OMRON

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DX Series
Condition Monitoring Package

User's Manual

Precautions for Correct Use

If you are using the package, please make sure to update to the latest version of both the package and the DX1 unit.
You can obtain the package files from the license portal below and upload them to the Data Flow Controller to use the package.

https://license-user.automation.omron.com/

For detailed upload instructions, please refer to the dashboard generator manual, section "2-4 Installation Procedures for Non-Pre-installed Packages."
For details on updating the DX1 unit version, please contact your OMRON sales representative.

N703-E1-03

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Introduction

Thank you for purchasing our DX-series Data Flow Controller.
This manual provides information about the Condition Monitoring Package included with the DX Series Data Flow Controller.
Please read this manual and make sure that you understand the functionality and performance of the product before you attempt to use it in a control system.

Intended Audience

This manual is intended for the following personnel, who must also have knowledge of electrical systems (electrical engineers or the equivalent).

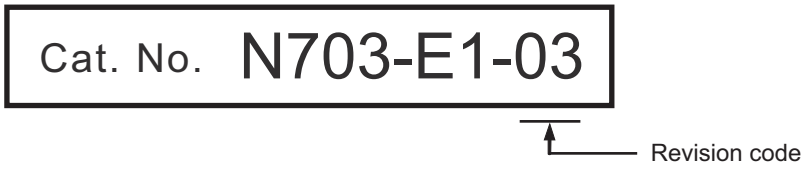
- Personnel in charge of designing and operating data utilization systems on a production site.
- Personnel in charge of designing and operating maintenance systems on a production site.

Guidance for Reading This Manual

For information on **Terms and Conditions Agreement**, **Precautions for Safe Use**, **Precautions for Correct Use**, and **Related Manuals**, refer to the *DX Series Data Flow Controller User's Manual (V241-E1)*.

Revision History

A manual revision code appears as a suffix to the catalog number on the front and back covers of the manual.



Revision code	Date	Revised content
01	October 2025	Original production
02	October 2025	Corrected mistakes
03	May 2026	Version upgrade support (V1.1)

Version Upgrade Details for the Condition Monitoring Package

Item	V1.0	Changes in V1.1
Measurement value collection cycle	The cycle for collecting measurement values from the condition monitoring device was fixed at 10 s.	The collection cycle can now be changed.
Threshold	Configured in the Dashboard Generator.	The thresholds and alarms configured in the condition monitoring device are collected and displayed on the dashboard. No threshold configuration is required in the Dashboard Generator.
Display Range	The maximum number of data points that could be displayed on the graph panel was 10,000.	When the number of data points exceeds 10,000 within the display period, the data is automatically thinned out to 10,000 points for display.
Condition Monitoring Package (Variable Speed Motor)	The graph panel and threshold evaluation results were displayed.	Numerical displays of Current, Max (Period), and Min (Period) have been added.
	The displayed feature values were fixed to seven items, including RMS voltage.	From the 142 feature values calculated by the K7DD, users can now select and display the desired feature values.
	Only a graph for one specified period was displayed.	Feature values for two specified periods can now be overlaid on a single graph panel to observe value changes.
Condition Monitoring Package (Induction Motor)	The graph panel and threshold evaluation results were displayed.	Numerical displays of Current, Max (Period), and Min (Period) have been added.
Condition Monitoring Package (Temperature in Control Panels)	Up to 10 temperature sensors could be displayed per package.	Up to 31 temperature sensors can now be displayed.
	The maximum value for each segment of the temperature sensors was displayed on the graph panel.	Two dashboards are now available. The Summary screen allows users to view the status of all 31 temperature sensors at a glance. The Detail screen allows users to reference the current value, maximum value, threshold setting value, and threshold evaluation result for each segment of each sensor. The maximum value graph display has been removed.

Sections in this Manual

CONTENTS

1

Features and System Configuration

This section describes the features and system configuration of the Condition Monitoring Package.

1-1 Capabilities of the Condition Monitoring Package

● Condition Monitoring Package

These packages enable data collection and visualization from condition monitoring devices.
By registering the dashboard, data visualization, threshold calculation, and alert configuration are supported.
There are four types of Condition Monitoring Packages available.

Type	Content
Condition Monitoring Package (Variable Speed Motor)	The condition of variable speed motors is visualized using the advanced motor condition monitoring device K7DD. The following measurement values and thresholds from among the 142 feature values are collected, and five feature values can be selected for display: • Current value, minimum value, maximum value, and alerts (caution threshold exceeded and warning threshold exceeded) For details on the measurement values, refer to the K7DD Power Line Data Generator User's Manual. The data acquisition interval can be varied from 0.1 s to 60 s. The default setting is 10 s. Two specified periods can be compared. A dataset can be output for threshold analysis.
Condition Monitoring Package (Induction Motor, type Current)	The current condition of induction motors is visualized using the motor condition monitoring device K6CM-CI2 (Comprehensive Current Diagnosis Type). The following measurement values and thresholds are collected from the condition monitoring device: • Current, Degradation Level 1, and Degradation Level 2: Current value, minimum value, maximum value, and alerts (caution threshold exceeded and warning threshold exceeded) For details on the measurement values, refer to the K6CM Motor Condition Monitoring Device User's Manual. The data acquisition interval can be varied from the sampling cycle of the condition monitoring device up to 99 s. *1 The default setting is 10 s. • Current data acquisition cycle: 5 s • Degradation Level 1: 5 s • Degradation Level 2: 5 s
Condition Monitoring Package (Induction Motor, type Vibration)	The vibration condition of induction motors is visualized using the motor condition monitoring device K6CM-VB (Vibration & Temperature Type). The following measurement values and thresholds are collected from the condition monitoring device: • Acceleration, velocity, and motor temperature: Current value, minimum value, maximum value, and alerts (caution threshold exceeded and warning threshold exceeded) For details on the measurement values, refer to the K6CM Motor Condition Monitoring Device User's Manual. The data acquisition interval can be varied from the sampling cycle of the condition monitoring device up to 99 s. *1 The default setting is 10 s. Sampling cycles: • Acceleration: 0.05 s • Velocity: 0.5 s • Motor temperature: 0.5 s

Type	Content
Condition Monitoring Package (Temperature In Control Panels)	The temperature inside control panels is visualized using the temperature condition monitoring device K6PM-TH. The following measurement values and thresholds are collected from the condition monitoring device: • Threshold 1 setting value, Threshold 2 setting value, current temperature, maximum temperature, and current temperature alerts (caution threshold exceeded and warning threshold exceeded) for the 16 thermal image segments of Sensors 1 to 31 For details on the measurement values, refer to the K6PM-TH Thermal Condition Monitoring Device User's Manual. The data acquisition interval can be varied from 10 s to 99 s. *1 The default setting is 10 s.

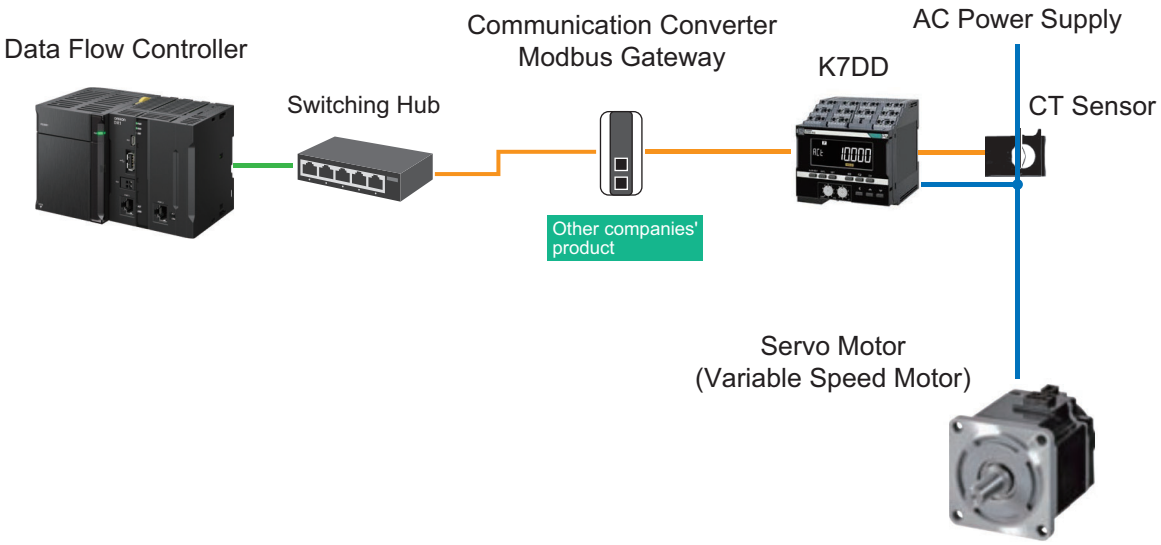
*1 The acquisition interval can be set down to a minimum of 10 ms on the setting screen. However, if the setting is below the lower limit defined for each package, data may not be acquired as configured. Exercise caution when setting the acquisition interval.

1-2 Example System Configurations

Typical system configurations for each Condition Monitoring Package are shown below.

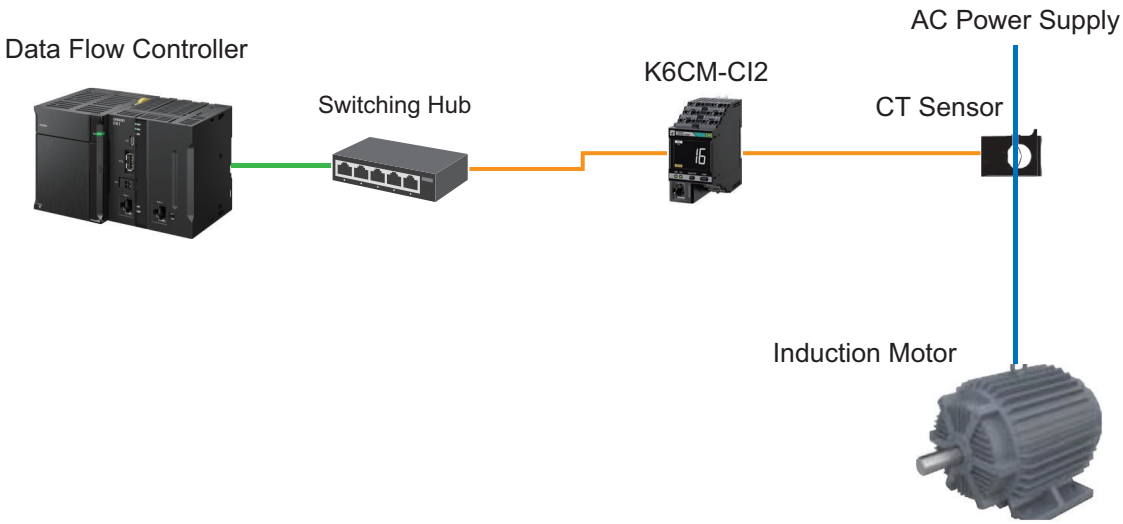
● Condition Monitoring Package (Variable Speed Motor)

System Configuration



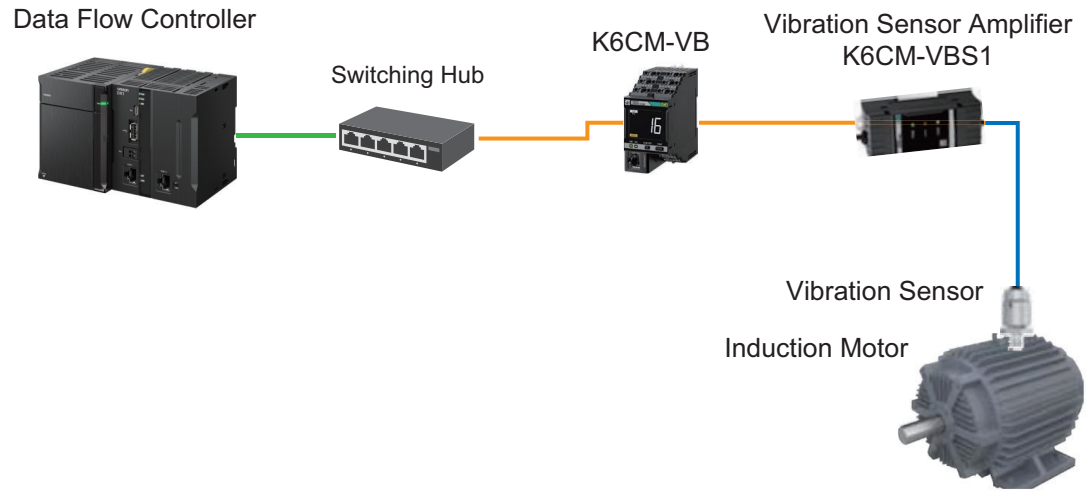
● Condition Monitoring Package (Induction Motor, type Current)

System Configuration



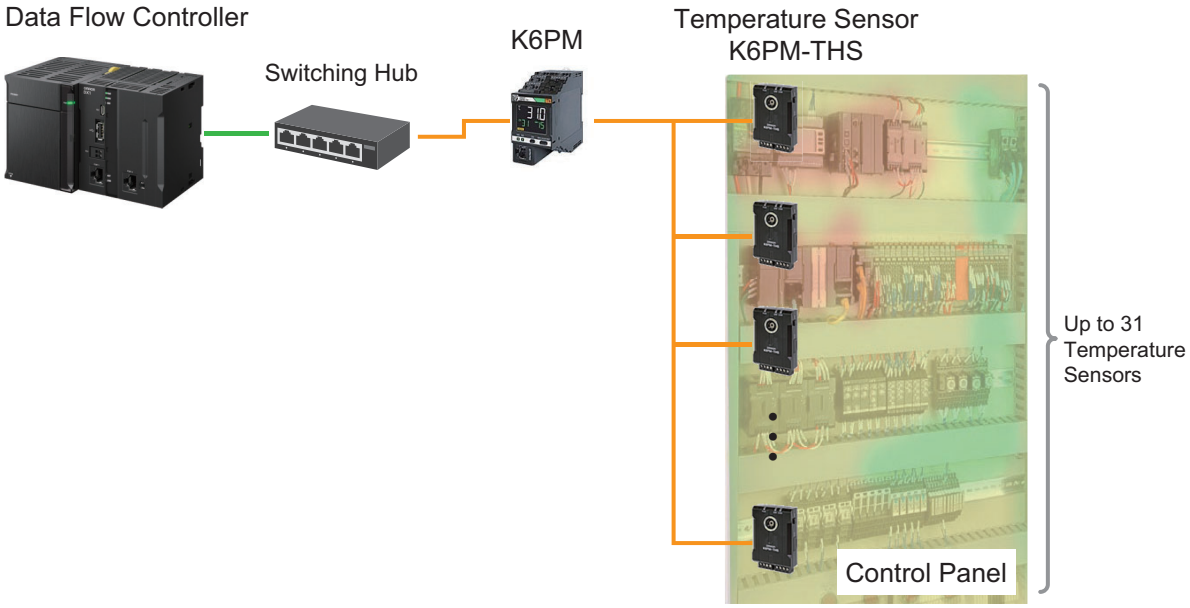
● Condition Monitoring Package (Induction Motor, type Vibration)

System Configuration



● Condition Monitoring Package (Temperature In Control Panels)

System Configuration



2

Operating Procedure

This section describes the operating procedure for the Condition Monitoring Package.

2-1 Overall Workflow

The following is the overall workflow for using the Condition Monitoring Package.
Refer to the manuals or instruction manuals of each device for wiring, installation, configuration, and software startup procedures.

Configure all devices on the same network

Wiring, installation, configuration, and threshold settings for measurement devices	Refer to the manuals or instruction manuals for the measurement devices in use. Use the Condition Monitoring Configuration Tool to configure K7DD, K6CM, and K6PM-TH.
Wiring, installation, and configuration of the Data Flow Controller	Refer to *3 Installation, Wiring, and Turning ON/OFF the Power Supply* in the *DX-series Data Flow Controller User's Manual*.

Launch the Dashboard Generator

Start the following web applications: • Dashboard Generator • SpeeDBee Synapse • Grafana	Refer to *4-1 Operating Procedure from the First Login to User Registration* in the *DX-series Data Flow Controller User's Manual*.
	Refer to *4-3 Procedure for Collecting and Visualizing Data Using Dashboard Packages* in the *DX-series Data Flow Controller User's Manual*.
Perform initial setup of the Dashboard Generator	Refer to *2-2 Basic Operations of the Dashboard Generator* in the *DX-series Dashboard Generator User's Manual*.

Configure the Condition Monitoring Package (SpeeDBee Synapse, Grafana)

Start the Condition Monitoring Package	Refer to *2-2-1 Configuration Procedure* on page 2-3.

