



AC Servo Drive

E-DHASxxE-F series (EtherCAT)

Quick Start Guide

V 0.1

Contents

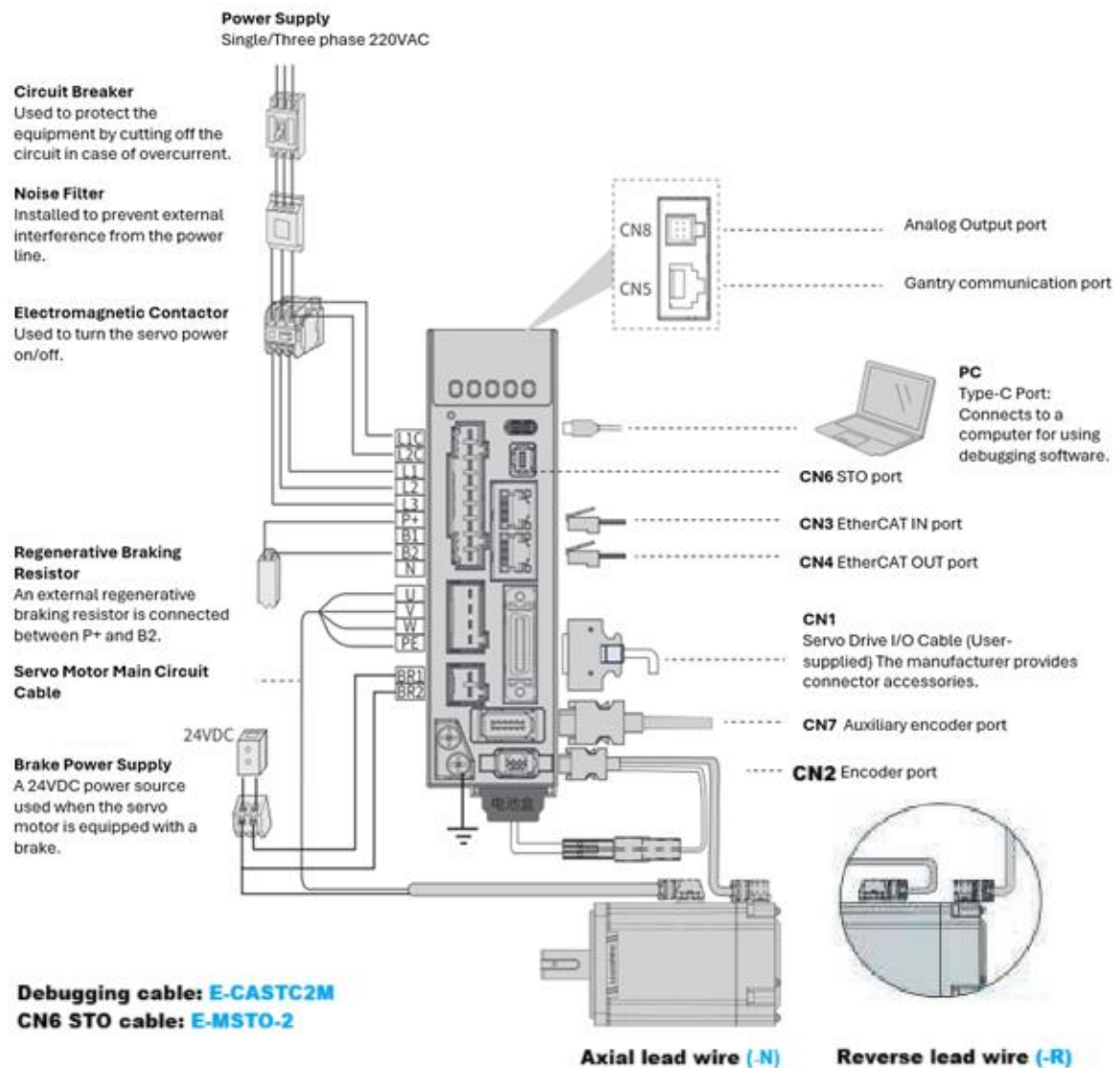
1. Wiring	3
Main Circuit Wiring Diagram	3
Control Signal Connector - CN1 Pin Assignment	4
2. Precautions Before Operation	7
3. EDrive Configuration Software	8
Download EDrive Configuration Software.....	8
Installation	8
Open Software	8
Connect to PC	9
Trial Run	9
Auto Tuning	10
Parameter Backup and Download	12
4. Change Motion Direction	15
5. Change Electronic Gear Ratio	18
6. Parameter Setting	22
7. Controller Axis Configuration Precautions	24
8. PLC EtherCAT Communication Example.....	25

