



# **New Features in ibaCMC v3.3.0**

**Author:** L.Gabriel, iba AG - Fürth

**Date:** November 2024

## Table of contents

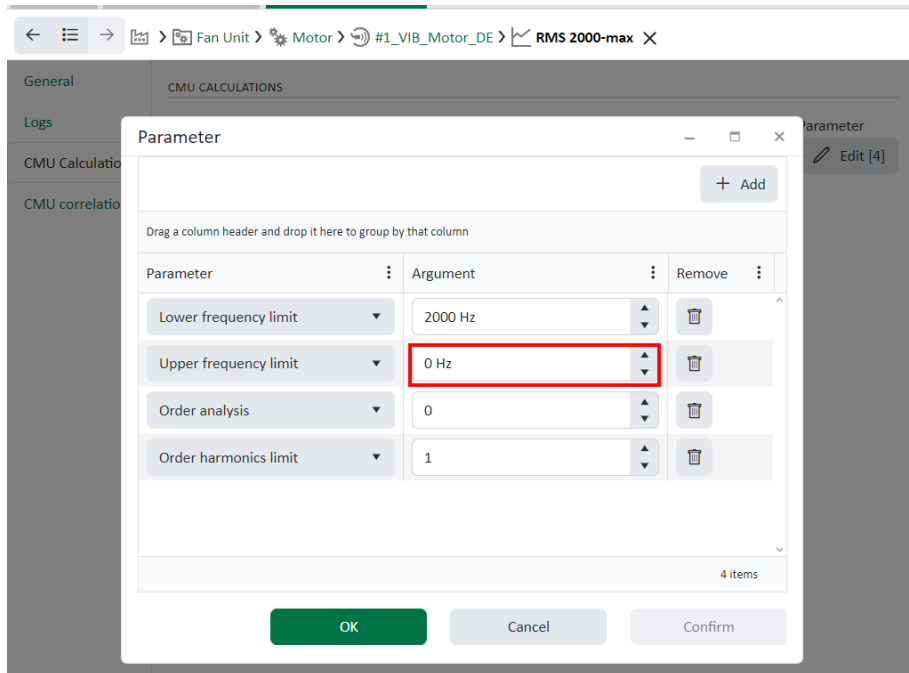
<b>1</b>	<b>Important Notes .....</b>	<b>3</b>
1.1	RMS 2000-max configuration issue was solved .....	3
1.2	TCP telegrams are only displayed underneath a CMU in the plant tree .....	4
1.3	Enhanced password validation added .....	4
1.4	New ibaCMU-S firmware available .....	5
1.5	MicroCMU support added for migrated plants .....	5
<b>2</b>	<b>New Features.....</b>	<b>6</b>
2.1	Alarm list .....	6
2.2	Added manual reset status change type .....	7
2.3	Add drag functionality to sideband and harmonic markers .....	7
2.4	Update hysteresis for all loaded trends with a global setting.....	9
2.5	SMTP system settings page.....	10
2.6	Snapshot specific measurement file cleanup for ibaPDA based CM-Devices.....	11
2.7	EUP-Info file download .....	11
2.8	Added system language switch for German and English .....	12
<b>3</b>	<b>Improvements .....</b>	<b>13</b>
3.1	Redesigned kinematic grid.....	13
3.2	Include thresholds in Y-axis on double click the autoscale Y-axis button .....	13
3.3	Opening dashboards was improved .....	14
3.4	Renamed trend K(t) to `RMS * Peak` .....	15
3.5	Workareas settings are migrated to thresholds during migration process.....	15
3.6	Markers in signal analysis charts are set based on the trend .....	16
3.7	CMU configuration status is set to “pending” after a config change.....	16

## 1 Important Notes

### 1.1 RMS 2000-max configuration issue was solved

In ibaCMC v3.2, an issue was introduced that caused the RMS and RMS 2000-max values to display identical trend data on the ibaCMU-S (Haicmon CMU). This issue has been resolved in v3.3.

If the upper frequency limit is set to 0 Hz for an RMS trend in the export file, a value of  $\text{samplerate} / 2$  is applied



Example configuration with samplerate of 20 kHz.

```
<VTrend Index="3" Id="25704" Name="RMS 2000-max" Einheit="m/s2" S
KorrBI="" KorrPar1="" KorrPar2="" MBSBI="">
  <CMUB Kz="RMS" BId="4" Mul="1">
    <BP Key="UntereGrenzfrequenz" Arg="2000" />
    <BP Key="ObereGrenzfrequenz" Arg="10000" />
    <BP Key="Ordnungsanalyse" Arg="0" />
    <BP Key="OrdnungsVielfache" Arg="1" />
  </CMUB>
</VTrend>
```



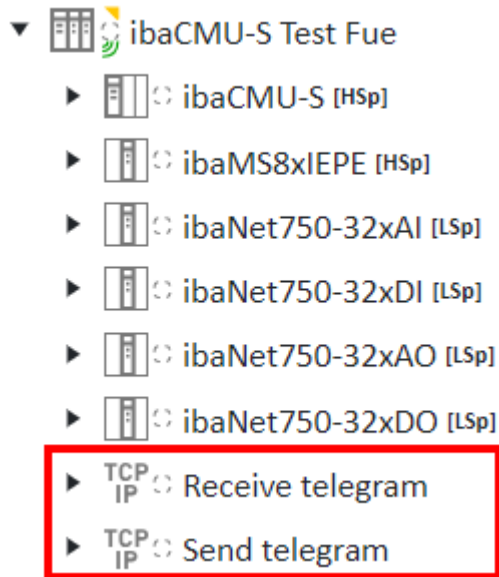
#### Important Note

For the change to take effect, the **CMU configuration must be uploaded** to the ibaCMU-S (Haicmon CMU).

## 1.2 TCP telegrams are only displayed underneath a CMU in the plant tree

Previously, it was possible to assign a TCP telegram to an Aggregate group. This setup was introduced in V1 because the CMU was not visible in the plant tree. With V3, however, the CMU was moved into the plant tree, and TCP telegrams now appear directly under the CMU. As a result, two instances of a TCP telegram could be shown in the plant tree, causing various issues.

To resolve this, the option to add TCP telegrams to Aggregate groups has been removed. Existing assignments will be removed automatically with the update to this version. All TCP telegrams are accessible directly under the CMU in the plant tree.



