Altivar Building ATV212

Variable Speed Drives

Smart Widget (BACnet)

Integration to EcoStruxure™ Building Operation Manual

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Schneider Electric

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As part of a group of responsible, inclusive companies, we are updating our communications that contain non-inclusive terminology. Until we complete this process, however, our content may still contain standardized industry terms that may be deemed inappropriate by our customers.

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Safety Information

Safety Information

Important Information

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result** in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Please Note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

Qualification of Personnel

Only appropriately trained persons who are familiar with and understand the contents of this manual and all other pertinent product documentation are authorized to work on and with this product. In addition, these persons must have received safety training to recognize and avoid hazards involved. These persons must have sufficient technical training, knowledge and experience and be able to foresee and detect potential hazards that may be caused by using the product, by changing the settings and by the mechanical, electrical and electronic equipment of the entire system in which the product is used. All persons working on and with the product must be fully familiar with all applicable standards, directives, and accident prevention regulations when performing such work.

Intended Use

This product is intended for industrial use according to this manual.

The product may only be used in compliance with all applicable safety standard and local regulations and directives, the specified requirements and the technical data. The product must be installed outside the hazardous ATEX zone. Prior to using the product, you must perform a risk assessment in view of the planned application. Based on the results, the appropriate safety measures must be implemented. Since the product is used as a component in an entire system, you must ensure the safety of persons by means of the design of this entire system (for example, machine design). Any use other than the use explicitly permitted is prohibited and can result in hazards.

Product Related Information

Read and understand these instructions before performing any procedure with this drive.

⚡⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Only appropriately trained persons who are familiar with and fully understand the contents of the present manual and all other pertinent product documentation and who have received all necessary training to recognize and avoid hazards involved are authorized to work on and with this drive system.
- Installation, adjustment, repair and maintenance must be performed by qualified personnel.
- Verify compliance with all local and national electrical code requirements as well as all other applicable regulations with respect to grounding of all equipment.
- Only use properly rated, electrically insulated tools and measuring equipment.
- Do not touch unshielded components or terminals with voltage present.
- Prior to performing any type of work on the drive system, block the motor shaft to prevent rotation.
- Insulate both ends of unused conductors of the motor cable.
- Do not short across the DC bus terminals or the DC bus capacitors or the braking resistor terminals.

Failure to follow these instructions will result in death or serious injury.

⚡⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Before performing work on the drive system:

- Disconnect all power, including external control power that may be present. Take into account that the circuit breaker or main switch does not de-energize all circuits.
- Place a "Do Not Turn On" label on all power switches related to the drive system.
- Lock all power switches in the open position.
- Wait 15 minutes to allow the DC bus capacitors to discharge. The DC bus LED is not an indicator of the absence of DC bus voltage that can exceed 800 Vdc.
- Measure the voltage on the DC bus between the DC bus terminals (PA/+ and PC/-) using a properly rated voltmeter to verify that the voltage is <42 Vdc.
- If the DC bus capacitors do not discharge properly, contact your local Schneider Electric representative. Do not repair or operate the product.

Before applying voltage to the drive system:

- Verify that the work has been completed and that the entire installation cannot cause hazards.
- If the mains input terminals and the motor output terminals have been grounded and short-circuited, remove the ground and the short circuits on the mains input terminals and the motor output terminals.
- Verify proper grounding of all equipment.
- Verify that all protective equipment such as covers, doors, grids is installed and/or closed.

Failure to follow these instructions will result in death or serious injury.

Damaged products or accessories may cause electric shock or unanticipated equipment operation.

⚡⚠ DANGER

ELECTRIC SHOCK OR UNANTICIPATED EQUIPMENT OPERATION

Do not use damaged products or accessories.

Failure to follow these instructions will result in death or serious injury.

Contact your local Schneider Electric sales office if you detect any damage whatsoever.

This equipment has been designed to operate outside of any hazardous location. Only install this equipment in zones known to be free of a hazardous atmosphere.

⚠**DANGER**
POTENTIAL FOR EXPLOSION
Install and use this equipment in non-hazardous locations only.
Failure to follow these instructions will result in death or serious injury.

Your application consists of a whole range of different interrelated mechanical, electrical, and electronic components, the drive being just one part of the application. The drive by itself is neither intended to nor capable of providing the entire functionality to meet all safety-related requirements that apply to your application. Depending on the application and the corresponding risk assessment to be conducted by you, a whole variety of additional equipment is required such as, but not limited to, external encoders, external brakes, external monitoring devices, guards, etc.

As a designer/manufacturer of machines, you must be familiar with and observe all standards that apply to your machine. You must conduct a risk assessment and determine the appropriate Performance Level (PL) and/or Safety Integrity Level (SIL) and design and build your machine in compliance with all applicable standards. In doing so, you must consider the interrelation of all components of the machine. In addition, you must provide instructions for use that enable the user of your machine to perform any type of work on and with the machine such as operation and maintenance in a safe manner.

The present document assumes that you are fully aware of all normative standards and requirements that apply to your application. Since the drive cannot provide all safety-related functionality for your entire application, you must ensure that the required Performance Level and/or Safety Integrity Level is reached by installing all necessary additional equipment.

⚠**WARNING**
INSUFFICIENT PERFORMANCE LEVEL/SAFETY INTEGRITY LEVEL AND/OR UNINTENDED EQUIPMENT OPERATION
• Conduct a risk assessment according to EN ISO 12100 and all other standards that apply to your application.
• Use redundant components and/or control paths for all critical control functions identified in your risk assessment.
• Verify that the service life of all individual components used in your application is sufficient for the intended service life of your overall application.
• Perform extensive commissioning tests for all potential error situations to verify the effectiveness of the safety-related functions and monitoring functions implemented, for example, but not limited to, speed monitoring by means of encoders, short circuit monitoring for all connected equipment, correct operation of brakes and guards.
• Perform extensive commissioning tests for all potential error situations to verify that the load can be brought to a safe stop under all conditions.
Failure to follow these instructions can result in death, serious injury, or equipment damage.