Version Update Record

Version	Update date	Update content
V1.0	2025-07	First release

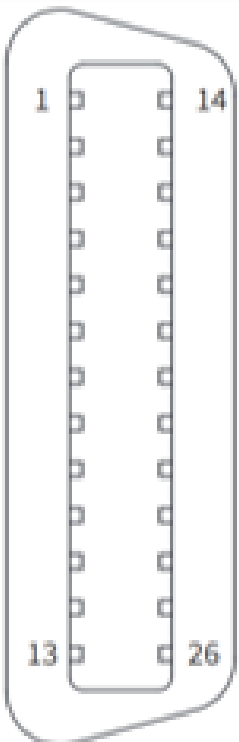
1. Wiring

Main Circuit Wiring Diagram



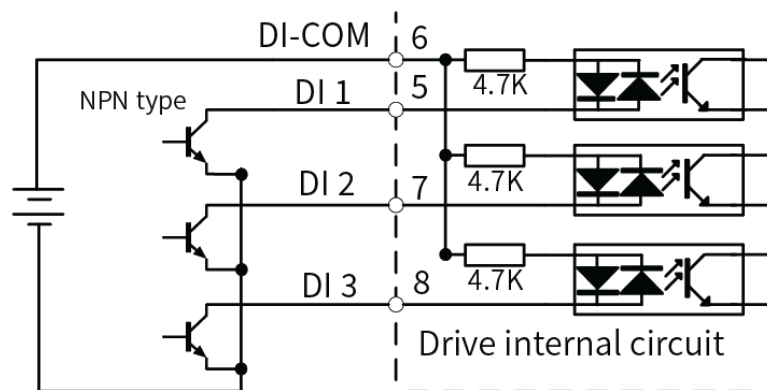
Control Signal Connector - CN1 Pin Assignment

To ensure I/O signal to not be affected by electromagnetic interference, a **shielded twisted pair cable** is recommended for this application.

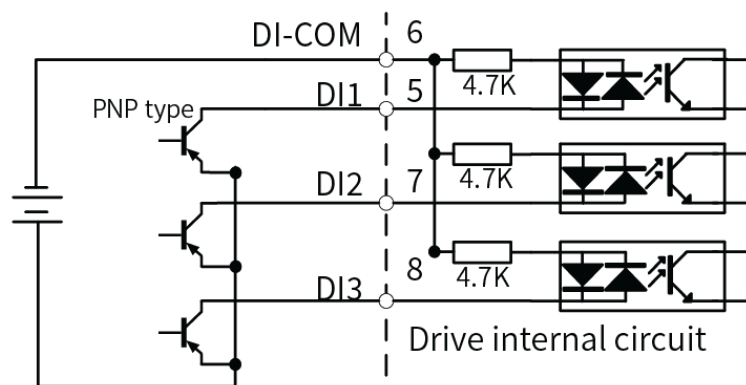
Port	Diagram (soldering side of the connector)	Pin	Label	Signal	Description (default function)
CN1		6	DI-COM	Input	Common digital input
		5	DI1	-	Digital input 1
		7	DI2	POT	Positive limit switch
		8	DI3	NOT	Negative limit switch
		9	DI4	HOME-SWITCH	Homing switch
		10	DI5	-	Digital input 5
		11	DI6	-	Digital input 6
		12	DI7	-	Digital input 7
		13	DI8	-	Digital input 8
		1	DO1+	BRK-OFF+	External brake released signal
		2	DO1-	BRK-OFF-	
		25	DO2+	S-RDY+	Servo ready signal output
		26	DO2-	S-RDY-	
		3	DO3+	ALM+	Alarm output
		4	DO3-	ALM-	
		17	A+	Differential output	Phase A frequency divider output
		18	A-	Differential output	
		20	B+	Differential output	Phase B frequency divider output
		19	B-	Differential output	
		21	Z+	Differential output	Phase Z frequency divider output
		22	Z-	Differential output	
		16	GND	Signal ground	Signal ground
		14	AI1 -	Analog input 1-	Analog input 1
		15	AI1+	Analog input 1+	
		23	AI2+	Analog input 2+	Analog input 2
		24	AI2-	Analog input 2-	
		Frame	-	FG	Ground