## 1.3 Enhanced password validation added

To meet rising security standards, stricter password requirements have been implemented. When setting a new password, it must meet the following criteria:

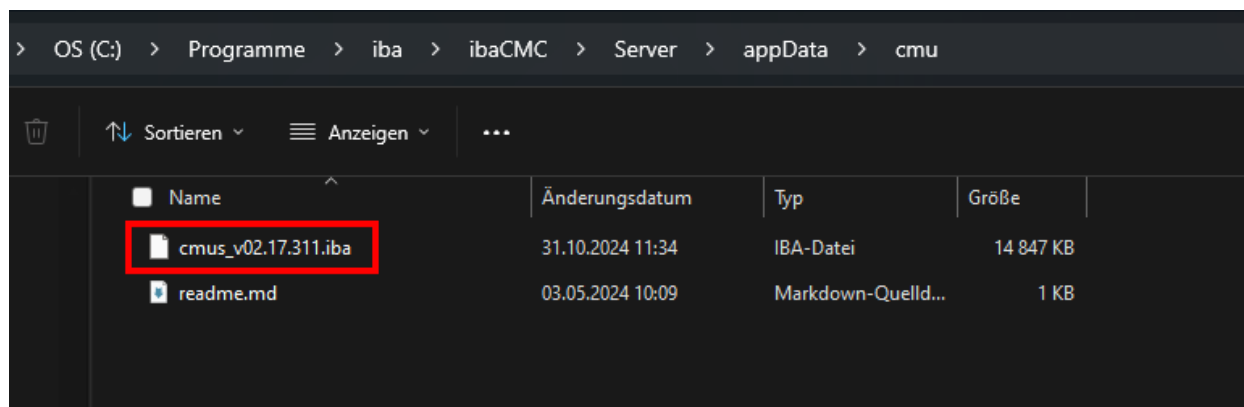
- Minimum of 8 characters
- At least one number
- At least one uppercase letter

## 1.4 New ibaCMU-S firmware available

ibaCMC v3.3 also includes a new ibaCMU-S firmware release. We recommend updating the ibaCMU-S firmware to v02.17.311.

The CMU update file can be found in the installation folder of ibaCMC (default path: C:\Program Files\iba\ibaCMC\Server\appData\cmu).

For detailed installation instructions, please refer to the "readme.md" file.



## 1.5 MicroCMU support added for migrated plants

The oil condition monitoring device microCMU, developed by Hainzl, is now supported in migrated plants. Migration of microCMU devices is possible with firmware version 2.5 or higher, and we recommend updating to the latest version.

The microCMU firmware file can be found in the ibaCMC installation folder (default path: C:\Program Files\iba\ibaCMC\Server\appData\microcmu).

For detailed installation instructions, please refer to the "readme.md" file.

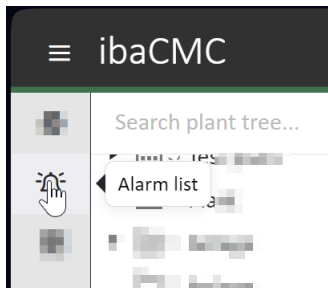


### Important Note

In ibaCMC v3.3, status calculation is now handled directly within ibaCMC. Therefore, check the threshold settings for microCMU trends before and after migration. Existing thresholds should migrate to v3 automatically. Previously, in v1, the status was directly inherited from the microCMU.

## 2 New Features

### 2.1 Alarm list



With the newly introduced alarm list, users can view an overview of open alarms associated with a specific plant tree element. Simply drag and drop the plant tree item onto the alarm list. The acknowledgment function allows users to acknowledge all alarms or select specific ones. During acknowledgment, users can add comments. All acknowledged alarms, along with their comments, can be found in the Acknowledged tab.

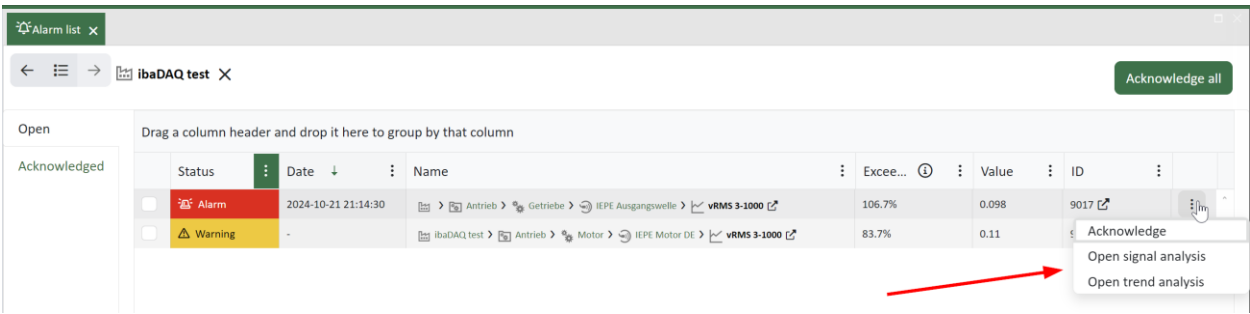
Status	Date	Name	Exceedance	Value	ID
Alarm	2024-10-21 21:14:30	IEPE Ausgangswelle > vRMS 3-1000	106.7%	0.098	9017
Warning	-	Motor > IEPE Motor DE > vRMS 3-1000	83.7%	0.11	90161

All the acknowledged alarms including the comments can be found in the acknowledged tab.

The comments are linked to the logbook and can also be accessed there.

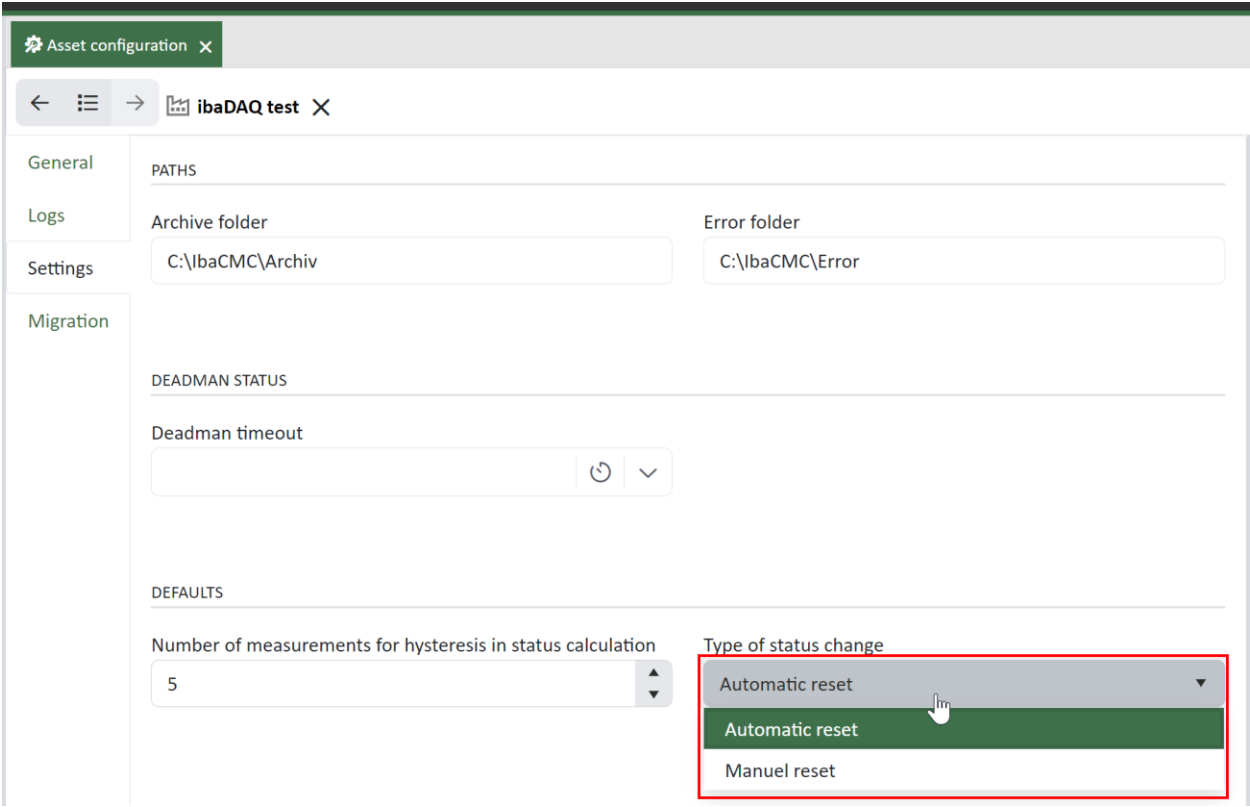
Status	Date	Name	Comment	Acknowledged by	Acknowledged at	ID
Warning	2024-10-21 20:59:59	RMS 2000-max	Under observation	ibaCMC SYSTEM(Admin)	2024-10-21 21:13:07	90160
Alarm	2024-10-16 10:36:25	vRMS 3-1000	Under observation	ibaCMC SYSTEM(Admin)	2024-10-21 21:13:07	9017
Alarm	2024-10-16 10:07:38	vRMS 3-1000	Acknowledge all open a...	ibaCMC SYSTEM(Admin)	2024-10-16 10:07:52	9017
Warning	2024-10-16 10:05:40	vRMS 3-1000		ibaCMC SYSTEM(Admin)	2024-10-16 10:07:11	9017

