The right choice for the ultimate yield!

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

# **DRIVEVIEW 9**

# **User Manual**





- 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	
V1.2	`20.2.3	Changes and new features (parameter window, trip history)	
V1.3	<b>'20.5.29</b>	Changes and new features Change company name	
V1.4	'22.03.02	Cover error revised	
V1.5	'22.03.16	Error revised	
V1.6	'22.04.19	Error revised	
V1.7	'22.11.03	Error revised and New feature	
V1.8	'23.07.25	Error revised and New feature	
V1.9	'23.11.03	New feature	

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# **1 Getting Started**

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# **1.1 DriveView 9 Characteristics**

DriveView 9 is a software tool for engineering the LS ELECTRIC 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, LS INV 485, USB).



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# **1.3 System Requirements**

Category	Requirement
Windows	Windows 7/8/10/11
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]

- 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	ew 9 - InstallShield Wizard	×
ځ	Select the language for the installation from the choices below.	
	English (United States)	1
	<u>O</u> K Cancel	

Γ

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



🕼 DriveView 9 - InstallShield Wizard	
Customer Information	1
Please enter your information.	
User Name:	
I	
Organization:	
InstallShield	

Γ

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	×			
Destinati Click Nex	<b>on Folder</b> It to install to this folder, or clic	ck Change to instal	l to a different folder	と
	Install DriveView 9 to: C:₩Program Files (x86)₩LS	₩DriveView9₩		Change
InstallShield -				
		< Back	Next >	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.



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

🙀 DriveView 9 - InstallShield W	izard X
	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.

E D E	HOME TOOLS	Ŧ			NewProject - Dri	veView 9				-	
$\rightarrow \sum_{\text{New}} [$	Open Add Delete	Compare Report	Connect Settings Open From Drive	PROM History Save	Monitoring Param	eter Parameter d Write	Stop and Reset	<ul> <li>Reverse</li> <li>Forward</li> </ul>	Event Log     Monitor     Trip		
	Project			Online			Drive C	Control	View		
Project	<b>→</b> ù	× DRV ×									
⊟ NewPr	roject *	Favorite	Code Parameter Name	Write Value	Drive Value	Default Value	Attributes	Unit			^
⊟ E New	wDrive(S100) - Offline	1	1 Cmd Frequency			0.00	R/W	Hz			
-E D	Detail Information	12	2 Cmd Torque			0.0	R/W	%			
	Parameters	1	3 Acc Time			20.0	R/W	sec			
-(114	E DRV	Ta	4 Dec Time			30.0	R/W	SEC			
-(18	e BAS	1	6 Cmd Source			Fx/Rx-1	R/W				
- 110	E CON	n	7 Freq Ret Src			Keypad-1	R/W				
110		1	8 Trq Ref Src			Keypad-1	R/W				
100		1	9 Control Mode			V/F	R/W				
110	ECOM	1	10 lorque Control			NO	R/W	110			
110			11 JOG Frequency			10.00	D AM	P1Z			
-114	E APO	1	12 JOG Acc Time			20.0	P AM	sec			
→ <u></u>	II PRT		14 Motor Capacity			0.4 kW	R AM	sec			
-114	H M2	1	15 Torgue Boort			Manual	P.AN				
- [114	USS	1	16 Fwd Boost			2.0	R/W	96			
114	N USF	ti	17 Rev Boost			2.0	R/W	96			
110	SPS	1	18 Base Freq			60.00	R/W	Hz			
- 🖈 Fi	avorites	1	19 Start Freg			0.50	R/W	Hz			
-110	Jser Sequence	1	20 Max Freq			60.00	R/W	Hz			
🖃 🗐 Logs		ta	21 Hz / Rpm Sel			Hz Display	R/W				
- 📰 Trip	DS .	12	22 (+) Trg Gain			100.0	R/W	%			~
E Tren	nds	-									
-E #	*New	Inp									• + ×
		Trip PC Time	Drive Name	Protoco	I-Station No.(IP) Mo	del Capacity	/ Trip				
		Event Log M	onitor Trip								
Roady										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

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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.

		DriveView 9		- D X
FILE HOME TOOLS		Difference		L
New Open Add Delete Compare Report	Connect Settings Open EEPON History	Monitoring	Reverse     Forward     Forward     Trip	
Project	Online		Drive Control View	
Project 🗸 🕈 🗙				
Trip				<del>▼</del> 무 ×
Trip PC Time	Drive Name Protocol	Station No.(IP) Model Capacity T	Trip	
Function Man	iter Tria			
Ready Event Log Mon				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, LS INV 485, USB.

(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.

Options					×
General					
Project					
Drive	Color Theme:	Blue		* <b>4</b>	a
	Language:	English		× •	
			OK	Cancel	Help
				Cancer	Help

#### [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.

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#### 2 Project

You can set the project features of DriveView 9.

Options	×
General	
Project	
Drive	Project
	C:\Users\Use
	4 Number of recent project files to display
	Open recent project when starting
	OK Cancel Help

[Chat Dialog Description]

- 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.

¢		DriveView 9	- 🗆 ×
New Project	Recent Documents		Recent Places
Open Project Open Parameter File	S100.dvproj C:\Users\ \Documents\DriveView 9\Projects\	-0	Projects C(JUsers) (Documents)DriveView 9(Projects) +P
Recent			
Save Project			
Save As Project			
Close Project			
C Option			
O Lat			

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		X
General		
Project		
Drive	Dofault	
	Display Mode	H7 Mode
	Display Default Value	
	▲ ✓ Ouick Scan	
	Station No. Max.	32
	Baudrate	(9600, 19200, 115200)
	Check Parameter Quick Write	
	Logs	
	Auto Save Trip Log	
	Max. File Size	64
	Trace Log	
	Trends	
	Expert Mode	
		OK Cancel Help

[Chat Dialog Description]

- a. Display Mode: Select the display mode of Hz and RPM.
- b. Logs: You can set log-related information.
- Auto save trip log: Saves and manages the trip information saved in separate files if trips occur.
- Max. file size: Sets the maximum size of the saved files. A new file will be automatically created and managed if the saved file size reaches the maximum file size.
- c. Display default value : Set whether to display default values
- d. Quick Scan : Set the Quick Port Scan feature
- e. Station No. Max : Set Station No. Max for quick scan
- f. Baudrate : Set the baudrat when quick scan.
- g. Check Parameter Quick Write : Set whether to display the write all parameters window.
- h. Auto save trip log: Save and manage the information as a separate file when a trip occurs.
- i. Max file size: Specifies the size of the file to be stored. When the file being saved reaches its maximum
- j. Trace Log : Set whether to save log files for communication.

k. Expert mode: Sets the ability to change graphs within a trend to various options.

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# **3 Project**

# 3.1 Project Configuration

The project configuration items are as follows.



[Chat Dialog Description]

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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.

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- 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. Trips: You can view the trip logs.
- i. Trend: Shows the information saved as trends.
- j. #New Item: Double-click and a dialog box will appear for adding a new item.
- k. New Item: Shows trends

# 3.2 Project Management

### 3.2.1 Creating a New Project

Creates a new project.

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

	New Project		×
a —	Project Name:	NewProject	WDriveView QWProjects
с —	Name:	NewDrive	
d —	<u>M</u> odel: Version:	1.60	•
			OK Cancel

[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. Refer to the Parameter within the Drive group (DRV-87).

#### 3.2.2 Open Project

Open a previously saved project file.