Product may perform unexpected movements because of incorrect wiring, incorrect settings, incorrect data or other errors.

⚠**WARNING**
UNANTICIPATED EQUIPMENT OPERATION
• Carefully install the wiring in accordance with the EMC requirements.
• Do not operate the product with unknown or unsuitable settings or data.
• Perform a comprehensive commissioning test.
Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠ **WARNING**

LOSS OF CONTROL

- The designer of any control scheme must consider the potential failure modes of control paths and, for critical control functions, provide a means to achieve a safe state during and after a path failure. Examples of critical control functions are emergency stop, overtravel stop, power outage and restart.

- Separate or redundant control paths must be provided for critical control functions.

- System control paths may include communication links. Consideration must be given to the implications of unanticipated transmission delays or failures of the link.

- Observe all accident prevention regulations and local safety guidelines (1).

- Each implementation of the product must be individually and thoroughly tested for proper operation before being placed into service.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

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(1) For USA: Additional information, refer to NEMA ICS 1.1 (latest edition), Safety Guidelines for the Application, Installation, and Maintenance of Solid State Control and to NEMA ICS 7.1 (latest edition), Safety Standards for Construction and Guide for Selection, Installation and Operation of Adjustable-Speed Drive Systems.

The temperature of the products described in this manual may exceed 80 °C (176 °F) during operation.

⚠ **WARNING**

HOT SURFACES

- Ensure that any contact with hot surfaces is avoided.

- Do not allow flammable or heat-sensitive parts in the immediate vicinity of hot surfaces.

- Verify that the product has sufficiently cooled down before handling it.

- Verify that the heat dissipation is sufficient by performing a test run under maximum load conditions.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

Machines, controllers, and related equipment are usually integrated into networks. Unauthorized persons and malware may gain access to the machine as well as to other devices on the network/fieldbus of the machine and connected networks via insufficiently secure access to software and networks.

⚠ **WARNING**

UNAUTHORIZED ACCESS TO THE MACHINE VIA SOFTWARE AND NETWORKS

- In your hazard and risk analysis, consider all hazards that result from access to and operation on the network/fieldbus and develop an appropriate cyber security concept.

- Verify that the hardware infrastructure and the software infrastructure into which the machine is integrated as well as all organizational measures and rules covering access to this infrastructure consider the results of the hazard and risk analysis and are implemented according to best practices and standards covering IT security and cyber security (such as: ISO/IEC 27000 series, Common Criteria for Information Technology Security Evaluation, ISO/ IEC 15408, IEC 62351, ISA/IEC 62443, NIST Cybersecurity Framework, Information Security Forum - Standard of Good Practice for Information Security, SE recommended Cybersecurity Best Practices*).

- Verify the effectiveness of your IT security and cyber security systems using appropriate, proven methods.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

(*) : SE Recommended Cybersecurity Best Practices can be downloaded on SE.com.

⚠ **WARNING**
LOSS OF CONTROL
Perform a comprehensive commissioning test to verify that communication monitoring properly detects communication interruptions
Failure to follow these instructions can result in death, serious injury, or equipment damage.

NOTICE
DESTRUCTION DUE TO INCORRECT MAINS VOLTAGE
Before switching on and configuring the product, verify that it is approved for the mains voltage.
Failure to follow these instructions can result in equipment damage.

About the Book

Validity Note

Original instructions and information given in this manual have been written in English (before optional translation).

This document is valid for the Altivar 212 drives. Refer to the related documents.

The technical characteristics of the devices described in the present document also appear online. To access the information online, go to the Schneider Electric home page www.se.com/ww/en/download/.

The characteristics that are described in the present document should be the same as those characteristics that appear online. In line with our policy of constant improvement, we may revise content over time to improve clarity and accuracy. If you see a difference between the document and online information, use the online information as your reference.

Document Scope

The purpose of this document is to show the integration of Altivar ATV212 Smart Widget (BACnet) to EcoStruxure[tm] Building Operation for monitoring and control.

Related Documents

Title of Documentation	Reference Number
ATV212 Catalog	DIA2ED2101102EN (English)
ATV212 Quick Start	S1A53825 (English), S1A53826 (French), S1A53827 (German), S1A53828 (Spanish), S1A53830 (Italian), S1A53831 (Chinese)
ATV212 Installation manual	S1A53832 (English), S1A53833 (French), S1A53834 (German), S1A53836 (Spanish), S1A53835 (Italian), SCDOC1563 (Chinese)
ATV212 Programming manual	S1A53838 (English), S1A53839 (French), S1A53840 (German), S1A53842 (Spanish), S1A53841 (Italian), SCDOC1564 (Chinese)
ATV212 Modbus manual	S1A53844
ATV212 Metasys N2 manual	S1A53846
ATV212 Apogée FLN P1 manual	S1A53847
Multiloader manual	BBV48778 (English)
SoMove: FDT	SoMove_FDT (English, French, German, Spanish, Italian, Chinese)
Altivar DTM	Altivar_DTM_Library (English, French, German, Spanish, Italian, Chinese)
Recommended Cybersecurity Best Practices	CS-Best-Practices-2019-340
ATV212 other option manuals: see www.se.com	

You can download these technical publications, the present document and other technical information from our website www.se.com/en/download/.

How to integrate Altivar Building ATV212 to EcoStruxure Building Operation

In complement of this manual a video presenting how to integrate Altivar Building ATV212 to EcoStruxure Building Operation procedure is available on the Schneider Electric FAQ (FAQ000242971).

Electronic product data sheet

Scan the QR code in front of the drive to get the product data sheet.

Terminology

The technical terms, terminology, and the corresponding descriptions in this manual normally use the terms or definitions in the relevant standards.