Clicking the three dots allows you to acknowledge a single status, access the signal analysis directly, or open the trend analysis.



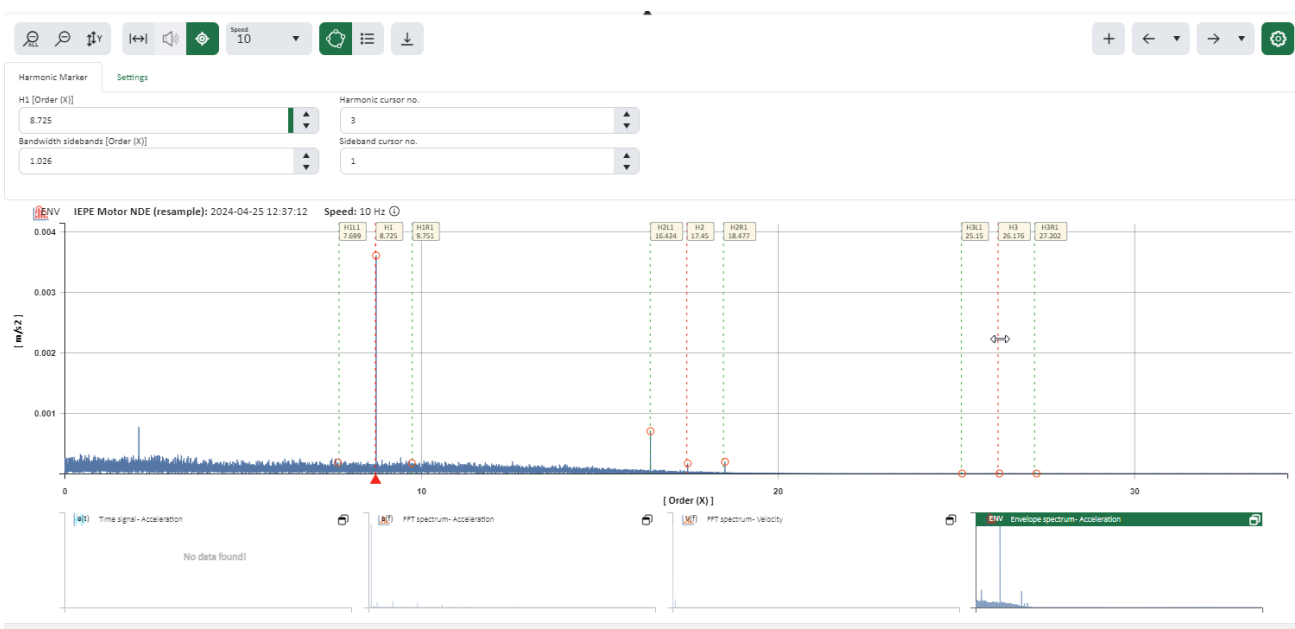
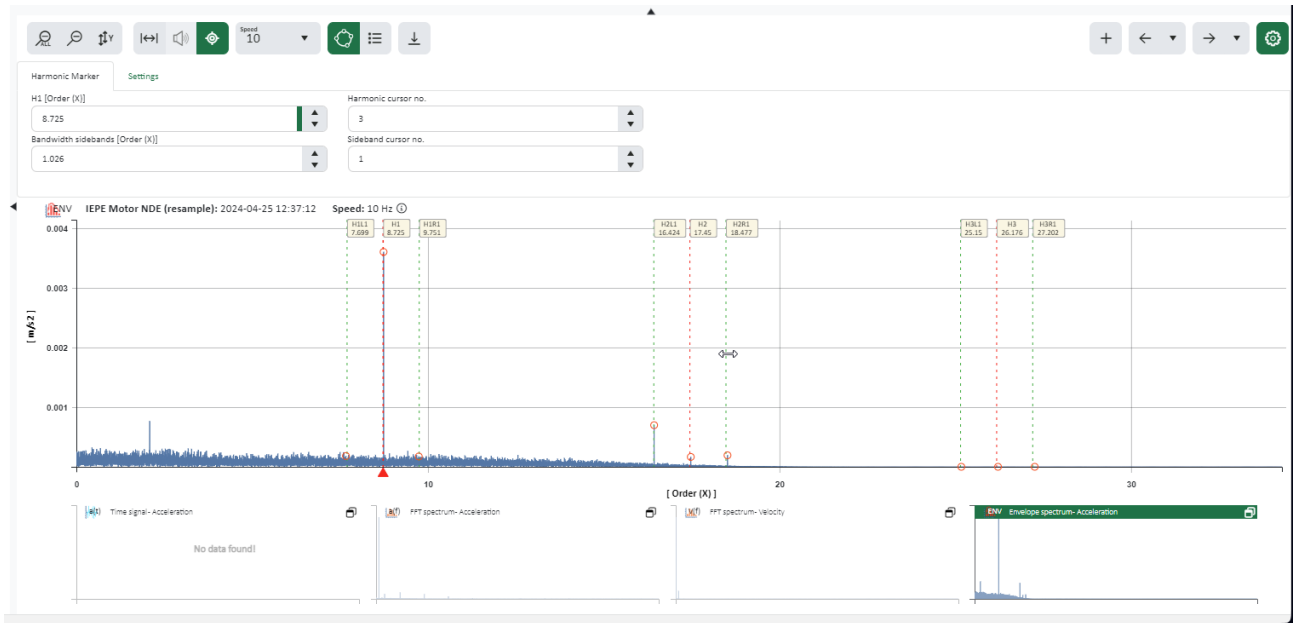
2.2 Added manual reset status change type

In addition to the automatic reset, a manual reset option is now available. The status change type can be configured for each plant. When the manual reset is selected, the highest status is maintained (Peak Hold). After reviewing the alarm, users can manually reset it either from the alarm list or through the context menu of the plant tree.