1. General digital input connection

NPN connection:

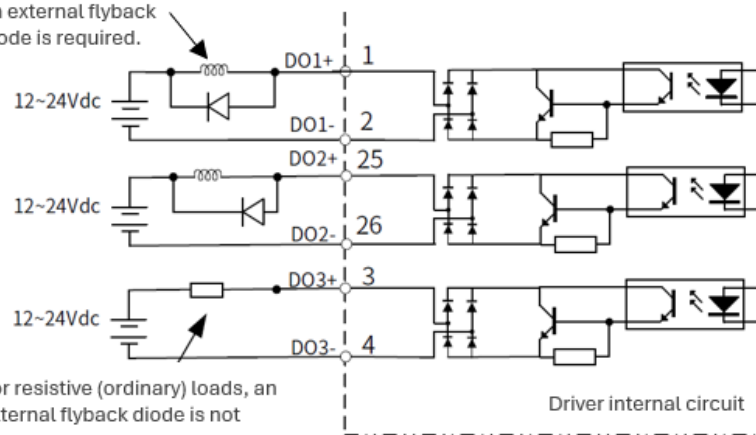


PNP connection:



2. General digital output circuit

For inductive loads,
an external flyback
diode is required.

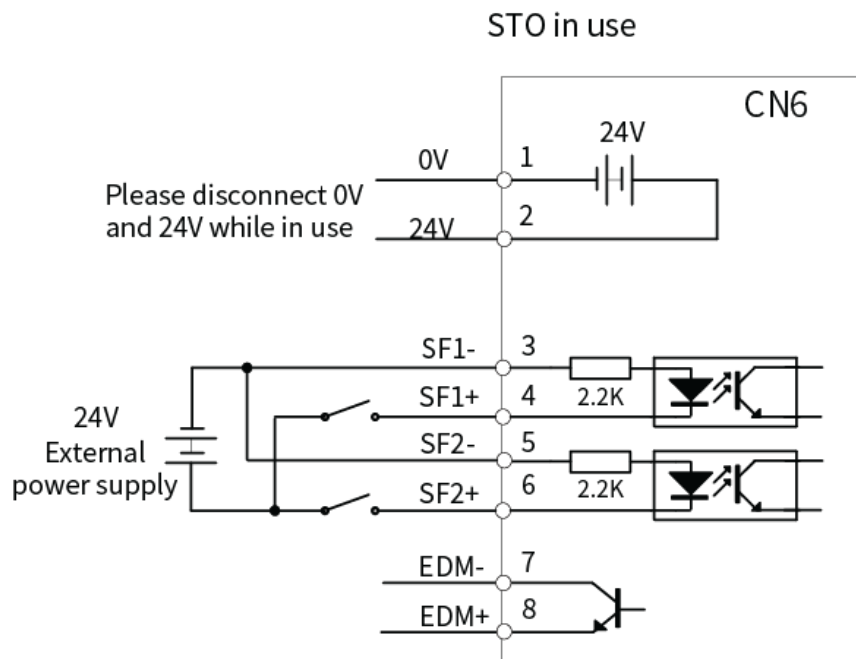


For resistive (ordinary) loads,
an external flyback diode is not
necessary.

3. STO wiring diagram

STO (Safe Torque Off) function: Cut off motor current supply physically (through mechanical means). The driver comes with an STO terminal pre-installed with short-circuit wiring. If the STO function is not used, do not remove the STO terminal.

STO wiring diagram when in use:



2. Precautions Before Operation

The driver and servo motor must be reliably grounded. The PE terminal of the driver must be securely connected to the equipment ground.

Ensure all wiring is correct before powering on.

An emergency stop circuit must be integrated to ensure the power supply immediately stops in case of a fault.

After a driver fault alarm, verify that the issue has been resolved before restarting, and ensure the SRV-ON signal is inactive.