Start Monitoring (Operation)

Change the thresholds of the measurement device (as required)	Refer to the manuals or instruction manuals for the measurement devices in use. Use the Condition Monitoring Configuration Tool to configure the K7DD, K6CM, and K6PM-TH.

2-2 Starting the Condition Monitoring Package

For procedures from logging into the Dashboard Generator to applying settings to SpeeDBee Synapse and Grafana, refer to *Section 2-2 "Using the Dashboard Generator"* in the *DX Series Dashboard Generator User's Manual*.

2-2-1 Configuration Procedure

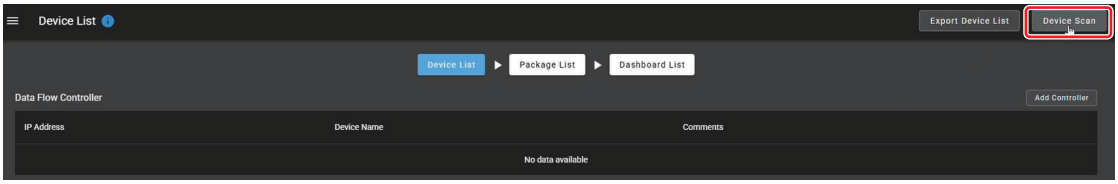
Follow the steps below.
This procedure assumes that the Dashboard Generator, Synapse, and Grafana are already integrated.

Configuration Steps	Details
Device List Screen Configuration	Perform a device scan to retrieve information about devices connected via the Condition Monitoring Package.
↓	
Package List Screen Configuration	Select the Condition Monitoring Package and specify the equipment identification information and the device to be used (e.g., K6CM-VBM) for dashboard registration. Register the dashboard based on the specified settings.
↓	
Dashboard List Screen Configuration (Synapse / Grafana)	Launch Synapse and start the Error Manager. Launch the Grafana dashboard (graph view).

Device List Screen - Device Scan

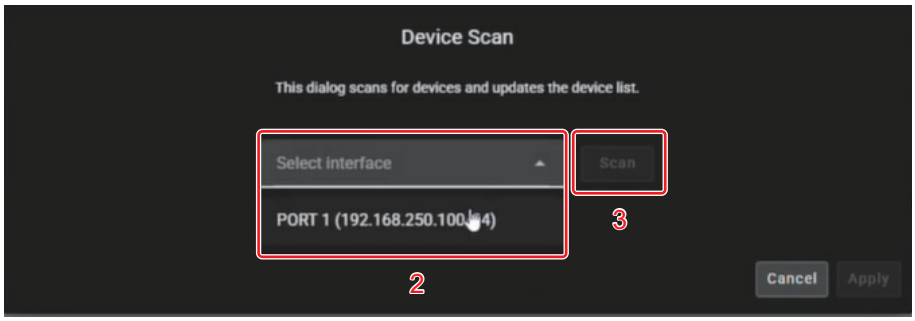
1 Click the **Device Scan** Button at the top right of the *Device List Screen*.

The *Device Scan Screen* will appear.

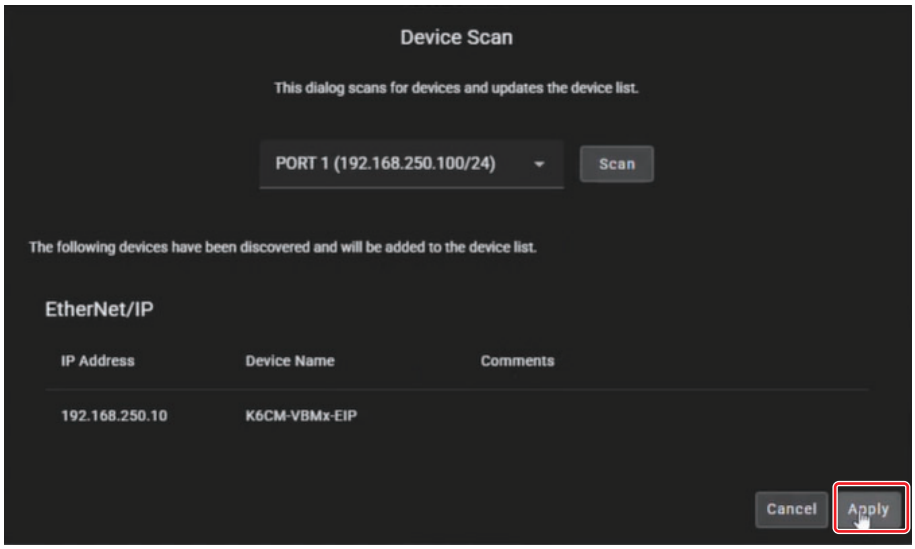


2 Select the interface from the dropdown menu.

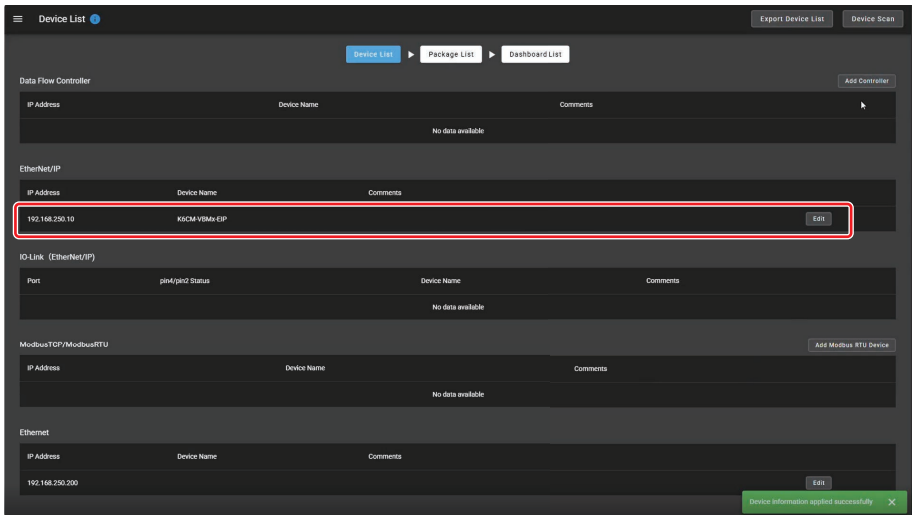
3 When the **Scan** Button becomes active, click it.



4 The scanned devices will be displayed. Click the **Apply** Button.

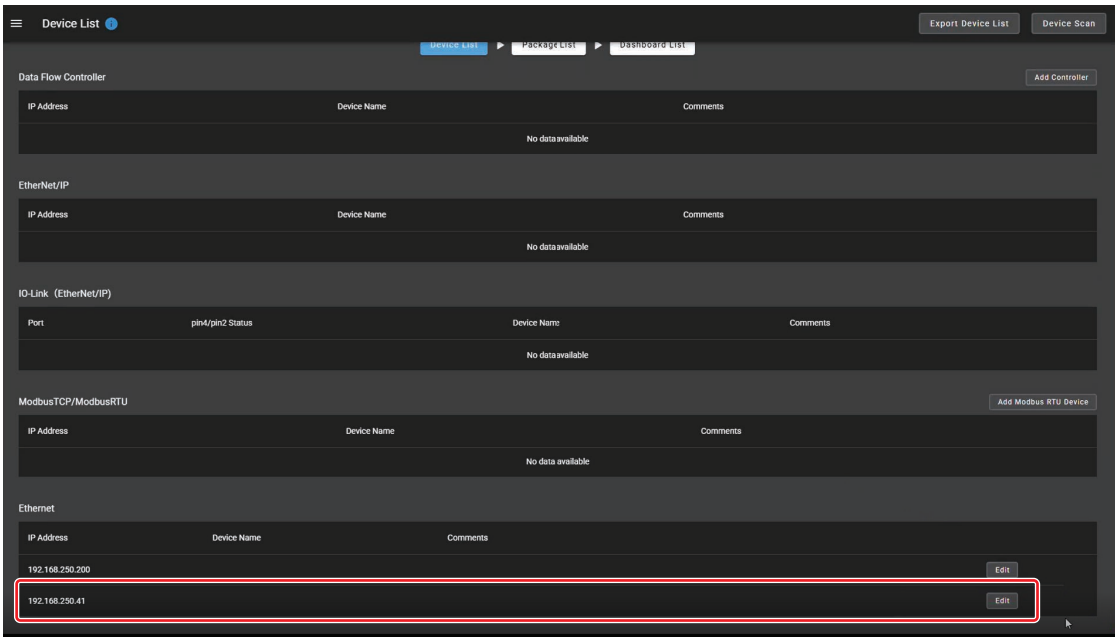


You will return to the *Device List Screen*. Confirm that the devices have been updated. In this example, **K6CM-VBMx-EIP** is added to **Ethernet/IP**.



For packages other than the Condition Monitoring Package (Variable Speed Motor), the device scan operation is complete.

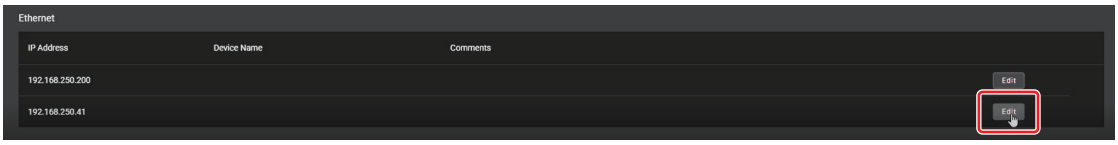
If using the Condition Monitoring Package (Variable Speed Motor), continue with the following steps. The scanned IP address of the communication converter will be displayed at the bottom under Ethernet.



At this stage, the communication converter and the K7DD used in the Condition Monitoring Package (Variable Speed Motor) have not yet been registered.
Proceed with the following steps to register the required information.

5 Click the **Edit** Button.

The *Edit Device Screen* will appear.



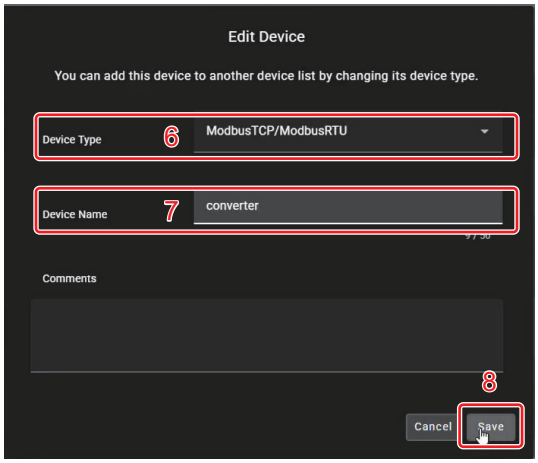
6 From the **Device Type** dropdown menu, select **ModbusTCP/ModbusRTU**.

7 Enter a desired name in the **Device Name** field.

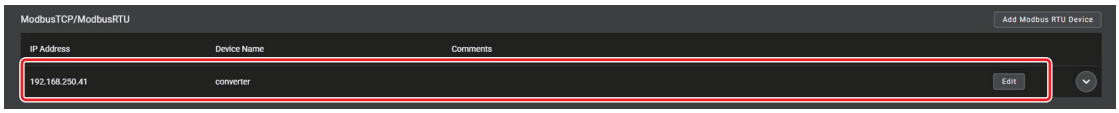
Example: converter

8 Click the **Save** Button.

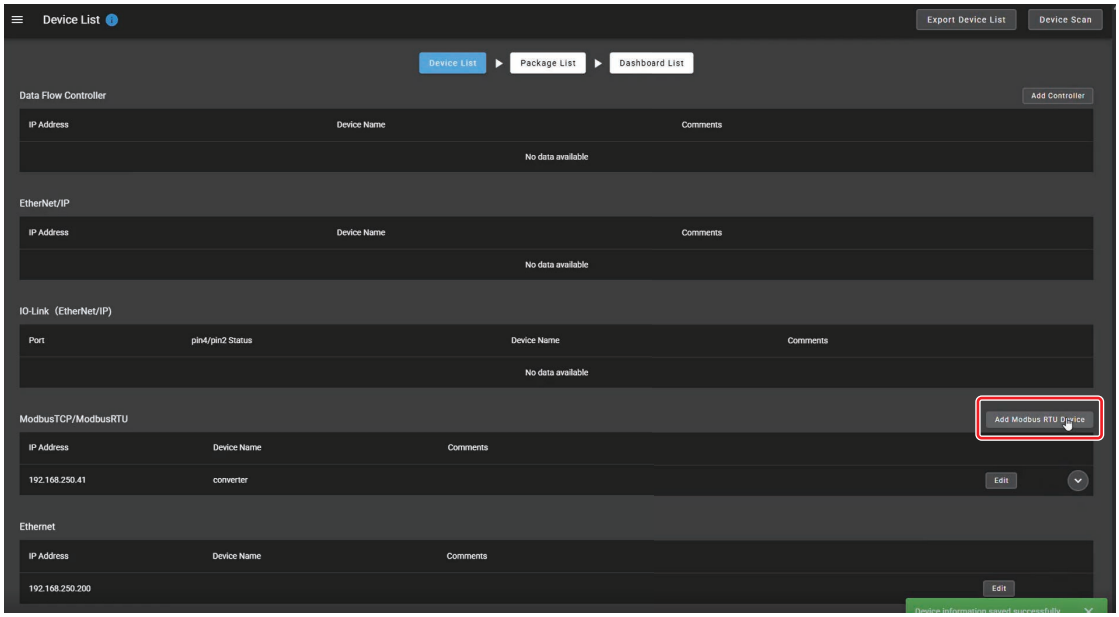
You will return to the *Device List Screen*.



The previously scanned IP address and **converter** will now appear under the **ModbusTCP/ModbusRTU** field.



9 Click the **Add Modbus RTU Device** Button.
The *Add Modbus RTU Device Screen* will appear.

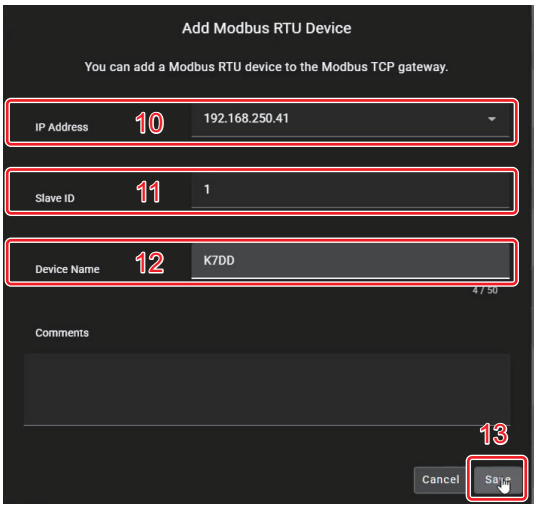


10 From the **IP Address** dropdown menu, select the IP address you added.

11 In the **Slave ID** field, select the communication number of the connected K7DD.

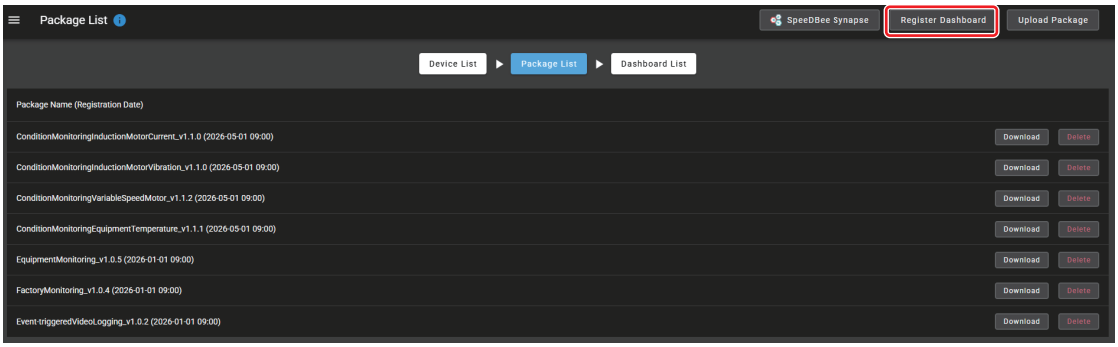
12 Enter a desired name in the **Device Name** field.
Example: K7DD

13 Click the **Save** Button.



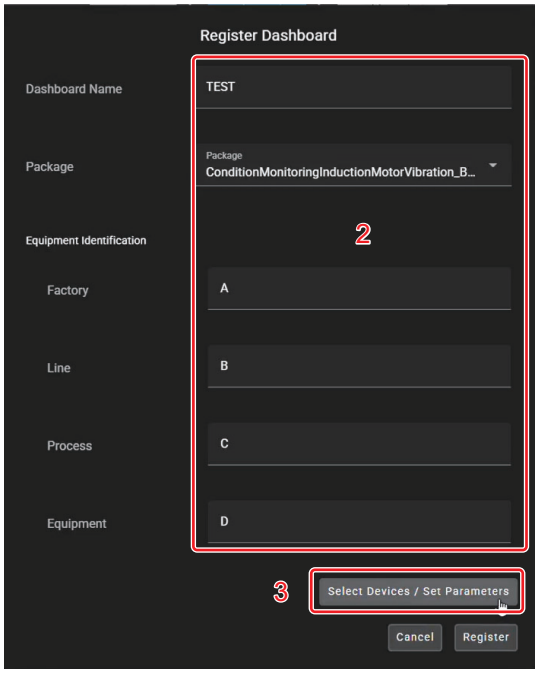
Package List Screen - Dashboard Registration

1 Click the **Register Dashboard** Button at the top right of the *Package List Screen*.
The *Register Dashboard Screen* will appear.



