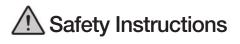
The right choice for the ultimate yield!

LSIS strives to maximize your profits in gratitude for choosing us as your partner.





- Read this manual carefully before installing, wiring, operating, servicing or inspecting this equipment.
- keep this manual within easy reach for quick reference.



Safety Precautions

Revision History

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| Version | Date | Remark | Revised Page |
|---------|----------|---------------|-----------------|
| V1.0 | `19.6.21 | First Edition | |
| V1.1 | '19.8.20 | Error revised | |
| | | | |
| | | | |

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1 Getting Started

1.1 DriveView 9 Characteristics

DriveView 9 is a software tool for engineering the LSIS inverter, referred to as drives. The tool holds the features for remote monitoring the drives connected to DriveView 9 and supports the necessary tasks needed for start-up and maintenance.

1.2 System Configuration

DriveView 9 supports various communication methods (Modbus-TCP, Modbus-RTU, LS485, USB).



1.3 System Requirements

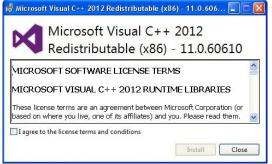
| Category | Requirement |
|-----------|--------------------------------------|
| Windows | Windows 7/8/10 |
| Processor | 1 GHz or higher |
| RAM | 1 GB (32-bit) or 2 GB (64-bit) |
| HDD | 16 GB (32-bit) or 20 GB (64-bit) |
| Graphics | Graphic card supporting MS DirectX 9 |

1.4 Prepare Installation

[Order]

ſ

- **1** Run the installation file.
- 2 For normal operation, there may be essential redistribution packages that must be installed. Click on the installation button if the following installation screen appears.



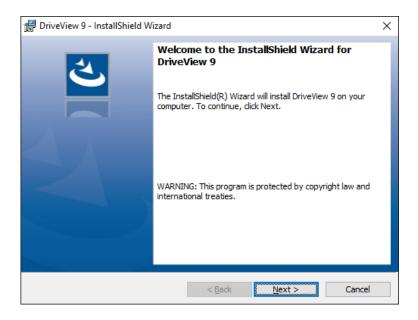
- 3 The time taken to install the redistribution package differs depending on the PC environment. In some cases, it may take more than 1-2 minutes. Even after it has been installed once, the installation of the redistribution package will not be requested again, even if DriveView 9 is installed again.
- 4 Select the installed language.

| DriveVie | w 9 - InstallShield Wizard | \times |
|----------|--|----------|
| ی | Select the language for the installation from the choices below. | |
| | English (United States) | \sim |
| | <u>Q</u> K Cancel | |



The installation wizard prepares the installation as follows.

| DriveView 9 - InstallShield Wiza | rd |
|----------------------------------|---|
| 2 | Preparing to Install |
| | DriveView 9 Setup is preparing the InstallShield Wizard, which will guide you through the program setup process. Please wait. |
| | Extracting: DriveView 9.msi |
| | |
| | |
| | |
| | Cancel |



| Enter the user and company name and click n | ext. |
|---|---------------|
| 🔀 DriveView 9 - InstallShield Wizard | × |
| Customer Information | 4 |
| Please enter your information. | C |
| User Name: | |
| user | |
| Organization: | |
| lsis | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| InstallShield | |
| < <u>B</u> ack | Next > Cancel |

Г

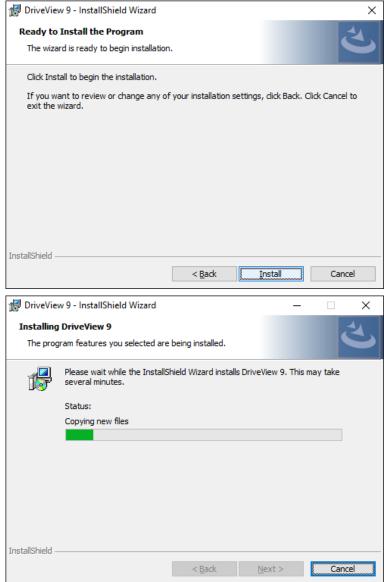
5

6 Specify the folder to install the files in. If you want to change the folder, click on the Browse button to enter or select a new folder. DriveView 9 needs around 120 MB of space for installation, so select a disk with sufficient space. If there is an insufficient amount of space, a warning message will appear and you cannot proceed to the next step.

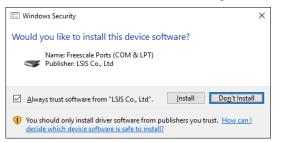
| 🖟 DriveVie | × | | | |
|-----------------|--|-----------------|--------------------------|----------------|
| | i on Folder kt to install to this folder, or click | Change to insta | ll to a different folder | と |
| ð | Install DriveView 9 to: C:₩Program Files (x86)₩LSIS | \$₩DriveView9₩ | | <u>C</u> hange |
| InstallShield - | | < <u>B</u> ack | <u>N</u> ext > | Cancel |

7 Once you have selected the folder, press the next button.

Check the installation information and click the Install button. Start installing as below.



8 If you need to use the USB connection with the H100 product, you must install the relevant drive. Click on the Install button if the following installation screen appears.



Г

9 After a moment, the installation will complete as shown below.

| 🕼 DriveView 9 - InstallShield W | 🕼 DriveView 9 - InstallShield Wizard 🛛 🕹 | | | | | | |
|---------------------------------|--|--|--|--|--|--|--|
| | InstallShield Wizard Completed The InstallShield Wizard has successfully installed DriveView 9. Click Finish to exit the wizard. | | | | | | |
| | < Back Finish Cancel | | | | | | |



2 Key Features

2.1 Main Screen

This is the screen displayed when DriveView 9 is started. The main screen consists of a title, menu, toolbar, control, search screen, parameter edit screen, result edit screen, and state screen.

| a → | Image: Second | Connect Settings Parameter Parameter EEPRom Sto | | RV - DriveView 9 | | - D X |
|-----|--|---|--|---|-------------------|--------------------------|
| b → | Payer > 3 C NewDive(SL0), - Offline C Payer | | Value 0.00 V/F 10.00 20.0 20.0 2.0 2.0 60.00 60.00 60.00 60.00 20 50.0 0.0 0.0 0.0 0.0 0.0 0.0 0 | Default Value Unit 0.00 Hz V/F 10.00 Hz 20.0 sec 0.4 kW Manual 2.0 % 60.00 Hz 60.00 Hz 60.00 Hz 60.00 Hz 60.00 Hz 60.00 Hz 60.00 Hz 60.00 Hz 80.00 % 10.00 % | : Сараску Тгір | • • • • • • • • |
| c → | Ready No | Event Log Trip exvDrive(G100) | | | | 100% |

[Chat Dialog Description]

- a. Ribbon Bar: The basic menu for the program. This ribbon is made up of a panel with command buttons and icons. The commands are divided into tabs.
- b. Project Screen: Shows the components of the current project.
- c. State Bar: Shows the state of the DriveView 9, accessed drive information, and more.
- d. Status Display Screen: Shows information of events and trips.

2.2 Starting

Γ

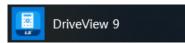
DriveView 9 is installed in the system.

You can run it using two methods.

- Click the Fun icon on the desktop



- Windows Start button - Run DriveView 9



Start DriveView 9.exe. The start screen of DriveView 9 is displayed.

| | | DRV - DriveView 9 | - □ × |
|---|--|---|------------------|
| New Open Add Delete Compare Report | Connect Settings Parameter Parameter EEPRom Write Read Save | Stop and Reset Stop And Rest | |
| Project | Online | Driving View | |
| Project v 4 | | | |
| NewProject * NewDrive(G100) - Offline | Favorite Code Parameter Name | Value Default Value Unit | A |
| Detail Information | 1 Cmd Frequency | 0.00 0.00 Hz | |
| Parameters | 11 9 Control Mode | V/F V/F 10.00 10.00 Hz | |
| | 11 JOG Frequency | 10.00 10.00 Hz 20.0 20.0 sec | |
| TH DRV TH BAS | 12 JOG Acc Time | 20.0 20.0 sec | |
| -TH ADV | 13 JOG Dec Time | 0.4 kW 0.4 kW | |
| TH ADV TH CON | 14 15 Torque Boost | Manual Manual | |
| - 11 IN | 14 16 Fwd Boost | 2.0 2.0 % | |
| | 14 17 Rev Boost | 2.0 2.0 % | |
| TH COM TH APP | 18 Base Freq | 60.00 60.00 Hz | |
| - tH APP | 14 19 Start Freq | 0.50 0.50 Hz | |
| -TH PRT -TH M2 | 14 20 Max Freq | 60.00 60.00 Hz | |
| - <u>t</u> H M2 | 11# 26 ATB3 Filter | 2 2 msec | |
| TH SPS | 11 27 ATB3 M_Gain | 50.0 50.0 % | U. |
| | 11 28 ATB3 G_Gain | 50.0 50.0 % | |
| E- Logs | 11 80 Reserved | 0 0 | |
| E Trends | 118 81 Reserved | 0 0 | |
| #New | 11H 89 Changed Para 11H 91 SmartCopy | No | |
| | 14 91 SmartCopy | None None | * |
| | Trip | | ▼ # × |
| | Trip Occurred Time Drive Nam | e Protocol-Station No.(IP) Model Capacity 1 | |
| | inpoceated time | recordentiation notes y model copacity in | np. |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Event Log Trip | | |
| Ready N | ewDrive(G100) | | 100% |

2.3 Communication

This explains the communication settings required for the drive connection and the deletion of the drive.

DriveView 9 supports Ethernet and Serial communication.

- Modbus-TCP, an Ethernet communications protocol, is supported automatically without any additional settings.
- The serial communication is connected with the drive by using Modbus-RTU, LS485.

(Refer to the manual guide of each drive for the maximum number of drives that can be connected.)

2.4 Options

1 General

You can set the general features of DriveView 9.

| | | | | \times |
|--------------|---------|----|-------------------|-------------------|
| | | | | |
| | | | | |
| Color Theme: | Blue | | * 4 | a |
| Language: | English | | • | b |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | ОК | Cancel | Help |
| | | | Language: English | Language: English |

[Chat Dialog Description]

- a. Theme color: Colors the theme of three colors (bold, dark, and bright).
- b. Language: Supports English and Korean. Initially, the language is set to the language installed on the PC. Changes to the language selection will be reflected after restarting.
- 2 Project

You can set the project features of DriveView 9.

| ptions | × |
|---------|--|
| ieneral | |
| roject | |
| rive | Erolect C:WUsersWbsparkaWDocumentsWDriveView 9WProject |

[Chat Dialog Description]

ſ

- a. Project Path: Set the folder where the generated projects are saved.
- b. Display Recent Projects: Sets the maximum number of items displayed in recent projects. This is the number of items shown on the screens, as shown below.

| ${\bf igodol}$ | | DriveView 9 | | - 1 | × |
|-----------------------|---|-------------|---|-----|----|
| | Recent Documents | | Recent Places | | |
| 🗁 Open Project | | | | | |
| 😂 Open Parameter File | S100.dvproj C:\Users\ \Documents\DriveView 9\Projects\ | -9 | C(Users) \Documents\DriveView 9\Projects\ | | -9 |
| | | | | | |
| 🛃 Save Project | | | | | |
| Save As Project | | | | | |
| Close Project | | | | | |
| Detion | | | | | |
| 🖒 Exit | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

- c. Opening the Previous Project when Starting: Opens the previously opened project when DriveView 9 launches.
- 3 Drive

If speed-related values are displayed from the parameter items of DriveView 9, it is displayed in the selected Hz and RPM.

| Options | | | × |
|--------------------|---|--------------|-----|
| General Project | | | |
| Drive | Oisplay Mode • [H2 Mode] O RPM Mode | | F |
| | | OK Cancel He | elp |

[Chat Dialog Description]

a. Display Mode: Select the display mode of Hz and RPM.