Do not touch the driver within at least 5 minutes after power is turned off to prevent electric shock.

If the driver panel is unresponsive after powering on, check whether the input voltage is within the rated range and ensure there are no phase losses.

3. EDrive Configuration Software

Download EDrive Configuration Software.

Download link:

https://www.misumi.com.cn/linked/archive/me/MISUMI_EDrive_v1_0_0.zip

Installation

Just unzip or pull the 'MISUMI EDrive_v1.0.0' folder to the desktop.

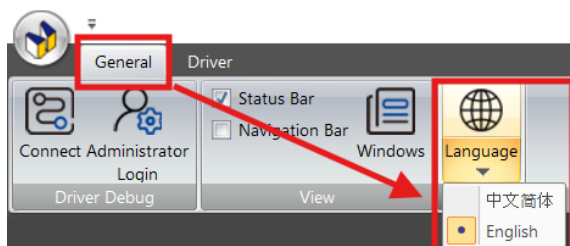
☐ Name	Date modified	Type	Size
EDriver_v1.1.0_alpha	6/30/2025 10:55 AM	File folder	
E-DHASE_V1.03.xml	6/26/2025 5:06 PM	Microsoft Edge HT...	157 KB

Open Software

Double click 'EDrive.exe' to open the software.

☐ Name	Date modified	Type	Size
Driver	6/30/2025 10:55 AM	File folder	
DriverDefaultPara	6/30/2025 10:55 AM	File folder	
Help	6/30/2025 10:55 AM	File folder	
Init	6/30/2025 10:55 AM	File folder	
Log	1/3/2025 5:11 PM	File folder	
Motors	6/30/2025 10:55 AM	File folder	
Pic	6/30/2025 10:55 AM	File folder	
Record	10/21/2024 2:26 PM	File folder	
Remark	6/30/2025 10:55 AM	File folder	
Script	6/30/2025 10:55 AM	File folder	
Tools	6/30/2025 10:55 AM	File folder	
DATA.mdb	2/14/2025 10:37 AM	Microsoft Access ...	19,068 KB
EDrive.exe	2/7/2025 11:14 AM	Application	7,085 KB
inp_num.dll	2/7/2025 11:14 AM	Application extens...	8 KB
Interop.dll	2/7/2025 11:14 AM	Application extens...	78 KB

After software opened, go to 'General' and change language to 'English'.

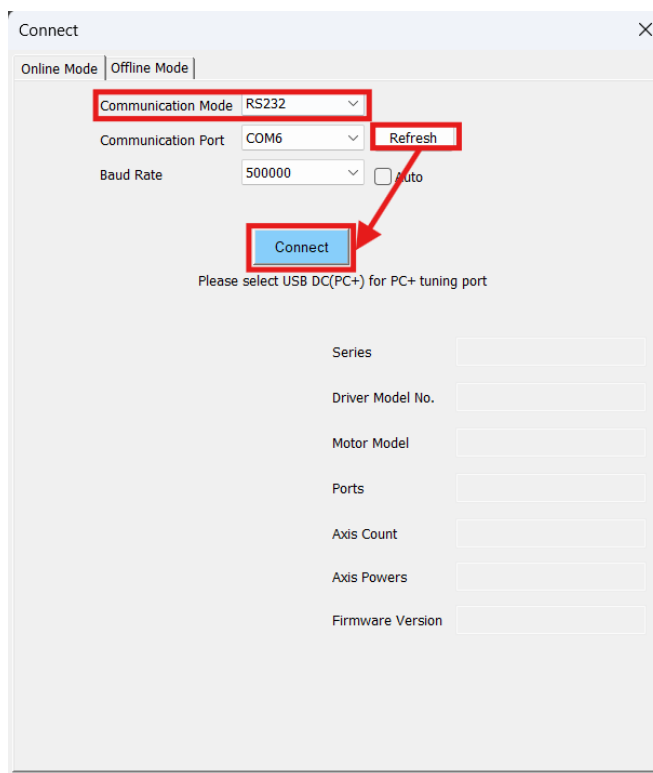


Connect to PC

Please use cable with one side USB type-A and the other side USB type-C.