2.3 Add drag functionality to sideband and harmonic markers

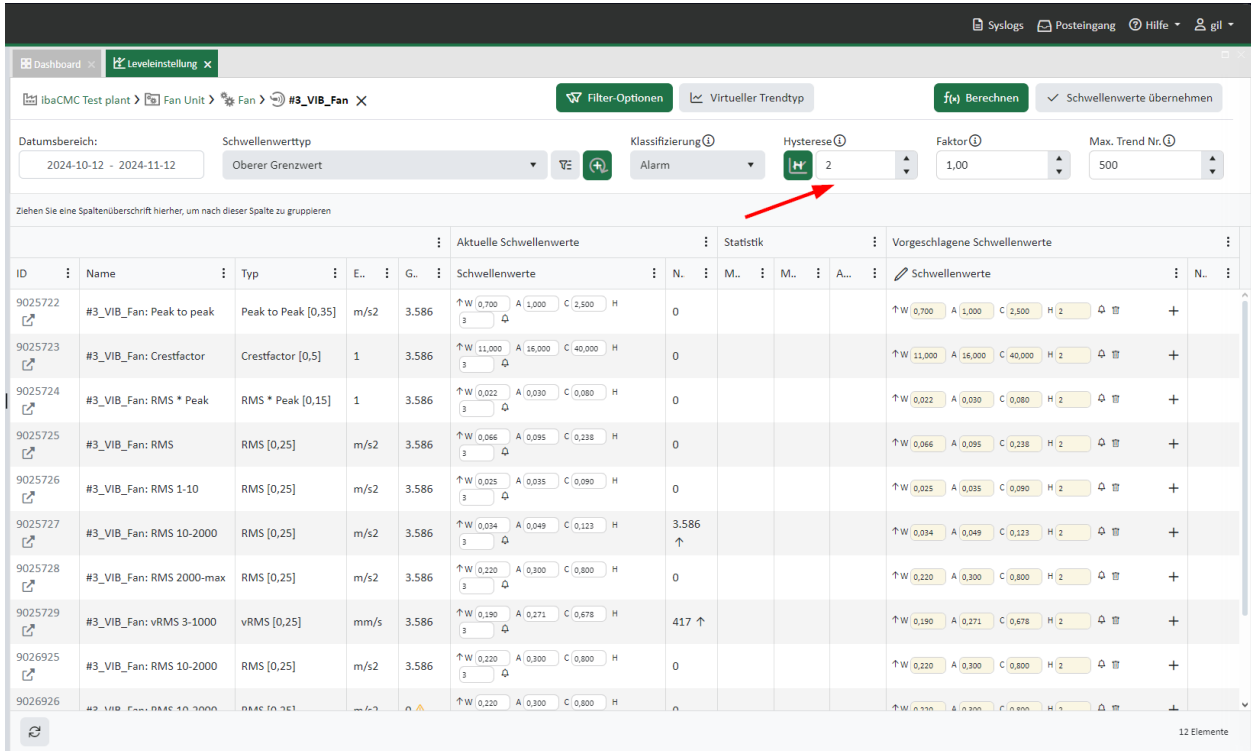
For sideband and harmonic markers, it is now possible to drag them with the mouse. This is possible for each harmonic and sideband marker. This helps when positioning the marker on a peak.





## 2.4 Update hysteresis for all loaded trends with a global setting

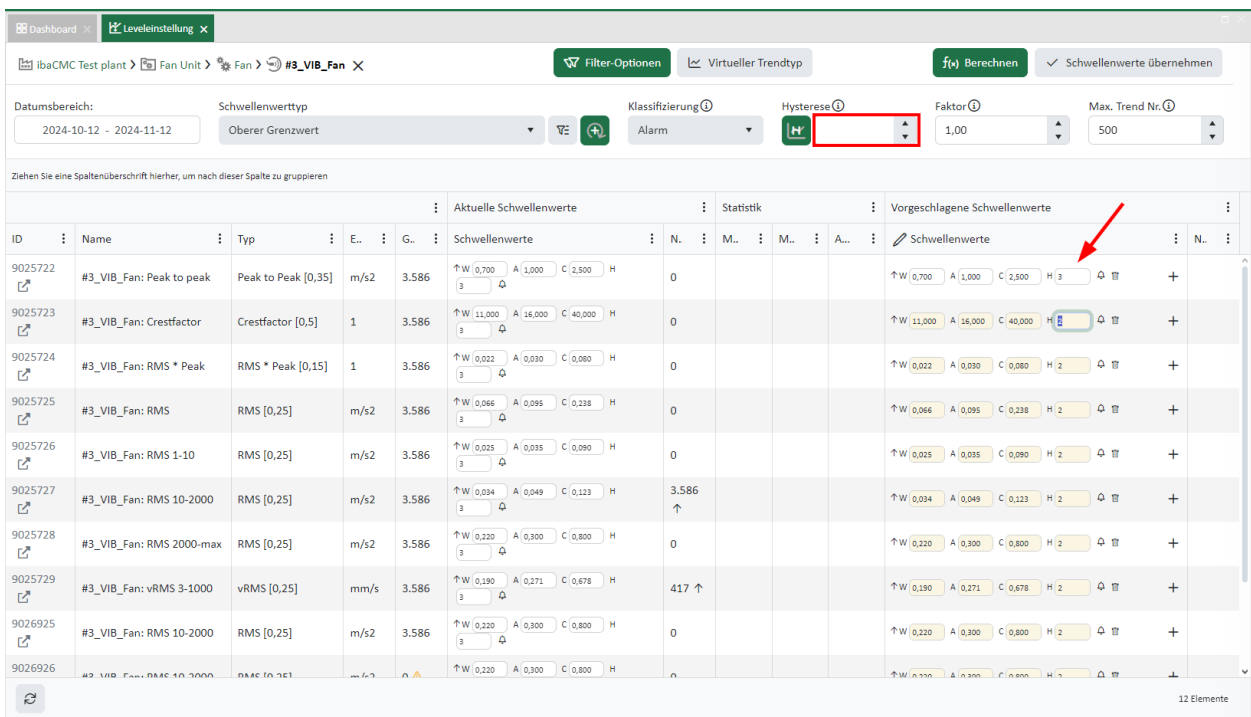
When enabling the hysteresis button it is now possible to modify the hysteresis for all shown trends at once.



The screenshot shows the 'Leveleinstellung' (Level Setting) window in ibaCMC. The 'Hysteresis' button is highlighted with a red arrow and is set to '2'. The table below lists various trends with their current and suggested hysteresis values.

ID	Name	Typ	E..	G..	Aktuelle Schwellenwerte	Statistik	Vorgeschlagene Schwellenwerte
9025722	#3_VIB_Fan: Peak to peak	Peak to Peak [0,35]	m/s²	3.586	↑ W 0,700 A 1,000 C 2,500 H 2	0	↑ W 0,700 A 1,000 C 2,500 H 2
9025723	#3_VIB_Fan: Crestfactor	Crestfactor [0,5]	1	3.586	↑ W 11,000 A 16,000 C 40,000 H 2	0	↑ W 11,000 A 16,000 C 40,000 H 2
9025724	#3_VIB_Fan: RMS * Peak	RMS * Peak [0,15]	1	3.586	↑ W 0,022 A 0,030 C 0,080 H 2	0	↑ W 0,022 A 0,030 C 0,080 H 2
9025725	#3_VIB_Fan: RMS	RMS [0,25]	m/s²	3.586	↑ W 0,066 A 0,095 C 0,238 H 2	0	↑ W 0,066 A 0,095 C 0,238 H 2
9025726	#3_VIB_Fan: RMS 1-10	RMS [0,25]	m/s²	3.586	↑ W 0,025 A 0,035 C 0,090 H 2	0	↑ W 0,025 A 0,035 C 0,090 H 2
9025727	#3_VIB_Fan: RMS 10-2000	RMS [0,25]	m/s²	3.586	↑ W 0,034 A 0,049 C 0,123 H 2	3.586	↑ W 0,034 A 0,049 C 0,123 H 2
9025728	#3_VIB_Fan: RMS 2000-max	RMS [0,25]	m/s²	3.586	↑ W 0,220 A 0,300 C 0,800 H 2	0	↑ W 0,220 A 0,300 C 0,800 H 2
9025729	#3_VIB_Fan: vRMS 3-1000	vRMS [0,25]	mm/s	3.586	↑ W 0,190 A 0,271 C 0,678 H 2	417	↑ W 0,190 A 0,271 C 0,678 H 2
9026925	#3_VIB_Fan: RMS 10-2000	RMS [0,25]	m/s²	3.586	↑ W 0,220 A 0,300 C 0,800 H 2	0	↑ W 0,220 A 0,300 C 0,800 H 2
9026926	#3_VIB_Fan: RMS 10-2000	RMS [0,25]	m/s²	3.586	↑ W 0,220 A 0,300 C 0,800 H 2	0	↑ W 0,220 A 0,300 C 0,800 H 2