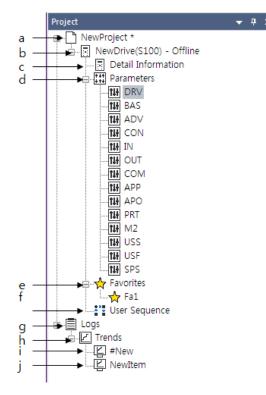
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3 Project

ſ

3.1 Project Configuration

The project configuration items are as follows.



[Chat Dialog Description]

- a. Project: Defines the entire system. Many related drives can be included in a single project.
- b. Drive: Shows the system for a single drive.
- c. Detailed Information: Shows the detailed information of the drive and the monitoring parameters.
- d. Parameter: Shows the information of the drive parameters.
- e. Favorites: Shows the information of the parameters registered as favorites.
- f. User Sequence, Scheduling: Shows the additional features provided for each drive.
- g. Log: Shows the information saved as logs.



- h. Trend: Shows the information saved as trends.
- i. #New Item: Double-click and a dialog box will appear for adding a new item.

٦

j. New Item: Shows trends

3.2 Project Management

3.2.1 Creating a New Project

Creates a new project.

٢

Select the menu [FILE] - [New Project].

| | × |
|----------------------------|---|
| NewProject | |
| C: WUsers Wbsparka WDocume | entsWDriveView 9WProjects |
| NewDrive | |
| S100 | * |
| 1.60 | ¥ |
| | OK Cancel |
| | C: WUsers Wbsparka WDocume New Drive S100 |

[Chat Dialog Description]

- a. Project Name: Enter the project name of your choice. This becomes the name of the project file, using the "dvproj" file extension.
- b. Path: The project file is created in the path as the name input by the user.
- c. Name: Input the drive name.
- d. Model: Select the model name of the drive.
- e. Version: Select the drive version.

3.2.2 Open Project

Open a previously saved project file.

Select the menu [FILE] - [Open Project].



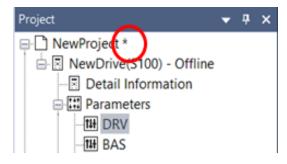
| → ^ ↑ | This PC > Documents > DriveView 9 > Projects | ~ 0 | Search Projects | |
|-----------------|--|-------------------|----------------------|----------------|
| ganize • New fo | | | | • 💷 (|
| | Name | Date modified | Туре | Size |
| Quick access | project1.dvproj | 5/20/2019 1:52 PM | DVPROJ File | 43 KB |
| OneDrive | project2.dvproj | 5/20/2019 1:52 PM | DVPROJ File | 43 KB |
| This PC | project3.dvproj | 5/20/2019 1:52 PM | DVPROJ File | 43 KB |
| Network | | | | |
| File | iame: | | Project File (*.dvpr | roj) Cancel |

3.2.3 Save Project

Save changed project.

Select the menu [FILE] - [Save Project].

If there are edits in the project and it needs to be saved, an asterisk "*" will appear next to the project name in the project window.



3.2.4 Save As

Save the project as a different file.

Select the menu [FILE] - [Save As].

| Save As | | | | |
|--------------------|--|-------------------|-----------------|--------|
| · - 🕇 📕 • 1 | This PC > Documents > DriveView 9 > Projects | - v C | Search Projects | |
| Organize • New fol | | | | • |
| Quick access | Name | Date modified | Туре | Size |
| Curck access | project1.dvproj | 5/20/2019 1:52 PM | DVPROJ File | 43 KE |
| loneDrive 🗠 | project2.dvproj | 5/20/2019 1:52 PM | DVPROJ File | 43 KE |
| This PC | project3.dvproj | 5/20/2019 1:52 PM | DVPROJ File | 43 KE |
| | | | | |
| File game: pro | ject1.dvproj | | | |
| Save as type: Pro | ject File (*.dvproj) | | | |
| Hide Folders | | | Save | Cancel |

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3.2.5 Opening the DriveView 7 Parameter File

You can open the parameter file created in DriveView 7.

- 1 Select the menu [FILE] [Open Parameter File].
- 2 Select the DriveView 7 parameter and select Open.

| | This PC > Documents | > DriveView 9 > Projects | ~ Ö | Search Projects | مر |
|-------------------|---------------------|--------------------------|-------------------|-----------------|-------|
| Organize • New fo | lder | | | 81 | - 🗆 🌘 |
| 🖈 Quick access | Name | ^ | Date modified | Туре | Size |
| Ithis PC | 🖏 S100_4.dmp | | 11/8/2016 1:39 PM | Dump File | 16 KB |
| | | | | | |
| | | | | | |

3 A new project is made and a dialog box appears for saving the project.

| Save As | | | | | × |
|----------------|--|-------------------|-----------------|--------|---|
| | > This PC > Documents > DriveView 9 > Projects | ~ Ü | Search Projects | , | ρ |
| Organize • New | w folder | | | II • (| 9 |
| Quick access | Name | Date modified | Туре | Size | |
| | project1.dvproj | 5/20/2019 1:52 PM | DVPROJ File | 43 KB | |
| la OneDrive | project2.dvproj | 5/20/2019 1:52 PM | DVPROJ File | 43 KB | |
| 🤜 This PC | project3.dvproj | 5/20/2019 1:52 PM | DVPROJ File | 43 KB | |
| 🔮 Network | | | | | |
| File pame: | project1.dvproj | | | | ~ |
| Save as type: | Project File (*.dvproj) | | | | × |
| ∧ Hide Folders | | | Save | Cancel | |



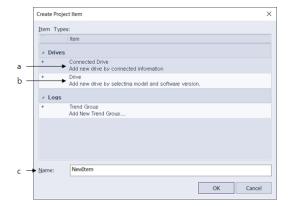
3.3 Project Item

Explains the items displayed in the project.

3.3.1 Drive

1 Add

Select the project name item and click [Add].



[Chat Dialog Description]

- a. Connected Drive: Use the connected drive information to add a drive.
- b. Drive: Select a model to add a new drive.
- c. Name: Input the drive name.
- 2 Delete Drive

Select a drive item to delete from the project tree and click [Delete].



3.3.2 Detailed Information

ſ

Shows the detailed information of the drive and the monitoring parameters.

Double-click the "Detail information" item under the drive item in the project window.



- 1 Model Image: Shows the main image of the drive.
- 2 Device Information: Shows the information of the drive device.
 - Model Name: Shows the model name of the drive.
 - Version: Shows the version.
 - Note: Shows the node name made up of the communication method, IP address, or telephone number.
 - Device Name: The name can be changed to the device name chosen by the user.
 - Change Button: Change the device name and click on the Change button to apply the changes.
 - Capacity: Shows the capacity of the drive.
 - Voltage: Shows the drive voltage.
- 3 Operating Information



- Communication State: Shows whether the communication state of the drive is normal or experiencing an error.
- Operation State: Shows the operation of the drive as Trip, Stop, or Operation.
- Acc Time: Shows the Acc Time.
- Dec Time: Shows the Dec Time.
- 4 Select Application
 - Shows the applications supported on the application combo list.
 - By default, "Not Use" is selected.
 - Select the application to apply to and click on the Change button.
 - The diagrams provided for the selected applications are added below the application, which is a sub menu of the drive in the navigation window.
- 5 Select Monitoring

The user can select the monitoring parameters for monitoring, and information is provided in the gauge format.

① Caution

If the frequency reference is an analog source, the operation frequency must be set to Command Freq in the combo box and the parameter value must be changed. (The content of the combo box may differ for each model.)

- 6 Output Gauge: Select from Output Frequency or Output Speed for monitoring.
 - Use the combo and select Output Frequency and Output Speed.
 - Custom Min / Max: If monitoring is difficult to the size of the maximum or minimum width, the maximum and the minimum value of the gauge can be adjusted.
 - Double-click on the gauge to display the maximum and minimum setting screen.

| Custom M | Custom Min/Max X | | | | | | |
|----------|------------------|--------|--|--|--|--|--|
| - Output | Frequency | | | | | | |
| Max: | 400.00Hz | 400.00 | | | | | |
| Min: | 0.00Hz | 0.00 | | | | | |
| | | | | | | | |
| | OK | Cancel | | | | | |

- Enter the maximum and minimum and click Apply.
- The gauge that is applied with the maximum and minimum values is output.
- 7 Select Monitoring Gauge: Seven gauges are provided. The user can select a gauge from the monitoring parameters.
 - The monitoring parameters can be selected from combo.

- Minimum and Maximum Settings: If monitoring is difficult to the size of the maximum or minimum width, the maximum and the minimum value of the gauge can be adjusted.
- Double-click on the gauge to display the maximum and minimum setting screen.
- Input the maximum and minimum and click Apply.
- The gauge that is applied with the maximum and minimum values is output.
- 8 Change Parameter Value

If the selected type of the monitoring parameter is a changeable parameter, then a control button for changing the parameter value is activated.

- Click the Control button.
- The Parameter Edit window will be shown.

| Command Fre | 0 | |
|-------------|--------|--------|
| þ.00 | | Hz |
| Max: | 400.00 | |
| Min: | 0.00 | |
| Default | 0.00 | Read |
| | | Write |
| | | Cancel |

- Enter the value within the minimum and the maximum value range, and click the Write button to apply it to the drive.
- The result after writing will be output on the Status Display window.
- The Read button is used to read the parameter value again from the drive.

3.3.3 Parameter

Parameters that can be viewed and changed from the drive are classified into a group and provided as a list. If you select the parameter group, all parameters will be displayed. If you select a group, then only the parameters in that group will be displayed.

① Caution

The parameter group may vary by model and version. The group name is identical to the name shown on the keypad.



| | DRV - DriveView 9 | - 🗆 × |
|----------------------------------|--|------------|
| New Open Add Delete Compare Repo | t Connect Setting: Parameter EPRom Write Read Save Draining View View | |
| | P X DRV X | |
| NewProject * | Favorite Code Parameter Name Value Default Value Unit | |
| - NewDrive(G100) - Offline | Pavonce Code Parameter Name Value Default Value Onit 114 1 Cmd Frequency 0.00 0.00 Hz | |
| Detail Information | Image Image Output Output <td></td> | |
| Parameters | 11 JOG Frequency 10.00 10.00 Hz | |
| | 1000 Hz 1000 Hz 1000 Hz 1000 Hz | |
| HH BAS | 12 JOG Dec Time 200 30.0 sec | |
| ADV | TH 14 Motor Capacity 0.4 kW 0.4 kW | |
| | 15 Torque Boost Manual Manual | |
| - THE IN | T# 16 Fwd Boost 2.0 2.0 % | |
| | 17 Rev Boost 2.0 2.0 % | |
| | 14 18 Base Freq 60.00 60.00 Hz | |
| H APP H PRT H M2 H SPS | 14 19 Start Freq 0.50 0.50 Hz | |
| tti PRT | 11H 20 Max Freq 60.00 60.00 Hz | |
| | ttil 26 ATB3 Filter 2 2 msec | |
| L-III SPS | 11 27 ATB3 M_Gain 50.0 50.0 % | |
| | 111 28 ATB3 G_Gain 50.0 50.0 % | |
| Logs | 11H 80 Reserved 0 0 | |
| Trends | 11H 81 Reserved 0 0 | |
| Ľ #New | 111 89 Changed Para No No | |
| | 11 91 SmartCopy None None | |
| | Trip | → 4 |
| | Trip Occurred Time Drive Name Protocol-Station No.(IP) Model Capacity Trip | |
| | | |
| | | |
| | | |
| | | |
| | Event Log Trip | |
| | | |

The display items per parameter are as below.

| Favorite | Code | Parameter Name | Value | Default Value | Unit |
|----------|-------|----------------|-------|---------------|------|
| | î# 1 | Cmd Frequency | 30.00 | 0.00 | Hz |
| | 111 2 | Cmd Torque | 0.0 | 0.0 | % |
| | 14 3 | Acc Time | 10.0 | 20.0 | sec |
| | î# 4 | Dec Time | 30.0 | 30.0 | sec |
| | | | | | |

It is displayed in blue if it is different than the default value. If it exceeds the minimum and the minimum value, it will be displayed in red.