2 Configure the information on the *Register Dashboard Screen*.

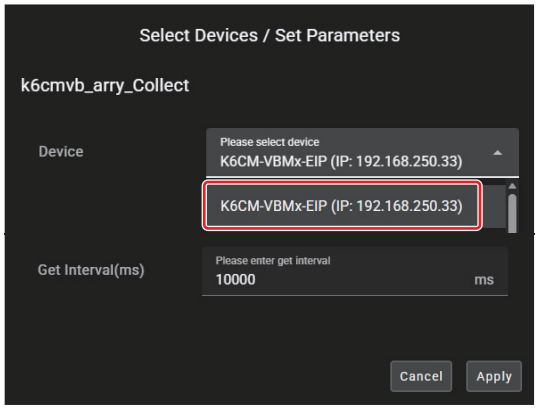
Setting Item	Description
Dashboard Name	Enter a desired name. It will be displayed in Synapse and Grafana. Example: TEST
Package	Select **Condition Monitoring Package (Induction Motor, type Vibration)**.
Equipment Identification	Optional input fields. Includes factory name, line name, process name, and equipment name.



3 When the **Select Devices / Set Parameters** Button becomes active, click it.

The *Select Devices / Set Parameters Screen* will appear.

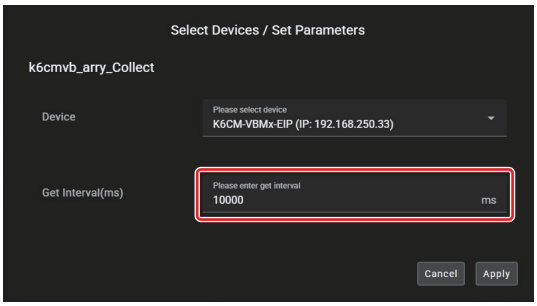
4 From the **IP Address** dropdown menu, select **K6CM-VBMx-EIP (IP:192.168.250.xx)**.



5 Enter the measurement data acquisition interval in the Get Interval (ms) text box.

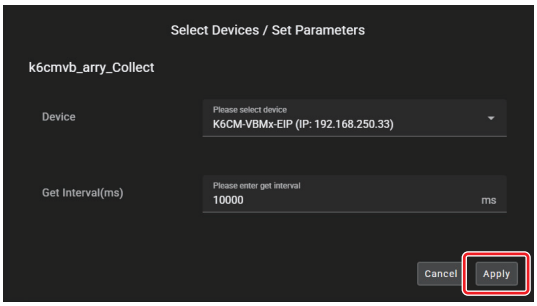
The default setting value is 10000 ms.

When the number of packages or devices increases, or when the interval is set shorter than the setting range (Table 1-1), data may not be acquired at the specified interval.



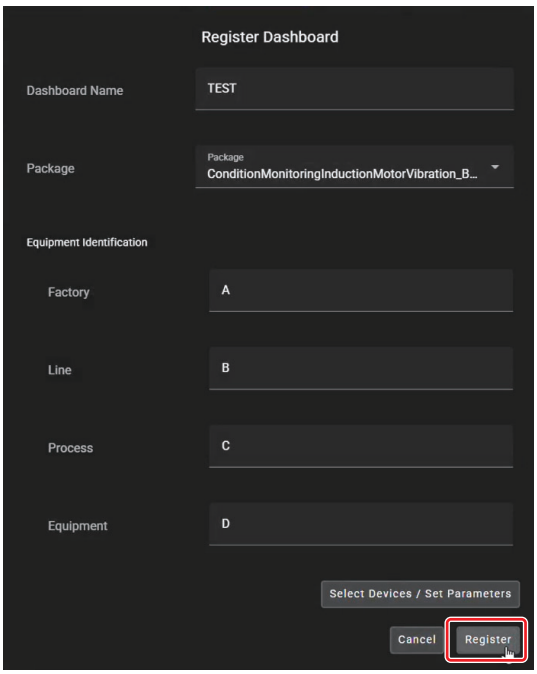
6 Click the **Apply** Button.

You will return to the *Register Dashboard Screen*.



7 Click the **Register** Button.

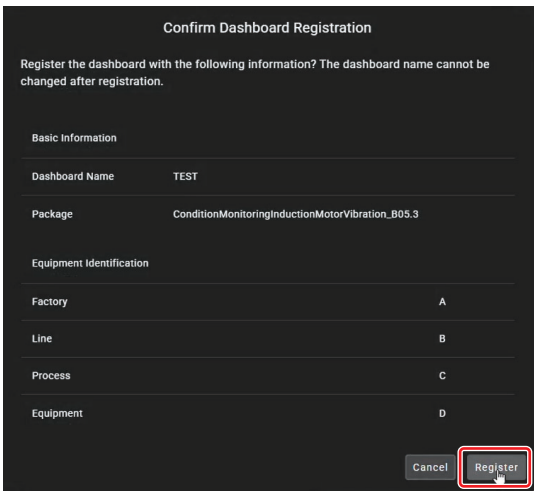
The Confirm *Dashboard Registration Screen* will appear.



8 Click the **Register** Button.

Dashboard registration takes approximately 30 seconds.

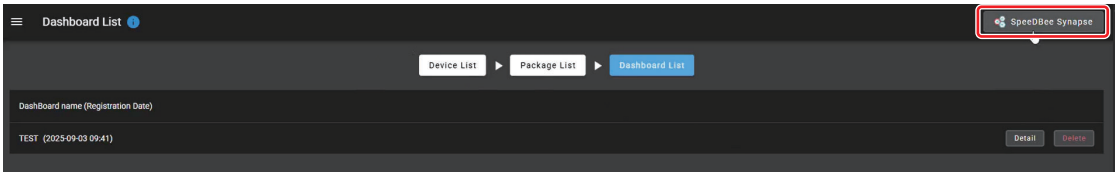
Once registration is complete, the system will transition to the *Dashboard List Screen*.



Dashboard List Screen - Launching Synapse

1 Click the **SpeeDBee Synapse** Button at the top right of the *Dashboard List Screen*.

The *SpeeDBee Synapse Screen* will appear.



2 A panel has been added with a custom dashboard name (e.g., TEST).
Click **DETAIL** on the corresponding panel.

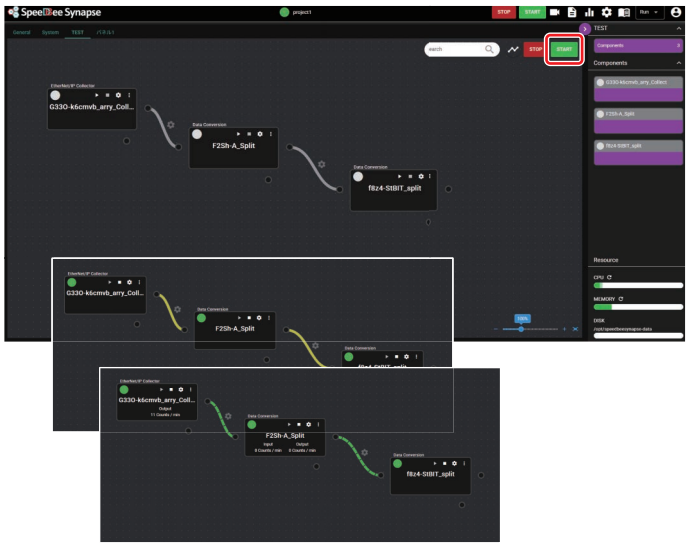
The screen will transition to the *Synapse Connection Screen*.

3 Click the **Start** Button.

A component showing flow links between each component will be displayed.

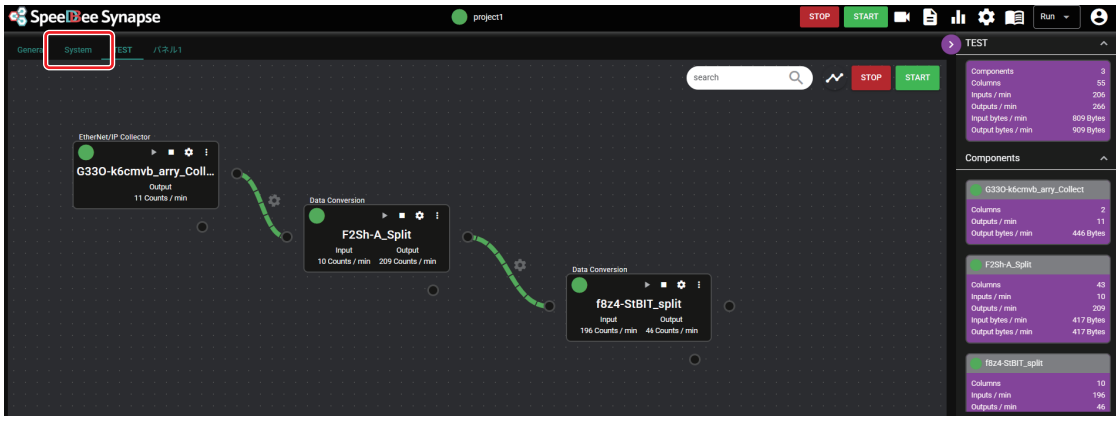
Once started, the flow links will turn yellow.

After a short time, the flow links will turn green.



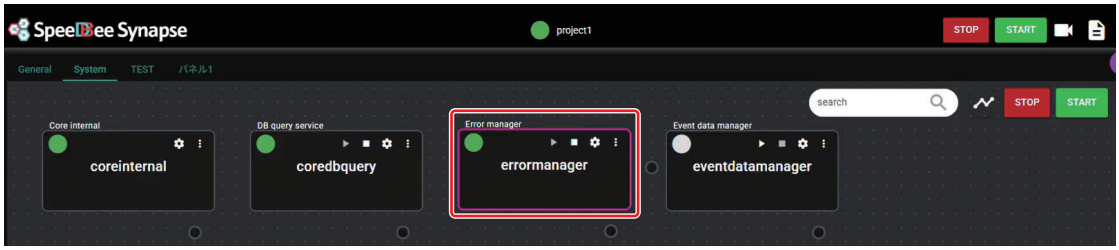
4 Click the *System Tab* at the top left (for Error Manager configuration).

The *System Panel* will appear.



5 Click the ▶ (**Launch**) Button on the *Error Manager Component*.

The Error Manager will start.

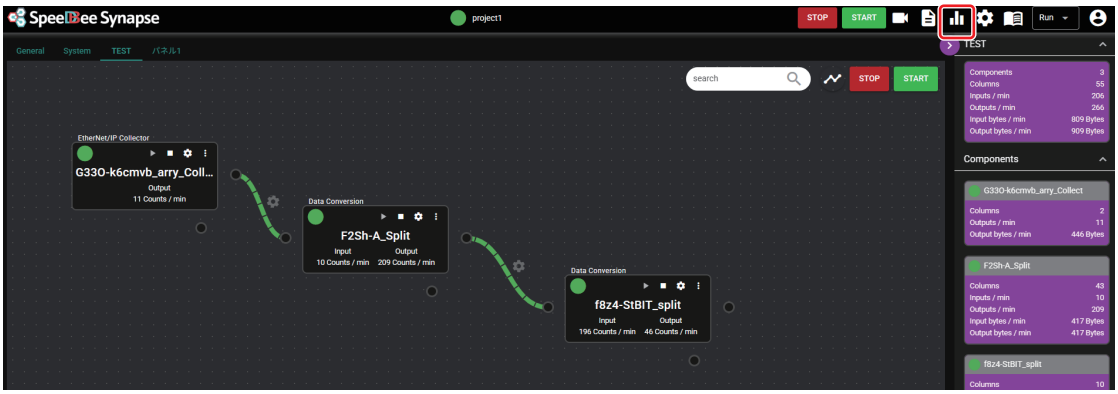


Note: Error Manager is required for Grafana to retrieve data from Synapse.

Dashboard List Screen - Launching Grafana

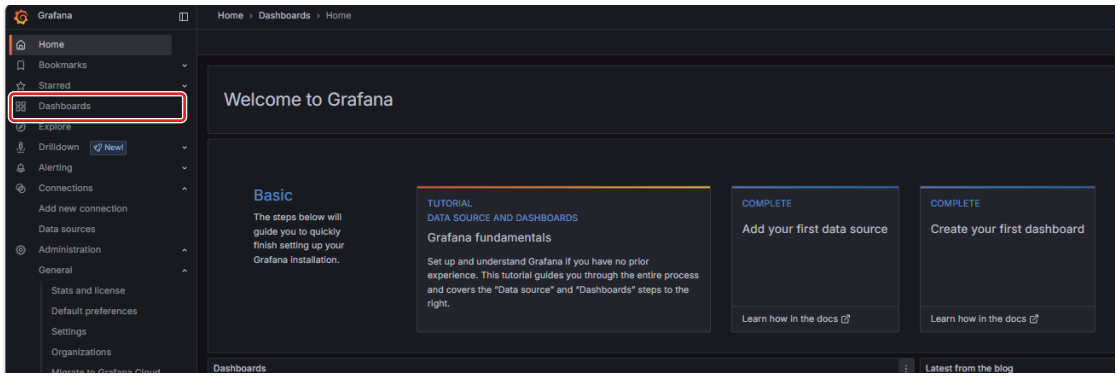
1 Click the graph icon in the upper-right corner of the *Synapse Screen*.

The *Grafana Screen* will appear.



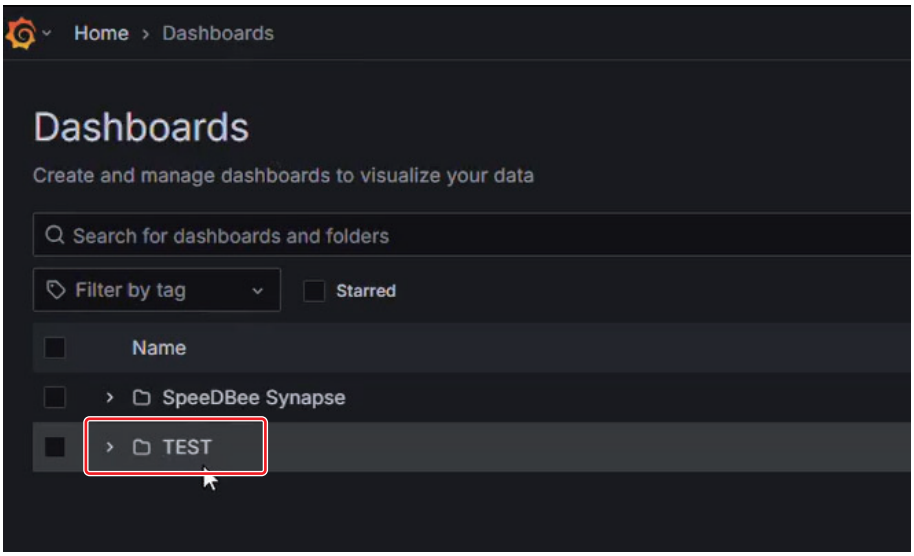
2 Click **Dashboards**.

The screen switches.



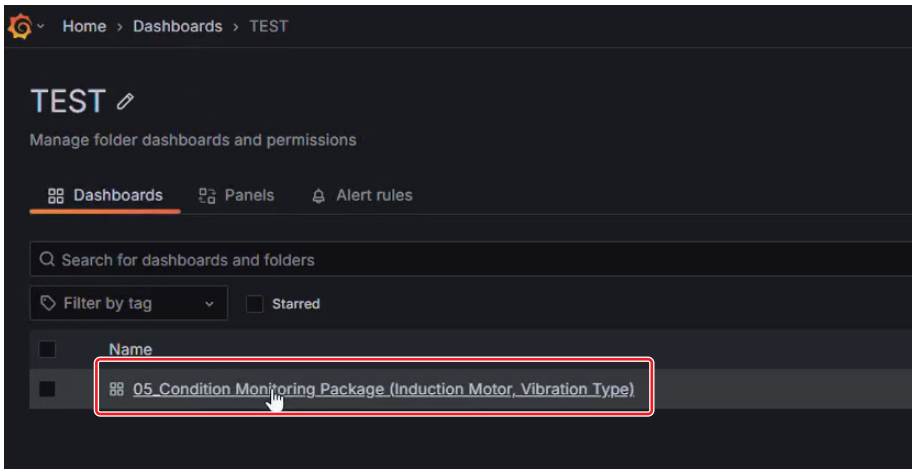
3 Click any dashboard name that has been added.