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

→ < ↑   > T	his PC > Documents > DriveView 9 > Projec	ts v Ö	Search Project	S
ganize • New fold	der			H • 🔳
	Name	Date modified	Туре	Size
Quick access	project1.dvproj	5/20/2019 1:52 PM	DVPROJ File	43 K
OneDrive	project2.dvproj	5/20/2019 1:52 PM	DVPROJ File	43 K
This PC	project3.dvproj	5/20/2019 1:52 PM	DVPROJ File	43 K
Network				

### 3.2.3 Save Project

Save changed project.

ſ

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					×
← → × ↑ 📕	> This PC > Documents > DriveView 9 > Projects	~ Ŭ	Search Projects	م	,
Organize • New	folder			E • 🤇	
<ul> <li>Quick access</li> <li>OneDrive</li> <li>This PC</li> <li>Network</li> </ul>	Name  Project1dyproj project2dyproj project3dyproj	Date modified 5/20/2019 1:52 PM 5/20/2019 1:52 PM 5/20/2019 1:52 PM	Type DVPROJ File DVPROJ File DVPROJ File	Size 43 KB 43 KB 43 KB	
File game: Save as type: F	κομετί άγρος Troject File (*.dvproj)		Save	Cancel	~ ~

### 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.

🛄 Open				>
🗧 🔶 🕤 🕇 🧧 🗧	'his PC → Documents → DriveView 9 → Projects	~ Ö	Search Projects	<i>م</i>
Organize • New fol	der		83	- 🔳 🔞
> 📌 Quick access	Name	Date modified 11/8/2016 1:39 PM	Type Dump File	Size 16 KB
> ᡠ Network				
File	name:		Parameter File (*.	dmp) ~
			Open	Cancel

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

🛄 Save As					×
← → × ↑ 🖡 > Thi	s PC > Documents > DriveView 9 > Projects	~ <sup>(1)</sup>	Search Projects		ρ
Organize • New folde					0
1.0.11	Name	Date modified	Туре	Size	
Cuick access	project1.dvproj	5/20/2019 1:52 PM	DVPROJ File	43 KB	
le 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 name: project	t1.dvproj				
Save as type: Project	t File (*.dvproj)				
<ul> <li>Hide Folders</li> </ul>			Save	Cancel	

# 3.3 Project Item

Explains the items displayed in the project.

## 3.3.1 Drive

#### 1 Add

ſ

Select the project name item and click [Add].

	Create Proje	ect Item	×
	Item Type	s:	
	_	Item	
	A Drives		
_	*	Connected Drive Add new drive by connected information	
+	* •	Drive Add new drive by selecting model and software version,	
	⊿ Logs		
	*	Trend Group Add New Trend Group	
_	Name:	NewItem	
		OK Cance	1

#### [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].

DriveView 9	$\times$
Pelete selected item?	
Yes No	

#### 3.3.2 Version Change

Provides the ability to change the version of a drive registered in a project.

When you create a project and add a drive, you can change it if you create the wrong version, and you can change and connect when you connect a drive with a different version.

Select the appropriate drive in the project tree, then right-click to select Properties.



You can change it to the version you want in the properties window

Drive Property		×
Name:	NewDrive	
Model:	iS7	-
Version:	1.00	-
	1.00	1
	1.02	
	1.10	
	20.00	

#### Caution

Only drives of the same model can be modified. Other models are not supported.

# 3.3.3 Detailed Information

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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.
- Node: Shows the node name made up of the communication method, IP address, or Station 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	in/Max	×
Output	Frequency	
Max:	400.00Hz	400.00
Min:	0.00Hz	0.00
	ordeniz	
	ОК	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.

Parameter Editor			:
Command Freq			
þ.00		Hz	
Mauri	400.00		
Min:	400.00		
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.

Virtual DI	(Virtual DI 1, Virtual DI 3, Virtual DI 6, Virtual DI 8, Virtual DI 1
Virtual DI 1	
Virtual DI 2	
Virtual DI 3	
Virtual DI 4	
Virtual DI 5	
Virtual DI 6	
Virtual DI 7	
Virtual DI 8	

#### 9 Virtual Digital Input Settings

Provides the settings to set up virtual digital values on the drives.

- Double click the left parameter to change its digital input.
- You can change the input status by changing the right on/off switch.

#### 3.3.4 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.

Project 👻 🕈 🗙	Detail Information 💉 DRV ×					
NewProject *	Favorite Code Parameter Name	Write Value	Drive Value	Default Value	Attributes	Unit
🕀 🖾 Connected Drive(iS7) - T	Favorite 🖽 1 Cmd Frequency	13.00	13.00	0.00	R/W	Hz
- Detail Information	Favorite 🖽 2 Cmd Torque	0.0	0.0	0.0	R/W	%
Parameters	Favorite 🖼 3 Acc Time	12.0	12.0	20.0	R/W	sec
DRV	1 d Dec Time	30.0	30.0	30.0	R/W	sec
- I BAS	6 Cmd Source	Keypad	Keypad	Fx/Rx-1	R/W	
- III ADV	1 7 Freq Ref Src			Keypad-1	R/W	
- CON	1 8 Trq Ref Src			Keypad-1	R/W	
THE IN	9 Control Mode			V/F	R/W	
THOUT	10 Torque Control			No	R/W	
- COM	11 JOG Frequency			10.00	R/W	Hz
- THE APP	III 12 JOG Acc Time			20.0	R/W	sec
- H AUT	13 JOG Dec Time			30.0	R/W	sec
- III APO	14 Motor Capacity			0.75kW	R/W	
- THE PRT	15 Torque Boost			Manual	R/W	
1 M2	16 Fwd Boost			2.0	R/W	%
🖹 🖈 Favorites	17 Rev Boost			2.0	R/W	%
🛧 Favorite	18 Base Freq			60.00	R/W	Hz
🖃 🗐 Logs	19 Start Freq			0.50	R/W	Hz
- 📰 Trips	1 20 Max Freq			60.00	R/W	Hz
E Trends	🖽 21 Hz / Rpm Sel			Hz Display	R/W	
[달] #New	1 25 Output Freq			0.00	R	Hz
	1 26 Adv ATB Filter			100	R/W	msec
	IIII 27 Adv ATB M Gain			50.0	R/W	%
	1 28 Adv ATB G Gain			50.0	R/W	%
	III 30 kW/HP Select			kW	R/W	

The display items per parameter are as below.

Favorite	Co	ode	Parameter Name	Write Value	Drive Value	Default Value	Attributes	Unit
Favorite	114	1	Cmd Frequency	13.00	13.00	0.00	R/W	Hz
Favorite	14#	2	Cmd Torque	0.0	0.0	0.0	R/W	%
Favorite	111	3	Acc Time	12.0	12.0	20.0	R/W	sec
	114	4	Dec Time	30.0	30.0	30.0	R/W	sec
	111	6	Cmd Source	Keypad	Keypad	Fx/Rx-1	R/W	
	11+	7	Freq Ref Src			Keypad-1	R/W	
	114	8	Trq Ref Src			Keypad-1	R/W	
	144	9	Control Mode			V/F	R/W	
	11+	10	Torque Control			No	R/W	
	11+	11	JOG Frequency			10.00	R/W	Hz
	144	12	JOG Acc Time			20.0	R/W	sec
	114	13	JOG Dec Time			30.0	R/W	sec
	114	14	Motor Capacity			0.75kW	R/W	

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

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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

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 Description

A. Favorites

Decides whether the parameter has been bookmarked.