1 View Parameter

If connected with the drive, you can use the "read" feature to look up the parameter values.

- 2 Edit Parameter
 - A. Input from the Edit Screen

It is saved in the project. If you want to save the drive later, you can use the "write" feature to send the parameter value.

B. Edit from the Parameter Edit Window

| Parameter Detail | × Parameter Detail × |
|---|--|
| [DRV] 7 : Freq Ref Src Value: 0] Keypad-1 | [DRV] 7 : Freq Ref Src Value: 0] Keypad-1 > |
| Default: Keypad-1 Current: Keypad-1 | Default: Keypad-1 Current: Keypad-1 |
| Read Only during running | Read Only during running |
| Read Write Close | Load Save Close |

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You can change and save the parameter value. If online, click the Write button from the dialog box, then the parameter value can be sent to the drive.

3.3.4 Favorites

You can make a separate favorites group for the parameters that you use frequently. You can only collect groups in favorites to view or read and write the favorites group only on the drive.

1 Add

Select the favorites area from the Parameter Edit window. The following dialog box will be displayed. Click the Complete button in the dialog box.

| Favorite | | | | | × |
|----------|----------|----|----|--------|---|
| Name: | Dec Time | | | | |
| Folder: | Favorite | | | | • |
| | | Do | ne | Delete | |

2 Delete

Select the registered parameter area from the parameter edit window. Click the Delete button in the dialog box. You can also delete items from the favorites group.

3.3.5 Trend

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This is a feature for monitoring parameters as graphs. The monitoring graphs show 8 channels. These 8 channels can be shown on one graph or each channel can be shown on each graph. Also, up to 8 graphs can be shown.

| Trends - NewItem1 Recording | Trigger | Elapsed Time | Record Counter | X-axis Time | Monitoring Time | Record Time |
|---|---------|--------------|---|-------------|-----------------|-------------|
| | | | | | 200.45 00:00.50 | |
| Channel ii CH1 CH2 CH2 CH3 CH4 CH5 CH5 CH5 CH6 CH7 CH6 | | | bata Offset Value/ 0 0 0 0 0 0 0 0 0 0 0 | | | |

1 Add

On the project tree, double-click on the "#New Item" below the trend item. Enter the name and click the Confirm button.

| Create Pro | ject Item | × |
|---------------|------------------------------------|-----------|
| Item Ty | pes: | |
| | Item | |
| ⊿ Logs | | |
| + | Trend Group Add New Trend Group | |
| <u>N</u> ame: | NewItem | |
| | <u></u> | OK Cancel |



2 Delete

Select the trend item to delete from the project tree and select [Delete] from the menu.

3 Menu

| ! | 8 🕜 | i - | | TREND TOOLS | | | | | | | | | |
|----------|------|-------|----------|-------------------------|------------------|-----------------|-----------------|---------------------|------------------|-----------------|---|--|----------|
| FILE | номе | то | OLS | GRAPH | | | | | | | | | |
| Open | Save | Print | Clipboar | Meta JPEG d b BMP | Start Monitor | Stop Monitor | Start Record | Stop Record | Start Trigger | Stop Trigger | ✓ Grid✓ Label✓ Y Auto | Normal Mode Zoom Mode | Settings |
| 🛉 Fi | le 🕈 | 1 | Streer | n 🛉 | † | 1 | Monit | orin <mark>g</mark> | 1 | 1 | | Display | 1 |
| | | | | | | | | | | | | Ť | |
| а | b | С | d | е | f | g | h | i | j | k | | I. | m |

- a. Open
- Select the menu at [Graph] [Open].
- This is a feature for importing the saved scope file.
- Click and select a file to open. The file extension is *.sco.
- This feature is enabled when monitoring is stopped.
- b. Save
- Select [Graph] [Save].
- This is a feature for saving the currently monitored graph.
- Save all the settings information of the graph.
- The extension of the saved file is *.sco.
- c. Print
- Select the menu at [Graph] [Print].
- Print the current graph screen.
- d. Clipboard
- Select the menu at [Graph] [Clipboard].
- Copies the current graph screen.
- e. Image
- Select the menu [Graph] [Image].
- Meta File: Save the graph screen in the meta file format.
- JPEG File: Save the graph screen in the JPEG file format.
- BITMAP File: Save the graph screen in the BITMAP file format.

- f. Start Monitoring
- Select the menu at [Graph] [Start Monitoring].
- Start monitoring. If you start monitoring, the recording icon and the triggering icon is enabled so you can start the recording and triggering.
- g. Stop Monitoring
- Select the menu at [Graph] [Stop Monitoring].
- Stop the monitoring in operation. When you stop monitoring, the recording icon and the triggering icon will be disabled. Also a marker is enabled so you can check each channel value.
- h. Start Recording
- Select the menu at [Graph] [Start Recording].
- When you start recording, the channels and values are recorded at every set recording time. The recordings are stored in the file specified in the recording file path. When recording, the signal blinks on the screen. Also, the recording counter shows the number of currently recorded items.
- i. Stop Recording
- Select the menu at [Graph] [Stop Recording].
- Stop Recording.
- j. Start Trigger Observation
- Select the menu at [Graph] [Start Trigger].
- Start trigger observation. When you start triggering, the screen will be stored if the channel value is higher or lower than the set value set on the trigger settings. The triggers are stored in the file specified in the screen save path.
- k. Stop Trigger Observation
- Select the menu at [Graph] [Stop Trigger].
- Stop the trigger observation.
- I. Display
 - Grid: The grid of the graph will be shown or hidden.
 - Show Label: The label that shows the channel name will be shown or hidden.
 - Automatic Y-Axis Scaling: This feature allows automatic movement of the Y-axis to the amount of the set channel value. Uncheck this value and the value of the Y-axis is adjusted to the specified minimum and maximum value.
 - Normal Mode: The marker becomes active in the graph.
 - Zoom Mode: The graph become zoom in.



- m. Settings
- Select the menu at [Graph] [Settings].
- This shows the option setting dialog box on the graph.

3.3.5.1 Graph Setting

Select the menu [GRAPH] - [Settings].

1 Channel Setting

| | Trend settings | × |
|------------|---|---|
| | Channel Setting Display Setting Trigger Setting | |
| a - b - | Background: Text: | |
| c - | Y-axis Auto Scaling: Y-axis Min: 0.00 Y-axis Max: 100.00 | |
| d - | Individual Channel: Graph Count: | |
| | <u>확인</u> 취소 적용(<u>A</u>) | |

[Chat Dialog Description]

a. Background Color

Select the color of the graph.

b. Text Color

Select the text color of the graph.

c. Auto Adjust Y-Axis

This feature allows automatic movement of the Y-axis to the amount of the set channel value. Uncheck this value and the value of the Y-axis is adjusted to the specified minimum and maximum value. If the channel value is lower or higher than the minimum or maximum values respectively, the Y-axis still will not change.

d. Separate View of Channels

This feature provides each channel as a separate graph. First select the separate channel view, enter the number of graphs (1-8), and click the Change button to see the monitoring

graphs, depending on the set number. By default, all channels are allocated as graph 1. If you do not select separate view of channels, only 1 graph is shown again and all channels are shown in that one graph.

2 Monitor Screen Settings

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| frend settings | | | | | | |
|-----------------|-----------------|-----------------|---|--|--|--|
| Channel Setting | Display Setting | Trigger Setting | | | | |
| Channel | Channel Pos | Line Thickness | | | | |
| CH1 | Graph1 | | 1 | | | |
| CH2 | Graph2 | | 1 | | | |
| CH3 | Graph3 | | 1 | | | |
| CH4 | Graph4 | | 1 | | | |
| CH5 | Graph5 | | 1 | | | |
| CH6 | Graph6 | | 1 | | | |
| CH7 | Graph7 | | 1 | | | |
| CH8 | Graph8 | | 1 | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

[Chat Dialog Description]

a. Channel Location

You can select the channel location for each channel.

b. Line Width

Select the line width of the channel.

3 Trigger and Record Settings

| | Trigger Ch.: | CH1 - |
|---|---|--|
| | Trigger Level: | 0,00 |
| | Edge Trigger: | Rising |
| | Save Screen: | |
| - | Record File Path: | C:WUsersWbsparkaWDocumentsWDriveView 9WTrend |
| 4 | Trigger screen save folder: | C:\Users\Use |
| - | Save as type: | BMP File (*.bmp) - |

[Chat Dialog Description]

a. Trigger Channel

To use the triggering feature, you must have saved the 1 trigger setting. The number of



channels that can be triggered is limited to 1.

b. Trigger Level

Set the reference value for triggering.

c. Condition

Select whether to save the screen if the channel value is rising in reference to the triggering value, or if the channel value is falling.

d. Save Screen

Select whether to save the screen if the channel value matches the condition.

e. Record Save Folder

Select a folder to save to when recording. You can select the folder after recording has stopped. While recording, it is disabled and cannot be selected.

f. Trigger Screen Save Folder

Select the folder you want to save the screen in when conducting triggering. You can select the folder after triggering has stopped. While triggering, it is disabled and cannot be selected.

g. Save Method

Select a method folder you want to save the screen in when conducting triggering.

3.3.5.2 Feature

[Show Graph]

| Recording T | rigger Elapsed | d Time Record Count | ter | X-axis Time | Monitoring Time | Record Time | |
|-------------|----------------|---------------------|---------|-------------|-----------------|-------------|---|
| • | 00:00 | 0:00 0 0 0 0 0 | 0 0 1 m | iin 🔹 | 1 sec | • 5 sec | - |

- 1 Recording
 - If you start recording during a monitoring operation, the light will flash to indicate that is is recording. This action can be used to indicate whether you are currently recording or not.
- 2 Trigger Generation
 - When you start trigger observation and a trigger occurs, this light will flash.
- 3 Elapsed Time

- This shows the elapsed time since monitoring started. The time is output in the 00:00:00 format.
- 4 Record Counter

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- Shows how many recordings were after recording started.
- 5 Adjust X-Axis Time
 - Select the time scope of the X-axis. You can select from 10 seconds to 1 hour.
- 6 Adjust Monitoring Time
 - Select the monitoring time interval of the channel. You can select between 0.1 5 seconds and a graph will be shown depending on the selected time period.
- 7 Adjust Record Time
 - Select the interval of record time. You can select between 1 second to 1 hour, and recording will be performed based on the selected interval.

[Parameter Settings]

| | Channel info | Connect info | Parameter Name | Data | Offset | Value | e/Di |
|----------|--------------|----------------|----------------|------|--------|-------|------|
| ~ | CH1 | NewDrive(S100) | Output Speed | | | 0 | 1 |
| ~ | CH2 | NewDrive(S100) | Output Voltage | | | 0 | 1 |
| | CH3 | Not Use | | | | 0 | 1 |
| | CH4 | Not Use | | | | 0 | 1 |
| | CH5 | Not Use | | | | 0 | 1 |
| | CH6 | Not Use | | | | 0 | 1 |
| | CH7 | Not Use | | | | 0 | 1 |
| | CH8 | Not Use | | | | 0 | 1 |

1 Parameter

For monitoring, you must enable the channel. If disabled, it is excluded from the monitoring item. You can select the connection information from the enabled channel. The connected information can select the drive included in the current project. You can select the parameter that can be monitoring in the drive.