Example: TEST

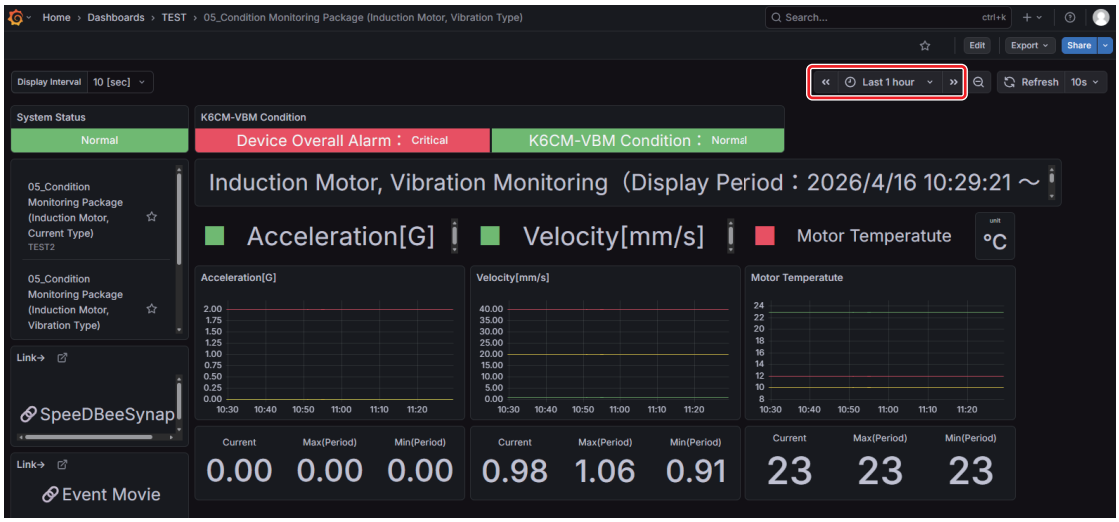


4 Click **Condition Monitoring Package (Induction Motor, Vibration Type)**.

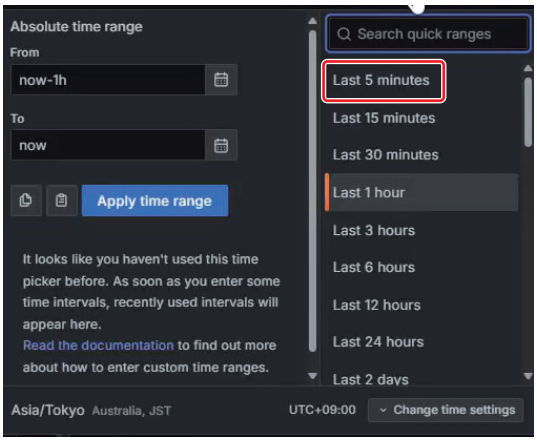
The screen switches.



5 The KPI is displayed as a graph. To change the time range on the horizontal axis, use the dropdown menu labeled **Last 1 hour**.

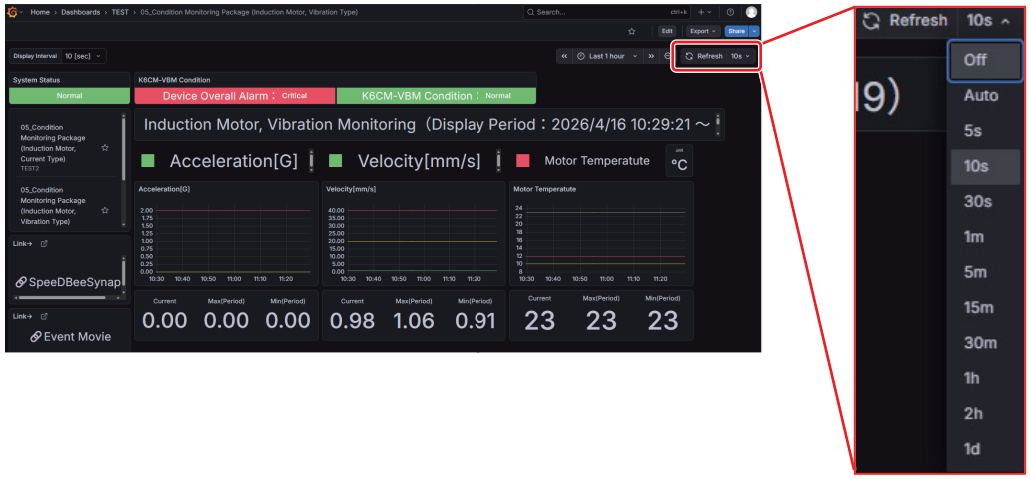


In this example, **Last 5 minutes** is selected.



Note:
The vertical axis (values) of the graph automatically adjusts its scale based on the range of acquired data.

6 To adjust the data refresh frequency, click **Refresh** Button at the top right.
Select the desired interval from the dropdown menu.



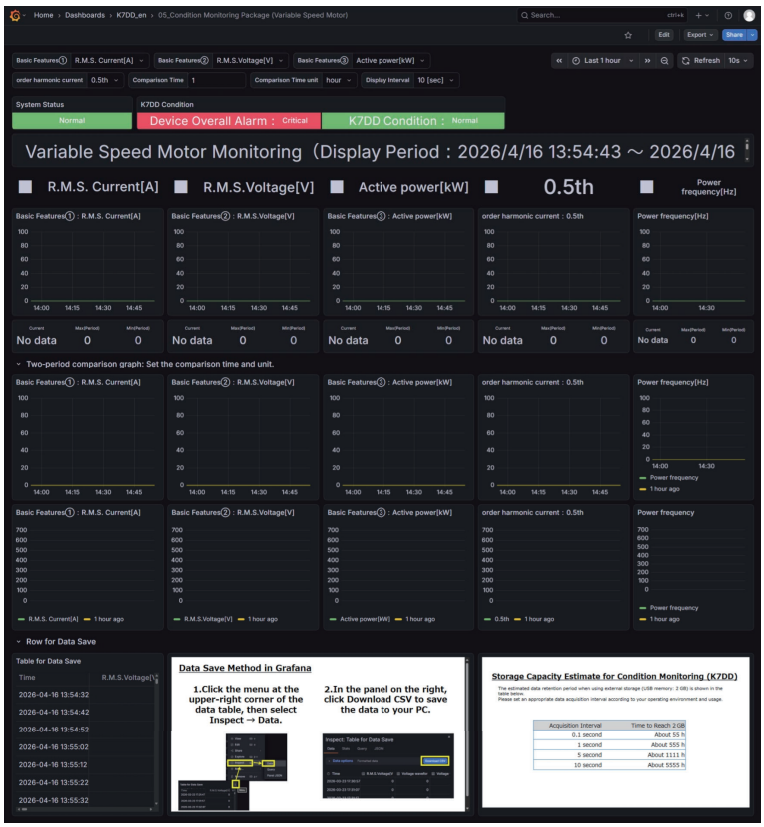
2-3 Screen Description of the Condition Monitoring Package

In the Condition Monitoring Package, graphs are displayed using an optimized screen layout for each condition monitoring device.

2-3-1 Condition Monitoring Package (Variable Speed Motor)

The screen consists of four areas:

A: Setting Selection Area
B: Condition Monitoring Display Area
C: Two-Period Comparison Display Area
D: Data Storage Area



A: Setting Selection Area
Select the display settings for each area.

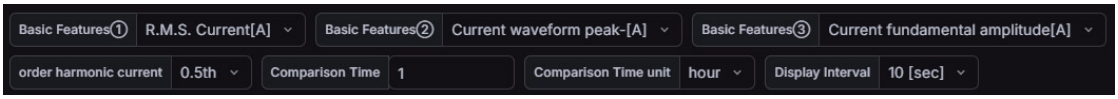
B: Condition Monitoring Display Area
Displays measurement values, threshold values, and representative values.

C: Two-Period Comparison Display Area
Displays data from a configured past period overlaid with the currently specified period.

D: Data Storage Area
Allows you to save and download the 142 feature values for the displayed period.

A: Setting Selection Area

You can change the display settings for each panel.

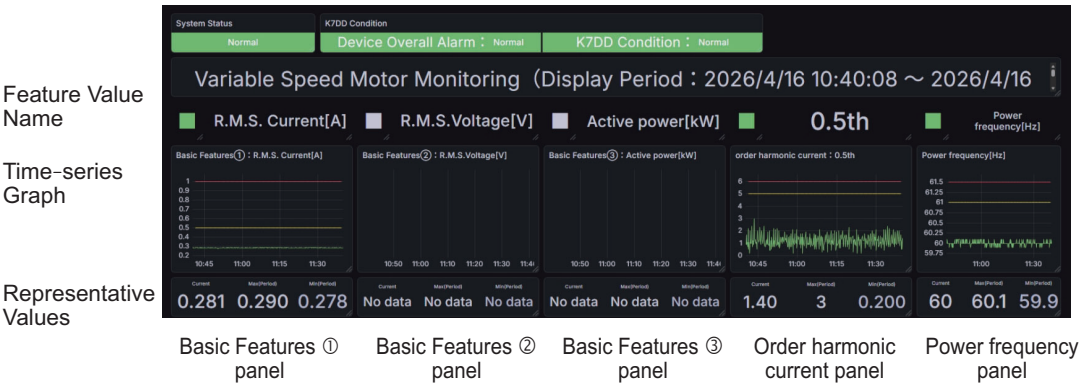


Item	Description
Basic Features ①	Select the feature quantities for current-, voltage-, or power-related measurements. *1 Current: RMS, Peak+, Peak-, Unbalance Rate, Fundamental Amplitude, Total Harmonic Distortion Voltage: RMS, Peak+, Peak-, Unbalance Rate, Fundamental Amplitude, Total Harmonic Distortion Power: Active Power, Reactive Power, Apparent Power, Power Factor
Basic Features ②	
Basic Features ③	
order harmonic current	Select the harmonic order. 0.5th, 1.5th, 2nd, 2.5th, … , 62.5th, 63rd
Comparison Time	Enter the comparison time to be displayed in the two-period comparison display area.
Comparison Time unit	Enter the unit of the comparison time to be displayed in the two-period comparison display area.
Display interval	Data is thinned at the specified interval, and the maximum value within each period is displayed.

*1. If the K7DD is configured to acquire only current data, these items will not be displayed on the dashboard (status will be shown as "No Data or Not Configured").

B: Condition Monitoring Display Area

Displays the device status and measurement values of the condition monitoring device.
In the Basic Features ①, Basic Features ②, Basic Features ③, and Order Harmonic Current panels, selecting a feature value from the dropdown menu at the top automatically switches the feature value name, time-series graph, and representative values.
Power Frequency panel is always displayed regardless of the selected measurement value.



Item	Description
System Status	Displays the status of SpeeDBee Synapse.
Device Condition	Device Overall Alarm: Displays the comprehensive alarm of the condition monitoring device.
	Device Condition: Displays the occurrence status of main unit abnormalities and internal circuit abnormalities of the condition monitoring device.
Variable Speed Motor Monitoring (Display Period: <Start Date and Time> - <End Date and Time>)	Displays the period of the data shown in each panel.
Feature Value Name	Displays the name of the feature value currently shown. If threshold values are configured, the display color changes. (Normal: Green, Warning: Yellow, Critical: Red, No Data: White) Threshold determination is based on the maximum value displayed in the time-series graph.
Time-series Graph	Displays time-series data. When thresholds are configured in the condition monitoring device, the threshold values are also displayed. (Measurement value: Green, Threshold 1: Yellow, Threshold 2: Red)
Representative Values	Displays the current value, maximum value, and minimum value within the display period.

Precautions for Correct Use

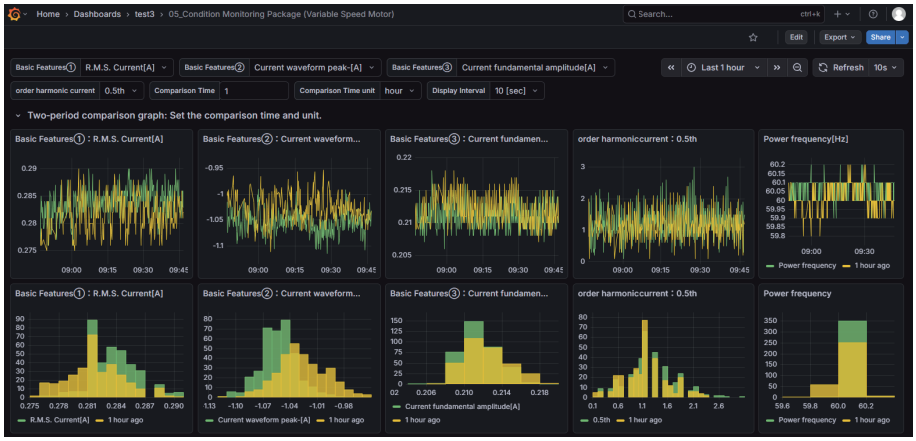
The acquisition cycle configured during dashboard registration is effective only for measurement values. Threshold values and device status information are updated every 10 minutes. After changing device settings or when a communication abnormality occurs, check the information after 10 minutes or restart SpeeDBee Synapse.

C: Two-Period Comparison Display Area

Displays the time-series data and histograms for the reference period and the comparison period.
In the Basic Features ①, Basic Features ②, Basic Features ③, and order harmonic current panels, selecting a feature value from the dropdown menu at the top automatically switches the time-series graph and histogram.
Power Frequency panel always displays fixed information regardless of the selected setting.

Time-series Data Comparison

Histogram Comparison

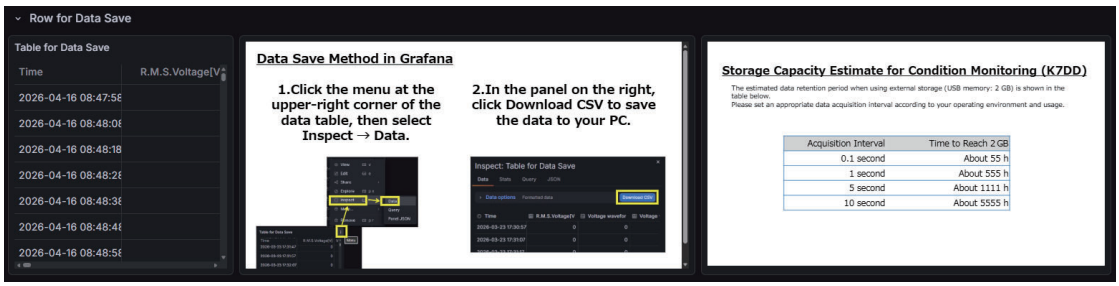


Basic Features ① panel | Basic Features ② panel | Basic Features ③ panel | Order harmonic current panel | Power frequency panel

Item	Description
Time-series Data Comparison	Displays time-series data for two periods. (Reference Data: Green, Comparison Data: Yellow)
Histogram Comparison	Displays histogram data for two periods. (Reference Data: Green, Comparison Data: Yellow) The legend displays the offset amount of the currently selected comparison time.

D: Data Storage Area

Allows you to save and download the 142 feature values for the displayed period.
Instructions for saving data and an estimate of the required storage capacity are provided.



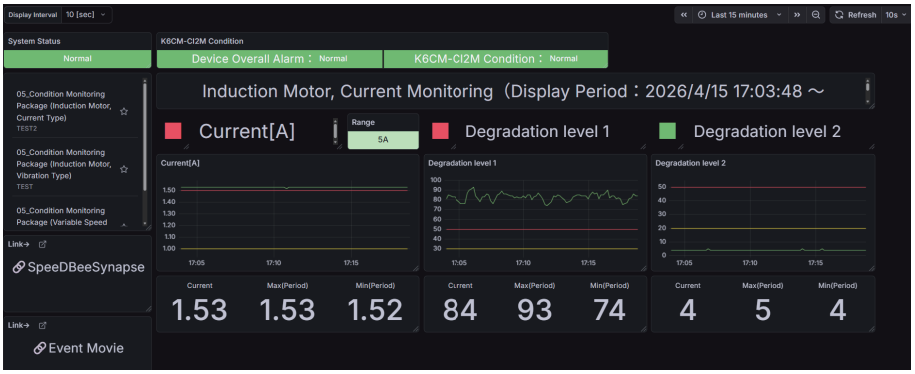
Item	Description
Table for Data Save	Displays 142 feature quantity data items. Data can be output according to the data saving procedure in Grafana.
Data Save Method in Grafana	Displays the operating procedure for the Data Table for Saving.
Storage Capacity Estimate for Condition Monitoring (K7DD)	Displays the acquisition cycle and estimated data capacity when using Condition Monitoring (Variable Speed Motor).