B. Group name

Displays the group name to which the parameter belongs.

Displayed only when the parameter window has been set to display "All."

C. Code

Shows the code number on the keypad display.

D. Parameter name

Displays the parameter name.

E. Write value

Displays the value to write to the parameter.

- F. Drive valueDisplays the value that was read from the drive.
- G. Default Values

Displays the default values for the parameters

H. Attributes

Shows the attributes of the parameter.

I. Unit

Displays the unit of the parameter value.

#### ① Caution

To display default values, you must select the "Display Default Value" option in the option.

Options			×
General			
Project			
Drive	⊿ Default		-
	Display Mode	HZ Mode	
	Auto EEPROM Save		_
	Display Default Value		_
	A Quick Scan		
	Station No. Max.	32	
	Baudrate	(9600, 19200, 115200)	
	Check Parameter Quick Write	<ul> <li>Image: A start of the start of</li></ul>	_
	⊿ Logs		
	Auto Save Trip Log		
	Max. File Size	64	
	/ Trends		Ŧ
	Display Default Value Displays default values in the parame	eter view.	
		OK Cancel H	Help

### 3.3.5 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

ſ

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			-
		Dor	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.

### 3.3.6 TRIP

Provides a feature to view the trips that have occurred in the drive. The trip files are saved in the "TripFile" folder under the project folder. This feature allows you to access the trip files in the "TripFile" folder. You can view the trip information saved in the trip files.

#### ① Caution

This feature is available on software version 1.0.7 or later.

#### 3 Feature

	1					
No.	Drive Name	Trip Occurred Time	Content	No.	File name	File path
1	NewDrive(IS7)	2020/02/13 15:29:11		1	TripLog	C <b>:</b> ₩Users₩wdo₩D
Detail If the the I	and solution : inverter is still in a fi SIS customer service	ault condition after powerin e center.	) it on again, please contact the supplier	or		

#### a. Trip list

Displays the information of the trip you have selected from the trip file list.

b. Diagnosis and resolutions

Displays the diagnosis of the trip you have selected from the trip file list and provides solutions to resolve the problem.

c. Trip file list

Displays the trip files stored in the folder in a set path

### 3.3.7 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.



#### 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	oject Item	×
Item Ty	pes:	
_	Item	
.⊿ Log	S	
÷	Trend Group Add New Trend Group	
Name:	NewItem	
Lanter		OK Cancel

#### 2 Delete

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

3 Menu

<b>I</b>	8	<b>6</b> 7		TREND TOOLS									
FILE	HOME	е то	OLS	GRAPH									
Open	Save	Print	Clipbo	Meta F JPEG ard	Start Monitor	Stop Monitor	Start Record	Stop Record	Start Trigger	Stop Trigger	<ul><li>✓ Grid</li><li>✓ Label</li><li>✓ Y Auto</li></ul>	<ul> <li>Normal Mode</li> <li>Zoom Mode</li> </ul>	Settings
🛉 Fil	le 🕈	1	Stre	en 🛉 🗌	<b>↑</b>	1	Monit	oring	1	<b>†</b>		Display	<b>↑</b>
												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

35
- Select the menu at [Graph] [Settings].
- This shows the option setting dialog box on the graph.

### 3.3.7.1 Graph Setting

Select the menu [GRAPH] – [Settings].

1 Channel Setting

•	Background:	Default *
•	Text:	Default *
•	Grid:	Default *
•	Y-axis Auto Scaling:	✓
•	Individual Channel:	
	Graph Count:	1

[Chat Dialog Description]

a. Background Color

Select the color of the graph.

b. Text Color

Select the text color of the graph.

c. Grid Color

Select the grid color of the graph.

d. 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.

e. 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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Trend settings					×
Display Setting	Channel Setting	Trigger Setting			
CH1 CH2 CH3 CH4 CH5 CH6 CH7 CH8	Y-axis Color Channel F Line Thick Min. Max.	'os ness	Yellow Green Graph1 1 0.000000 100.000000		a
			ОК	Cancel	Apply

[Chat Dialog Description]

a. Color

You can change the color of channels by channel.

b. Channel Location

You can select the channel location for each channel

c. Line Width

Select the line width of the channel.

d. Minimum value

You can change the minimum value of the Y axis by channel.

e. Maximum value

You can change the maximum value of the Y axis by channel

3 Trigger and Record Settings

Display Setting Channel Setting Trigger Setting  Trigger Ch.: CH1  Trigger Level: 0.00  Certex Edge Trigger: Rising  Certex Screen:  Record File Path: C:WUbers/Wbsparka/WDocuments/WDriveView 9/WTrend	Display Setting Channel Setting Trigger Setting  Trigger Ch.: CHI  Trigger Level: 0.00  Edge Trigger: Rising  Save Screen:  Record File Path: C::WUsersWbsparkawDocumentsWDriveView 9wTrend  Trigger screen save folder: C::WUsersWbsparkawDocumentsWDriveView 9wTrend  Save as type: BMP File (*.bmp)	Trend settings		
Trigger Ch.: CH1     Trigger Level: 0.00     Edge Trigger: Rising     Save Screen:      Record File Path: C:://Users//bsparka//Documents///DriveView 9//Trend	Trigger Ch.:       CH1         Trigger Level:       0.00         Edge Trigger:       Rising         Save Screen:          Record File Path:       C:WUsersWbsparkawDocumentswDriveView 9wTrend         Trigger screen save folder:       C:WUsersWbsparkawDocumentswDriveView 9wTrend         Trigger screen save folder:       C:WUsersWbsparkawDocumentswDriveView 9wTrend         Save as type:       BMP File (*.bmp) •	Display Setting Channel	Setting Trigger Setting	
Record File Path: C::WUsersWbsparkawDocumentsWDriveView 9WTrend	Record File Path:       C:WUsersWbsperkawDocumentsWDriveView 9wTrend          Trigger screen save folder:       C:WUsersWbsparkawDocumentsWDriveView 9wTrend          Save as type:       BMP File (*.bmp) *	Trigger Ch.: Trigger Level: Edge Trigger: Save Screen:	CH1 • 0.00 Rising •	
Cull learetubenarkatuDocumantetuDrivaView 94/Trand	Trigger screen save folder: C:://Users/Hbperka/WDocuments/HDriveView 9/HTrend Save as type: BMP File (*.bmp) •	Record File Path:	C:WUsersWbsparkaWDocumentsWDriveView 9WTrend	
Tingger screen save tolder:      C. Hodesholpankarrockinesholmerkew shiftend      Save as type: BMP File (*.bmp) *		Trigger screen save fold	ar: C:\Users\Use	

[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.

### 3.3.7.2 Feature

### [Show Graph]

- 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.

1 min

1 sec

- 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
  - 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/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.

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4 Ratio

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

### 3.3.8 Compare

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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 Ad	d Delete Compare Report	Connect Settings Parameter Parameter Write Read	EEPRom Save Stop and Reset Driving	<ul> <li>✓ Event Log</li> <li>✓ Trip</li> <li>Project</li> <li>View</li> </ul>

It will be displayed as below.

Project Compare		
\$100 V	\$100_1_10 ~	Target 👻
S100 ■ Petal Information ■ Pavorites ■ APV ■ APV ■ APV ■ APV ■ APV ■ APV ■ AVT ■ A	Stol_10         IN RewOrke           Stol_110         Information           Exercise         Information           Exercise         All           All         All	
User Sequence	User Sequence	Qlose

In Compare with, select the items to compare.