2 Data

Shows the current value. This is the original value that is not offset or applied with a ratio. If there is an error with communication, it will be displayed as a communication error.

3 Offset

This is applying offset to the current value. The applied value is shown in the graph.

4 Ratio

This is applying a ratio to the current value. The applied value is shown in the graph.

3.3.6 by business site

This is a feature for showing the wrong parameter value in the results window by comparing drivedrive, drive-file, file-file, drive-default value (null device), and file-default parameter file.

Select the menu at [HOME] – [Compare].

| FILE HOME TOOLS | | | |
|------------------------------------|--|---------|------------------------------|
| New Open Add Delete Compare Report | Image: Settings Image: Settings Image: Settings Image: Settings Image: Settings Disconnect Settings Parameter Parameter EEPRom Write Read Save | | Event Log Trip Project |
| Project | Online | Driving | View |

It will be displayed as below.

| Project Compare | | |
|---|---|------------|
| | | |
| \$100 | ~ S100_1_10 | ✓ Target ▼ |
| Stote Detal information Privates Parameters ADV APD AV APD AV APD AV BAS COM COM COM ORV IN M2 OUT PRT SPS USS | S100_1_10 NewOrks Detal Information Parameters Parameters ADV APD AUT BAS COM COM COM COM ORV IN M2 OUT PSS USS | |
| User Sequence | User Sequence | Qlose |
| | | Quse |

In Compare with, select the items to compare.

| Target 👻 |
|--------------------|
| Project File |
| Default Values |
| Connected Item |
| Select Online Item |

is shown if the content is the same and is shown if the content is different.

For more information, double-click on the group and the following dialog box is shown.

| Compare | Conte | nts - BA | 5 | | | | | | | | | | × |
|---------|--------------------------|----------|----------------|-------|------|-------|---|------|----------------|--------|------|--|---|
| | | | | | | | | | | | | | |
| Group | | Code | Parameter Name | Value | Unit | Group | | Code | Parameter Name | Value | Unit | | |
| | | | | | | BAS | 11 1 11 1 11 1 | 27 | Rs (PM) | 0.110 | Ohm | | |
| BAS | t4t | 28 | Ld (PM) | 0.00 | mH | BAS | 141 | 28 | Ld (PM) | 1.70 | mH | | |
| BAS | 114 114 114 114 | 29 | Lq (PM) | 0.00 | mH | BAS | t ## | 29 | Lq (PM) | 2.00 | mH | | |
| BAS | Ť1† | 32 | Lq(PM) Scale | 100 | % | | | | | | | | |
| BAS | 111 | 34 | Ld,Lg Tune Lev | 33.3 | % | | | | | | | | |
| BAS | 111 | 35 | Ld,Lg Tune Hz | 150.0 | % | | | | | | | | |
| | | | | | | BAS | 111 | 95 | Reserved | 0.0 | % | | |
| | | | | | | BAS | 114 114 114 | 96 | Reserved | 100.00 | Hz | | |
| | | | | | | BAS | 111 | 97 | Reserved | 0.0 | % | | |

1

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Shows all parameters on the screen.

- 2 Shows only different parameters on the screen.
- **3** Shows only the same parameters on the screen.

3.3.7 Report

This is a feature for outputting the parameter values as a report format.

This explains the report edit and output features.

3.3.7.1 Run

Select the menu [HOME] - [Report].



The currently selected parameter content of the drive on the project window. This is shown on the dialog box of the report.

| Sode Name Sode Name N Parameter C <th>t Refresh Settings 2019.05.22 17:14:45</th> <th>Us M</th> <th>Default Value 0.00 0.00 0.00 0.00 0.00 0.00 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 10.00 20.0</th> <th>96 Hz Sec Sec Hz Sec</th> <th></th> | t Refresh Settings 2019.05.22 17:14:45 | Us M | Default Value 0.00 0.00 0.00 0.00 0.00 0.00 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 10.00 20.0 | 96 Hz Sec Sec Hz Sec | |
|--|--|--|---|-------------------------------------|--|
| | Kerresh Settings 2019.05.22 17:14:45 S100 RewDrive(S100) Group: DRV] Parameter Name Cmd Torque Acc Time Dec Time Cmd Source Freq Aef Src Trq Ref Src Trq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Acc Time JOG Acc Time | Value M 0,00 0,0 0,00 0,0 20,0 30,0 Fx/Rx-1 Keypad-1 Keypad-1 V/F No 10,00 20,0 | Default Value 0,00 0,00 0,00 0,00 20,0 30,0 Fx/Rx-1 Keypad-1 V/F 10,00 20,0 | Unit H2 % Sec Sec Hz | |
| ompany ate 2 ate 2 codel Name 2 obde Name N N S Parameter C C C C C C C C C C C C C C C C C C C O T C C T C C C O T G C S J J J J S J S J S S S F F F S E S E S S E S S N H H K S C S C C C S S C C C C | t Refresh Settings 2019,05,22 17:14:45 2019,05,22 17:14:45 2019,05,22 17:14:45 2019,05,22 17:14:45 2010 NewDrive(S100) RewDrive(S100) RewDriv | Value M 0,00 0,0 0,00 0,0 20,0 30,0 Fx/Rx-1 Keypad-1 Keypad-1 V/F No 10,00 20,0 | Default Value 0,00 0,00 0,00 0,00 20,0 30,0 Fx/Rx-1 Keypad-1 V/F 10,00 20,0 | Unit H2 % Sec Sec Hz | |
| ompany ate 2 ate 2 codel Name 2 obde Name N N S Parameter C C C C C C C C C C C C C C C C C C C O T C C T C C C O T G C S J J J J S J S J S S S F F F S E S E S S E S S N H H K S C S C C C S S C C C C | 2019,05,22 17:14:45 S100 NewDrive(S100) Group: DRV] Parameter Name Cnd Frequency Cnd Torque Acc Time Dec Time Cnd Source Freq Ref Src Trq Ref Src Trq Ref Src Trq Ref Src Trq Ref Src Torque Control JOG Frequency JOG Pec Time | Value M 0,00 0,0 0,00 0,0 20,0 30,0 Fx/Rx-1 Keypad-1 Keypad-1 V/F No 10,00 20,0 | Default Value 0,00 0,00 0,00 0,00 20,0 30,0 Fx/Rx-1 Keypad-1 V/F 10,00 20,0 | Unit H2 % Sec Sec Hz | |
| ate 2 codel Name Node Name Parameter C Code F C C C C C C C C C C C C C C C C C C D T D T S J S J S F F F S E S E S S S S S E S E S S S S S S S S S C S C S C S C S C | S100 Sroup : DRV] Parameter Name Cmd Frequency Cmd Torque Acc Time Dec Time Cmd Source Freq Ref Src Trq Ref Src Control Mode Torque Ontrol JOG Frequency JOG Acc Time JOG Acc Time | Value M 0,00 0,0 0,00 0,0 20,0 30,0 Fx/Rx-1 Keypad-1 Keypad-1 V/F No 10,00 20,0 | Default Value 0,00 0,00 0,00 0,00 20,0 30,0 Fx/Rx-1 Keypad-1 V/F 10,00 20,0 | Unit H2 % Sec Sec Hz | |
| Sode Name Sode Name N Parameter C <th>S100 Sroup : DRV] Parameter Name Cmd Frequency Cmd Torque Acc Time Dec Time Cmd Source Freq Ref Src Trq Ref Src Control Mode Torque Ontrol JOG Frequency JOG Acc Time JOG Acc Time</th> <th>Value Or 0,00 0,0 20,0 30,0 Fx/Rx-1 Keypad-1 V/F No 10,00 20,0 20,0 20,0</th> <th>Default Value 0,00 0,00 0,00 0,00 20,0 30,0 Fx/Rx=1 Keypad-1 V/F 10,00 20,0</th> <th>Unit H2 % Sec Sec Hz</th> <th></th> | S100 Sroup : DRV] Parameter Name Cmd Frequency Cmd Torque Acc Time Dec Time Cmd Source Freq Ref Src Trq Ref Src Control Mode Torque Ontrol JOG Frequency JOG Acc Time JOG Acc Time | Value Or 0,00 0,0 20,0 30,0 Fx/Rx-1 Keypad-1 V/F No 10,00 20,0 20,0 20,0 | Default Value 0,00 0,00 0,00 0,00 20,0 30,0 Fx/Rx=1 Keypad-1 V/F 10,00 20,0 | Unit H2 % Sec Sec Hz | |
| Dode Name N Parameter C Code F C C C C C C C C C C C C C C C C D T Q J J | NewDrive(S100) Group : DRV] Parameter Name Cnd Frequency Cnd Torque Acc Time Dec Time Cnd Source Freq Ref Src Trq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | Value 0,00 0,0 20,0 30,0 Fx/R≻1 Keypad-1 Keypad-1 V/F 10,00 20,0 | Default Value 0.00 20,0 30,0 Fx/R≻1 Keypad-1 Keypad-1 V/F 10,00 20,0 | Unit H2 % Sec Sec Hz | |
| Parameter (Parameter (C C C C C C C C C C C C C | Group : DRV] Parameter Name Cnd Frequency Cnd Torque Acc Time Dec Time Cnd Source Freq Ref Src Trq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | Value 0,00 0,0 20,0 30,0 Fx/Rx-1 Keypad-1 Keypad-1 V/F ── No ── 10,00 20,0 | Default Value 0,00 20,0 30,0 Fx/R>-1 Keypad-1 Keypad-1 V/F 10,00 20,0 | Unit H2 % Sec Sec Hz | |
| Feature Feature C C C C C C C C C C C C C C C C C C C C T T J J S E | Parameter Name Cmd Frequency Cmd Torque Acc Time Dec Time Cmd Source Freq Ref Src Trq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | 0,00 0,0 20,0 5×/R≻1 Keypad-1 V/F | 0.00 0.0 20.0 5x/Rx-1 Keypad-1 V/F 10,00 20.0 | Hz % sec sec Hz | |
| Feature Feature C C C C C C C C C C C C C C C C C C C C T T J J S E | Parameter Name Cmd Frequency Cmd Torque Acc Time Dec Time Cmd Source Freq Ref Src Trq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | 0,00 0,0 20,0 5×/R≻1 Keypad-1 V/F | 0.00 0.0 20.0 5x/Rx-1 Keypad-1 V/F 10,00 20.0 | Hz % sec sec Hz | |
| Feature Feature C C C C C C C C C C C C C C C C C C C C T T J J S E | Parameter Name Cmd Frequency Cmd Torque Acc Time Dec Time Cmd Source Freq Ref Src Trq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | 0,00 0,0 20,0 5×/R≻1 Keypad-1 V/F | 0.00 0.0 20.0 5x/Rx-1 Keypad-1 V/F 10,00 20.0 | Hz % sec sec Hz | |
| C C C C C C C C C C C C C C C C C C C | Cmd Frequency Cmd Torque Acc Time Dec Time Cmd Source Freq Ref Src Trq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | 0,00 0,0 20,0 5×/R≻1 Keypad-1 V/F | 0.00 0.0 20.0 5x/Rx-1 Keypad-1 V/F 10,00 20.0 | Hz % sec sec Hz | |
| C C C C C C C C C C C C C C C C C C C | Cnd Torque Acc Time Dec Time Cnd Source Freq Ref Src Trq Ref Src Control Mode Torque Control JOG Frequency JOG Frequency JOG Acc Time | 0,0 20,0 30,0 Fx/Rx-1 Keypad-1 V/F No 10,00 20,0 | 0.0 20.0 30.0 Fx/Rx-1 Keypad-1 Keypad-1 V/F | % sec sec Hz | |
| A C C C C C C F F T T C C C Q J J J | Acc Time Dec Time Cnd Source Freq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | 20,0 30,0 Fx/Rx-1 Keypad-1 V/F | 20,0 30,0 Fx/Rx-1 Keypad-1 Keypad-1 V/F | sec sec Hz | |
| C C C C C C C C C C C C C C C C C C C | Dec Time Cnd Source Freq Ref Src Trq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | 30.0 Fx/Rx-1 Keypad-1 Keypad-1 V/F No 10.00 20.0 | 30,0 Fx/Rx−1 Keypad-1 V/F No 10,00 20,0 | Sec Hz | |
| C C F F T T T T T T T T T T T T T T T T | Cmd Source Freq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | Fx/Rx-1 Keypad-1 Keypad-1 V/F | Fx/Rx-1 Keypad-1 V/F | Hz | |
| F T T T T T T T T T T T T T | Freq Ref Src Trq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | Keypad-1 Keypad-1 V/F No 10,00 20,0 | Keypad-1 Keypad-1 V/F | | |
| T C C C C C C C C C C C C C C C C C C C | Trq Ref Src Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | Keypad-1 V/F | Keypad-1 V/F No 10,00 20,0 | | |
| C C C C C C C C C C C C C C C C C C C | Control Mode Torque Control JOG Frequency JOG Acc Time JOG Dec Time | V/F No 10,00 20,0 | V/F No 10,00 20,0 | | |
| D T J J J J J J J J J J J J J J J J J J J | Torque Control JOG Frequency JOG Acc Time JOG Dec Time | No | No | | |
| J J 2 J 3 J 4 N 5 T 7 F 8 E 9 S 9 S 0 N 1 H 2 (1 3 (1) | JOG Frequency JOG Acc Time JOG Dec Time | 10,00 20,0 | 10,00 20,0 | | |
| 2 J 3 J 4 N 5 T 5 F 7 F 8 E 9 S 0 N 1 H 2 (1) 3 (1) | JOG Acc Time JOG Dec Time | 20,0 | 20,0 | | |
| 3 J 4 N 5 T 6 F 7 F 8 E 9 S 9 S 0 N 1 H 2 (1) 3 (1) | JOG Dec Time | | | sec | |
| I I K 5 7 7 7 6 7 7 7 7 3 E 3 E 3 5 3 S 0 N N 1 | | 30.0 | | | |
| 5 T 6 F 7 F 8 E 9 S 0 N 1 H 2 (1) 3 (1) | Motor Canacity | | 30,0 | sec | |
| 6 F 7 F 8 E 9 S 0 N 1 F 2 (* | | 0,4 kW | 0,4 kW | | |
| 7 F 3 E 9 S 0 N 1 F 2 (* | Torque Boost | Manual | Manual | | |
| 3 E 9 S 0 N 1 H 2 (* | Fwd Boost | 2,0 | 2,0 | % | |
| 9 S 0 N 2 (* 3 (* | Rev Boost | 2,0 | 2,0 | % | |
|) N 2 (· 3 (· | Base Freq | 60,00 | 60,00 | Hz | |
| 2 (· 3 (· | Start Freq | 0,50 | 0,50 | Hz | |
| 2 (* | Max Freq | 60,00 | 60,00 | Hz | |
| 3 (* | Hz / Rpm Sel | Hz Display | Hz Display | | |
| s (: | (+) Trq Gain | 100,0 | 100,0 | % | |
| | (-) Trq Gain | 80,0 | 80,0 | % | |
| | (-) Trq Gain0 | 80,0 | 80,0 | % | |
| | (-) Trq Offset | 40,0 | 40,0 | % | |
| | - Reserved - | 0 | 0 | | |
| | - Reserved - | 0 | 0 | | |
| | Parameter Read | No | No | | |
| | ParameterWrite | No | No | | |
| | D/A Card Sel | No | No | | |
| | Changed Para | No | No | | |
| | Multi-Key Sel | × | 0 | | |
| | SmartCopy | None | None | | |
| | Parameter Init | No | No | | |
| | Key Lock Pw | 0 | 0 | | |
| | Key Lock Set Inv S/W Ver | 0.00 | 0.00 | | |