Precautions for Correct Use

Updating the Table for Data Save may take time. If the system becomes slow, close the Row used for data saving.

2-3-2 Condition Monitoring Package (Induction Motor, type Current)

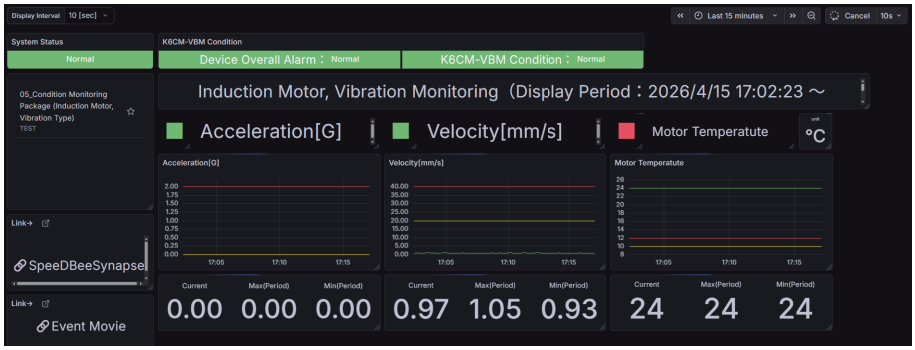
Displays the device status and measurement values of the condition monitoring device.
In the Current, Degradation level 1, and Degradation level 2 panels, the feature value name, time-series graph, and representative values are displayed respectively.



Item	Description
Display Interval	Select the display interval for panel data. Data is thinned out at the specified interval, and the maximum value within each period is displayed.
System Status	Displays the status of SpeeDBee Synapse.
Device Condition	Device Overall Alarm: Displays the comprehensive alarm of the condition monitoring device.
	Device Condition: Displays the occurrence status of main unit abnormalities and internal circuit abnormalities of the condition monitoring device.
Induction Motor, Current Monitoring (Display Period: <Start Date and Time> - <End Date and Time>)	Displays the period of the data shown in each panel.
Feature Value Name	If threshold values are configured, the display color changes. (Normal: Green, Warning: Yellow, Critical: Red) Threshold determination is based on the maximum value displayed in the time-series graph.
Time-series Graph	Displays time-series data. When thresholds are configured in the condition monitoring device, the threshold values are also displayed. (Measurement value: Green, Threshold 1: Yellow, Threshold 2: Red)
Representative Values	Displays the current value, maximum value, and minimum value within the display period.
Current Range	Displays the current range configured in the condition monitoring device.

2-3-3 Condition Monitoring Package (Induction Motor, type Vibration)

Displays the device status and measurement values of the condition monitoring device.
In the Acceleration, Velocity, and Motor Temperature panels, the feature value name, time-series graph, and representative values are displayed respectively.



Feature Value Name

Time-series Graph

Representative Values

Acceleration panel　Velocity panel　Motor Temperature panel

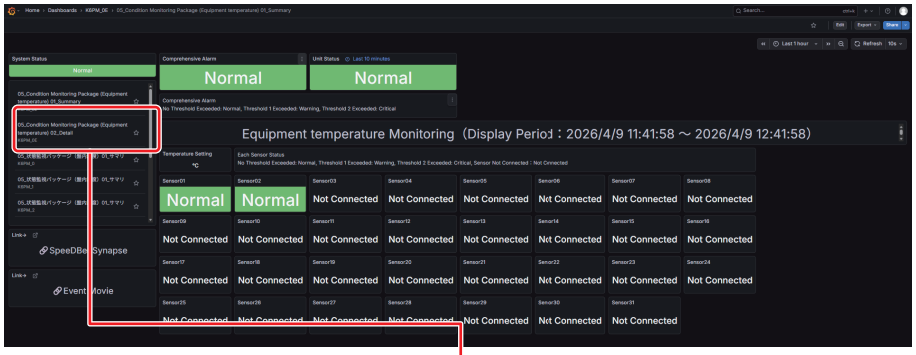
Item	Description
Display Interval	Select the display interval for panel data. Data is thinned out at the specified interval, and the maximum value within each period is displayed.
System Status	Displays the status of SpeeDBee Synapse.
Device Condition	Device Overall Alarm: Displays the comprehensive alarm of the condition monitoring device.
	Device Condition: Displays the occurrence status of main unit abnormalities and internal circuit abnormalities of the condition monitoring device.
Induction Motor, Vibration Monitoring (Display Period: <Start Date and Time> - <End Date and Time>)	Displays the period of the data shown in each panel.
Feature Value Name	Displays the name of the feature value currently shown. If threshold values are configured, the display color changes. (Normal: Green, Warning: Yellow, Critical: Red) Threshold determination is based on the maximum value displayed in the time-series graph.
Time-series Graph	Displays time-series data. When thresholds are configured in the condition monitoring device, the threshold values are also displayed. (Measurement value: Green, Threshold 1: Yellow, Threshold 2: Red)
Representative Values	Displays the current value, maximum value, and minimum value within the display period.
Unit	Displays the motor temperature unit configured in the condition monitoring device.

2-3-4 Condition Monitoring Package (Temperature in Control Panels)

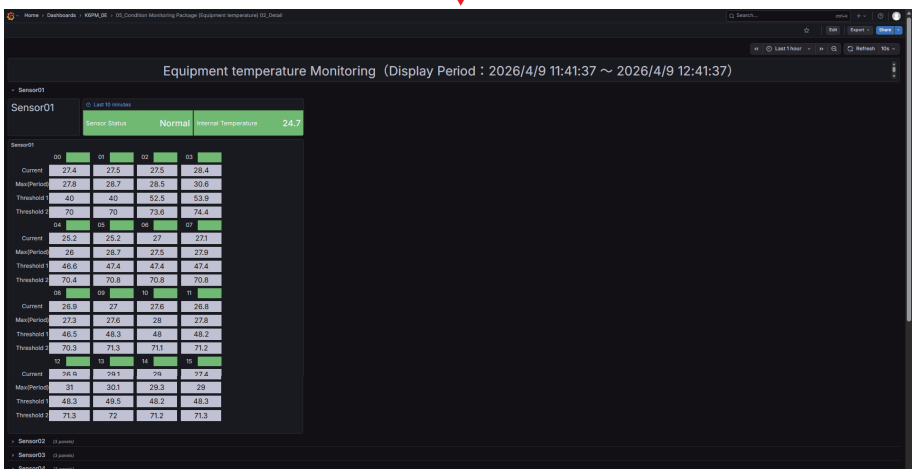
The Condition Monitoring Package (Temperature in Control Panels) includes two dashboards: Summary and Detail.
You can move from the Summary dashboard to the Detail dashboard from the dashboard list on the left side of the screen.

From the dashboard list on the left side of the screen, select **05_Condition Monitoring Package (Equipment temperature) 02_Detail**.

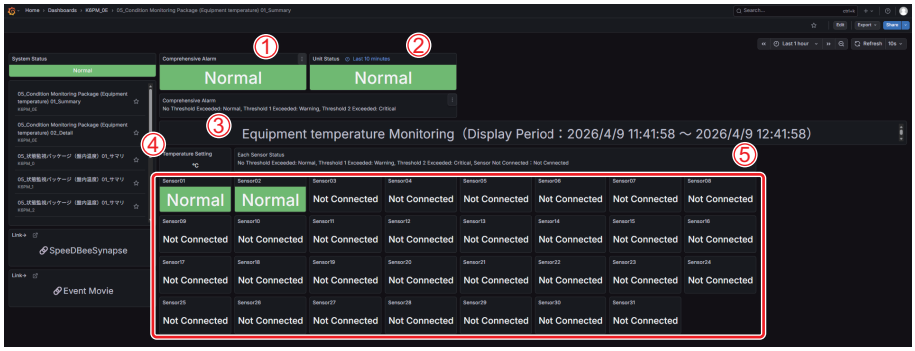
Summary Screen



Detail Screen

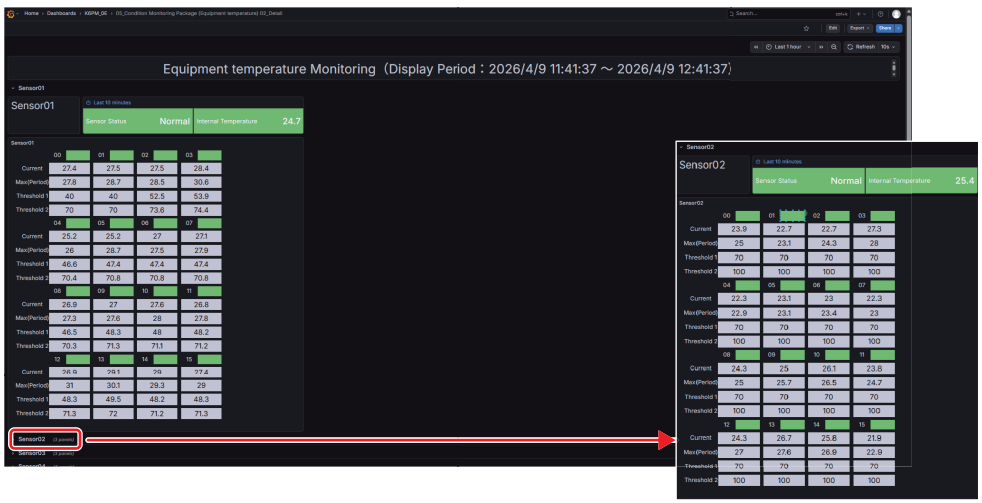


On the Summary screen, the status of the condition monitoring device K6PM-TH and the status of temperature sensors 1 to 31 are displayed.

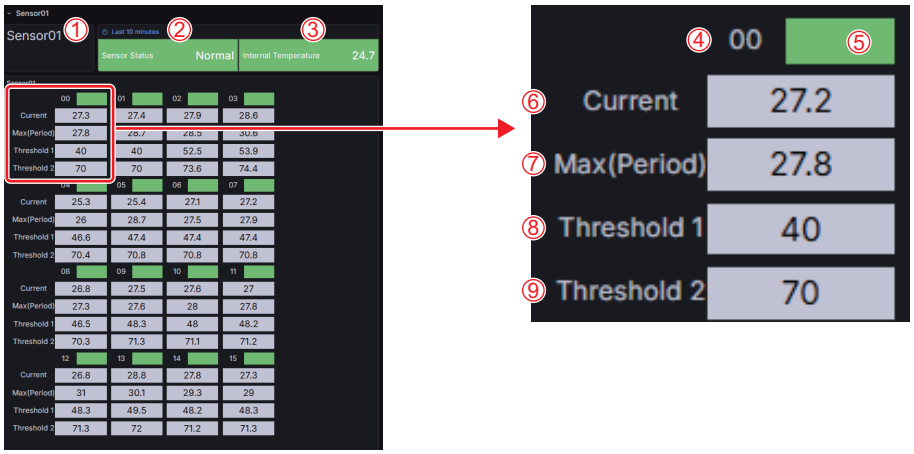


Panel	Displayed Data	Display Content
① Comprehensive Alarm	Displays threshold exceedance in the condition monitoring device. (Threshold 1 exceeded, Threshold 2 exceeded)	No threshold exceeded: Normal (Green) Threshold 1 exceeded: Warning (Yellow) Threshold 2 exceeded: Critical (Red)
② Unit Status	Displays abnormalities in the condition monitoring device. (Main unit internal abnormalities, sensor abnormalities)	Main unit internal abnormality detected: Main unit abnormality (Red) Sensor abnormality detected: Sensor abnormality (Red) No abnormality: Normal (Green) Communication with the condition monitoring device stopped: Communication Stopped (Yellow)
③ Display Period	Displays the period of the data shown on the screen.	Display period (date and time)
④ Temperature Setting	Displays the temperature unit configured for the K6PM-TH.	Temperature unit: "°C" or "°F"
⑤ Sensor Status	Displays the alarm status and connection status of Sensors 1 to 31.	No threshold exceeded: Normal (Green) Threshold 1 exceeded: Warning (Yellow) Threshold 2 exceeded: Critical (Red) Sensor not registered: Not Connected (Transparent)

On the Detail screen, the status of each sensor (1 to 31) and the temperature for each segment are displayed. On the initial screen, Sensor 1 is displayed. Sensors 2 to 31 can be displayed by clicking the “>” icon to the left of the sensor name.



The display for each sensor segment is described below.



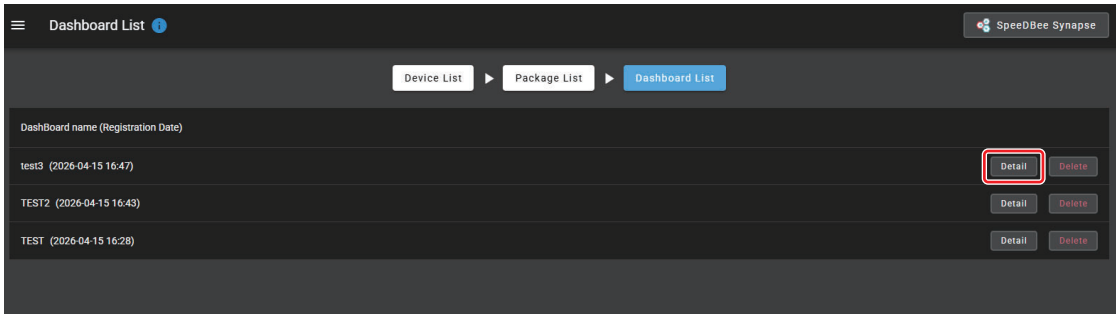
Panel	Displayed Data	Display Content
Sensor No.	Displays the sensor number.	Sensor 1 to 31
Sensor Status	Displays the alarm status of the sensor.	No threshold exceeded: Normal (Green) Threshold 1 exceeded: Warning (Yellow) Threshold 2 exceeded: Critical (Red) Sensor not registered: Not Connected (Transparent)
Internal Temperature	Displays the internal temperature of the sensor.	Internal temperature
Segment No.	Displays the segment number of the sensor.	00 to 15
Alarm Indicator	Displays threshold-exceedance alarms for segments 0 to 15 using color. (Warning alarm, Critical alarm)	Current temperature ≥ Threshold 1: (Yellow) Current temperature ≥ Threshold 2: (Red) Current temperature < Threshold 1: (Green)
Current	Displays the current temperature of the segment.	Current temperature
Max (Period)	Displays the maximum value within the Grafana display period.	Maximum value for the display period
Threshold 1	Displays the configured temperature threshold 1 value for the segment.	Threshold 1 setting value
Threshold 2	Displays the configured temperature threshold 2 value for the segment.	Threshold 2 setting value

2-4 Operating Procedure for the Condition Monitoring Package

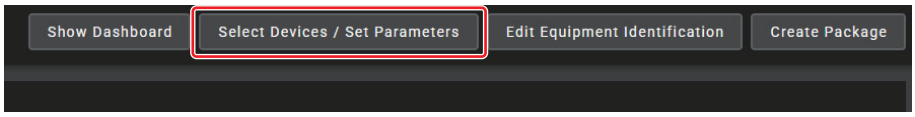
2-4-1 Changing the Acquisition Cycle After Dashboard Registration

After registering the dashboard, you can change the acquisition cycle from the Select Devices / Set Parameters option on the *Dashboard List Screen*.

1 Open the *Dashboard List Screen* in the *Dashboard Generator*.
Select the dashboard to be changed and click the **Detail** Button.