In the area of drive systems this includes, but is not limited to, terms such as **error, error message, failure, fault, fault reset, protection, safe state, safety function, warning, warning message**, and so on.

Among others, these standards include:

- IEC 61800 series: Adjustable speed electrical power drive systems
- IEC 61508 Ed.2 series: Functional safety of electrical/electronic/ programmable electronic safety-related
- EN 954-1 Safety of machinery - safety-related parts of control systems
- ISO 13849-1 & 2 Safety of machinery - safety related parts of control systems
- IEC 61158 series: Industrial communication networks - Fieldbus specifications
- IEC 61784 series: Industrial communication networks - Profiles
- IEC 60204-1: Safety of machinery - Electrical equipment of machines – Part 1: General requirements

In addition, the term **zone of operation** is used in conjunction with the description of specific hazards, and is defined as it is for a **hazard zone** or **danger zone** in the EC Machinery Directive (2006/42/EC) and in ISO 12100-1.

Also see the glossary at the end of this manual.

Contact us

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Configuration of the drive

This chapter will show the configuration of the drive to enable the integration and control via BACnet fieldbus communication to allow the device to be discoverable within EcoStruxure™ Building Operation.

The following parameters need to be set manually on the drive through the menu selection buttons or with SoMove.

The following table will show the steps to configure the drive:

Step	Action
1	Verify that the **[Com channel choice]** (*F b o 7*) is set to *I* **[Open style]**.
2	Verify that the switch **SW102** is set to **Source**.
3	Set parameter **[Communication protocol]** (*F b 2 9*) to *4* **[BACnet]** to enable the BACnet communication protocol.
4	Set parameter **[Command mode sel]** (*C П o d*) to *2* **[Communication]** to enable the control via fieldbus.
5	Set parameter **[Frequency mode sel]** (*F П o d*) to *4* **[Serial com ref]** to configure the Reference source.
6	Define the error response in case of a BACnet communication interruption. Set parameter **[Com fault setting]** (*F b 5 I*) according to your application to: <table><tr><td>*2* **[Ramp stop]**</td><td>Motor performs a stop along the defined ramp.</td></tr><tr><td>*3* **[Freewheel]**</td><td>Drive cuts the output power and the motor performs a stop in freewheel.</td></tr></table>
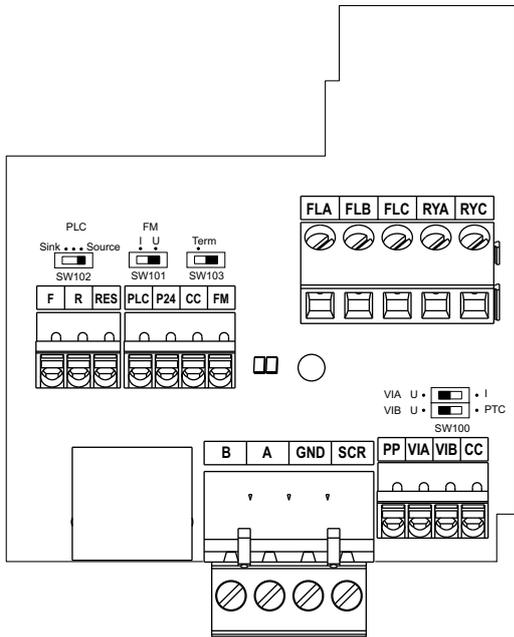
Step	Action
7	Set the parameter **[Network baud rate]** (*F B 9 1*) to *5* **[Auto]**. Alternative following settings can be selected for **[Network baud rate]** (*F B 9 1*): • *1*: 9600 bps • *2*: 19200 bps • *3*: 38400 bps • *4*: 76800 bps **Remark:** Any setting other than *5* **[Auto]** will require the same setting in the BACnet MSTP Network configuration within EcoStruxure™ Building Operation.
8	Set the BACnet device ID to a non-conflicting ID within the range of 0 to 41944303. This device ID must be set in 2 fields in the drive as follows: • **[Instance number H]** (*F B 9 3*) setting range: 0 to 4194 • **[Instance number L]** (*F B 9 4*) setting range: 0 to 999 **NOTE:** This need to be remembered when assigning the device later in EcoStruxure™ Building Operation.

EcoStruxure™ Building Operation device integration

How to connect the device to EcoStruxure™ Building Operation Workstation

The following table shows how to connect the device to EcoStruxure™ Building Operation Workstation.

Step	Description
1	Log-in to EcoStruxure™ Building Operation Workstation:
2	Open the **Engineering** workspace:
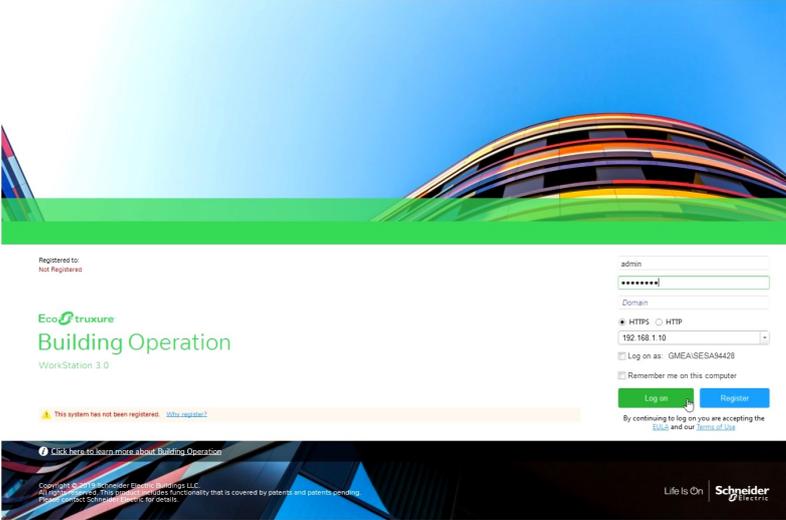
Add MSTP Network