3.3.7.2 Export File

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This is a feature to save the report information as an Excel or web file. Select the menu at [FILE] – [Export File].

| Export Report File | | | | | | |
|---|--|--------|---|--|--|--|
| $\leftarrow \rightarrow \land \uparrow$ | > This PC > Documents > DriveView 9 > Trend v 👌 Search Trend | | ٩ | | | |
| Organize 👻 Ne | w folder | - | ? | | | |
| This PC 3D Objects Desktop Downloads Music Pictures Videos Local Disk (C: | No items match your search. | | | | | |
| File <u>n</u> ame: | | | ~ | | | |
| Save as <u>t</u> ype: | "Excel File (*.xls) | | ~ | | | |
| ∧ Hide Folders | "Excel Flie ("sds) HTML File (".htm) | Cancer | | | | |

1 Output in Excel Format

It is saved as an Excel file with the extension .xls.

| Company | | Department | |
|------------|---------------------|-------------|-------------------|
| Date | 2019.05.22 17:14:45 | User Name | |
| Model Name | S100 | Model Versi | 1.40 |
| Node Name | NewDrive(S100) | Operation N | TCP_10.13.115.196 |

| [Parameter Group : DRV] | | | | | |
|--------------------------|----------------|----------|---------------|------|--|
| Code | Parameter Name | Value | Default Value | Unit | |
| 1 | Cmd Frequency | 0.00 | 0.00 | Hz | |
| 2 | Cmd Torque | 0.0 | 0.0 | % | |
| 3 | Acc Time | 20.0 | 20.0 | sec | |
| 4 | Dec Time | 30.0 | 30.0 | sec | |
| 6 | Cmd Source | Fx/Rx-1 | Fx/Bx-1 | | |
| 7 | Freq Ref Src | Keypad-1 | Keypad-1 | | |
| 8 | Trq Ref Src | Keypad-1 | Keypad-1 | | |
| 9 | Control Mode | V/F | V/F | | |
| 10 | Torque Control | No | No | | |
| 11 | JOG Frequency | 10.00 | 10.00 | Hz | |
| 12 | JOG Acc Time | 20.0 | 20.0 | Sec | |
| 13 | JOG Dec Time | 30.0 | 30.0 | sec | |
| 14 | Motor Capacity | 0.4 kW | 0.4 kW | | |
| 15 | Torque Boost | Manual | Manual | | |

2 Output as a Web File

It is saved as a web file with the extension .htm.

Project

| C | Company | | Department | |
|---|------------|---------------------|----------------|------------------|
| C |)ate | 2019.05.22 17:14:45 | User Name | |
| N | Aodel Name | S100 | Model Version | 1.40 |
| N | lode Name | NewDrive(S100) | Operation Mode | TCP_10.13.115.19 |

[Parameter Group : DRV]

| Code | Parameter Name | Value | Default Value | Unit |
|------|----------------|------------|---------------|------|
| 1 | Cmd Frequency | 0.00 | 0.00 | Hz |
| 2 | Cmd Torque | 0.0 | 0.0 | % |
| 3 | Acc Time | 20.0 | 20.0 | sec |
| 4 | Dec Time | 30.0 | 30.0 | sec |
| 6 | Cmd Source | Fx/Rx-1 | Fx/Rx-1 | |
| 7 | Freq Ref Src | Keypad-1 | Keypad-1 | |
| 8 | Trq Ref Src | Keypad-1 | Keypad-1 | |
| 9 | Control Mode | V/F | V/F | |
| 10 | Torque Control | No | No | |
| 11 | JOG Frequency | 10.00 | 10.00 | Hz |
| 12 | JOG Acc Time | 20.0 | 20.0 | sec |
| 13 | JOG Dec Time | 30.0 | 30.0 | sec |
| 14 | Motor Capacity | 0.4 kW | 0.4 kW | |
| 15 | Torque Boost | Manual | Manual | |
| 16 | Fwd Boost | 2.0 | 2.0 | % |
| 17 | Rev Boost | 2.0 | 2.0 | % |
| 18 | Base Freq | 60.00 | 60.00 | Hz |
| 19 | Start Freq | 0.50 | 0.50 | Hz |
| 20 | Max Freq | 60.00 | 60.00 | Hz |
| 21 | Hz / Rpm Sel | Hz Display | Hz Display | |
| 22 | (+) Trq Gain | 100.0 | 100.0 | % |
| 23 | (-) Trq Gain | 80.0 | 80.0 | % |
| 24 | (-) Trq Gain0 | 80.0 | 80.0 | % |
| 25 | (-) Trg Offset | 40.0 | 40.0 | % |

3.3.7.3 Header Settings

This is a feature to edit the text shown in the report header. Select the menu at [CONFIGURATION] – [Header Settings]. The edit window of the report header is output.

| Report Header | |
|-----------------|---------------------|
| Company: | |
| Department: | |
| Date: | 2019.05.22 18:19:31 |
| User Name: | |
| Model Name: | S100 |
| Model Version: | 1.60 |
| Node Name: | NewDrive(S100) |
| Operation Mode: | Offline |
| | OK Close |

The items that can be edited are company name, department name, and writer. The rest are automatically input.

Click on the Confirm button and all setting information are saved. The changed content are applied to the report.

3.3.7.4 Refresh

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This is a feature for updating the report content to the latest information. Select the menu at [FUNCTION] – [Refresh]. This newly reads information and displays as a report.

3.3.7.5 Output

This is a feature to print the report with the printer. Select the menu at [FILE] – [Print]. The print settings window will be output.

| Print Setup | | | | × |
|-------------------------|--|--------|------------|----------------------|
| Printer Name: | Microsoft Print to PDF | | | Properties |
| | Ready Microsoft Print To PDF PORTPROMPT: | | | |
| Paper Si <u>z</u> e: | A4 | ~ | Orientatio | n |
| <u>S</u> ource: | | \sim | Α | ○ L <u>a</u> ndscape |
| Network | | | OK | Cancel |

Click the Confirm button to print the report with the selected printer.

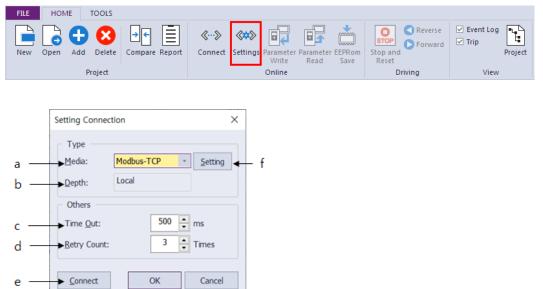
4 Online

4.1 Connection Option

Set the network to connect with the drive.

The connection method can be both Ethernet and Serial, and supports all three protocols (Modbus-TCP, Modbus-RTU, LS485).

Select the menu [HOME] – [Settings].



[Chat Dialog Description]

- a. Method: Set the communication media to be used when there is a connection with the drive. You can set to Modbus-TCP, Modbus-RTU, LS485.
- b. Steps: Set the structure of connection with the drive. You can select from local, 1-step remote, and 2-step remote connection settings.
- c. Timeout: Enter the communication timeout with the drive to one thousandth of a second.
- d. Retry Attempt: Enter the number of communication attempts to try after communication failure.
- e. Connect: This is a set access option that tries to establish a connection with the drive.

f. Setting: Displays a dialog to set the IP address.