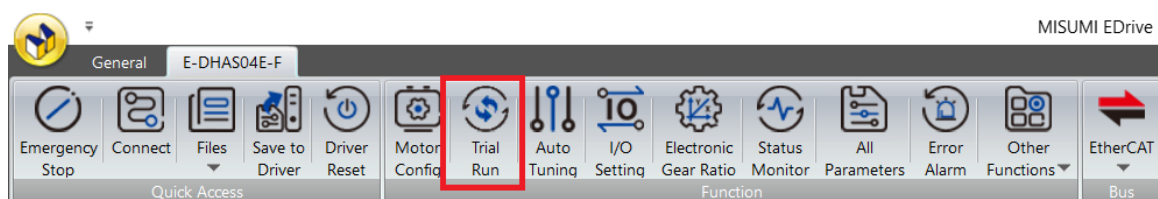


Open EDrive software and start connection. 'Communication Mode' please choose 'RS232', then click 'Refresh', then click 'Connect'.

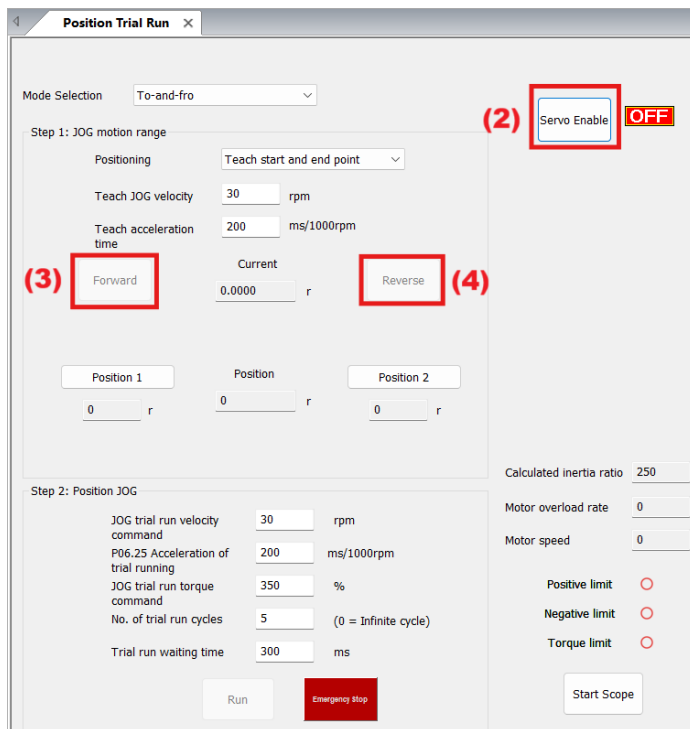


Trial Run

Click 'Trial Run'.

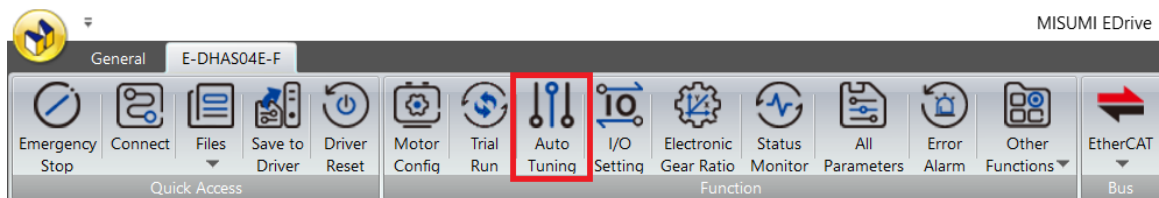


Click (2) 'Servo Enable', then click (3) 'Forward' or (4) 'Reverse', to move the motor.



Auto Tuning

Click 'Auto Tuning'.



Click 'Next'.

Note: Suggest not to change other parameters if not necessary.

E-DHASxxE-F series (EtherCAT type) Quick Start Guide

The 'One-Click Tuning' window displays a sequence of steps: 'Tuning settings', 'Range of motion', 'Tuning operation', and 'Tuning result'. The 'Tuning settings' step is active. It includes three radio button options for 'Tuning response': 'High response [suitable for applications with high mechanical stiffness]', 'Medium response [suitable for applications with medium mechanical stiffness]' (which is selected), and 'Low response [suitable for applications with low mechanical stiffness]'. Below this, the 'Tuning mode' section has 'Positioning mode' selected and 'Track Mode' unselected. The 'Target in position range' section shows 'Unit selection' with 'Encoder unit', 'Command uni', and '0.0001rev' options, and 'In position range' with '20' and '0.0001r' values. A 'Next' button is highlighted with a red box at the bottom right.