Step	Description
1	Add **MSTP Network** to your **BACnet Interface**:
2	Configure the MSTP network properties and ensure the Baud rate matches the one set previously in the drive parameter **[Network baud rate]** ($F\,B\,9\,1$): **NOTE:** If the drive parameter **[Network baud rate]** ($F\,B\,9\,1$) is set to 5 **[Auto]**, the **MSTP baud rate** can be set in accordance to your application. The drive will detect the **MSTP baud rate** and will adapt to the correct communication speed.
3	Select the appropriate RS485 communication port:
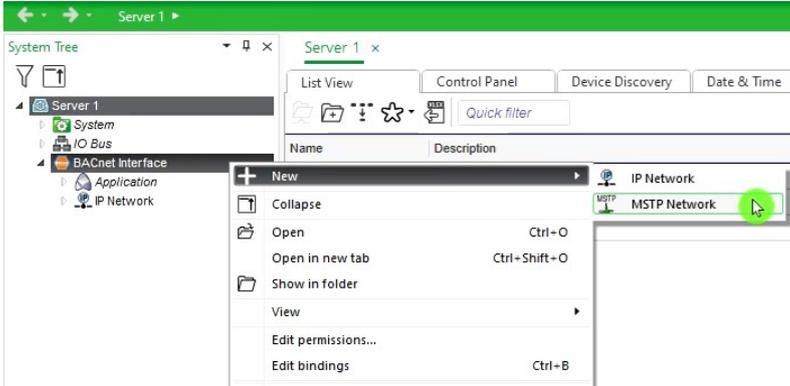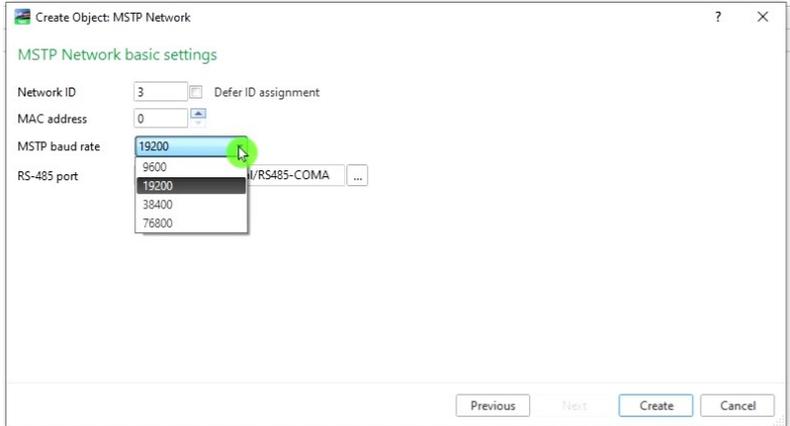
Device discovery

Step	Description
1	Click on **Device Discovery** tab:
2	Set **Device Type** to **BACnet devices**:
3	All BACnet devices discoverable on the network are displayed:

Import the Smart Widget

Step	Description
1	Right-click on the correct MSTP Network and use the **Import** function from the context menu:
2	Download the XML file: **ATV212_BACnet Widget** Select the widget XML file and import it.

Step	Description
3	Finish the import process:
4	Right-click on the widget and navigate through the context menu and select **Associate with device**:
5	Enter the BACnet Device ID that has been set in the drive: **NOTE:** The Device-ID can also be found in the Device Discovery.
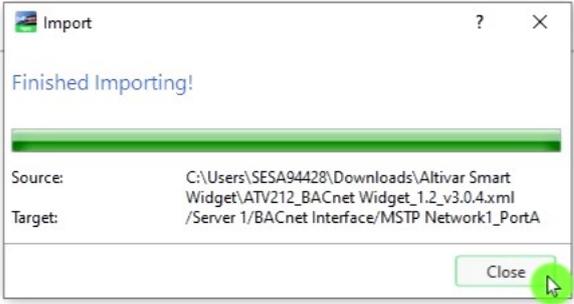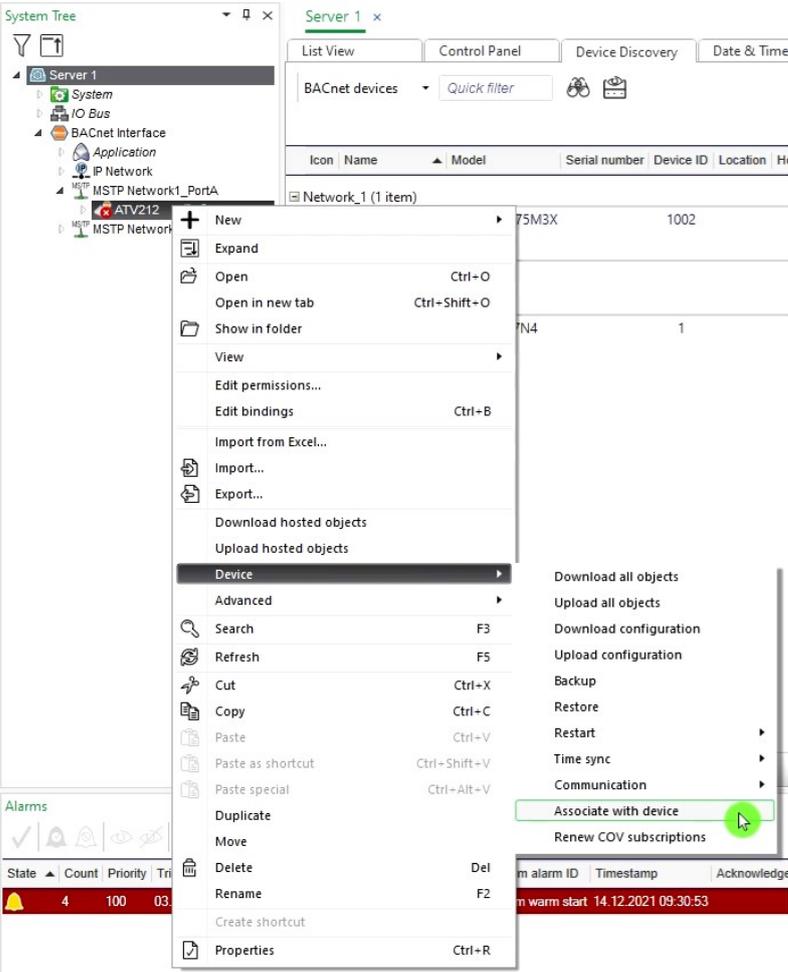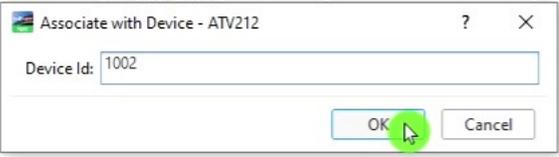
Step	Description
6	Right-click on the widget and navigate through the context menu and select **Download hosted objects**:
7	Finish the download and close the window:
8	The widget is online and ready to use.