[Ethernet]

ſ

- 1 Connection Method Set the method to Modbus-TCP and click the Set button.
- 2 Enter the IP address.

| | Setting IP Add | ress | × |
|---|--------------------------------------|-----------------|---|
| a | IP Address ► <u>A</u> ddress: | 127 . 0 . 0 . 1 | |
| b | ► Port: | 502 | |
| | | OK Cancel | |

[Chat Dialog Description]

- a. Address: Enter the address assigned to the drive.
- b. Port: Shows the port information used after connecting to the drive.

① Caution

For an Ethernet connection, the PC must have an Ethernet connection. The IP setting is the IP of the Ethernet communications model. You can check whether normal access if possible with the set IP address using Ping under [Run] in the Windows starts menu.

[Serial]

- 1 Connection Method Set the method to Modbus-RTU, LS485 and click the Set button.
- 2 Set the communications port.

| | Setting COM Port | | × |
|-----|--------------------------|----------|----|
| | Settings | | |
| a | Station No: | 1 | |
| b | COM: | COM3 | • |
| с | Baudrate: | 38400 | • |
| d | Parity Bit: | None | • |
| e | Data Bit: | 8 . | • |
| f | Stop Bit: | 1 | • |
| g | Flow Control: | None | • |
| h | Delay Time(Before): | 0 🔶 n | ns |
| i - | → Delay Time(After): | 15 🔹 n | ns |
| | Auto scanning port | OK Cance | 4 |

[Chat Dialog Description]

- a. Phone Number: Input the phone number assigned to the drive.
- b. Communication Port: Select the COM Port connected to the drive. Only the COM Port installed in the system will be displayed. You cannot use the same COM Port for each Modbus-RTU and LS485.
- c. Communication Speed: Input the communication speed.
- d. Parity Bit: Input the parity bit.
- e. Data Bit: Input the data bit.
- f. Stop Bit: Input the stop bit.
- g. Flow Control: Select the flow control.
- h. Wait time (Before): Delay time used for RTS control (before transmission)
- i. Wait time (After): Delay time used for RTS control (after transmission)

4.2 Connect/End Connection

This tries to establish a connection with the drive, depending on the access option you set.

Select the menu [HOME] - [Connect].

A dialog box appears during connection.



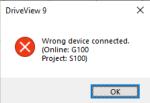
① Caution

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If a normal connection cannot be achieved

1) If the project drive and the connection drive are different models

A normal connection will not be made and the following dialog box will be displayed.



2) If the project drive and the connection drive have a different code version (If the version of the connection drive is higher)

The following dialog box is displayed. If the "Yes" button is clicked

| DriveViev | 9 w | × |
|-----------|---|----|
| ? | The version of the project's data file(S100_1.40) is lower than the version of the data file(S100_1.60) you want to connect. The parameter contents may be different. Do you still want to connect? | |
| | <u>Y</u> es <u>N</u> o | |
| If the p | project drive and the connection drive ha | ٦١ |

 If the project drive and the connection drive have different code versions (If the version of the connection drive is lower)



4.3 Write

Select the menu at [HOME] – [Write]. You can select the parameters to send to the drive, favorites, and features for each product.

1

| Write | | × |
|------------|--------|---|
| NewDrive | ОК | |
| | Cancel | |
| ADV CON | | |
| IN OUT | | |
| COM APP | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

4.4 Read

Γ

Select the menu at [HOME] – [Read]. You can select the parameters to receive from the drive, favorites, and features for each product.

| Read | × |
|--|--------------|
| NewDrive Parameters DRV BAS ADV CON OUT OUT OUT APP AUT PRT USS USF SPS Favorites User Sequence | OK Cancel |

4.5 Drive Control

This feature acts as a keypad that gives a control command to the drive. This is located in the menu [HOME] - [Driving] group and is enabled only when the drive is connected.



1 Reverse direction (Reverse direction operation)

If you select the reverse drive and click the Reverse icon, the reverse operation will be applied to the drive and the result can be checked through the operation status.

2 Reset/Stop

If you select a drive and click the Reset/Stop icon, a reset command is issued if a trip occurs or a command is given to stop the drive if it is operating.

3 Forward direction (Forward direction operation)

If you select the reverse drive and click the forward icon, the forward operation will be applied to the drive and the result can be checked through the operation status.

4.6 EEPRom Save

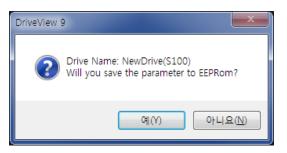
ſ

When changing parameter values of the drive with communication, the original drive value is displayed instead of the changed one at the next time you turn on the system because the changed value by such communication applies only to the drive's RAM. To solve this problem, this function is to remain the changed value by saving it to the drive's EEPRom.

In the Project window, select the drive you want to save, select the menu [HOME] - [EEPRom save].



Select the Yes button to save the EEPRom.



The saved result is displayed in the event window.

① Caution

This is a feature that only works on certain models. Available models(iS7, S100, H100, G100)

5 Other Screens

5.1 Event

The adding, deleting, and controlling type of events of the drive are shown on the event screen. The events are collected from the activation of DriveView 9. Upon ending, the existing events will be deleted.

| Event Log | |
|---------------------|----------------------------------|
| Event Occurred Time | Event Description |
| 2019/05/22 17:11:39 | NewDrive(S100) : Stop Control |
| 2019/05/22 17:11:34 | NewDrive(S100) : Forward Control |
| 2019/05/22 17:11:33 | NewDrive(S100) : Connect |
| 2019/05/22 17:11:29 | NewDrive(S100) : Disconnect |
| 019/05/22 16:54:18 | NewDrive(S100) : Connect |
| Event Log Trip | |

5.2 Trip

If a trip occurs on the connected drive, the information will be shown on the trip screen.

1 View Trip

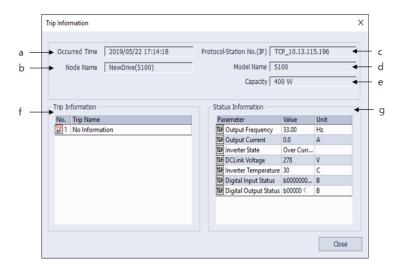
To view a trip, click on a trip on the navigation window or click the Trip tab in the Result Information window and it will be shown in the results information window.

| Trip | | | | | |
|---------------------|----------------|--------------------------|-------|----------|---------------|
| Trip Occurred Time | Drive Name | Protocol-Station No.(IP) | Model | Capacity | Trip |
| 2019/05/22 17:58:17 | NewDrive(S100) | TCP_10.13.115.196 | S100 | 400 W | No Motor Trip |

2 View Detailed Trip

This is a feature for viewing the status and additional trip information when trip occurs.

Select the trip to view the detailed information from the trip list and double-click on it. As shown below, the dialog box will appear with detailed information of the trip.



[Chat Dialog Description]

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- a. Occurrence Time: Shows the time of the trip occurrence.
- b. Device Name: Shows the drive name.
- c. Communication method-Phone number (IP): Shows communication method of the drive and the phone number (IP).
- d. Model Name: Shows the model name.
- e. Capacity: Shows the capacity.
- f. Detailed trip information: Shows the detailed trip information upon trip occurrence.
- g. Detailed Status Information: Shows the main parameter values upon trip occurrence.

6 Specialized Features

6.1 User Sequence

This is used to implement a simple sequence using a combination of various functional blocks. It can be composed of up to 18 steps using 29 function blocks and 30 void parameters.

1 loop means that a maximum of 18 user-defined sequences are performed once. 1 Loop Time can be selected by the user between 10 and 1,000 ms.

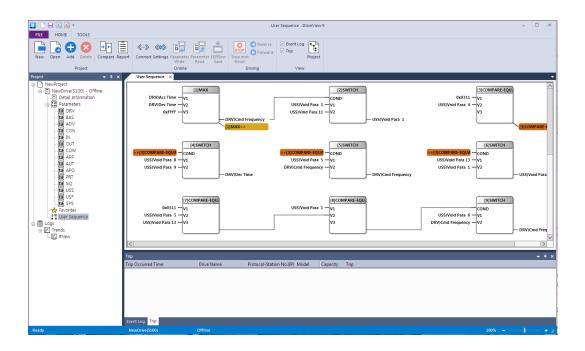
User-sequence-related groups include the USS group responsible for setting up the user sequences and the USF group responsible for setting up the function blocks.

① Caution

This is a feature that only operates on S100 models and can be used in Code Ver. 1.00, IO S/W Ver. 0.11 or later.

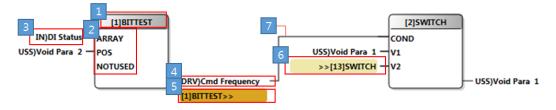
6.1.1 Diagram

Double-click "User Sequence" in the project. Then, the parameter information (USS and USF group parameter) will be read and displayed on the screen.



6.1.2 Block Description

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- 1 This displays the feature name that is used by the function bloc. ([Number] shows the block number)
- 2 Shows the input information depending on the function
- 3 Shows the name of the input parameter
- 4 Shows the name of the output parameter
- 5 Shows if the output parameter of the block is set as the input parameter of another block (If it is not a nearby block)
- 6 Shows if the input parameter of the block is set as the output parameter of another block (If it is not a nearby block)
- 7 Shows if the input parameter of the block is set as the output parameter of another block (If it is a nearby block)



6.1.3 Block Settings

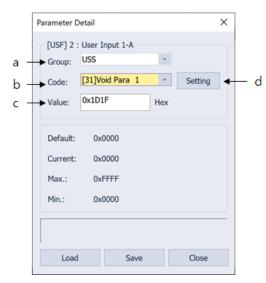
1 Feature Settings

Click on the block and the feature can be changed. Select NOP if a function block is not being used.

| Parameter Detail | × |
|---|---|
| [USF] 1 : User Func 1 Value: 5] MAX | |
| Default: NOP Current: MAX | |
| Load Save Close | |

2 Input/Output Parameter Settings

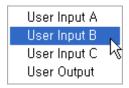
Select the parameter area to change and the parameter edit window will appear as shown below. The parameter can be changed from the window.



[Chat Dialog Description]

- a. Select Group: Select the parameter groups.
- b. Select Group: Select the parameters of the selected group.
- c. Input Value: Directly enter the communication address. This is changed when the group and the group code are changed.
- d. Settings: Settings is enabled for parameters where its value can be set and a dialog box for setting the value is displayed.

If the parameter being changed is not in the area, select the block and right-click it. Then, the following context menu will be displayed. Select the parameter to change from the menu and select the parameter. Then, the following parameter edit window will be displayed.



6.1.4 Screen Settings

6.1.4.1 Screen Mode

You can change the screen mode by right-clicking on the diagram screen.

| Zoom In | Ctrl + |
|--------------------|--------|
| Zoom Out | Ctrl - |
| 100% | Ctrl 0 |
| Value Display Mode | |

1 Expand

Shows the diagram displayed on the screen bigger in 10% increments. (Maximum 200%)

2 Reduce

Shows the diagram displayed on the screen bigger in 10% decrements. (Minimum 10%)

3 100%

Changes the diagram displayed on the screen to its original size.

4 Value Display Mode

Changes the parameter information displayed on the screen by the parameter name and value expression.

1

6.2 Time Event Scheduling

This is a feature used to start the desired operation at the specified time by using an RTC (Real Time Clock), First, you need to set the current date and time. Then, you need to set Time Period Module (the time to start the operation), Time Event (what operation to perform), Exception Date (specific date and time that affects priority of operation execution).

It is made up of 4 event intervals and 8 event exceptions. The scheduling operation is started with the settings.