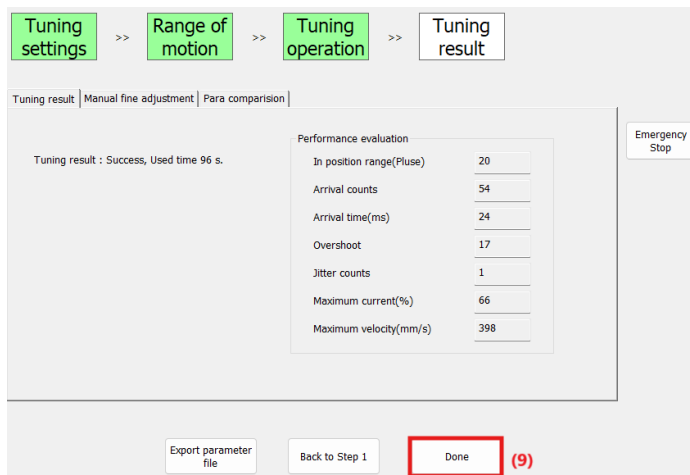
Click (3) 'Servo Enable'. (Note: If driver already connected through EtherCAT, please tick check box 'External enabling disabled')

Click (4) 'Forward'. After motor reaches starting position, click (5) 'Position 1'. Then click (6) 'Reverse'. After motor reaches ending position, click (7) 'Position 2'. (Note: Please always make sure motor is in between of starting position and ending position) Click (8) 'Next', and follow the instruction to finish Auto Tuning.

The 'One-Click Tuning' window shows the 'Range of motion' step. The 'Tuning settings' button is highlighted in green. The 'Motion mode and range' section includes 'Mode Selection' set to 'To-and-fro', 'Teach JOG velocity' at 30 rpm, and 'Teach acceleration' at 200 ms/1000rpm. A 'Servo Enable' button with an 'OFF' indicator is highlighted with a red box and labeled (3). Below this, 'Forward' (4) and 'Reverse' (6) buttons are shown. The 'Position' section has 'Position 1' (5) and 'Position 2' (7) buttons, each with a text input field. A note states: 'Note: Before tuning, start and end point must be set through JOG operation and the position'. The 'Inertia Ratio' section shows 'Default Inertia Ratio' at 250 and a checkbox for 'Disable inertia ratio identification failure alarm'. The 'Tuning speed limit' section shows 'Speed limit' at 1500 rpm and a note: 'Note: This speed limit is only effective in the tuning process. Default value is 50% of the rated'. At the bottom, a 'Next' button is highlighted with a red box and labeled (8), with a warning: 'Warning: The setting distance ranges from 0.5 to 30r'.

Click (9) 'Done', and follow the instruction to save parameters.

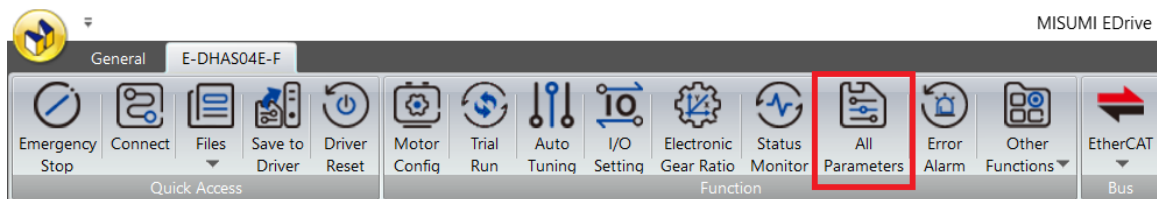
E-DHASxxE-F series (EtherCAT type) Quick Start Guide