How to use the widget

To access the Smart Widget of your drive, use the System Tree to navigate through the imported ATV212 Widget folders.
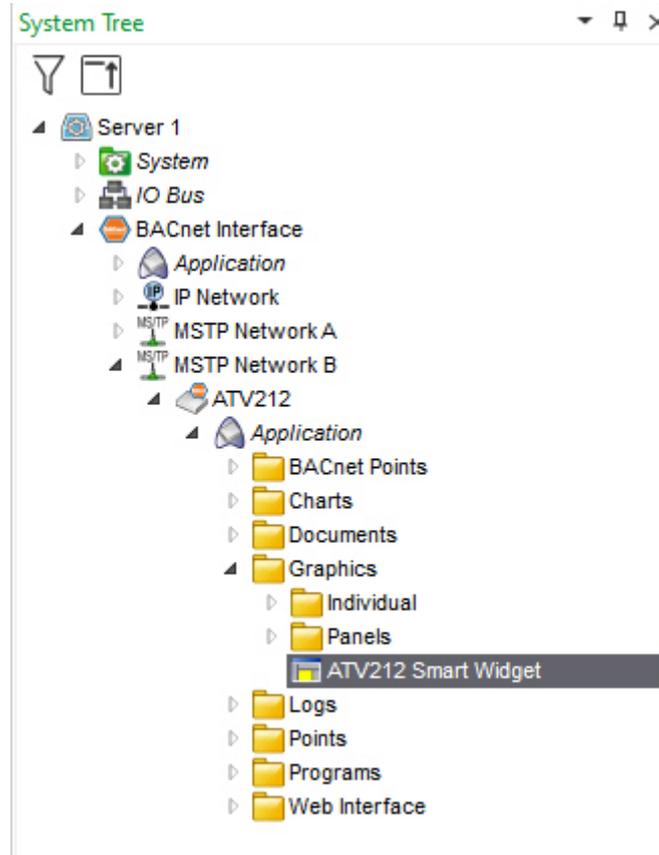
The Overview page can be accessed in the subfolder Graphics by selecting the ATV212 Smart Widget.
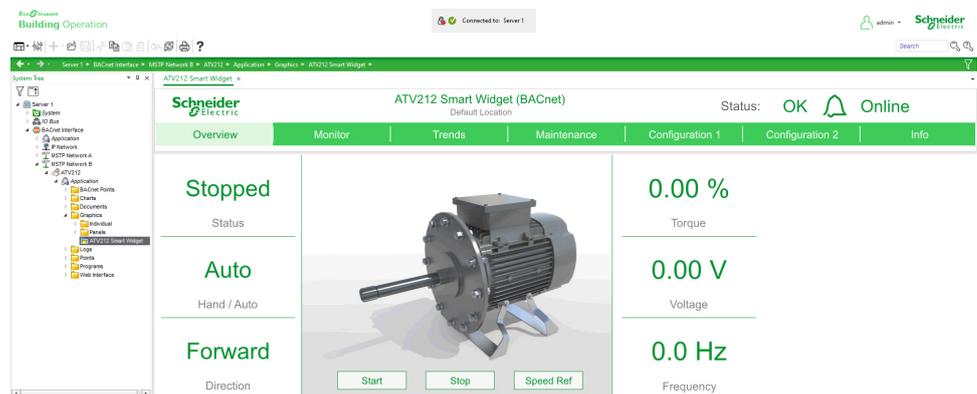
Overview Page

This page is used to monitor and control the drive application.
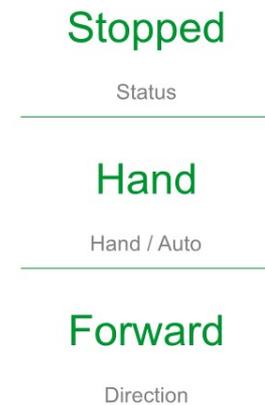

The Overview is split into three main sections:

- Status
- Control
- Monitor

Status

The status section provides information about the drive application.

The following information will be displayed:

- Status:

  Information if the application is running or stopped.
- Hand / Auto:

  Information about the control mode of the drive.
- Direction of rotation:

  Information about the direction of rotation.