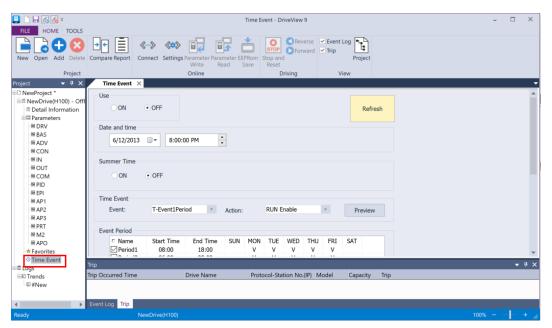
① Caution

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This is a feature that only operates in H100 models.

6.2.1 Start Operation

Select "Scheduling Operation" from the project window and the relevant information screen will be displayed.



6.2.2 Function Description

1 Date and Time

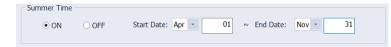
Provides a feature to set the date and time.

| Date and time | | | | |
|---------------|----------------|--------|--|--|
| 7/ 7/2013 | ■▼ 12:00:00 AM | ▲ ▼ | | |

2 Summer Time

This provides a feature to set summer operation.

- ON: The summer time schedule can be set. Set the start date and the end date to operate in summer time mode during that period.



- OFF: Select to not use summer time.

| Summer Time - | | | | |
|---------------|-------|--|--|--|
| OON | • OFF | | | |

() Caution

If even ON is selected, summer time mode will not start if the start date and the end date is the same.

3 Event Settings

This provides the features related to registering, changing, and deleting an event.

| Time Event | | | | | | | | | | |
|---|---|--|-----------------------|-----|----------------------------|-----|-----|-----|-----|------|
| | + | | | | | + | | | | |
| Event: | T-Event1Perio | d - / | Action: | | None | | • | • | Pre | view |
| Event Period | | | | | | | | | | |
| Name | Start Time | End Time | SUN | MON | TUE | WED | THU | FRI | SAT | |
| Period1 | 24:00 | 24:00 | | | | | | | | |
| Period2 | 24:00 | 24:00 | | | | | | | | |
| Period3 | 24:00 | 24:00 | | | | | | | | |
| | 24:00 | 24:00 | | | | | | | | |
| Period4 | 21.00 | 21100 | | | | | | | | |
| Event Exception | Start Time | End Time | Mont | h D | ay | 1 | | | | |
| Event Exception | | | Mont 1 | | ay)1 | | | | | |
| Event Exception | Start Time | End Time | | (| | | | | | |
| Event Exception | Start Time 24:00 | End Time 24:00 | 1 | (|)1 | | | | | |
| Event Exception | Start Time 24:00 24:00 | End Time 24:00 24:00 | 1 | (|)1)1 | | | | | |
| Event Exception Name Exception1 Exception2 Exception3 | Start Time 24:00 24:00 24:00 | End Time 24:00 24:00 24:00 | 1 1 1 | |)1)1)1 | | | | | |
| Event Exception Name Exception1 Exception2 Exception3 Exception4 | Start Time 24:00 24:00 24:00 24:00 | End Time 24:00 24:00 24:00 24:00 | 1 1 1 1 | | 01 01 01 01 | | | | | |
| Event Exception | Start Time 24:00 24:00 24:00 24:00 24:00 | End Time 24:00 24:00 24:00 24:00 24:00 24:00 | 1 1 1 1 1 | | 01 01 01 01 01 | | | | | |

[Chat Dialog Description]

a. Select Event Connection

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You can select 8 connections. For each connection, you can register 4 event intervals and 8 exception intervals.

| | | | | _ | | |
|---|---|---|----------------------------|---|------------------------|-------|
| Time Event 1 | Time Event 2 | Time Event 3 | Time Event 4 | | Time Even | t 8 |
| (AP3 60) T-Event1Period 0 0 0 0 0 0 0 0 1 0 0 | (AP3 62) T-Event2Period 00000000 1100 | (AP3 64) T-Event3Period 00000000 1010 | (AP3 66) T-Event4Period | | (AP3 72) T-Event8Pe | riod |
| Time Period 1 | <u>^^</u> | <u>^</u> ^ | <u>^</u> <u>^</u> | • | 1 | **** |
| Period1 StartT Period1 Stop Period1 Day | | | | | | ***** |
| Time Period 2 Period2 StartT | | | | | | |
| Period2 Stop T Period2 Day | | | | | | T |
| Time Period 3 Period3 StartT | | | | | | |
| Period3 Stop T Period3 Day | | | | | | ť |
| Time Period 4 Period 4 StartT Period4 Stop T Period4 Day | l | | | | | J |
| Except Date 1 Except StartT | | | | | | |
| Except1 Stop T Except1 Date | | | | | | |
| Except Date 2 Except2 StartT Except2 Stop T | | | | | | |
| Except2 Date | | | | | | |
| Except Date 8 | | | | | | |
| Except3 StartT Except3 Stop T Except3 Date | | | - | | | |

b. Event Operation Settings

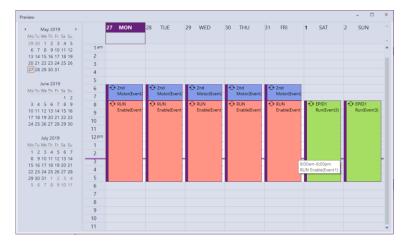
You can select the operation following the event settings.

| Setting | S | | |
|---------|------------|----|----------------|
| 0 | None | 16 | PID Openloop |
| 1 | Fx | 17 | PID Gain 2 |
| 2 | Rx | 18 | PID Ref Change |
| 3 | Speed-L | 19 | 2nd Motor |
| 4 | Speed-M | 20 | Timer In |
| 5 | Speed-H | 21 | dis Aux Ref |
| 7 | Xcel-L | 22 | EPID1 Run |
| 8 | Xcel-M | 23 | EPID1 ITermClr |
| 9 | Xcel-H | 24 | Pre Heat |
| 10 | Xcel Stop | 25 | EPID2 Run |
| 11 | Run Enable | 26 | EPID2 ITermClr |
| 12 | 2nd Source | 27 | Sleep Wake Chg |
| 13 | Exchange | 28 | PID Step Ref L |

| 14 | Analog Hold | 29 | PID Step Ref M |
|----|--------------|----|----------------|
| 15 | I-Term Clear | 30 | PID Step Ref H |

c. Event Settings Preview

Shows the event internal and exception period as a calendar and can also show the selected event action together.



d. Event Interval Settings

4 intervals can be set. You can set selection by interval, start and end time, and settings per day. The start and end time is shown as a time list to be selected.

| Start Time | e |
|------------|--------|
| 24:00 | \sim |
| 00:00 | |
| 01:00 | |
| 02:00 | |
| 03:00 | |
| 04:00 | |
| 05:00 | |
| 06:00 | |
| 07:00 | |

For settings per day, double-click on the days in the interval and it will be shown as "V." To disable the setting, double-click on it again and the "V" mark will be removed.

| SUN | MON | TUE | WED | THU | FRI | SAT |
|-----|-----|-----|-----|-----|-----|-----|
| V | | V | | V | | ۷ |
| | V | | ٧ | | V | |
| | | V | | V | | |

e. Event Exception Settings

You can set the start and end time together with the event interval. The monthly or daily settings stops the operation of the event on the specified day.

4 Parameter Renewal

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The parameter information is read again to display it on the screen. Any unsaved parameter information can be deleted, so take care when refreshing.

| Use | | |
|-----|-------------------------|---------|
| OON | OFF | Refresh |
| | | |



6.3 Wizard

This section describes the Wizard, which is a feature that allows you to set up important parameters step by step during initial drive installation.

6.3.1 Run

Select the menu at [Tools] – [Parameter Wizard]. The wizard screen is displayed corresponding to the selected model. (Here, the explanation is based on iS7.)

| | | | | | | × |
|--|-------------------------------|----------|----------|--------|------------|---|
| | 1.Motor & Control | | | | | |
| 1. Motor & Control 2. Speed & Torque | Control Mode : | | ~ | | | |
| 3. Xcel Time | Parameter | Default | Max | Min | Value Unit | |
| | Motor Capacity | 0.75kW | 450.0 kW | 0.2 kW | 0.75kW | |
| 4. Start & Stop | 60/50 Hz Sel | 60Hz | 50Hz | 60Hz | 60Hz | |
| 4. Start & Stop | Pole Number | 4 | 48 | 2 | 4 | |
| | Rated Slip | 40 | 3000 | 0 | 40 mm | |
| 5. Digital Input | Rated Curr | 3.6 | 1000.0 | 1.0 | 3.6 A | |
| | Noload Curr | 1.6 | 1000.0 | 0.5 | 1.6 A | |
| 6. Multi-Step Speed | Rated Volt | 0 | 480 | 180 | 0 V | |
| | Efficiency | 72 | 100 | 70 | 72 % | |
| 7. Digital Output | Inertia Rate AC Input Volt | 0 220 | 8 480 | 0 | 0 220 V | |
| 8. V1 Analog Input 9. I1 Analog Input 10. Analog Output 11. Install | | | | | | |
| | | Previous | Nex | :t | Cancel | |

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6.3.2 Step-by-step Settings

Set the parameter using the 10 steps of the wizard (excluding install). To move between steps, you can go to the previous step or the next step by clicking the button corresponding to each step or by clicking the Previous Next button.

The steps and the step-by-step parameter types may vary by model.

1 Motor & Control

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Set the main parameters for motor & control.

| 1.Motor & Control | | | | | |
|--------------------|------------|----------|----------------------------------|--------------|------|
| Control Mode : Ser | isorless-1 | v | Torque Contr | ol : 🔿 Yes 🧕 |)No |
| Parameter | Default | Max | Min | Value | Unit |
| Motor Capacity | 0.75kW | 450.0 kW | 0.2 kW | 0.75kW | |
| 60/50 Hz Sel | 60Hz | 50Hz | 60Hz | 60Hz | |
| Pole Number | 4 | 48 | 2 | 4 | |
| Rated Slip | 40 | 3000 | 0 | 40 | npm |
| Rated Curr | 3.6 | 1000.0 | 1.0 | 3.6 | Α |
| Noload Curr | 1.6 | 1000.0 | 0.5 | 1.6 | Α |
| Rated Volt | 0 | 480 | 180 | 0 | V |
| Efficiency | 72 | 100 | 70 | 72 | % |
| Inertia Rate | 0 | 8 | 0 | 0 | |
| AC Input Volt | 220 | 480 | 0 | 220 | V |

Torque Control is disabled if Control Mode is V/F, V/F PG, or Slip.

You can edit each parameter by clicking the setting value column in the list.

Depending on whether Torque Control is set to Yes or No, the next step is changed to the Torque settings or the Speed settings.

2 Speed & Torque

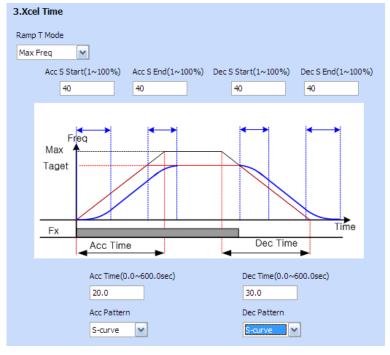
| 2.Speed & Torque - Speed | | | | | | | |
|--------------------------|----------|--------|----------|----------|------|--|--|
| Parameter | Default | Max | Min | Value | Unit | | |
| Cmd Frequency | 0.00 | 400.00 | 0.00 | 0.00 | Hz | | |
| Freq Ref Src | Keypad-1 | Binary | Keypad-1 | Keypad-1 | | | |
| Base Freq | 60.00 | 400.00 | 30.00 | 60.00 | Hz | | |
| Start Freq | 0.50 | 10.00 | 0.01 | 0.50 | Hz | | |
| Max Freq | 60.00 | 400.00 | 40.00 | 60.00 | Hz | | |
| Torque Boost | Manual | Auto | Manual | Manual | | | |
| Fwd Boost | 2.0 | 15.0 | 0.0 | 2.0 | % | | |
| Rev Boost | 2.0 | 15.0 | 0.0 | 2.0 | % | | |

If Torque Boost is Manual, you can set it to Fwd Boost and Rev Boost.