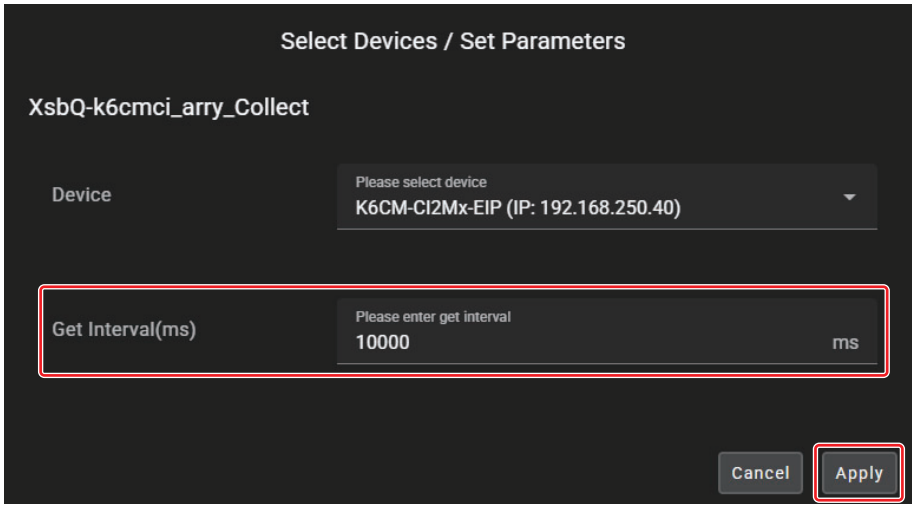


2 Click the Select **Devices / Set Parameters** Button.



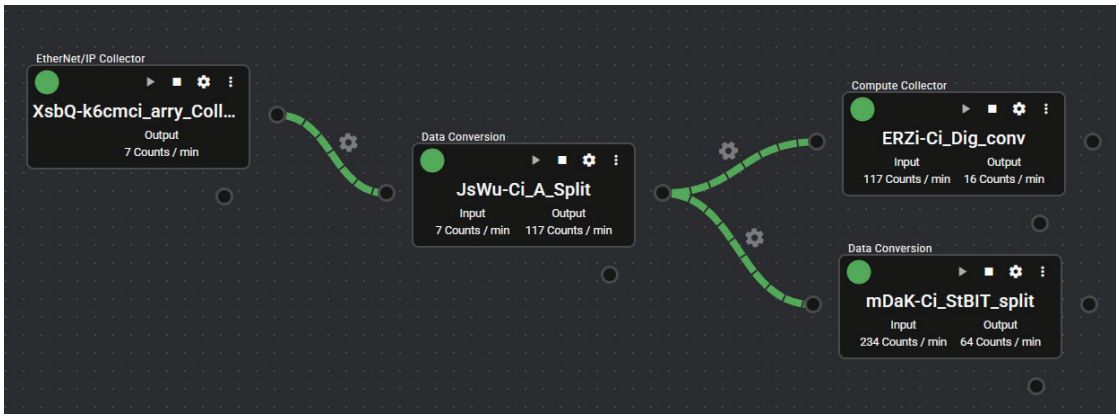
3 Change the acquisition interval.
Enter a value for the acquisition cycle in milliseconds in the **Get Interval (ms)** field.

4 Click the **Apply** Button.



5 On the *SpeeDBee Synapse* Screen, confirm that the component is operating normally.

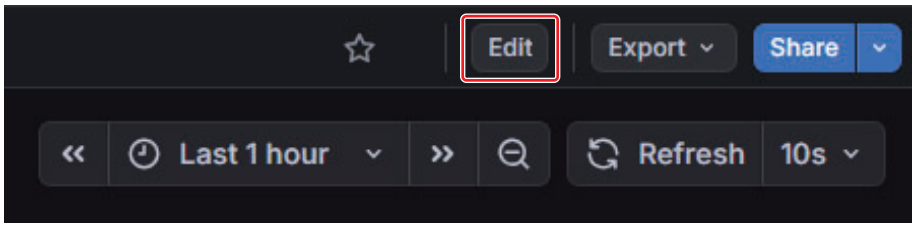
If the collector status indicator in the upper left and all flow links are green, the component is operating normally.



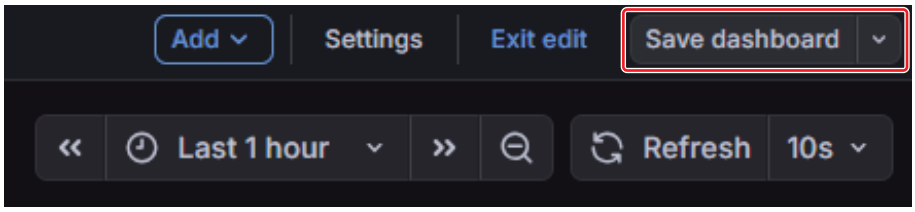
2-4-2 Saving Dashboard Setting Items

Settings such as display rate and feature value selection will return to the default values when the dashboard is closed.
To retain the configured settings, it is necessary to overwrite the default settings.

1 Change Grafana to **Edit Mode**.

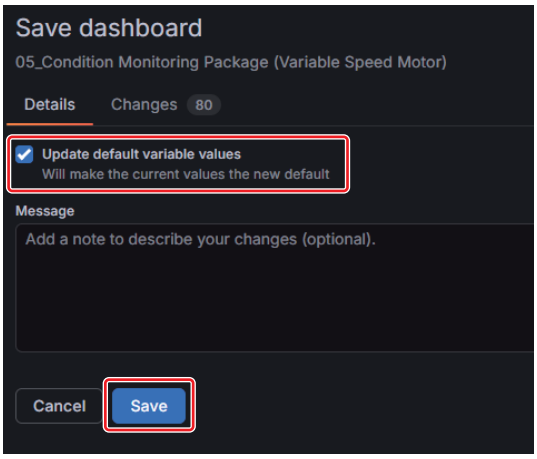


2 Click **Save dashboard**.

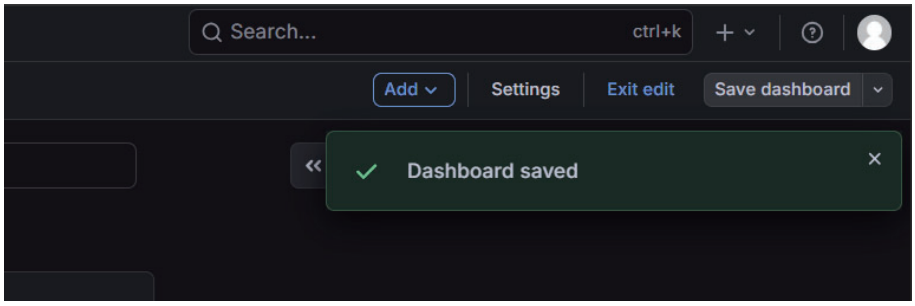


3 Select the **Update default variable values** checkbox.

4 Click the **Save** Button.



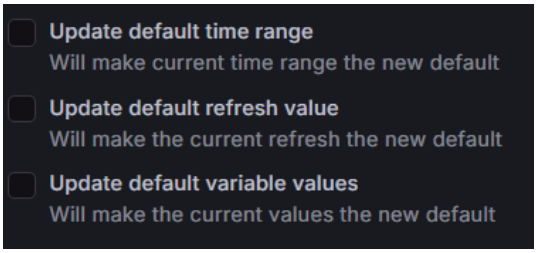
5 If *Dashboard Saved* is displayed, the settings have been saved successfully.



Additional Information

To retain the display period or refresh rate, select the following options before clicking Save:

Display period:
Update default time range
Refresh rate:
Update default refresh value

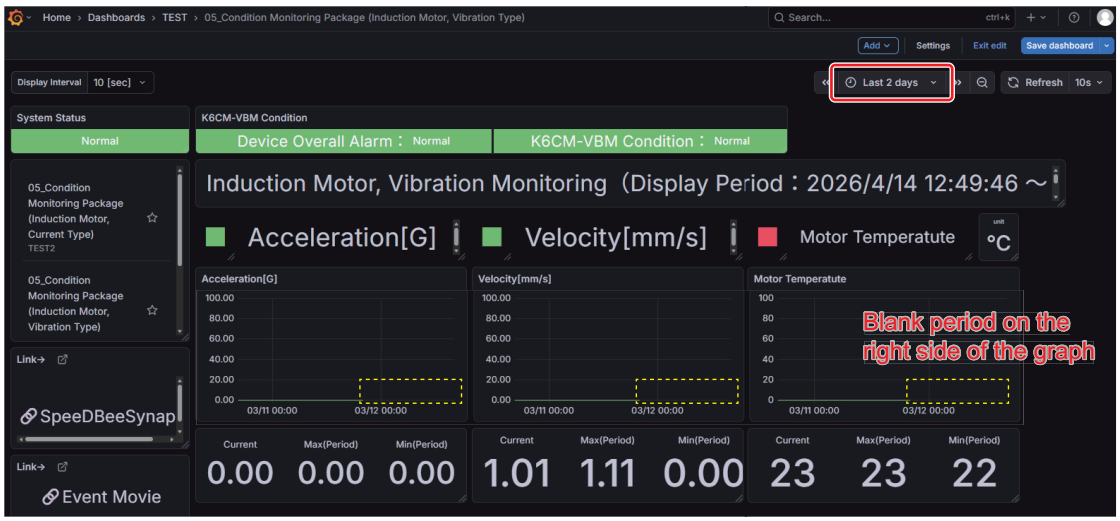


2-4-3 Expanding the Graph Display Period

A function to change the data display cycle has been added.
By thinning the displayed data according to the display range, long-term graph display of 24 hours or more is now possible.
This function applies to the following packages:

- Condition Monitoring Package (Variable Speed Motor)
- Condition Monitoring Package (Induction Motor, type Vibration)
- Condition Monitoring Package (Induction Motor, type Current)

If the display interval is set smaller than the appropriate value for the display period, a blank area may appear on the right side of the time-series graph and the graph may not be displayed correctly.
This section explains how to configure an appropriate display interval.
In this example, the display period is changed to **Last 2 days**.

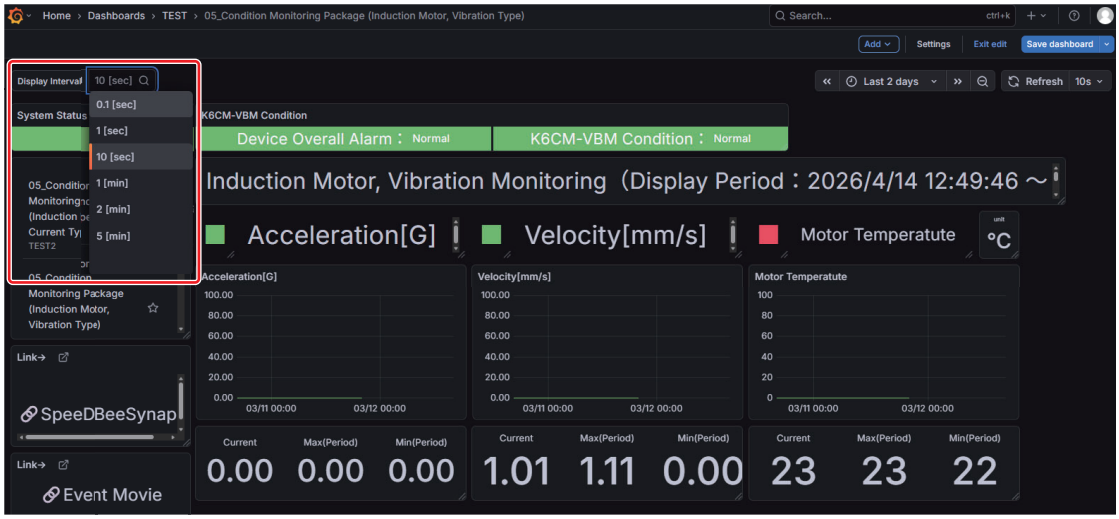


1 Select an appropriate data thinning setting value from the **Display Interval** dropdown menu.

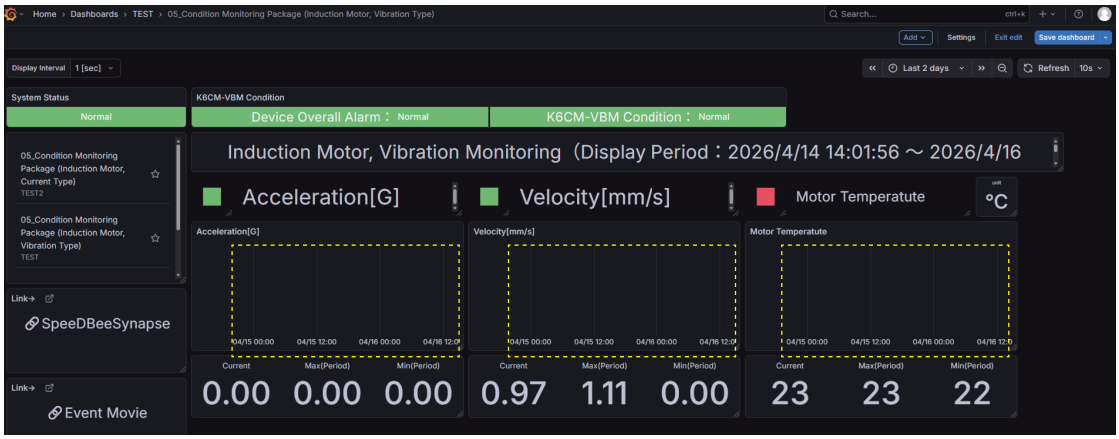
In this example, **1 minute** is selected.

Refer to the following table for the recommended display period and display interval settings.

Recommended Display Period	Display Interval Setting
Up to 15 minutes	0.1 seconds
Up to 3 hours	1 second
Up to 1 day	10 seconds
Up to 1 week	1 minute
Up to 2 weeks	2 minutes
Up to 1 month	5 minutes



2 The graph is updated and the blank area is displayed.



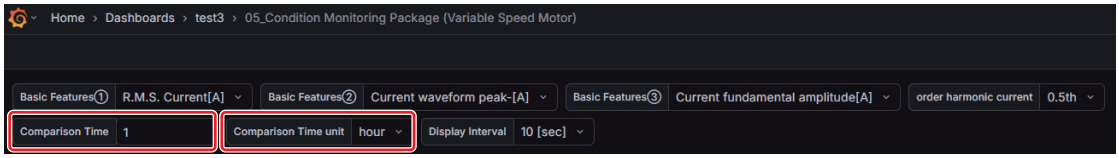
Precautions for Correct Use

The thinning interval for graph data is determined by the longer value between the Display Interval and the component's acquisition interval.
Even if the Display Interval is set to a value shorter than the acquisition interval, the graph display will not change.

2-4-4 Configuring a Two-Period Comparison Graph Condition Monitoring Package (Variable Speed Motor)

1 Configure the comparison time settings.

Change the following two settings:
Comparison Time: Enter the offset time value for comparison.
Comparison Time unit: Select the time unit from the dropdown menu.



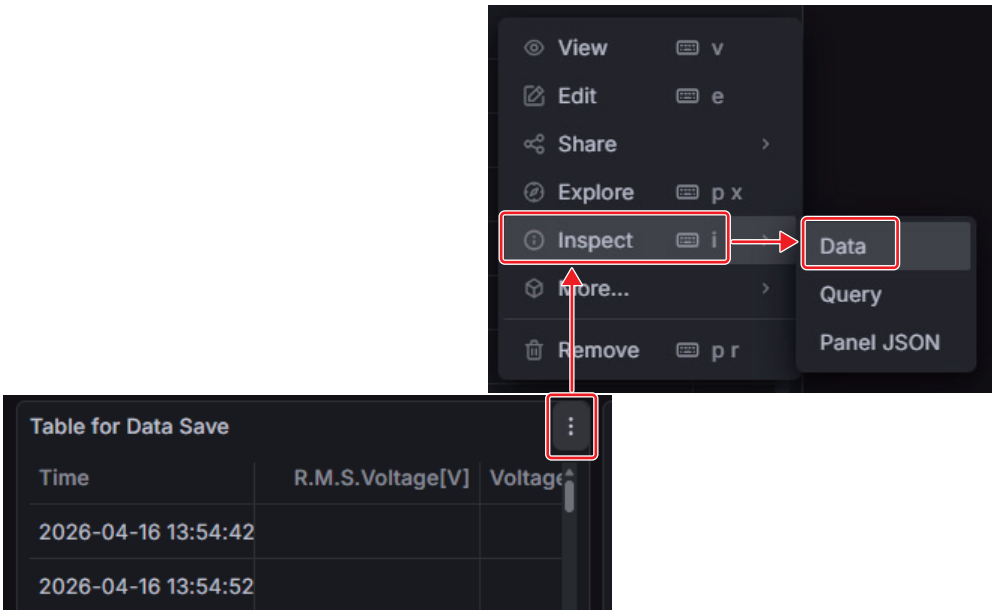
2 After configuration, the graph is updated.

The offset time is displayed in the legend.