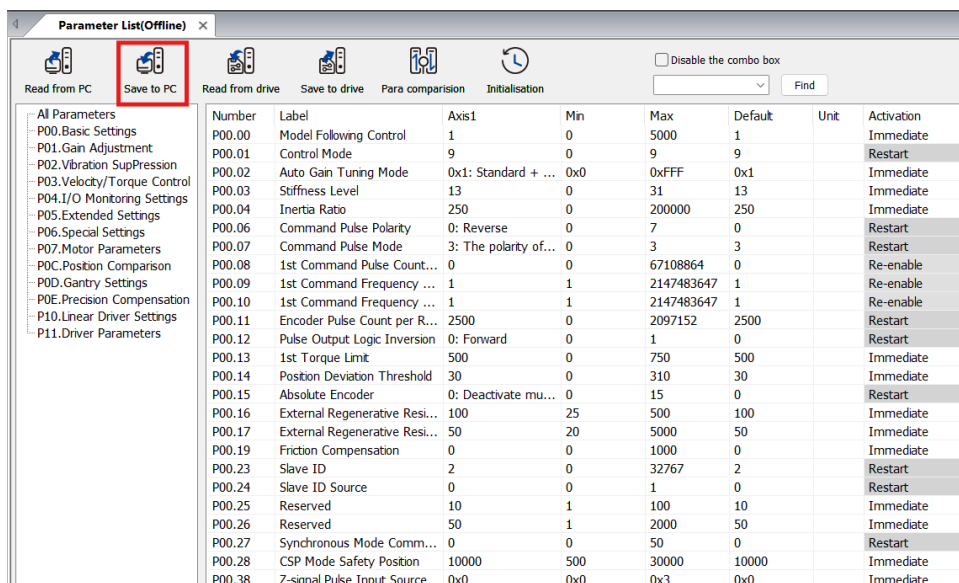
Parameter Backup and Download

Please refer to following steps to backup parameters.

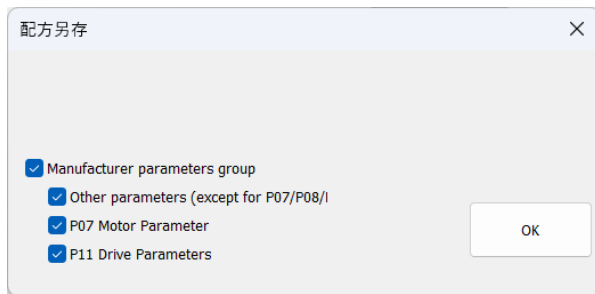
Click 'All Parameters'.



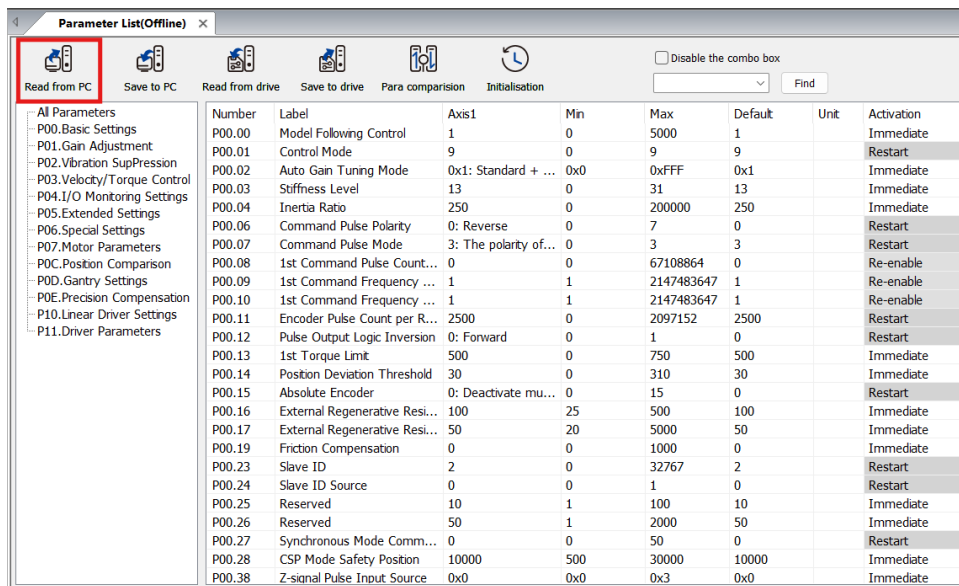
Click 'Save to PC' and follow the instruction to finish saving.