It is still possible to assign different hysteresis values to the trends in the list. However, if one hysteresis value differs from the others, the hysteresis input field will automatically be cleared.



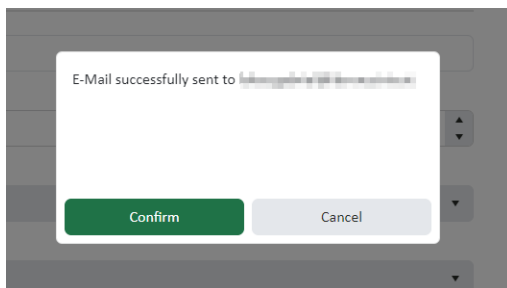
The screenshot shows the same 'Leveleinstellung' window, but with the 'Hysteresis' input field for the first trend (Peak to peak) highlighted with a red arrow. The input field is empty, indicating that the hysteresis value has been cleared.

## 2.5 SMTP system settings page

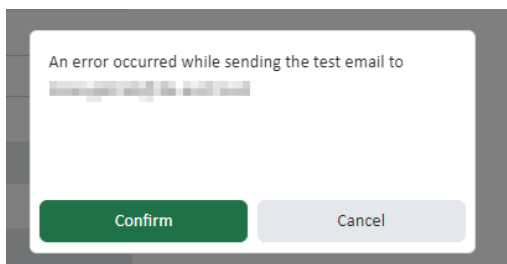
Now the SMTP mail settings can be configured directly in the system settings. Previously, these settings had to be adjusted in the *appsettings.json* file. Additionally, a 'Send Test Email' button has been added, enabling users to verify if the configured settings are functioning properly.

The screenshot shows the 'System settings' window with the 'Mail (SMTP)' tab selected. The settings are organized into sections: SENDER, SMTP SERVER, and a 'Send test email' button at the bottom. The SENDER section includes a 'From' field with the value 'test <cms@iba-ag.com>' and a toggle for 'Add plant name suffix'. The SMTP SERVER section includes fields for 'Hostname' (smtp.iba-ag.com), 'Port' (25), 'Security' (None), 'Authentication' (None), 'Domain', 'Username', and 'Password'. A 'Send test email' button is located at the bottom left of the settings area. Confirmation and Cancel buttons are at the top right.

The following success message is shown when the connection works.

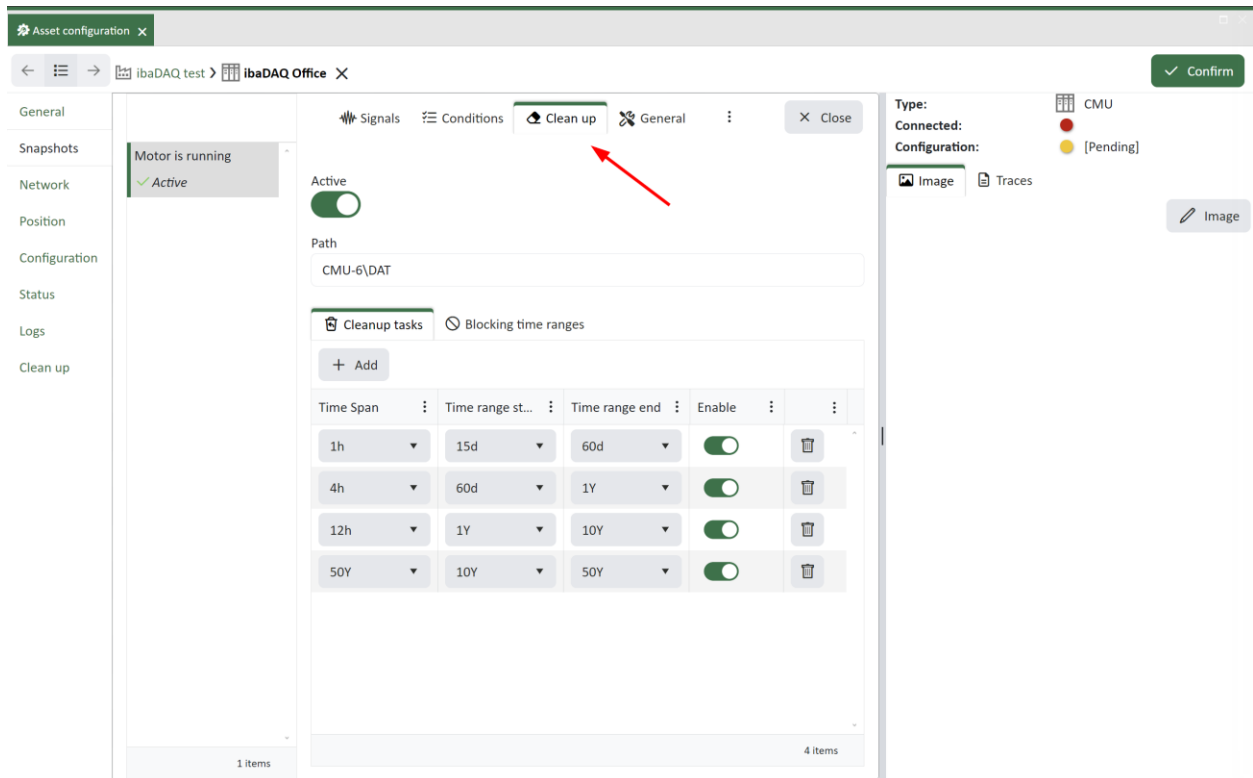


The following error message is shown when the connection to the SMTP server is not working. In this case check if the hostname, port and authentication settings are set correctly.