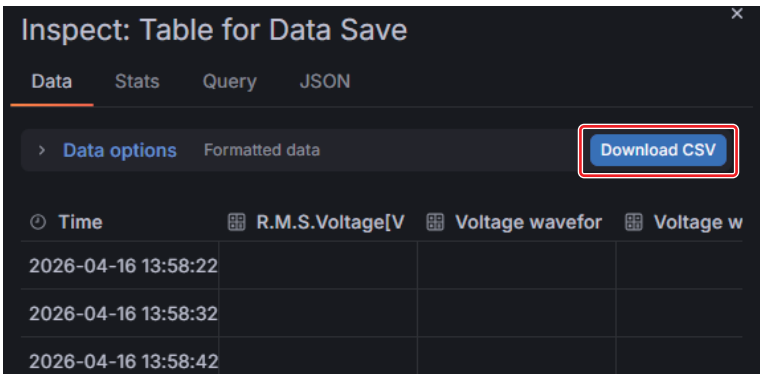
2-4-5 Outputting Feature Value Data Condition Monitoring Package (Variable Speed Motor)

1 Open the *Data Storage Row* and update the graph.

2 Click the **Menu** in the upper right corner of the **Table for Data Save**, and select **Inspect** → **Data**.



3 Click **Download CSV** on the right side of the screen to save the data to the PC.



4 Close the *Data Storage Row*.

Precautions for Correct Use

If you are considering building or operating a monitoring system using the collected data, please contact your OMRON sales representative for further assistance.

2-4-6 Data Storage (Perpetuation)

In SpeeDBee Synapse, enabling Storage allows long-term historical data to be saved and referenced in Grafana.
Data output from the component can be stored collectively or selectively. Selecting and storing only the required data helps reduce memory usage for data storage.

Set by regular expression
Stores all data output from the component. For the setting procedure, refer to the *DX Series Dashboard Generator User's Manual* (N700-E1).

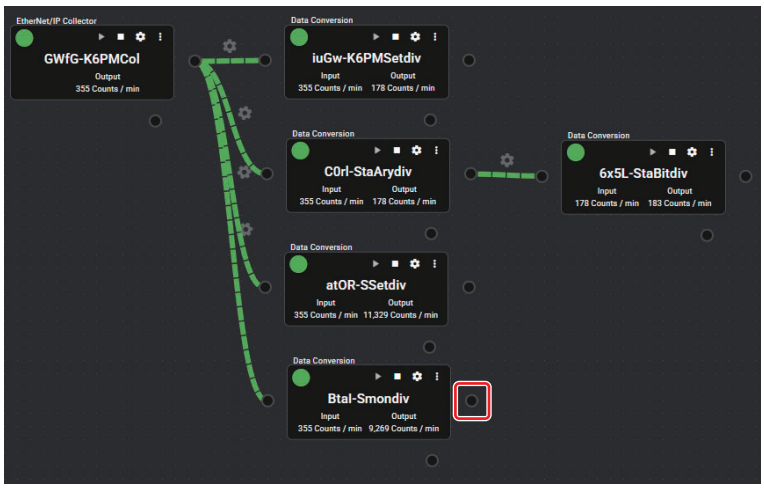
Receive and set data definitions
Stores selected data output from the component. Since the Condition Monitoring Package (Temperature in Control Panels) acquires a large amount of data, it is recommended to select and store only the required data. Refer to the next page for the setting procedure.

Package Name	Target Component	Configuration Method	Data Name
Condition Monitoring Package (Variable Speed Motor)	xxxx-K7DD_Collector_TH	Configure Using Regular Expressions	.*
Condition Monitoring Package (Induction Motor, type Vibration)	xxxx-A_Split	Configure Using Regular Expressions	.*
Condition Monitoring Package (Induction Motor, type Current)	xxxx-Ci_A_Split xxxx-Ci_Dig_conv	Configure Using Regular Expressions	.*
Condition Monitoring Package (Temperature in Control Panels)	xxxx-Smondiv	Configure by Receiving Data Definitions	Select with reference to: K6PM-TH Current Temperature Data

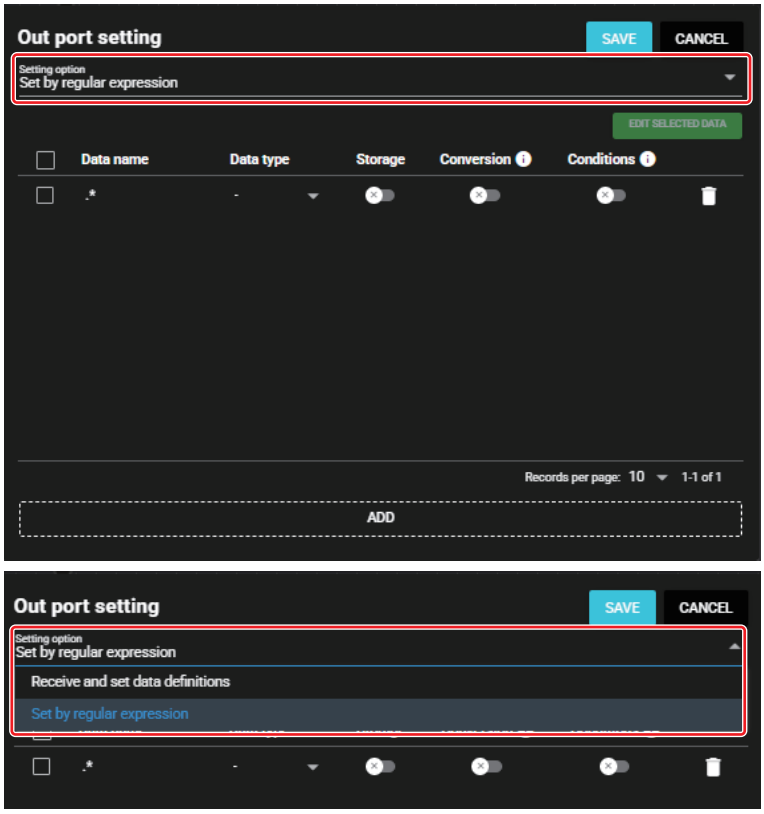
Note: "xxxx" varies depending on the dashboard.

After specifying the retention period by group according to
Steps 1 to 5 in Section 2-6 of the *DX Series Dashboard Generator User's Manual*, configure the settings using the following procedure.

1 Right-click the component output port ●.

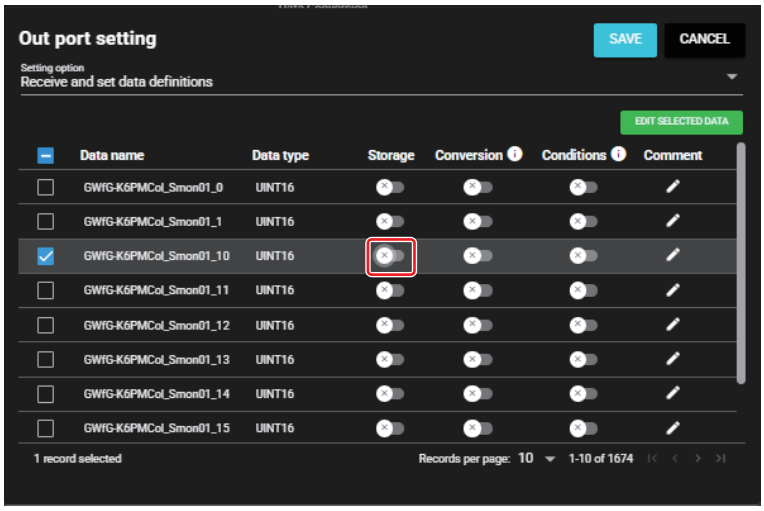


2 In the *Output port settings Screen*, configure the settings as follows:
In the **Setting option**, select **Receive and set data definitions**.

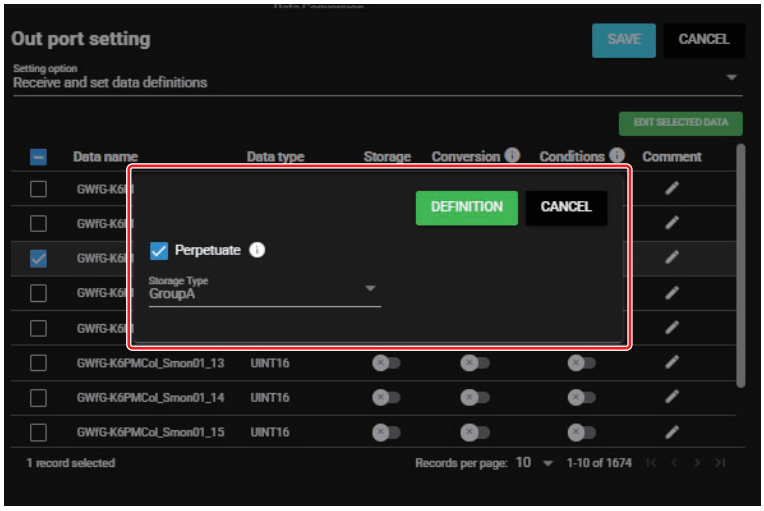


3 The names of the output data will be displayed. Configure the settings as follows:

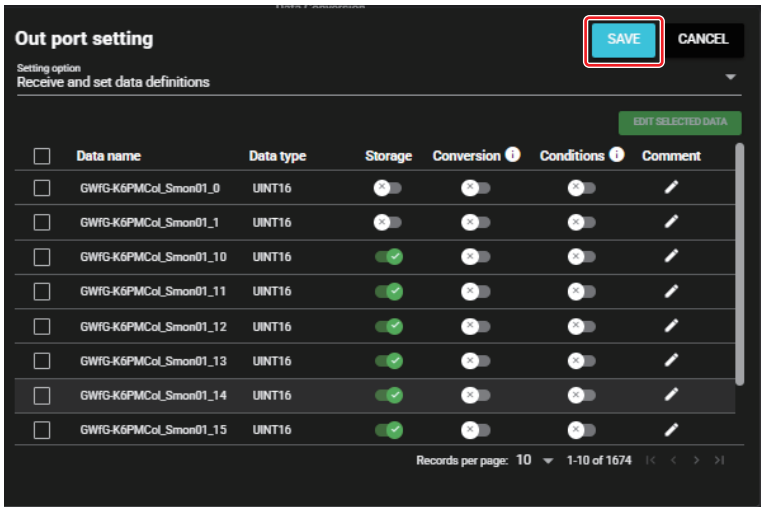
Select the checkbox to the left of the data to be stored.
Enable **Storage**.



Set the Storage Type to Group.
Click the **DEFINITION** Button.



Apply this setting to all data to be stored.
Click the **SAVE** Button after completing the settings.



Reference Table: Current Temperature Data of K6PM-TH

For the K6PM-TH, enable Storage for the output port of the “xxxx-Smondiv” component.
The naming convention for Synapse data is as follows:

xxxx-K6PMCol_SmonN_M
- xxxx-K6PMCol: Name of the EtherNet/IP collector component
  “xxxx” varies depending on the dashboard.
- N: Sensor number (01 to 31)
- M: Data array number acquired by the collector (0 to 53)

For example, for the data of Sensor 1, refer to the following table.

Array No.	K6PM-TH Data Name	Synapse Data Name	Display in Grafana
0	K6PM-TH sensor 1 version	xxxx-K6PMCol_Smon01_0	Not displayed
1	K6PM-TH sensor 1 status	xxxx-K6PMCol_Smon01_1	Not displayed
2	K6PM-TH sensor 1 alarm status	xxxx-K6PMCol_Smon01_2	Not displayed
3	Internal temperature value of K6PM-TH sensor 1	xxxx-K6PMCol_Smon01_3	Displayed
4	K6PM-TH sensor 1 internal maximum temperature	xxxx-K6PMCol_Smon01_4	Not displayed
5	K6PM-TH sensor 1 internal predicted arrival time temperature value	xxxx-K6PMCol_Smon01_5	Not displayed
6	Current value of the K6PM-TH sensor 1 segment 0 temperature	xxxx-K6PMCol_Smon01_6	Displayed
7	Current value of the K6PM-TH sensor 1 segment 1 temperature	xxxx-K6PMCol_Smon01_7	Displayed
8	Current value of the K6PM-TH sensor 1 segment 2 temperature	xxxx-K6PMCol_Smon01_8	Displayed
9	Current value of the K6PM-TH sensor 1 segment 3 temperature	xxxx-K6PMCol_Smon01_9	Displayed
10	Current value of the K6PM-TH sensor 1 segment 4 temperature	xxxx-K6PMCol_Smon01_10	Displayed
11	Current value of the K6PM-TH sensor 1 segment 5 temperature	xxxx-K6PMCol_Smon01_11	Displayed
12	Current value of the K6PM-TH sensor 1 segment 6 temperature	xxxx-K6PMCol_Smon01_12	Displayed
13	Current value of the K6PM-TH sensor 1 segment 7 temperature	xxxx-K6PMCol_Smon01_13	Displayed
14	Current value of the K6PM-TH sensor 1 segment 8 temperature	xxxx-K6PMCol_Smon01_14	Displayed
15	Current value of the K6PM-TH sensor 1 segment 9 temperature	xxxx-K6PMCol_Smon01_15	Displayed
16	Current value of the K6PM-TH sensor 1 segment 10 temperature	xxxx-K6PMCol_Smon01_16	Displayed

Array No.	K6PM-TH Data Name	Synapse Data Name	Display in Grafana
17	Current value of the K6PM-TH sensor 1 segment 11 temperature	xxxx-K6PMCol_Smon01_17	Displayed
18	Current value of the K6PM-TH sensor 1 segment 12 temperature	xxxx-K6PMCol_Smon01_18	Displayed
19	Current value of the K6PM-TH sensor 1 segment 13 temperature	xxxx-K6PMCol_Smon01_19	Displayed
20	Current value of the K6PM-TH sensor 1 segment 14 temperature	xxxx-K6PMCol_Smon01_20	Displayed
21	Current value of the K6PM-TH sensor 1 segment 15 temperature	xxxx-K6PMCol_Smon01_21	Displayed
22	Maximum value of the K6PM-TH sensor 1 segment 0 temperature	xxxx-K6PMCol_Smon01_22	Not displayed
:	:	:	:
53	K6PM-TH sensor 1 segment 15 predicted value	xxxx-K6PMCol_Smon01_53	Not displayed

A

Appendices

A-1 Mapping Table of Data Names Between Condition Monitoring Devices and Synapse

This table shows the correspondence between the K6PM-TH data names used in the Condition Monitoring Package (Temperature in Control Panels) and the data names used in Synapse. Use this table as a reference when customizing settings or enabling data storage.

■ Sensor Threshold Values (Alarm Setting Values)

Output from the component:
yyyy-Ssetdiv
“yyyy” varies depending on the dashboard.

Naming Convention for Synapse Data

xxxx-K6PMCol_SSetN_M

- xxxx-K6PMCol: Name of the EtherNet/IP collector component
  “xxxx” varies depending on the dashboard.
- N: Sensor number (01 to 31)
- M: Data array number acquired by the collector (0 to 65)
- Data is output from the component:
  yyyy-Ssetdiv
  “yyyy” varies depending on the dashboard.

For example, for Sensor 1, refer to the following:

Array No.	K6PM-TH Data Name	Synapse Data Name
0	Sensor 1 Internal temperature alarm value (threshold 1)	xxxx-K6PMCol_SSet01_0
1	Sensor 1 Internal temperature alarm value (threshold 2)	xxxx-K6PMCol_SSet01_1
2	K6PM-TH sensor 1 segment 0 Current temperature alarm setting (threshold 1)	xxxx-K6PMCol_SSet01_2
3	K6PM-TH sensor 1 segment 0 Current temperature alarm setting (threshold 2)	xxxx-K6PMCol_SSet01_3
4	K6PM-TH sensor 1 segment 0 Differential temperature alarm value (threshold 1)	xxxx-K6PMCol_SSet01_4
5	K6PM-TH sensor 1 segment 0 Differential temperature alarm value (threshold 2)	xxxx-K6PMCol_SSet01_5
6	K6PM-TH sensor 1 segment 1 Current temperature alarm setting (threshold 1)	xxxx-K6PMCol_SSet01_6
7	K6PM-TH sensor 1 segment 1 Current temperature alarm setting (threshold 2)	xxxx-K6PMCol_SSet01_7
8	K6PM-TH sensor 1 segment 1 Differential temperature alarm value (threshold 1)	xxxx-K6PMCol_SSet01_8
9	K6PM-TH sensor 1 segment 1 Differential temperature alarm value (threshold 2)	xxxx-K6PMCol_SSet01_9
:	:	:
62	K6PM-TH sensor 1 segment 15 Current temperature alarm setting (threshold 1)	xxxx-K6PMCol_SSet01_62

Array No.	K6PM-TH Data Name	Synapse Data Name
63	K6PM-TH sensor 1 segment 15 Current temperature alarm setting (threshold 2)	xxxx-K6PMCol_SSet01_63
64	K6PM-TH sensor 1 segment 15 Differential temperature alarm value (threshold 1)	xxxx-K6PMCol_SSet01_64
65	K6PM-TH sensor 1 segment 15 Differential temperature alarm value (threshold 2)	xxxx-K6PMCol_SSet01_65

■ Main Unit Monitor

Output from the component:
yyyy-StaArydiv
“yyyy” varies depending on the dashboard.