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.

2

Compare	Contents	s - BAS											×
XX	3												
Group		Code Par	rameter Name	Value	Unit	Group		Code	Parameter Name	Value	Unit		
						BAS	t1ł	27	Rs (PM)	0.110	Ohm		
BAS	î.H	28 Ld (	(PM)	0.00	mH	BAS	t i ł	28	Ld (PM)	1.70	mH		
BAS	î.H	29 Lq (	(PM)	0.00	mH	BAS	tił	29	Lq (PM)	2.00	mH		
BAS	î.H	32 Lq(	(PM) Scale	100	%								
BAS	îlt	34 Ld,I	Lq Tune Lev	33.3	%								
BAS	î.H	35 Ld,I	Lq Tune Hz	150.0	%								
						BAS	t1ł	95	Reserved	0.0	%		
						BAS	tił	96	Reserved	100.00	Hz		
						BAS	111	97	Reserved	0.0	%		

- 1 Shows all parameters on the screen.
  - Shows only different parameters on the screen.
- 3 E: Shows only the same parameters on the screen.

### 3.3.9 Report

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

This explains the report edit and output features.

### 3.3.9.1 Run

Select the menu [HOME] – [Report].

FILE	HOME	TOOLS										
New	Open A	dd Delete	Compare Report	<b>&amp;…&gt;</b> Disconnec	🕸 🕸	Parameter Write	Parameter Read	EEPRom Save	Stop and Reset	<ul> <li>Reverse</li> <li>Forward</li> </ul>	✓ Event Log ✓ Trip	Project
		Project				Online			D	riving	View	

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

Report					×
EILE FUN	CTION CONFIGURATION				
Export	Print Hetresh Settings				0
Company	y	Depar	tment		
Date	2019.05.22 17:14:45	User	Name		-
Model Na	sme S100	Mode	Vers 1,40		-
Node Nar	NewDrive(S100)	Opera	tion NTCP 10 13 115 196		-
node na		opere			_
[ Parame	ter Group : DRV 1				
Code	Parameter Name	Value	Default Value	Unit	
1	Cmd Erequency	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/Bx-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	JUG Dec Time	30,0	30,0	sec	_
14	Torque Report	U,4 KW	U,4 KW		-
15	Ewd Boost	20	20		-
17	Bey Boost	2.0	2,0	%	-
18	Base Freg	60.00	60.00	H7	-
19	Start Freg	0.50	0.50	Hz	-
20	Max Freg	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	(-) Trq Offset	40,0	40,0	%	_
80	- Reserved -	0	0		_
81	- Reserved -	U	U		_
05	Parameter Read	No	NO		-
00	Parameterwrite	No	No		-
89	Changed Para	NO	NO		-
90	Multi-Key Sel	0	0		-
91	SmartCopy	None	None		-
93	Parameter Init	No	No		
94	Key Lock Pw	0	0		1
95	Key Lock Set	0	0		-
97	Inv S/W Ver	0,00	0,00		
98	IO S/W Ver	0.00	0,00		

### 3.3.9.2 Export File

This is a feature to save the report information as an Excel or web file.



#### 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 Nam	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/Bx-1	Fx/Bx-1	
7	Freq Ref Src	Keypad-1	Keypad-1	
8	Trg 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.

Company		Department	
Date	2019.05.22 17:14:45	User Name	
Model Name	S100	Model Version	1.40
Node Name	NewDrive(S100)	Operation Mode	TCP_10.13.115.196

#### [Parameter Group : DRV]

Γ

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	(-) Trq Offset	40.0	40.0	%

### 3.3.9.3 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.

### 3.3.9.4 Refresh

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.

### 3.3.9.5 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.



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

# 4 Online

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### **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, LS INV 485).

Select the menu [HOME] – [Settings].



b	_	•	Depth:	Local	
			General		
С	_	•	Time Out:	500 📮	ms.
d	_	•	Retry Count:	3 🔺	Times
е	_	•	Connect	ОК	Cancel

[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, LS INV 485, USB.
- 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]

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



[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, LS INV 485 and click the Set button.
- 3 Set the communications port.

Online

	Setting COM Port		Х
	Settings		
а	 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 🛉 m	s
i	 Delay Time(After):	15 🔹 m	s
	Auto scanning port	OK Cancel	

[Chat Dialog Description]

ſ

- a. Station Number: Input the Station number assigned to the drive.
- 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 LS INV 485.
- 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].

FILE	HOME	TOOLS											
New	Open Ac	dd Delete	Compare Report	<b>≪…≫</b> Connect	Settings	Parameter Write	Parameter Read	EEPROM Save	History	Stop and Reset	Reverse Forward	Event Log	Project
		Project			ł.	Onlin	e			Dr	iving	View	

A dialog box appears during connection.

DriveView 9
In progress, please wait

### ① Caution

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



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



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### 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.



#### a. Write Default Values

Check to use if you want to write the drive defaults when writing.

Writes only write values to the drive when not checked.

#### b. Auto save EEPROM

Enabled when the parameter full entry is selected.

When checking, write the entire item and save the EEPROM once at the end

# 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          IN          CON          IN          COM          APP          AVT          APO          PRT          M2          SPS          Favorites          User Sequence	OK Cancel

### 4.5 Write/Read by Group

Provides write/read per parameter group in the project tree.

Individual write/read functionality is provided, and if you want behavior for the entire parameter, select the "Parameter" item and then operate.



Online

### [Writing parameters]

ſ

Write		×
Initialize para	ameters 00:	01
Total:		
Current:		
	Cancel	

### [Reading the parameters]

Read	×
DRV(1 / 1) Cmd Source (5 / 25)	00:00
Total:	
Current:	
	Cancel

### ① Caution

It is displayed in a pop-up window to prevent malfunction when writing all parameters. If you do not want to display it again, you can select the check box.



### 4.6 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.

Added to the Quick Launch tool



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# 4.7 EEPRom Save

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.

① Caution

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



## 4.8 Trip history

When the drive detects a failure, a trip occurs or a warning message is output to prevent damages to the internal circuitry. The displayed messages are stored in the drive. This feature allows you to view the trip history stored in the drive.

### ① Caution

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This feature is available only in the drive models that support this feature. (S100 drive of specific application version)

In the project window, select the drive to save the trip information to and select [Home] > [Trip history] in the menu.

F	ILE	ном	E TOOLS							
1	lew	Open	Add Delete	e Compare Report	Connect Settings P	arameter Parameter EEP Write Read S	ROM History	Stop and Reset	✓ Event Log ✓ Trip	Project
			Project			Online		Driving	View	
4	D	)escr	iption							
				c I						
	Dri	ve Hist	ory						×	
	Tr	ip Histo	ory							
a		Ref	resh	Erase						
b	-	No.	Code	On Time	Run Time	Content				
		1 2	0×1A 0×1A	0/0/9 17:02 0/0/9 17:02	0/0/2 03:39 0/0/2 03:39	Safety B Err Safety B Err		I		
		3	0x1A	0/0/9 17:02	0/0/2 03:39	Safety B Err				
		5	0x0D 0x1A	0/0/9 19:12	0/0/2 03:39	Safety B Err				
d		Detail a	nd solution							
						ОК	Cancel	Apply	Help	

#### a. Refresh

Reads the trip history stored in the drive.