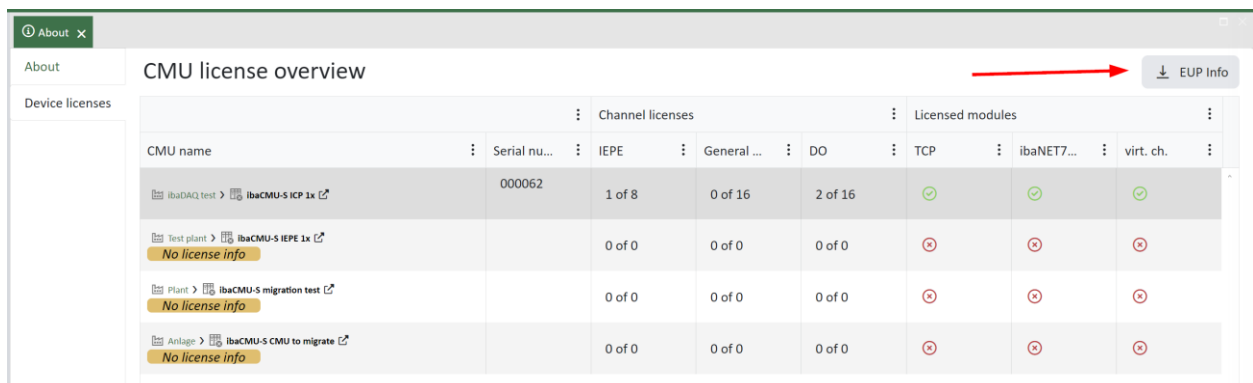
## 2.6 Snapshot specific measurement file cleanup for ibaPDA based CM-Devices

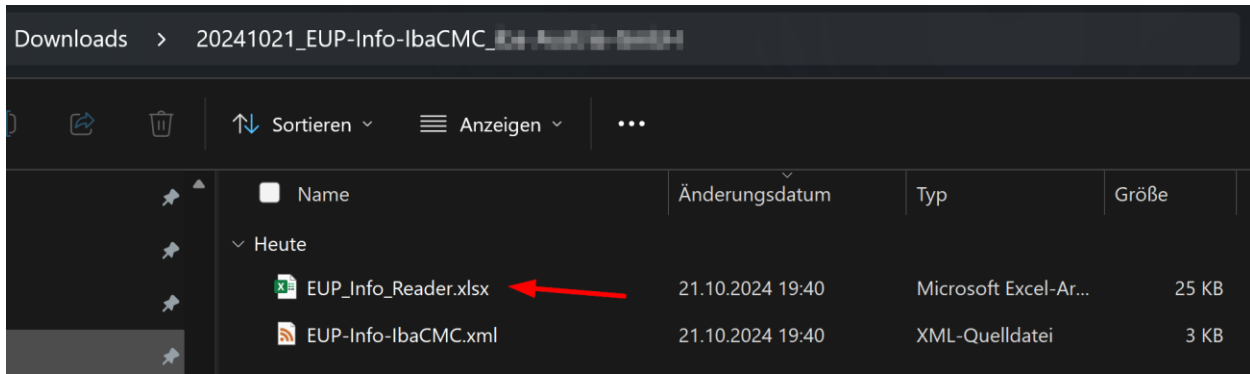
ibaPDA-based CM devices generate snapshot-specific DAT files. Now the cleanup strategy for these devices can be configured directly within the snapshot settings. By default, the cleanup is disabled, but cleanup tasks are preconfigured. To enable cleanup, simply activate the 'Active' switch.



## 2.7 EUP-Info file download

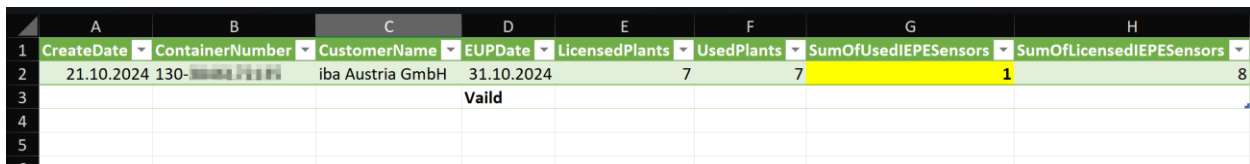
The EUP-Info file streamlines the process for customers when requesting a EUP extension. It consolidates all the essential information about licensed and used sensors in the iba CMS, allowing the iba sales team to generate an EUP offer much more quickly. By providing this file, customers can enjoy a faster and more efficient service, ensuring their extension requests are handled promptly.





Downloads > 20241021\_EUP-Info-IbaCMC\_...

Name	Änderungsdatum	Typ	Größe
▼ Heute			
EUP_Info_Reader.xlsx	21.10.2024 19:40	Microsoft Excel-Ar...	25 KB
EUP-Info-IbaCMC.xml	21.10.2024 19:40	XML-Quelldatei	3 KB

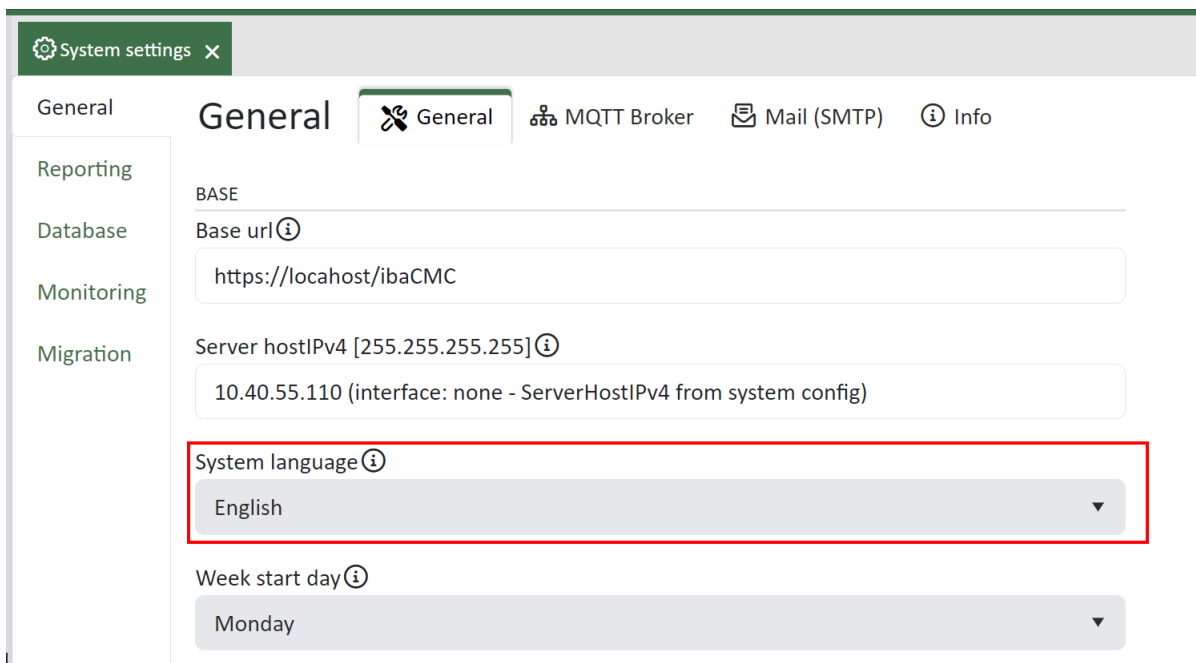
  


CreateDate	ContainerNumber	CustomerName	EUPDate	LicensedPlants	UsedPlants	SumOfUsedIEPESensors	SumOfLicensedIEPESensors
21.10.2024	130-...	iba Austria GmbH	31.10.2024	7	7	1	8
		Valid					

## 2.8 Added system language switch for German and English

Previously, the system language had to be selected during installation. Now, it is possible to change the system language at runtime by navigating to System Settings > General.

This setting affects the language of the predefined assets in the component library.