The Synapse data names are as follows:

Array No.	K6PM-TH Data Name	Synapse Data Name
0	Main Unit status Bit 0: Main Unit internal error Bit 1: K6PM-TH sensor error Bit 8: Comprehensive temperature alarm (threshold 1 exceeded) Bit 9: Comprehensive temperature alarm (threshold 2 exceeded)	UnitSta
1	Running time data	RunTime
2	Software version	SoftVer
3	Number of connected K6PM-TH sensors	NoOfSensor
4	Target sensor in position adjustment mode	SenPosAdj

■ Main Unit Settings

Output from the component:
yyyy-K6PMSetdiv
“yyyy” varies depending on the dashboard.

The Synapse data names are as follows:

Array No.	K6PM-TH Data Name	Synapse Data Name
0	Alarm latch	AlmLat
1	Use Running Time	UseRunT
2	Temperature unit	TempUnit
3	Output inversion	OutInv
4	Use arrival prediction	UseArv
5	K6PM-TH sensor 1 type registration	SType01
:	:	:
35	K6PM-TH sensor 31 type registration	SType31

This table shows the correspondence between the K7DD data names used in the Condition Monitoring Package (Variable Speed Motor) and the data names used in Synapse. Use this table as a reference when customizing settings or enabling data storage.

1) Sensor Monitor Data

See the table for synaptic data names.
Output from the component:
yyyy-K7DD_Collector_TH
“yyyy” varies depending on the dashboard.

Array No.	K7DD Data Name	Synapse Data Name	Display in Grafana
0	R.M.S. voltage	V_RMS	Displayed
1	Voltage waveform peak+	V_Peak+	Displayed
2	Voltage waveform peak-	V_Peak-	Displayed
3	Voltage unbalance	V_Unb	Displayed
4	Voltage fundamental amplitude	V_Fnd	Displayed
5	Voltage total harmonic distortion	V_THD	Displayed
6	R.M.S. Current	I_RMS	Displayed
7	Current waveform peak+	I_Peak+	Displayed
8	Current waveform peak-	I_Peak-	Displayed
9	Current unbalance	I_Unb	Displayed
10	Current fundamental amplitude	I_Fnd	Displayed
11	0.5th order harmonic current	I_0.5	Displayed
12	1.5th order harmonic current	I_1.5	Displayed
13	2nd order harmonic current	I_2	Displayed
14	2.5th order harmonic current	I_2.5	Displayed
:	:	:	:
134	62.5th order harmonic current	I_62.5	Displayed
135	63rd order harmonic current	I_63	Displayed
136	Current total harmonic distortion	I_THD	Displayed
137	Active power	P_Act	Displayed
138	Reactive power	P_React	Displayed
139	Apparent power	P_Aprnt	Displayed
140	Power factor	PF	Displayed
141	Power frequency	FREQ	Displayed

2) Sensor Threshold Values (Alarm Setting Values)

See the table for synaptic data names.

Output from the component:

yyyy-K7DD_Collector_TH

“yyyy” varies depending on the dashboard.

Array No.	K7DD Data Name	Synapse Data Name	Display in Grafana
0	R.M.S. voltage (Warning)	th_caution_V_RMS	Displayed
1	Voltage waveform peak+ (Warning)	th_caution_V_Peak+	Displayed
2	Voltage waveform peak- (Warning)	th_caution_V_Peak-	Displayed
3	Voltage unbalance (Warning)	th_caution_V_Unb	Displayed
4	Voltage fundamental amplitude (Warning)	th_caution_V_Fnd	Displayed
5	Voltage total harmonic distortion (Warning)	th_caution_V_THD	Displayed
6	R.M.S. Current (Warning)	th_caution_I_RMS	Displayed
7	Current waveform peak+ (Warning)	th_caution_I_Peak+	Displayed
8	Current waveform peak- (Warning)	th_caution_I_Peak-	Displayed
9	Current unbalance (Warning)	th_caution_I_Unb	Displayed
10	Current fundamental amplitude (Warning)	th_caution_I_Fnd	Displayed
11	0.5th order harmonic current (Warning)	th_caution_I_0.5	Displayed
12	1.5th order harmonic current (Warning)	th_caution_I_1.5	Displayed
13	2nd order harmonic current (Warning)	th_caution_I_2	Displayed
14	2.5th order harmonic current (Warning)	th_caution_I_2.5	Displayed
:	:	:	:
134	62.5th order harmonic current (Warning)	th_caution_I_62.5	Displayed
135	63rd order harmonic current (Warning)	th_caution_I_63	Displayed
136	Current total harmonic distortion (Warning)	th_caution_I_THD	Displayed
137	Active power (Warning)	th_caution_P_Act	Displayed
138	Reactive power (Warning)	th_caution_P_React	Displayed
139	Apparent power (Warning)	th_caution_P_Aprnt	Displayed
140	Power factor (Warning)	th_caution_PF	Displayed
141	Power frequency (Warning)	th_caution_FREQ	Displayed
142	R.M.S. voltage (Critical)	th_warning_V_RMS	Displayed
143	Voltage waveform peak+ (Critical)	th_warning_V_Peak+	Displayed
144	Voltage waveform peak- (Critical)	th_warning_V_Peak-	Displayed
145	Voltage unbalance (Critical)	th_warning_V_Unb	Displayed
146	Voltage fundamental amplitude (Critical)	th_warning_V_Fnd	Displayed
147	Voltage total harmonic distortion (Critical)	th_warning_V_THD	Displayed
148	R.M.S. Current (Critical)	th_warning_I_RMS	Displayed
149	Current waveform peak+ (Critical)	th_warning_I_Peak+	Displayed
150	Current waveform peak- (Critical)	th_warning_I_Peak-	Displayed
151	Current unbalance (Critical)	th_warning_I_Unb	Displayed
152	Current fundamental amplitude (Critical)	th_warning_I_Fnd	Displayed
153	0.5th order harmonic current (Critical)	th_warning_I_0.5	Displayed
154	1.5th order harmonic current (Critical)	th_warning_I_1.5	Displayed
155	2nd order harmonic current (Critical)	th_warning_I_2	Displayed
156	2.5th order harmonic current (Critical)	th_warning_I_2.5	Displayed
:	: (Critical)	:	:
276	62.5th order harmonic current (Critical)	th_warning_I_62.5	Displayed

Array No.	K7DD Data Name	Synapse Data Name	Display in Grafana
277	63rd order harmonic current (Critical)	th_warning_I_63	Displayed
278	Current total harmonic distortion (Critical)	th_warning_I_THD	Displayed
279	Active power (Critical)	th_warning_P_Act	Displayed
280	Reactive power (Critical)	th_warning_P_React	Displayed
281	Apparent power (Critical)	th_warning_P_Aprnt	Displayed
282	Power factor (Critical)	th_warning_PF	Displayed
283	Power frequency (Critical)	th_warning_FREQ	Displayed

3) Main Unit Monitor

See the table for synaptic data names.

Output from the component:

yyyy-K7DD_Collector_TH

“yyyy” varies depending on the dashboard.

Array No.	K7DD Data Name	Synapse Data Name
0	K7DD Error 0: Not occurred 1: Occurred	main_unit_abnormal
1	Input Circuit Error 0: Not occurred 1: Occurred	input_circuit_abnormal
2	Comprehensive Deterioration Alarm (Warning) 0: Not occurred 1: Occurred	integrated_degradation_alert
3	Comprehensive Deterioration Alarm (Critical) 0: Not occurred 1: Occurred	integrated_degradation_warning

This table shows the correspondence between the K6CM-VBM data names used in the Condition Monitoring Package (Induction Motor, type Vibration) and the data names used in Synapse. Use this table as a reference when customizing settings or enabling data storage.

1) Sensor Monitor Data

See the table for synaptic data names.
Output from the component:
yyyy-A_Split
“yyyy” varies depending on the dashboard.

Array No.	K6CM-VBM Data Name	Synapse Data Name	Display in Grafana
0	Mes cpu version	k_CPU_v	Not displayed
1	Main cpu version	m_CPU_v	Not displayed
2	Eip cpu version	E_CPU_v	Not displayed
3	Main body status	Status	Display After 3) Main Unit Monitoring Processing
4	Running Time	Life	Not displayed
5	Number of triggers	TRIGGER	Not displayed
6	Acceleration status	Accl_s	Not displayed
7	Acceleration pv	Accl_v	Displayed
8	Acceleration min.	Accl_min	Not displayed
9	Acceleration max.	Accl_max	Not displayed
10	Velocity status	val_s	Not displayed
11	Velocity pv	val_v	Displayed
12	Velocity min.	val_min	Not displayed
13	Velocity max.	val_max	Not displayed
14	Motor temperature status	Mtemp_s	Not displayed
15	Motor temperature pv	Mtemp_v	Displayed
16	Motor temperature min.	Mtemp_min	Not displayed
17	Motor temperature max.	Mtemp_max	Not displayed
18	Temperature gap status	Dtemp_s	Not displayed
19	Temperature gap pv	Dtemp_v	Not displayed
20	Temperature gap min.	Dtemp_min	Not displayed
21	Temperature gap max.	Dtemp_max	Not displayed

2) Sensor Threshold Values (Alarm Setting Values) and Unit Settings

See the table for synaptic data names.

Output from the component:

yyyy-A_Split

“yyyy” varies depending on the dashboard.

Array No.	K6CM-VBM Data Name	Synapse Data Name	Display in Grafana
0	Software reset	Reboot	Not displayed
1	Max./min. reset	MaxMin_Reset	Not displayed
2	Display value type	view_calm	Not displayed
3	Trigger mode	Trigger_S	Not displayed
4	Trigger type	Trigger_M	Not displayed
5	Trigger level	Trigger_L	Not displayed
6	Monitoring time	K_Time	Not displayed
7	Alarm latch	War_L	Not displayed
8	Use Running Time	Life_S	Not displayed
9	Moving average times	MoveAvg	Not displayed
10	Temperature unit	Temp_unit	Displayed
11	Reserved area	Tra_out	–
12	Reserved area	Delay_t	–
13	Acceleration failure warning	Accl_ca	Displayed
14	Acceleration failure critical	Accl_wa	Displayed
15	Velocity failure warning	Val_ca	Displayed
16	Velocity failure critical	Val_Wa	Displayed
17	Motor temperature failure warning	Mtemp_ca	Displayed
18	Motor temperature failure critical	Mtemp_wa	Displayed
19	Temperature gap failure warning	Dtemp_ca	Not displayed
20	Temperature gap failure critical	Dtemp_wa	Not displayed

3) Main Unit Monitor

See the table for synaptic data names.

Output from the component:

yyyy-StaBIT_split

“yyyy” varies depending on the dashboard.

Array No.	K6CM-VBM Data Name	Synapse Data Name
0	Mes cpu error 0: Not occurred 1: Occurred	k_CPU_Err
1	Mes cpu data flash error 0: Not occurred 1: Occurred	k_cpu_DErr
2	Main cpu error 0: Not occurred 1: Occurred	M_CPU_Err
3	Main cpu data flash error 0: Not occurred 1: Occurred	M_cpu_DErr
4	Individual acceleration (Warning) 0: Not occurred 1: Occurred	Accl_M_Err
5	Individual acceleration (Critical) 0: Not occurred 1: Occurred	Accl_v_Err
6	Individual velocity (Warning) 0: Not occurred 1: Occurred	Val_M_Err
7	Individual velocity (Critical) 0: Not occurred 1: Occurred	Val_v_Err
8	Individual motor temperature (Warning) 0: Not occurred 1: Occurred	Mtemp_M_Err
9	Individual motor temperature (Critical) 0: Not occurred 1: Occurred	Mtemp_v_Err

This table shows the correspondence between the K6CM-CI2 data names used in the Condition Monitoring Package (Induction Motor, type Current) and the data names used in Synapse. Use this table as a reference when customizing settings or enabling data storage.

1) Sensor Monitor Data

See the table for synaptic data names.
Output from the component:
yyyy-Ci_A_Split
“yyyy” varies depending on the dashboard.

Array No.	K6CM-CI2 Data Name	Synapse Data Name	Display in Grafana
0	Mes cpu version	k_CPU_v	Not displayed
1	Main cpu version	m_CPU_v	Not displayed
2	Eip cpu version	E_CPU_v	Not displayed
3	Main body status	Status	Display After 4) Main Unit Monitoring Processing
4	Running Time	Life	Not displayed
5	Number of triggers	TRIGGER	Not displayed
6	Current status	Current_s	Not displayed
7	Current pv	Current_v	Display After 3) Digit Conversion Processing
8	Current min.	Current_min	Display After 3) Digit Conversion Processing
9	Current max.	Current_max	Display After 3) Digit Conversion Processing
10	Degradation level 1 status	Degradation1_s	Not displayed
11	Degradation level 1 pv	Degradation1_v	Displayed
12	Degradation level 1 min.	Degradation1_min	Not displayed
13	Degradation level 1 max.	Degradation1_max	Not displayed
14	Degradation level 2 status	Degradation2_s	Not displayed
15	Degradation level 2 pv	Degradation2_v	Displayed
16	Degradation level 2 min.	Degradation2_min	Not displayed
17	Degradation level 2 max.	Degradation2_max	Not displayed

2) Sensor Threshold Values (Alarm Setting Values) and Unit Settings

See the table for synaptic data names.

Output from the component:

yyyy-Ci_A_Split

“yyyy” varies depending on the dashboard.

Array No.	K6CM-CI2 Data Name	Synapse Data Name	Display in Grafana
0	Software reset	Reboot	Not displayed
1	Max./min. reset	MaxMin_Reset	Not displayed
2	Display value type	view_calm	Not displayed
3	Trigger mode	Trigger_S	Not displayed
4	Trigger type	Trigger_M	Not displayed
5	Trigger level	Trigger_L	Not displayed
6	Monitoring time	K_Time	Not displayed
7	Alarm latch	War_L	Not displayed
8	Use Running Time	Life_S	Not displayed
9	Moving average times	MoveAvg	Not displayed
10	Current range	Current_unit	Displayed
11	Reserved area	Tra_out	Not displayed
12	Reserved area	Delay_t	Display After 3) Digit Conversion Processing
13	Current failure warning	Current_ca	Display After 3) Digit Conversion Processing
14	Current failure critical	Current_wa	Not displayed
15	Degradation level 1 failure warning	Degradation1_ca	Displayed
16	Degradation level 1 failure critical	Degradation1_Wa	Displayed
17	Degradation level 2 failure warning	Degradation2_ca	Displayed
18	Degradation level 2 failure critical	Degradation2_wa	Displayed

3) Digit Conversion

See the table for synaptic data names.

Output from the component:

yyyy-Ci_Dig_conv

“yyyy” varies depending on the dashboard.

Array No.	K6CM-CI2 Data Name	Synapse Data Name	Display in Grafana
0	Current pv	Current_v_po	Displayed
1	Current min.	Current_min_po	Not displayed
2	Current max.	Current_max_po	Not displayed
3	Current failure warning	Current_ca_po	Displayed
4	Current failure critical	Current_wa_po	Displayed

4) Main Unit Monitor

See the table for synaptic data names.

Output from the component:

yyyy-Ci_StBIT_split

“yyyy” varies depending on the dashboard.

Array No.	K6CM-CI2 Data Name	Synapse Data Name
0	Mes cpu error 0: Not occurred 1: Occurred	k_CPU_Err
1	Mes cpu data flash error 0: Not occurred 1: Occurred	k_cpu_DErr
2	Main cpu error 0: Not occurred 1: Occurred	M_CPU_Err
3	Main cpu data flash error 0: Not occurred 1: Occurred	M_cpu_DErr
4	Individual current (Warning) 0: Not occurred 1: Occurred	Current_M_Err
5	Individual current (Critical) 0: Not occurred 1: Occurred	Current_v_Err
6	Individual degradation level 1 (Warning) 0: Not occurred 1: Occurred	Degradation1_M_Err
7	Individual degradation level 1 (Critical) 0: Not occurred 1: Occurred	Degradation1_v_Err
8	Individual degradation level 2 (Warning) 0: Not occurred 1: Occurred	Degradation2_M_Err
9	Individual degradation level 2 (Critical) 0: Not occurred 1: Occurred	Degradation2_v_Err

OMRON Corporation **Industrial Automation Company**

Kyoto, JAPAN **Contact : www.ia.omron.com**

Contact for inquiries for this product (only for DX-series)

DataPF-contactdesk-OC@omron.com

Operation Hours: 9:00 to 17:00 (except Saturdays, Sundays, and Dec. 31 to Jan. 3), JST

Tutorial Video

https://www.fa.omron.co.jp/dx1/video-manual/en/

Authorized Distributor:

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