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#### b. Trip list

Displays the trip history stored in the drive. Up to five items can be stored. After the maximum number is reached, the next file will be saved after the oldest file is deleted.

c. Delete

Deletes all trip history stored on the drive.

d. Detail and solution

Displays the details of the trip you have selected from the trip file list and provides solutions to resolve the problem.

### ① Caution

The operation time is based on the cumulative operation time of the drive, and the run time is based on the cumulative operation time of the fan.

# 4.9 Open from Drive

The ability to create and connect a project from a connected drive.

Attempt to connect through drive communication settings and, if successful, create a project with the appropriate drive information.

This feature is useful if you don't know the drive version information.



### ① Caution

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If a project is already open, perform the Close Project function and then perform the action.

# 4.10 Pass-through

This function allows you to access the drive through the LSE PLC. In the communication setting, you must also set the connection information for the PLC with the drive you want to connect to.



### ① Caution

This function operates only on certain PLC(XGI-CPUUN, XGL-EFMTB). Please refer to the product manual for the OS version.

The drive operates on products equipped with Ethernet or RAPIEnet+ modules.

Online

#### 1 Connection Settings

ſ

Connection Setti	ings		×
- Connections -			
Type:	Modbus-TCP	٣	Setting
Depth:	Remote 1	*	Test
General			
Time Out:	500	)	ms.
Retry Count:	3	•	Times
Connect	ОК		Cancel

Type: Set to Modbus-TCP. Depth: Set to Remote 1.

2 Drive Access Setting

Setting TCP		×
TCP Remote 1		
IP Address:	192 . 168 . 1 . 111	
Port:	502	
	OK	Cancel

Enter the communication information of the drive to be connected.

3 Check PLC Connection Information

Connection		
Address:	192 . 168 . 1 . 3	
Module		
Base:	0	
Slot:	0	

Address: Set the PLC communication address connected to the PC.(If connected to another communication module, enter the communication address of that module.)

Base: Set the base information of the module connected to the drive.

Slot: Set the slot information of the module connected to the drive.

💷 🗋 🖬 🔏 🐼 Ο 🔇 🗩 DRV - DriveView 9 Home Tools New Open Add Delete Compare Report Stop and Forward «--» «=> 💽 🖬 📩 🎦 ✓ Event Log Disconnect Settings Open Parameter From Drive Write arameter EEPROM History Read Save Stop and Reset Project Online Drive Contro **→** ₽ × DRV × Favorite Code Parameter Name Write Value Drive Value Attributes Unit e(H100) - TCP\_192.168.1.111@B00501 
 Image: Creating of the second secon R/W Hz R/W R/W sec R/W sec 5 KPD H.O.A Lock 6 Cmd Source R/W R/W E ADV 7 Freq Ref Src
 8 AUTO Mode Sel R/W R/W 圖 CON 9 Control Mode 11 JOG Frequency R/W E COM E PID E PID R/W Hz 12 JOG Acc Time R/W sec R/W sec I2 JOG Acc Time
 I3 JOG Acc Time
 I3 JOG Dec Time
 I4 Motor Capacity
 I5 Torque Boost
 I6 Fivel Boost
 I7 Rev Boost
 I8 Base Freq
 I9 Start Freq
 I9 Start Freq
 I2 JMax Freq
 I2 JMax Freq
 I2 JMax Freq 118 E AP1 R/W R/W TE AP2 画 AP3 一冊 PRT 一冊 M2 R/W % R/W Hz R/W Hz TH APO Favorites R/W Hz 1 Hz / Rpm Sel R/W Logs Trips 
 24 Hand Key Sel

 25 HAND Cmd Freq

 26 HAND Ref Mode

 30 kW/HP Unit Sel
 R/W R Hz R/W R/W tił) 98 I/O S/W Ver Event Log • # × vent Occurred Time Event Description 2023/07/25 16:36:10 vent Log Trip

If connected after setting, it can be used as if the drive was directly connected.

Drive access information is displayed with the following meaning.

TCP_192.168.1.111	@	B00	S00
drive address	connect	base information	slot information

# **5 Other Screens**

# 5.1 Event

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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
of 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.

➡ Occurred Time 2020/02/13 11:54:42	Protocol-Station No.(IP) R	TU_5	
→ On Time 0/0/10 00:22	Node Name N	ewDrive(S100)	
Run Time 0/0/2 03:39	Capacity 7	5 kW	
Trip Information	Status Information		
No. Trip Name	Parameter	Value	Unit
🔛 1 No Motor Trip	111 Output Frequency	0.00	Hz
	111 Output Current	0.0	A
	11 D-Axis Current	0.0	A
	111 Q-Axis Current	-0.1	A
	111 Inverter State	Steady	
	11 DCLink Voltage	288	V
	111 Inverter Temperature	32	C
	11 Digital Input Status	P00000000000	В
	111 Digital Output Status	b000010	В

[Chat Dialog Description]

- a. Occurrence Time: Shows the time of the trip occurrence.
- b. Operation time: Displays the time of the trip based on the drive's operation time. (Omissible)
- c. Run time: Displays the time of the trip based on the cooling fan's operation time. (Omissible)
- d. Communication method-Station number (IP): Shows communication method of the drive and the Station number (IP).
- e. Model Name: Shows the model name.
- f. Capacity: Shows the capacity.
- g. Detailed trip information: Shows the detailed trip information upon trip occurrence.
- h. Detailed Status Information: Shows the main parameter values upon trip occurrence.

# 5.3 Monitor

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The parameter values from the connected drive are displayed in the monitor window.

### 1 Parameter Registration

After selecting the parameters to monitor in the parameters window, you can register them using a mouse drag & drop function.

Monitor					<b>▼</b> ₽	×
Drive Name	Group Name	Code	Parameter Name	Value	e Unit	
Connected Drive	DRV	1	Cmd Frequency	13.00	0 Hz	
Connected Drive	DRV	3	Acc Time	12.0	0 sec	
Connected Drive	DRV	4	Dec Time	30.0	0 sec	

### 2 Unregister Parameter

After selecting the parameter you want to cancel, select the delete button, or if you want to cancel everything, select delete all.

Monitor					
Drive Name	Group Name	Code	Parameter Name	Value	Unit
Connected Drive	DRV	1	Cmd Frequency	13.00	Hz
Connected Drive	Сору	3	Acc Time	12.0	sec
Connected Drive	Paste	4	Dec Time	30.0	sec
	Delete				
	Clear				

### 3 Start/End Monitoring

You can set monitor start/end for parameters registered in the monitor window.



# 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.

### 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.

[USF] 2	: User Input 1-A			
Group:	USS			
Code:	[31]Void Para 1	+	Setting	+
► Value:	0x1D1F	Hex		
Default	0-000			
Derault.	0x0000			
Current:	0x0000			
Max.:	0xFFFF			
Min.:	0x0000			
				-
-		11	<b>c</b> 1	11

[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.



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### 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.

If connected by communication, parameter values can be monitored.

## 6.2 Advanced User Sequence

We have improved the existing user sequence. The improvements are as follows.

- Maximum number of blocks : 100
- Maximum number of block inputs and outputs : 32(variable depending on block)
- Free screen arrangement(reading and writing possible within the drive)
- Provides real-time parameter value monitoring function



## ① Caution

This is a feature that only operates in **S300** models.