Control

The Control section in the center of the screen allows the control of the drive application.
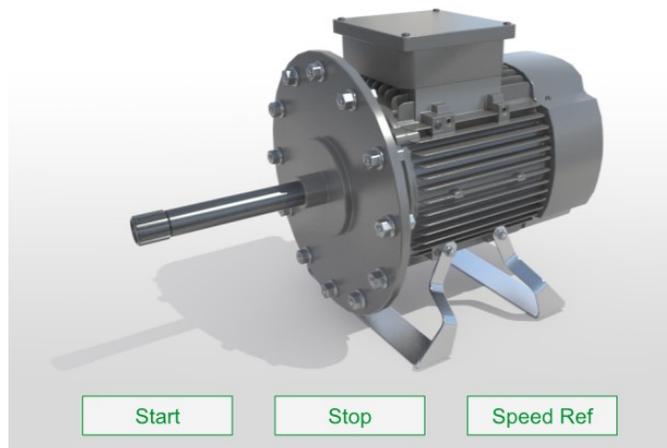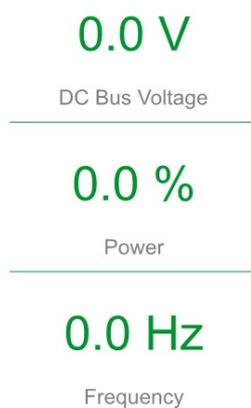

The following operation controls are available:

- Start:

    Press this button to start the motor.

- Stop:

    Press this button to stop the motor.

- Speed Ref:

    Press this button to access the dialog box to set the speed reference.

Monitoring

The Monitor section provides information about actual values in three customizable displays.

0.0 V

DC Bus Voltage

0.0 %

Power

0.0 Hz

Frequency

Default setting displays the values for:

- Speed
- Voltage
- Frequency

For more information, check Widget Configuration Chapter, page 30.

Monitoring Page

This page is used to monitor the main values of the drive application in Real time.
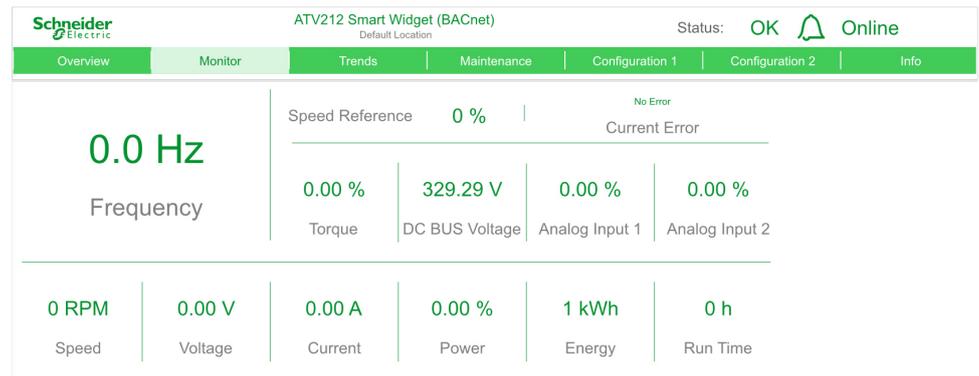
The actual values for the most important values can be monitored here:

- Frequency
- Speed Reference
- Current Error
- Torque
- DC Bus Voltage
- Analog Input 1
- Analog Input 2
- Speed
- Voltage
- Current
- Power
- Energy
- Run Time

Trends Page

This page is used to monitor actual values of the drive application as trend lines:
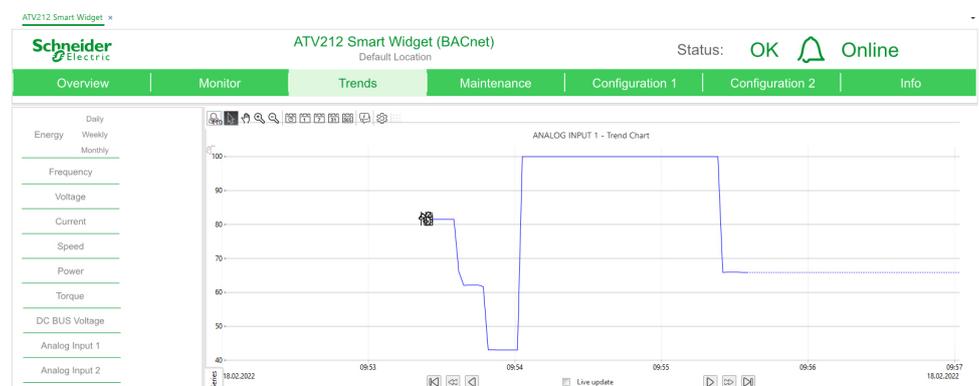
The interval for the recording can be set individually for each monitored value. Default setting of the Trend recorder is set to 15 minutes.

To adapt the setting navigate in the System Tree through the imported ATV212 Widget to access the folder **Logs**.

Maintenance Page

This page is used to check the health status and run time information of the drive.

The Overview is split into four main sections:

- Warnings / Errors
- EBO Hours Run Alarm
- ATV Maintenance State
- Energy

Warnings / Errors

The Warnings / Errors section provide information about the health status of the drive.

The following information will be displayed:

- Faults Status:

  Actual Status of the drive (Healthy or Error).

- Current Code:

  Display the actual Error.

- Previous Code 1:

  Information about previous Error (actual Error -1)

- Previous Code 2:
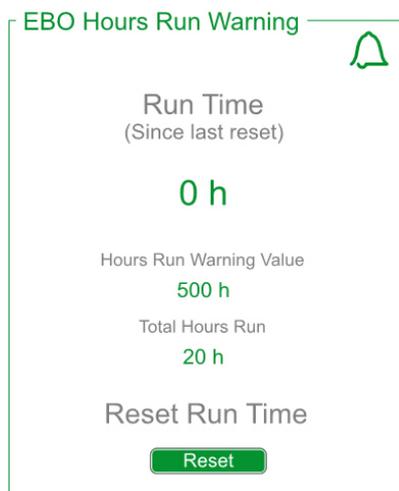
  Information about previous Error (actual Error -2)

- Warning / Error Reset:

    Use Button to perform a Reset operation.

    NOTE: For more information about error and warnings codes, refer to the ATV212 Programming Manual S1A53838.

EBO Hours Run Warning

The Run Time section in the center of the screen provides information about the operation hours of the drive application.