System settings x

General Reporting Database Monitoring Migration

**General** General MQTT Broker Mail (SMTP) Info

BASE

Base url ⓘ  
https://localhost/ibaCMC

Server hostIPv4 [255.255.255.255] ⓘ  
10.40.55.110 (interface: none - ServerHostIPv4 from system config)

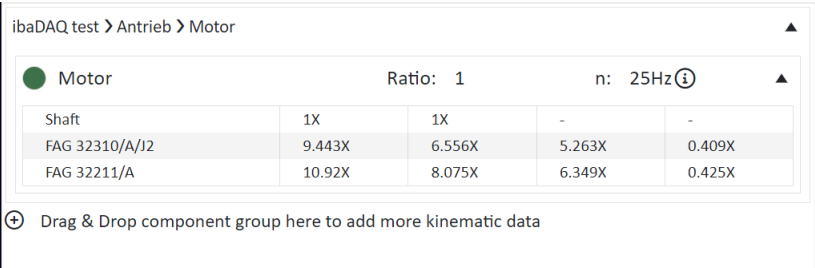
System language ⓘ  
English ▼

Week start day ⓘ  
Monday ▼

### 3 Improvements

#### 3.1 Redesigned kinematic grid

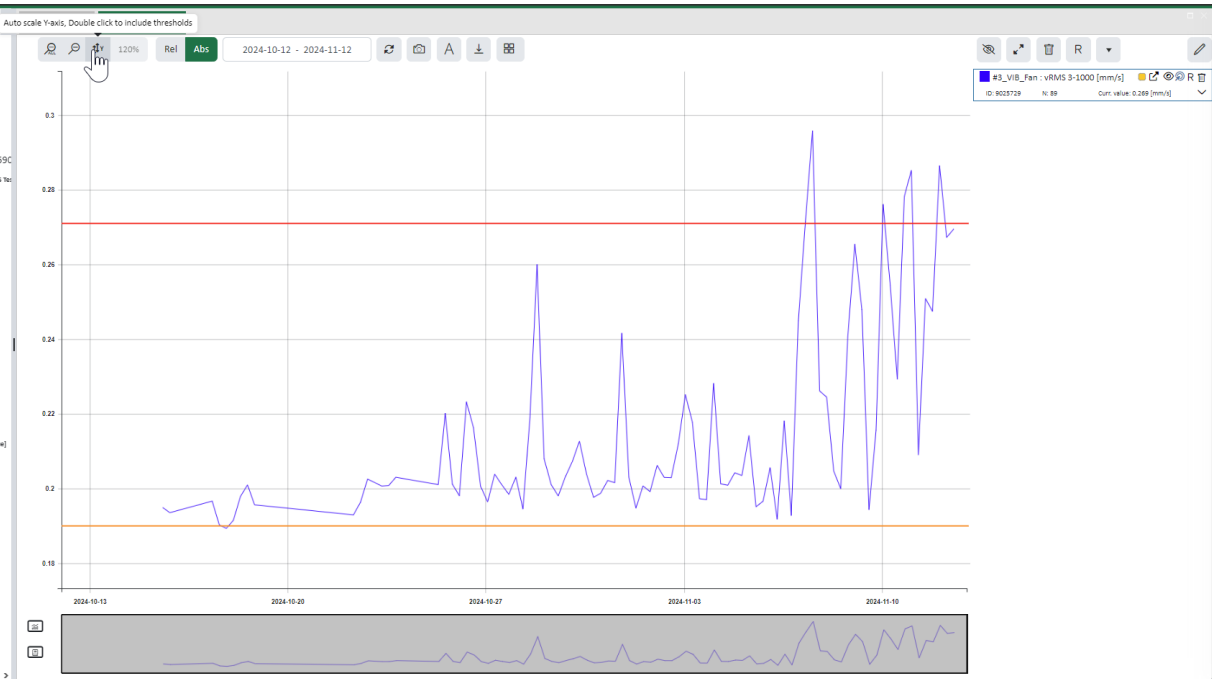
The kinematic grid has been redesigned to be collapsible and now includes the full plant path in the header for better clarity. The core features remain unchanged.



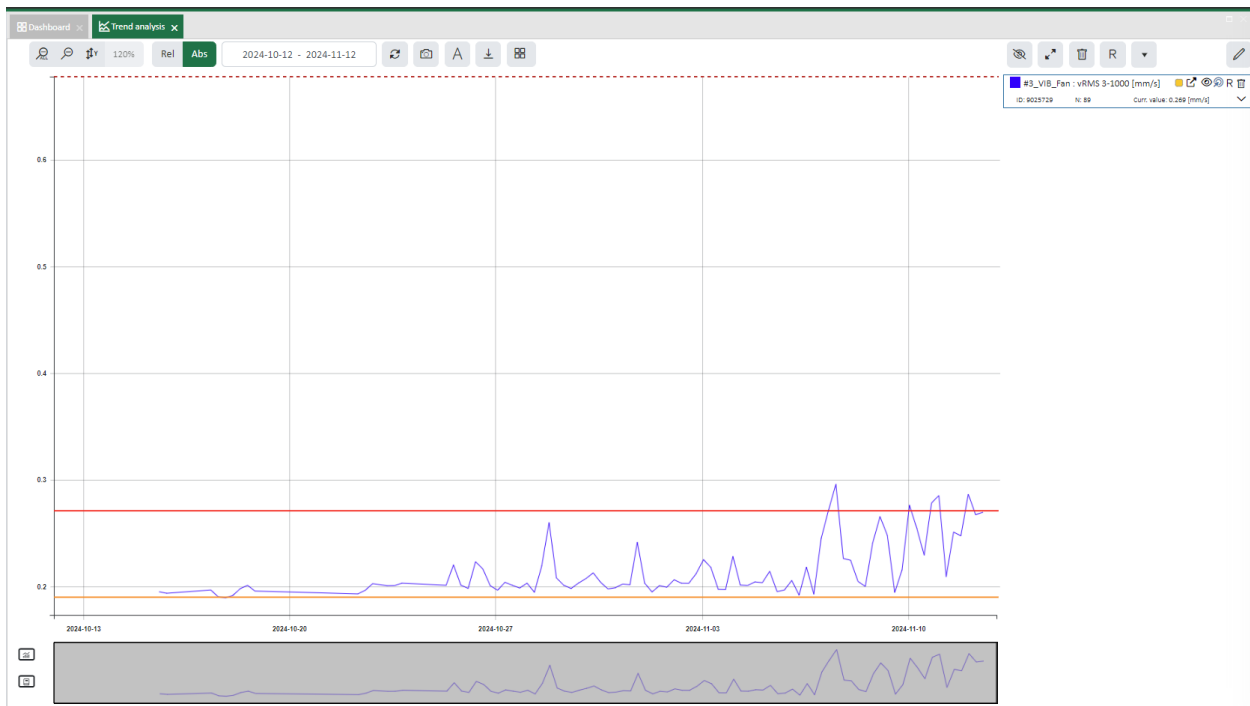
#### 3.2 Include thresholds in Y-axis on double click the autoscale Y-axis button

Double-clicking on the auto-scale Y-axis now includes the threshold in the scaling, providing a more accurate view of the data range.