## 6.2.1 Screen Arrangement

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	T NewProject - DiteView 5	- 0 X	
New Open Add Delete	Congere Report Discovered Conjug. Cong. EXPECTAMINANY Program Payment		
Project	Online Drive Control View		
Project 🔹 🖣 🗙			
E D NewProject *	Anina Instit	🕅 Function List 👻	
⊕ E Connected Drive(S	0.020 904	⊿ Etc ▲	
⊟ New Item(\$300) - 1	4.96	- Comment	
- Detail Informati-	AT BURDET	✓ Analog Input	
E-SR Parameters	Diription foldpare Anti Type Select	- 1300 Analog Input1 1201 Analog Input2	
M DRV	Diversitie 21 + 1 h	- 1302 Analog Input3	
- E MOTI		✓ Analog Output	
- WVF1	Diversity Att = y1 Recent	- 100 Analog Output1	
- R VEC1	Diversitier Make Function 1 Value Function 1	tion2 - 101 Analog Output2	1
- MOT2	0.00 807 0.517	✓ Communication	<b>-</b> − n
—展V/F2	Determined All + pit Resert	- 800 ModbusMaster1	
- IR VEC2	Diversite In the New York Construction of the		
-BADV	Ar taiwark the first the f	User Sequence List •	
Gree	Diversions Att-yf Amant 22 Monard 1 Molecular Att-yf Amant 1 Molecular	No Name	
- M DIN	Diversitie (PAL Drate) Address (PAL Drate)	2 Dive	
-MAN	A A A A A A A A A A A A A A A A A A A	3 Digital Input1	
- NOUT	Dire stur M1-y2 Nover / A-8-C	4 Analog Input1	
-M XDIN	Diversitie Mitanting / Material Material Parallel	5 Value Function3	
-R XAN	A Garany	6 Value Function2 7 Value Function1	
-M XOUT	Diversible Att UM Cain	8 Analog Input2	
M PHU M COT			
-S DIAG			
-WINTC	Analog Input2		
-RINTM	0.127 90.0		
- MUSBC	A2 Musler(2) 100 %	N	
- NRT			<b>←</b> C
-HENC	Tain the second s	- 1 - 2	U U
-BEPI1	ny		
-BEP12	inp PC inne Unive Name Protocol-Station No.(IP) Model Capacity Imp		
- MPOS1			
- M POS2			
- M WEBT			
- MUS			
- MUSL			
- M USV			
BUSP V			
•	Event Log Monitor Step		
Ready	New Item(\$300) USB. Online 8 / 100 (8%) x	c1433, y:1 109% + _d	
	т	T	
	1	1	
		-	
	ا_	•	
	Q	e	
	6	-	

- a. Displays the User Sequence screen
- b. Displays description and function list
- c. Displays a list of functions displayed on the screen(shows the flow chart as well)
- d. Display number of functions used(including maximum number)
- e. Display mouse coordinates on screen

## 6.2.2 Block Description



#### [Explanation]

- a. Display descriptive statement
- b. Display function block



- 1. Shows block name
- 2. Shows block ID
- 3. Shows block order
- 4. Shows the values of input parameters
- 5. Shows the names of input parameters
- 6. Shows the names of output parameters
- 7. Shows output parameter values
- c. Display output information for connected blocks

## 6.2.3 Block Settings

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## 6.2.3.1 Function Block

After selecting the function to add from the function list, you can add it by mouse drag & drop on the screen.

## 6.2.3.2 Description

You can write a description within the screen. You can select a description item from the function list and add it by drag & drop.

Comment	×
Comment:	
(AI1 + AI2) / 2 execute	•
	•
OK Can	el

## 6.2.3.3 Input/Output Parameter

You can set input/output parameters for a function. If you select the function you want to change and double-click it, the dialog box below will be displayed.

✓ Input		
AI1 Type Select	Unipolar Voltage	
AI1 + x1 In	Drive value	
AI1 + y1 Percent	Drive value	
AI1 + x2 In	Drive value	
AI1 + y2 Percent	Drive value	
AI1 - x1 In	Drive value	
AI1 - y1 Percent	Drive value	
AI1 - x2 In	Drive value	
AI1 - y2 Percent	Drive value	
AI1 Quantizing	Drive value	
AI1 LPF Gain	Drive value	
<ul> <li>Output</li> </ul>		
AI1 Monitor[%]	0.00	

After selecting the parameters to change, you can set them to 3 types.



- 1. Drive value : Use the value provided by the drive.
- 2. Parametric value : You can directly enter a value into the parameter.
- 3. Connected parameter value : You can select outputs and general parameters of other functions.

## 6.2.4 Monitoring

You can monitor the set user sequence. Block and input/output parameters cannot be changes during monitoring.

📙 🗋 🖬 🖾 🙆 🔘 🔍	•			NewProject - D	riveView 9			- 0 ×
FILE HOME TOOL	5							
Parameter Options Connectio	n Convert Check for OS Datafile Download	Run Stop Start Stop	Theck for Update					
To	ools	Advanced User Sequence	Information					
Project 👻 🔻 🗙	Detail Information ×	DRV × New Item.main ×						<b>T</b>
E D NewProject *	Disorder Williage Dire scher Dire scher	Analog Input1           0:300         30 or           All Standard         30 or           All Standard         41 MembryD           All Standard         41 or           All Standard         41 or           All Standard         41 or           All or         41 or           All Ormont         41 or           All Ormont         41 or	200	0 01 Manhor[9] 90,0 0302 10 Manhor[9] 9 0 40 4+8+C 0	Value Function 1 50 Stor Water Dogo 401 Space 401 Space 401 Space	Pic and Days Pic Days 2 JATEC	Value Function2 0.811 Value Function2 Value12 Input Value12 Input Value12 Input Value12 Input Value12 Input	
- M PRT	121		/					M
- INTC								
-BINTM	Monitoring Window		. Materia					· · ·
E USBC	Program Funct	on Parameter	Value	Init 20.00				· ·
- VIRT	2 main User B	lock1 Dec Time	1.0	0 30.00				
ENC .	3 main User B	lock1 1st Freq Ref Sr	c Keypa	d Keypad				
EPI1	4 main User B	lock1 1st Command 5	iource Keypa	d Ex/Rx-1				
EPI2	5 main Drive	DI1 Status	0	110 110				
M POST	6 main Drive	Run Reverse	0	110 110				
E POSZ	7 main Drive	Value03 Output	t	0 0				
M WEBT	8 main Drive	Acc Time	0.0	0 20.00				
E US	9 main Drive	Dec Time	0.0	0 30.00				*
E USL	Trip							<b>▼</b> # ×
E USV	Trip PC Time	Drive Name Prot	ocol-Station No.(IP) Model	Capacity Trip				
BUSM								
P Adv User Service								
- D main								
E E Logs								
Trips								
Irends								
- E #New								
< >	Event Log Monitor Trip							
Ready	New Item(S3	00) USB, Online				8 / 100 (	8%) x:1129, y:2	100% - + "i

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## 6.3 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.

Caution

This is a feature that only operates in H100 models.

## 6.3.1 Start Operation

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

B B B File Home Tools	Time Event - DriveView 9
New Open Add Delete Compare Report	Image: Connect Settings     Open     Parameter Parameter EEPROM History     Image: Connect Settings     Im
Project 👻 🕂 🗙	Time Event ×
H100     MewDrive(H100) - Offline     Detail Information     GII Parameters     HIN DRV	Use         ○ ON ● OFF         Write         Read           Date and time         ■         <
	2013-7-07 · : 12:00 요전 · : Synchronize with PC dock
	Summer Time ON OFF Start Date: 4 01 ~ End Date: 11 30
	Time Event         Fevent1Period         Action:         None         Preview
	CEvent Period
H PRT H M2 Favorites O Time Event	Name         Start Time         End Time         SUN         MON         TUE         WED         THU         FRI         SAT           □ Period1         24:00
Trips	Event Exception
上上 #New	Name Start Time End Time Month Day
	Trip
	Trip Occurred Time Drive Name Protocol-Station No.(IP) Model Capacity Trip
	Event Log Trip

## 6.3.2 Function Description

#### 1 Date and Time

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Provides the ability to set the date and time.