2.Speed & Torque - Torque

| Parameter | Default | Max | Min | Value | Unit |
|----------------|----------|--------|----------|----------|------|
| Cmd Torque | 0.0 | 180.0 | -180.0 | 0.0 | % |
| Trg Ref Src | Keypad-1 | Binary | Keypad-1 | Keypad-1 | |
| Torque Lmt Src | Keypad-1 | Binary | Keypad-1 | Keypad-1 | |
| Speed Lmt Src | Keypad-1 | PLC | Keypad-1 | Keypad-1 | |
| FWD Speed Lmt | 60.00 | 400.00 | 0.00 | 60.00 | Hz |
| REV Speed Lmt | 60.00 | 400.00 | 0.00 | 60.00 | Hz |
| Speed Lmt Gain | 500 | 5000 | 100 | 500 | % |

3 Xcel Time



Xcel Time related parameters are output with the graph. The graph changes according to the parameter value selected in the combo. The time range can be changed in the edit window.

4 Start & Stop

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| 4.Start & Stop | | | | | |
|----------------|---------|---------------|--------|---------|------|
| Parameter | Default | Max | Min | Value | Unit |
| Cmd Source | Fx/Rx-1 | PLC | Keypad | Fx/Rx-1 | |
| Start Mode | Acc | Dc-Start | Acc | Acc | |
| Stop Mode | Dec | Power Braking | Dec | Dec | |
| Run Prevent | None | Reverse Prev | None | None | |
| Power-on Run | No | Yes | No | No | |
| Dc Inj Level | 50 | 200 | 0 | 50 | % |

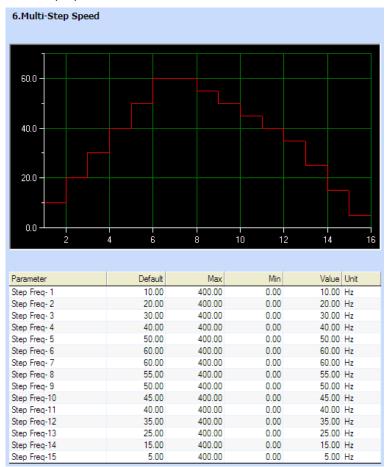
Set the parameters corresponding to Start & Stop. If DC-Start is selected from Start Mode, "Dc-Start Time" will be displayed. IF DC-Brake is selected in Stop Mode, the Dc-Block Time, Dc-Brake Time, and Dc-Brake Freq parameters will be displayed.

5 Digital Input

| 5.Digital Input | | | | | | |
|--|--------------------|------------------|---|-------------------|------|--|
| P1 Define P2 Define | FX | v | ~~~ ~~~~ | P1 | | |
| P3 Define | RX BX | ~ ~ | ```` | P3 | - | |
| P4 Define | RST | ~ | ``` | P4 P5 | | |
| P5 Define P6 Define | Speed-L | <u> </u> | | P6 | _ | |
| P6 Define | Speed-M Speed-H | <u> </u> | ~~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | P7 - P8 | | |
| P8 Define | JOG | ~ | | СМ | | |
| | | | | | | |
| Out Freq | $ \rightarrow $ | Out Freq | \leq | Out Fr | req | |
| Speed-L Speed-M Speed-H Speed-X | | UP Down FX | | FX RX 3Wire | | |

Set the parameters corresponding to Digital Input.

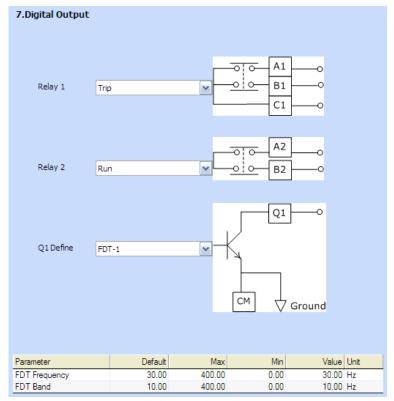
6 Multi-Step Speed



Set the parameters corresponding to Set Multi-Step Speed.

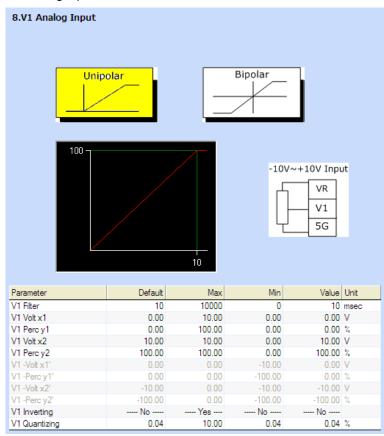
7 Digital Output

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Set the parameters corresponding to Digital Output.

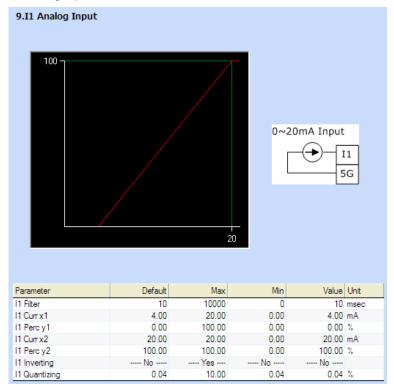
8 V1 Analog Input



Set the parameters corresponding to V1 Analog Input.

9 I1 Analog Input

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Set the parameters corresponding to I1 Analog Input.

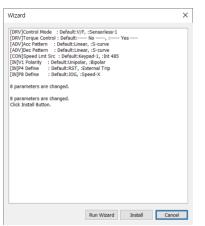
LSis 67

10 Analog Output

| 10.Analog Outp | out | | | | |
|-----------------------|--------|-----------------|------------|----------------|----------------------|
| AO1 Mode | Freque | ency | × | A01 | ⊂ <u>V</u> 0~10V |
| Parameter | | Default | Max | Min | Value Unit |
| AO1 Gain | | 100.0 | 1000.0 | -1000.0 | 100.0 % |
| AO1 Bias | | 0.0 | 100.0 | -100.0 | 0.0 % |
| AO1 Filter | | 5 | 10000 | 0 | 5 msec |
| AO1 Const % | | 0.0 | 100.0 | 0.0 | 0.0 % |
| | | | | | |
| | | | | | |
| AO2 Mode | Freque | ency | <u></u> | A02 - | |
| | Freque | | | | |
| Parameter | Freque | Default | Max | Min | Value Unit |
| Parameter AO2 Gain | Freque | Default 80.0 | Max 1000.0 | Min -1000.0 | Value Unit 80.0 % |
| Parameter | Freque | Default | Max | Min | Value Unit |

Set the parameters corresponding to Analog Output.

11 Install



The content of the changed parameters is displayed.

Wizard Run Button: Converts to the Wizard Settings screen. Use this button to make additional changes.

Install Button: Saves the parameters set in the wizard to the project parameters. You can use the write function if you need to apply the parameter contents to the drive.

6.4 Parameter interconversion between models / Parameter Converter

This section describes about the parameter interconversion between models. A subset of parameters may not be changed. (uneditable, unchangeable, inaccessible. etc)

Caution

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Not all models support parameter interconversion. The supported models will be expanded in the future.

6.4.1 Source Drive Configuration

For this feature, a source drive project must be configured and there are 3 methods to configure a project.

1) Open DriveView 7 parameter file

Source drive project can be configured by using the DriveView 7 parameter files from the source drive. If the project was managed using DriveView 7 SW, this would be a useful method.

2) Create new project

Source drive project can be configured by creating a new project. When creating a new project, the drive model and the version must be specified.

3) Open project

Source drive project can be opened from existing source drive.

6.4.2 Convert Parameter

Select the Menu [TOOLS] - [Converter]



Specialized Features

| arameter Converter | ن ا |
|---|--|
| Settings | |
| Source Drive: | iG5A • 2.70 • |
| Drive to convert: | • • |
| Name of the drive to convert: | NewItem |
| Options | |
| Compare converted results | View excluded parameters |
| Read-only parameters, PID control, Motor rated voltage, Stall prevent, U Speed search, Motor capacity, Load | ameter are not applicable in the conversion. Sensorless vector control, |

[Dialog Box Description]

- a. Source Drive: Shows the source drive that needs parameter conversion.
- b. Drive to convert: Shows the information about the drive to convert.
- c. Name of the drive to convert: Shows the name of the converted project.
- d. Options Compare convert results: You can select this check box to compare the values of converted drive and the default values in a new window.

e. Options – View convert exclude list: You can select this check box to view the excluded parameters.

| Code | Parameter Name | ^ |
|--------|----------------|---|
| DRV:15 | FRQ2 | |
| DRV:16 | PID Ref. | |
| DRV:17 | PID FBK. | |
| FU1:14 | PreExTime | |
| FU1:39 | Volt Perc | |
| FU1:59 | Stall prev. | |
| FU1:60 | Stall level | |
| FU1:61 | OutVolt Supp | |
| FU1:63 | UP/DN SAVE | |
| FU1:64 | UP/DN FREQ | |
| FU1:65 | UP/DN Mode | |
| FU1:66 | UP/DN Step | |
| FU1:70 | Draw Mode | |
| FU1:71 | Draw Percent | |
| EU2.0C | | • |

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Warranty

Warranty Information

After purchasing and installing the product, please keep the note of the following information in detail and store in a safe location. If the product does not operate as correctly during the applicable warranty period, this information outlines the free service benefits.

| Product Name | LSIS Universal | Inverter | Installation Date | |
|-----------------|---------------------------|----------|----------------------|--|
| Model Name | | | Warranty Period | |
| | Name (Company Name) | | | |
| Customer | Address | | | |
| | Phone Number | | | |
| | Name (Company Name) | | | |
| Dealership | Address | | | |
| | Phone Number | | | |

Warranty Period

The warranty period of this product is 12 months from the date of installation. If the installation date is not written down, the warranty period is 18 months from the date of manufacture. (The warranty period differs depending on the contract conditions made during installation and construction.)

Information on the Free Quality Assurance Service

If a product malfunction occurs within the warranty period under normal use, you may be entitled to a free warranty repair service at our agency or designated service center.

Charged Repair Service

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A charged repair service is provided for the following cases.

- · If a malfunction occurs due to intentional or negligence of the consumer
- If a malfunction occurs due to a fault in the power supply or connected equipment
- If a malfunction occurs due to natural disasters (fire, flood, gas accident, earthquake, etc.)
- If the product has been remodeled or repaired at a place other than our dealer or service center
 - If the product is not marked with an authentic LSIS nameplate
 - If the warranty period has passed

Homepage

Go to the LSIS Homepage (*http://www.lsis.biz*) to get useful information on products as well as service information.

UL mark



The UL mark applies to products in the United States and Canada. This mark indicates that UL has tested and evaluated the products and determined that the products satisfy the UL standards for product safety. If a product received UL certification, this means that all components inside the product have been certified to meet UL standards as well.

CE mark

The CE mark indicates that the products carrying this mark comply with European safety and environmental regulations. European standards include the Machinery Directive for machine manufacturers, the Low Voltage Directive for electronics manufacturers and the EMC guidelines for safe noise control.

Low Voltage Directive

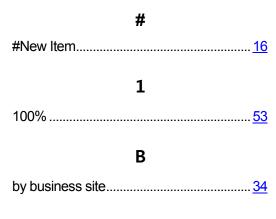
We have confirmed that our products comply with the Low Voltage Directive (EN 61800-5-1).

EMC Directive

The Directive defines the requirements for immunity and emissions of electrical equipment used within the European Union. The EMC product standard (EN 61800-3) covers requirements stated for drives.

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