Y-scaling based on trend data (one click)

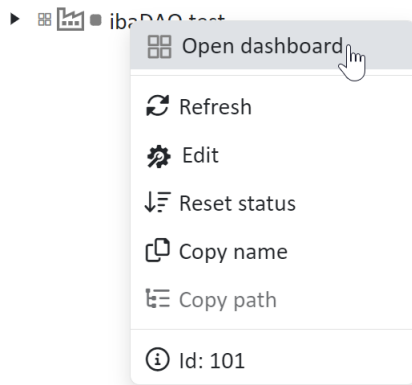


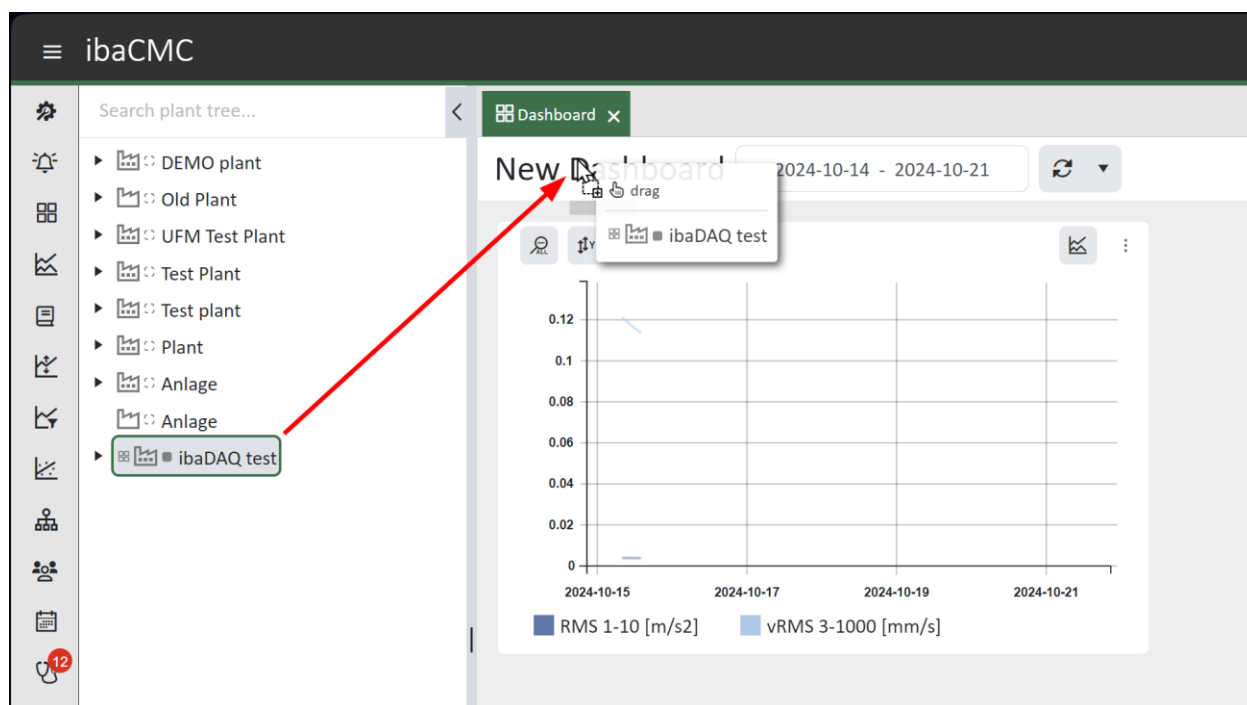
### Y-scaling including threshold (double click)



### 3.3 Opening dashboards was improved

Dashboard access is now available directly through the context menu for quicker navigation. Alternatively, you can load the dashboard by drag and drop a plant tree item, including its associated dashboard, onto the dashboard name.





### 3.4 Renamed trend K(t) to `RMS \* Peak`

The trend K(t) is renamed to RMS \* Peak because the official definition of the K(t) is  $1 / \text{RMS} * \text{Peak}$  and in the system the indicator is calculated by RMS \* Peak.



#### Note

The RMS \* Peak (formerly K(t)) trend will no longer be generated for the sensor definitions IEPE Vibration Sensor (Regular) and IEPE Vibration Sensor (Extended) in migrated plants.

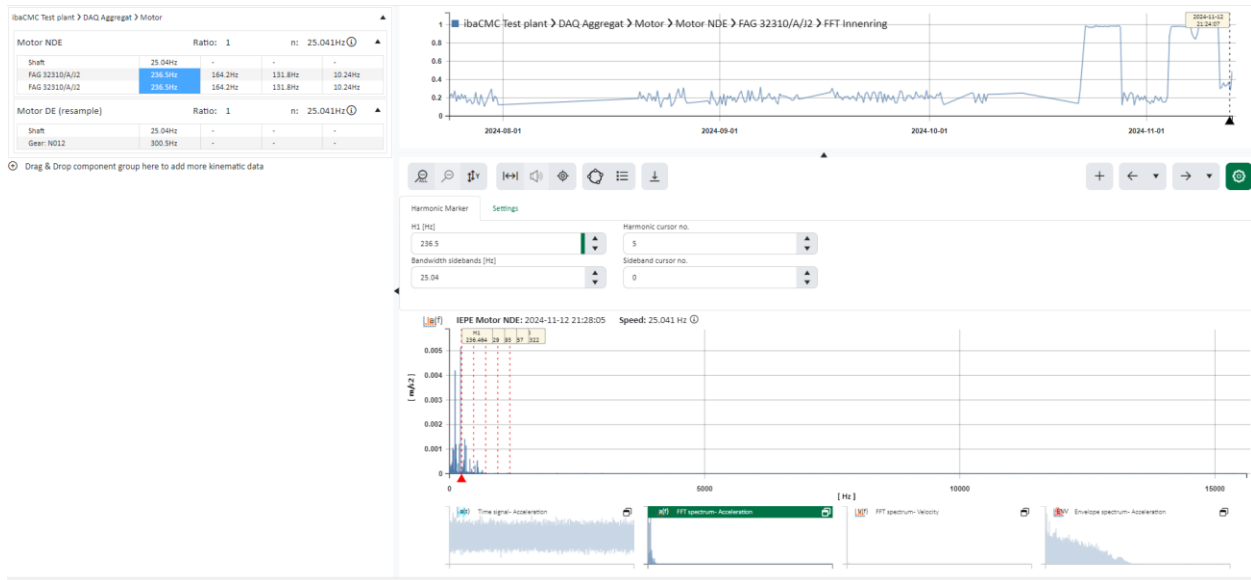
### 3.5 Workareas settings are migrated to thresholds during migration process

During the migration from v1 to v3, the configured work area settings are transferred to v3. As part of this, threshold settings (Max, Min, SD) are created for the relevant trends under each TCP telegram, digital sensor, or analog sensor, enabling the use of the relative trend view for these trends.

### 3.6 Markers in signal analysis charts are set based on the trend

When opening a signal analysis from a component trend, the markers for spectrum and time signals are positioned according to the trend type.

For example, when an FFT inner race trend is opened, the marker is automatically set to the defect frequency of the inner race.



### 3.7 CMU configuration status is set to “pending” after a config change

When any CMU-related configuration—such as sensor settings, module assignments, or CMU parameters—is modified, the CMU configuration status is set to “pending.” This status indicates that the CMC and CMU configurations are out of sync and require an update on the CMU.

To synchronize, navigate to the *Configuration* tab of the CMU, click the *Export Config* button, and select *Entire Configuration* to upload the latest settings.