The following information will be displayed:

- Run Time (since last reset):

    Provides information about Run Time since the last Reset.

- Hours Run Warning Value:

    Pre-Set Run Time Hour for Alarm Level.

    NOTE: To adapt the setting navigate in the System Tree through the imported widget to access the Run Time settings in the folder Programs.

- Total Hours Run:

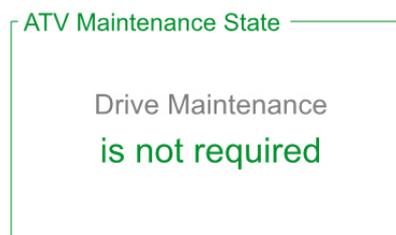   Displays the total Run Hours.

- Reset Run Time:

    Use Button to perform a Reset of the Run Time.

    The total Hours Run will not be affected.

ATV Maintenance State

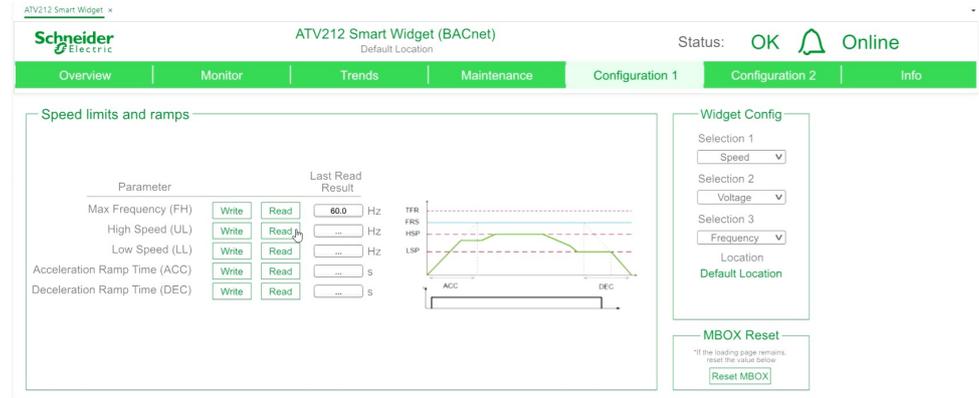This section provide information about the Maintenance status of the drive.

Energy

The Energy section provides information about the total consumed Energy.

Energy

Total Usage

1 kWh

Configuration 1 Page

This page is used to change the parameter settings of the drive and the configuration of the monitoring section of the Overview page.

The Configuration 1 page is split into three main sections:

- Speed Limits and Ramps.
- Widget Configuration.
- MBOX Reset.

Speed limits and ramps

This section is used to manage the drive parameter settings for speed limits and ramp Times.

The following drive parameters can be modified:

- **[Max Frequency]** `TFR`.
- **[High Speed]** `HSP`.
- **[Low Speed]** `LSP`.
- **[Acceleration]** `ACC`.
- **[Deceleration]** `DEC`.

  NOTE: For more information, refer to the ATV212 Programming Manual S1A53838.

Use the **Read** button to get the current value.

Use the **Write** button to set a new value and follow the instructions on the Prompt to enter a new value. After the new value has been set, use the Read button to update the displayed value.

  NOTE: During Operation a change of parameter may be prohibited. In this case the Write function will be not be available.

Widget Configuration

This section is used to configure the ATV212 Widget.

```
┌─ Widget Config ──────┐
│                      │
│   Selection 1        │
│   ┌──────────────┐   │
│   │  Torque    ∨ │   │
│   └──────────────┘   │
│                      │
│   Selection 2        │
│   ┌──────────────┐   │
│   │  Voltage   ∨ │   │
│   └──────────────┘   │
│                      │
│   Selection 3        │
│   ┌──────────────┐   │
│   │  Frequency ∨ │   │
│   └──────────────┘   │
│       Location       │
│   Default Location   │
│                      │
│                      │
└──────────────────────┘
```

In this section, the selection of the actual values to be displayed on the Overview tab can be customized.

An individual identifier of the application or for the localization of the drive application can be set.

Actual Value Monitoring

Use the Drop-down menus to customize the selection of actual values displayed on the Overview Tab, page 23.

The following actual values can be selected:

• Current (Motor Current)

• DC Bus Voltage

• Energy

• Frequency (Output Frequency)

• Power

• Run Time

• Speed (Motor speed)

• Torque (Motor torque)

• Voltage (Motor voltage)

Identifier

An individual tag as identifier for the application or for the localization of the equipment can be assigned.

This identifier will be displayed on top of each tab. It could also be found on the device identification in the Info tab.

Click on the (Default Location) to open the input dialog window.

MBOX Reset

Use the Reset MBOX Button to reset the communication whenever the loading screen may remain. The actual task will be canceled.

If a write command was given, it is recommended to check the actual setting of the parameter while using the corresponding Read Button.

Configuration 2 Page

This page is used to change the parameter settings of the **Motor Data** in the drive.
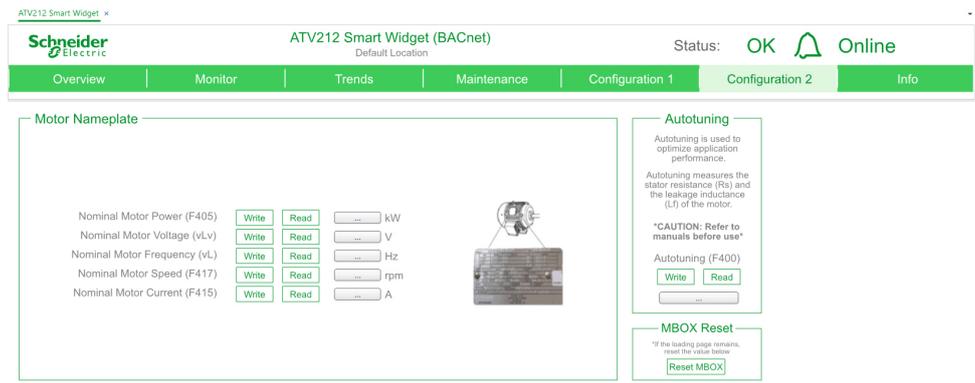
The Configuration 2 page is split into three main sections:

- Motor Nameplate
- Autotuning
- MBOX Reset

Motor Nameplate

This part is used to manage the Motor data according to the Nameplate.