If you want to synchronize with your PC watch, click the button to synchronize

2013-7-07 ·	Date and time			
	2013-7-07 🔹 🗘	12:00 오전 🔹 🗘	Synchronize with PC clock	

#### 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 -				
⊖ ON	• 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.

## **Specialized Features**

	a					a				
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								
Period4	24:00	24:00								
Period4	24:00	24:00	Mor	stb. [	224					
Period4  Vent Exception  Name  Exception	24:00 Start Time	24:00 End Time	Mor	nth C	)ay	]				
Period4 Event Exception Exception Exception1 Exception1	24:00 Start Time 24:00	24:00 End Time 24:00	Mor 1	nth C	Day 01					
Period4 Period4  Vent Exception Exception Exception1 Exception2 Exception2	24:00 Start Time 24:00 24:00 24:00	24:00 End Time 24:00 24:00	Mor 1	nth [	Day 01 01					
Period4  Vent Exception  Name Exception1 Exception2 Exception3 Exception4	24:00 Start Time 24:00 24:00 24:00 24:00	24:00 End Time 24:00 24:00 24:00	Mor 1 1 1	nth E	Day 01 01 01					
Period4  Event Exception  Name Exception1 Exception2 Exception3 Exception4 Exception4	24:00 Start Time 24:00 24:00 24:00 24:00 24:00	24:00 End Time 24:00 24:00 24:00 24:00 24:00	Mor 1 1 1 1	nth E	Day 01 01 01 01 01					
Period4  Event Exception  Kxception1 Exception2 Exception3 Exception4 Exception4 Exception5 Exception5	24:00 Start Time 24:00 24:00 24:00 24:00 24:00 24:00	24:00 End Time 24:00 24:00 24:00 24:00 24:00 24:00	Mor 1 1 1 1 1	nth E	Day 01 01 01 01 01 01					
Period4  Event Exception  Exception1  Exception1  Exception3  Exception3  Exception3  Exception5  Exception5  Exception7  Exc	24:00 Start Time 24:00 24:00 24:00 24:00 24:00 24:00 24:00	24:00 End Time 24:00 24:00 24:00 24:00 24:00 24:00 24:00	Mor 1 1 1 1 1 1 1	nth E	Day 01 01 01 01 01 01 01					

[Chat Dialog Description]

a. Select Event Connection

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 E	vent	8	l
		(AP3 60)	(AP3 62)	(AP3 64)		(AP3 66)		(AP3	72)		Ĩ
		T-Event1Period	T-Event2Period	T-Event3Period		T-Event4Period		T-Event	BPeri	od	
		00000000 100	0 0000000 110	0 0 0 0 0 0 0 0 0 1 0	10	10000001 00	00	000001	0 1	111	
1	Time Period 1				, <b>m</b>	A A		1	· · ·	44	ċ
	Period1 StartT									-+-	è
	Period1 Stop Period1 Day										
i	Time Revied 2										
	Period2 StartT									ш	
	Period2 Stop T			!							
ļ	Period2 Day										
	Time Period 3										
	Period3 StartT									-4	
	Period3 Day										
í											
	Time Period 4										
	Period4 Stop T										
	Period4 Day										
1	Except Date 1										
	Except Date 1										
	Except1 Stop T										
ļ	Except1 Date										
	Except Date 2										
	Except2 StartT										
	Except2 Stop T										
ľ	Except2 Date										
	1										
	Except Date 8										
	Except3 StartT										
	Except3 Stop T										

b. Event Operation Settings

You can select the operation following the event settings.

Settings			
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

ſ

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		٧	
	V		V		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 Write/Read

Read/write parameters related to scheduling operation can be performed. Online and offline movements are different, so please check and operate.

/	Time Event	×		
	Use O ON	• OFF	Write	Read
	Data and tim			

[Offline]

Write: Saves the set information in the screen to the parameter.

Read: Read parameter information to display in-screen.

[Online]

Write: Save the information you set on the screen to a parameter and write the parameter to the drive.

Read: Read parameters from the drive, save parameters, read parameter information, and display inscreen

## 6.4 Wizard

ſ

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

## 6.4.1 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.)

iS7 Wizard						×
	1.Motor & Control					
1. Motor & Control	Control Mode : V	/F	<b>•</b>			
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	6UHz	60Hz	
	Pole Number	4	48	2	4	
	Rated Silp	40	3000	1.0	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	70	480	180	U V	
	Efficiency	/2	100	/0	/2 %	
	Inertia Rate	220	400	0	220 1/	
7. Digital Output	AC Input Voit	220	480	U	220 V	
9. I1 Analog Input 10. Analog Output 11. Install						
		Previous	Nex	t	Cancel	

## 6.4.2 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

Set the main parameters for motor & control.

1.Motor & Control					
Control Mode : Ser	nsorless-1		<ul> <li>Torque Contr</li> </ul>	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	rpm
Rated Curr	3.6	1000.0	1.0	3.6	Α
Noload Curr	1.6	1000.0	0.5	1.6	A
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.

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

2.Speed & Torque - Torque



ſ

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

#### 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	
Do 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						
Sibigital input						
P1 Define	FX	(	<b>→</b> ^	v−−P1	·	
P2 Define	RX	(	<b>∽</b> `	°- Р2	2	
P3 Define	BX	(	✓	ю Р3		
P4 Define	RST	(			+ -	
P5 Define	Speed-L	(	<b>▼</b> `		2	
P6 Define	Speed-M	(	<b>▼</b> ^	V-P7	7	
P7 Define	Speed-H	(	<b>∨</b> ^	V PE	3	
P8 Define	JOG	[	~	CM	1	
Out Freq	~~	Out Freq		Out	Freq	
FX		UP		FX	П	
Speed-M Speed-H		Down		. R)	<	
Speed-X		FX _		3W	ire	

Set the parameters corresponding to Digital Input.

#### 6 Multi-Step Speed

٢



Set the parameters corresponding to Set Multi-Step Speed.

#### 7 Digital Output



Set the parameters corresponding to Digital Output.

## 8 V1 Analog Input

Γ

8.V1 Analog Input				
Unip	olar		Bipolar	
100 -		10	-10V~	+10V Input VR V1 5G
Parameter	Default	Max	Min	Value Unit
V1 Filter	10	10000	0	10 msec
V1 Volt x1	0.00	10.00	0.00	0.00 V
V1 Perc y1	0.00	100.00	0.00	0.00 %
V1 Volt x2	10.00	10.00	0.00	10.00 V
V1 Perc y2	100.00	100.00	0.00	100.00 %
V1 -Volt x1'	0.00	0.00	-10.00	0.00 V
V1 -Perc y1'	0.00	0.00	-100.00	0.00 %
V1 -Volt x2'	-10.00	0.00	-10.00	-10.00 V
V1 -Perc y2'	-100.00	0.00	-100.00	-100.00 %
V1 Inverting	No	Yes	No	No
V1 Quantizing	0.04	10.00	0.04	0.04 %

Set the parameters corresponding to V1 Analog Input.

