friends,

In order to have some solid documented proof i must ask you to explain to me how the accuracy of your devices was/is determined. Apparently for some people this seems to be a major issue, so could you please inform me on this.

Some people seem worried about tolerances between individual items of the same manufactor, so what do we have there to work with?

I do understand that a full laboratory test on both accuracy and tolerance is out of the question in view of the price (I enquired at a certified electronic testing lab, and the price is 1000€ per unit!) but how do you, manufactors, propose to deal with this.

It is in all of your (our) interrest we come up with some solid answers so we can deal with the "nasty" questions that are already being asked.

Hope to hear from you all soon,

Regards,
Walter

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