The following drive parameters can be modified:

- **[Motor Standard]** BFR
- **[Nominal Motor Power]** NPR
- **[Nom Motor Voltage]** UNS
- **[Nominal Motor Freq]** FRS
- **[Nominal Motor Speed]** NSP
- **[Nom Motor Current]** NCR

The Drive nominal Rating is a Read-only parameter.

> **NOTE:** For more information, refer to the ATV212 Programming Manual S1A53838.

Use the **Read** button to get the current value.

Use the **Write** button to set a new value and follow the instructions on the Prompt to enter a new value. After the new value has been set, use the Read button to update the displayed value.

> **NOTE:** During Operation a change of parameter may be prohibited. In this case the Write function will be not be available.
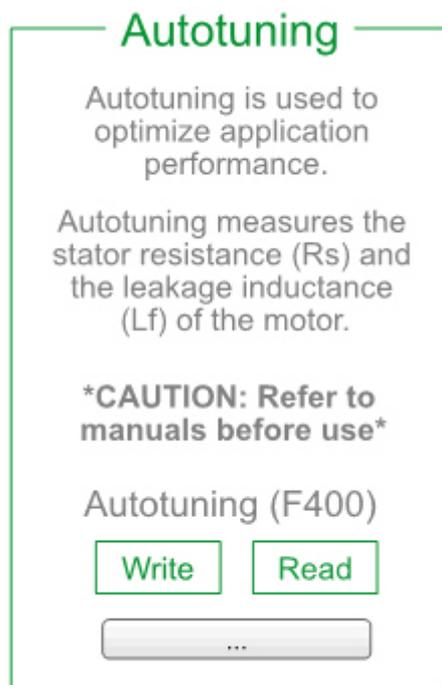
Autotuning

⚠ **WARNING**
LOSS OF CONTROL
• Fully read and understand the manual of the connected motor.
• Verify that all motor parameters are correctly set by referring to the nameplate and the manual of the connected motor.
Failure to follow these instructions can result in death, serious injury, or equipment damage.

This section can be used to initiate an Autotuning procedure to optimize the application performance.

Use the Write button and follow the input dialog to apply the Autotuning procedure.

> **NOTE:** For more information, refer to the ATV212 Programming Manual S1A53838.

MBOX Reset

Use the Reset MBOX Button to reset the communication whenever the loading screen may remain. The actual task will be canceled.

If a write command was given, it is recommended to check the actual setting of the parameter while using the corresponding Read Button.

Info Page

This page will display information about the connected drive and provide access to the drive documentation.

The Info page is split into two main sections:

- Widget Info
- Documents

Widget Info

This section provides information about the connected drive.


The following information will be displayed:

- Model Name:

    Commercial Reference of the connected drive.

- BACnet ID:

    BACnet Address of the connected drive.

- Software Version:

    Software Version of the BACnet Communication Module.

- Firmware Revision:

    Firmware Revision of the connected drive.

- Location:

    Customized identifier configured on Configuration 1.

    As factory setting (Default Location) will be displayed.

Documents

This section will provide access to the related documentation.
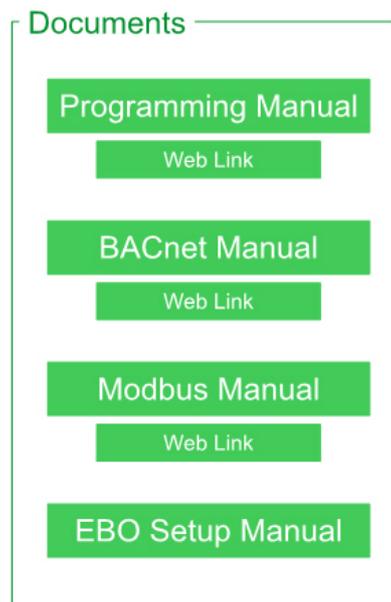
The following documents are available:

- Programming Manual
- BACnet MS/TP Manual
- Modbus Serial Manual
- Modbus TCP Manual
- EBO Setup Manual

All documents can be accessed directly or via Web Link.

NOTE: WebLink will provide the latest version of the documents.

An Internet connection is required.

Glossary

E

Error :

Discrepancy between a detected (computed, measured, or signaled) value or condition and the specified or theoretically correct value or condition.

F

Fault Reset:

A function used to restore the drive to an operational state after a detected error is cleared by removing the cause of the error so that the error is no longer active.

Fault:

Fault is an operating state. If the monitoring functions detect an error, a transition to this operating state is triggered, depending on the error class. A "Fault reset" is required to exit this operating state after the cause of the detected error has been removed. Further information can be found in the pertinent standards such as IEC 61800-7, ODVA Common Industrial Protocol (CIP).

M

Monitoring function:

Monitoring functions acquire a value continuously or cyclically (for example, by measuring) in order to check whether it is within permissible limits. Monitoring functions are used for error detection.

P

Parameter:

Device data and values that can be read and set (to a certain extent) by the user.

W

Warning:

If the term is used outside the context of safety instructions, a warning alerts to a potential error that was detected by a monitoring function. A warning does not cause a transition of the operating state.

Z

Zone of operation:

This term is used in conjunction with the description of specific hazards, and is defined as it is for a **hazard zone** or **danger zone** in the EC Machinery Directive (2006/42/EC) and in ISO 12100-1.

As standards, specifications, and design change from time to time,
please ask for confirmation of the information given in this publication.

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