#### 9 I1 Analog Input



Set the parameters corresponding to I1 Analog Input.

#### 10 Analog Output

ſ

10.Analog Outpu	t				
				_	7 0
AO1 Mode	Fre	quency	×	AC	)1 — a(⊻)
					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	Fre	quency	<b>v</b>	AC	
					0~20mA
Parameter		Default	Max	Min	Value Unit
AO2 Gain		80.0	1000.0	-1000.0	80.0 %
AO2 Bias		20.0	100.0	-100.0	20.0 %
AO2 Filter		5	10000	0	5 msec
AO2 Const %		0.0	100.0	0.0	0.0 %

Set the parameters corresponding to Analog Output.

#### 11 Install

Vizard			×
[DRV]Control Mode : Default:V/F [DRV]Torque Control : Default: (ADV]Ace Patter : Default:Lines (COV]See Patter : Default:Lines (DBV)Patter : Default:Str.; Default:Str.; [DIV]P bofne : Default:Str.; [DIV]P bofne : Default:Str.; [DIV]P bofne : Default:Str.; B parameters are changed. 8 parameters are changed. Click Install Button.	:Sensorless-1 Ho, : r, S-curve r, IS-curve pad-1, int 42 ; -Bipolar sternal Trip peed-X	Yes	
	Run Wizard	Install	Cancel

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.

## **Specialized Features**

## 6.5 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.

## 6.5.1 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.

## 6.5.2 Convert Parameter

Select the Menu [TOOLS] - [Converter]

## **Specialized Features**

Settings Source Drive: Source				0.8
Source Drive:  IGSA  2.70  Drive to convert:  Name of the drive to convert:  Options  Compare converted results  View excluded parameters  Precautions> This function automatically converts parameters between selected inverters. Please take note that the following parameter are not applicable in the conversion.	ettings			
Drive to convert:     Name of the drive to convert:     NewItem     Options     Compare converted results     View excluded parameters	iource Drive:	iG5A	• 2.70	•
Name of the drive to convert:      Options      Compare converted results      View excluded parameters      Precautions>      This function automatically converts parameters between selected inverters. Please take note that the following parameter are not applicable in the conversion.	Drive to convert:		-	12
Options     Compare converted results     View excluded parameters <pre></pre>	Name of the drive to convert:	NewItem		
Compare converted results     View excluded parameters	ptions			
<precautions> This function automatically converts parameters between selected inverters. Please take note that the following parameter are not applicable in the conversion.</precautions>	Compare converted results	View exc	luded param <del>eters</del>	
<ul> <li>Read-only parameters, PID control, Sensorless vector control, Motor rated voltage, Stall prevent, Up/Down, Draw operation, Speed search, Motor capacity, Load inertia rate, Digital input/output settings, Kinetic energy buffering(KEB), Communication parameters.</li> <li>Please refer to the user manual for the setting direction of the above functions.</li> </ul>	recautions> is function automatically converts par ase take note that the following para Read-only parameters, PID control, 3 Motor rated voltage, Stall prevent, U Speed search, Motor capacity, Load Kinetic energy buffering(KEB), Comm ase refer to the user manual for the	rameters between s ameter are not app Sensoriess vector o Ip/Down, Draw ope inertia rate, Digital nunication paramete setting direction of	selected inverters. licable in the conversion control, eration, input/output settings, ers. f the above functions.	n.

[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.

NewItem1(G100)	
Newtem1(G100)	NewItem1     Detail Information     =Favrites     #APV     #APO     #APD     #APP     #BAS     =COM     #COM     #COM     #COM     #CM     #R      #M2     #U      #R      #CM     #R      #CM     #R      #CM     #R      #CM     #CM
242°	SH2
	Close

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
EU2.00	

## 6.6 OS Download Function

This function allows you to download OS files to the drive.

#### ① Caution

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This is a feature that only operates in S300 models.

## 6.6.1 Run

If DriveView 9 is running, select Menu-[Tools]-[OS Download].



If you need to run the program separately, double-click the DriveOS.exe file in the DriveView 9 installation path.

## **Specialized Features**

<ul> <li></li></ul>	6) > LS > DriveView9 ~ じ			1
Name	<ul> <li>Date modified</li> </ul>	Туре	Size	
CrashRpt.dll	11/3/2023 5:27 PM	Application extension	174 KB	
Crashrpt_English	11/3/2023 5:27 PM	Configuration settings	9 KB	
Crashrpt_Korean	11/3/2023 5:27 PM	Configuration settings	7 KB	
CrashRptConfig	11/28/2023 9:47 AM	XML Document	1 KB	
TrashSender	11/3/2023 5:33 PM	Application	1,268 KB	
M dmDataFileReader.dll	11/3/2023 5:28 PM	Application extension	179 KB	
🗟 dmParmMan.dll	11/3/2023 5:28 PM	Application extension	53 KB	
2 DriveHistory	11/3/2023 5:27 PM	Microsoft Access Dat	356 KB	
🕭 DriveOS	11/3/2023 5:33 PM	Application	89 KB	
DriveProxy.dll	11/3/2023 5:27 PM	Application extension	128 KB	
DriveProxyServer	11/3/2023 5:33 PM	Application	55 KB	
DriveStub.dll	11/3/2023 5:32 PM	Application extension	1,231 KB	
DriveView 9	11/3/2023 5:33 PM	Application	373 KB	
DriveView 9.exe.manifest	11/3/2023 5:32 PM	MANIFEST File	1 KB	
DriveViewCore.dll	11/3/2023 5:31 PM	Application extension	1,862 KB	
FPSPR70.ocx	11/3/2023 5:27 PM	ActiveX control	1,882 KB	
fpSpru70.ocx	11/3/2023 5:27 PM	ActiveX control	1,830 KB	
iPlotLibrary.ocx	11/3/2023 5:27 PM	ActiveX control	2,229 KB	
🗟 LS485.dll	11/3/2023 5:29 PM	Application extension	66 KB	
MainRes.dll	11/3/2023 5:32 PM	Application extension	7,107 KB	
MainRes_KOR.dll	11/3/2023 5:32 PM	Application extension	7,089 KB	
Media.dll	11/3/2023 5:29 PM	Application extension	175 KB	

## 6.6.2 Download Settings

			City Daths City Isorstill	#Downloadc#AcDriveDlatform AddrShift row10
1	<ul> <li>Drive infomation</li> <li>Madel</li> </ul>	5200	File Paul.	
	Model	5300	OS File Infomation	
	OC Made	1.UU Application	SW Version	01.00
	Dessibility	Application	Model	S300
	Possibility	TRUE	Build Date	2021-12-07
			Build Time	10:46:22
S	SW Version Displays the Drive sol	ftware Version.		Download

#### [Dialog box description]

- a. Drive: You can view the information of the drive to download the OS. You can connect to communication through the "Setting" button and click "Connect". Once the connection is complete, you can check the information of the connected drive in Drive Information.
- b. OS File: You can view OS file information to be downloaded to the drive. Select the OS file to download through the "File Path" button. When downloading the final OS file, select the "Download" button.

# Warranty

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## 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	LS ELECTRIC	Universal	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**

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 LS ELECTRIC nameplate
  - If the warranty period has passed

#### Homepage

Go to the LS ELECTRIC Homepage (*https://www.ls-electric.com*) to get useful information on products as well as service information.

# **UL** mark

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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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