E-DHASxxE-F series (EtherCAT type) Quick Start Guide



When download parameters, click 'Read from PC'.



Choose the parameter file you saved, and it will be shown in a new tab (4). Click (5) 'Save to driver', then click (6) 'Driver Reset'. Follow the instruction to finish saving.

E-DHASxxE-F series (EtherCAT type) Quick Start Guide

MISUMI EDrive

General E-DHAS04E-F (3)

Emergency Stop Connect Files Save to Driver Driver Reset Motor Config Trial Run Auto Tuning I/O Setting Electronic Gear Ratio Status Monitor All Parameters Error Alarm Other Functions EtherCAT Bus

Quick Access

Parameter List Par_B.msm x (4)

Read from PC Save to PC Save to drive (5) Para comparison Help

☐ Disable the combo box

	Number	Label	Axis1	Min	Max	Default	Unit	Activation
P00. Basic settings	P00.00	Model-following bandwidth	1	0	5000	1	0.1Hz	Immediate
P01. Gain adjustment	P00.01	Control Mode Settings	9	0	9	9	model	Restart
P02. Vibration Suppression	P00.02	Real time Auto Gain Adjus...	0x1: Standard + ...	0x0	0xFF	0x1	--	Immediate
P03. Velocity / Torque Contr	P00.03	Real time auto stiffness a...	13	0	31	13	--	Immediate
P04. I/O Monitoring Settings	P00.04	Inertia ratio	250	0	200000	250	%	Immediate
P05. Extension settings	P00.06	Probe signal polarity settin...	0: The comman...	0	7	0	--	Restart
P06. Special Settings	P00.07	Command pulse counts p...	3: Probe 1 and P...	0	3	3	--	Restart
P07. Motor parameters	P00.08	1st command pulse count...	0	0	67108864	0	--	Re-enable
P0C. Position Comparison	P00.09	1st command frequency d...	1	1	2147483647	1	--	Re-enable
P0D. Gantry settings	P00.10	1st command frequency d...	1	1	2147483647	1	--	Re-enable
P0E. Precision compensation	P00.11	Encoder pulse output per r...	2500	0	2097152	2500	P/rev	Restart
P11. Drive parameters	P00.12	Pulse output logic inversion	0: No Reversal	0	1	0	--	Restart
	P00.13	1st Torque Limit	350	0	500	350	%	Immediate
	P00.14	Excessive Position Devatio...	30	0	310	30	0.1rev	Immediate
	P00.15	Absolute Encoder settings	0: Disable mult-t...	0	15	0	--	Restart
	P00.16	Regenerative resistance	100	25	500	100	Ω	Immediate
	P00.17	Regenerative resistor pow...	50	20	5000	50	W	Immediate
	P00.19	Friction compensation setti...	0	0	1000	0	--	Immediate
	P00.23	Slave Alias	2	0	32767	2	--	Restart
	P00.24	Slave Alias Source	0: The master st...	0	1	0	--	Restart
	P00.25	Retain Parameters	10	1	100	10	--	Immediate
	P00.26	Retain Parameters	50	1	2000	50	--	Immediate
	P00.27	Synchronization mode co...	0	0	50	0	--	Restart
	P00.28	CSP mode safe selfrunnin...	10000	500	30000	10000	--	Immediate
	P00.30	Encoder feedback mode	2	0	3	2	--	Restart

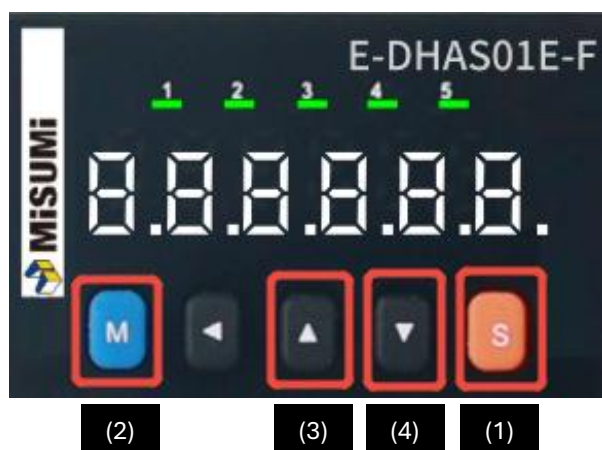
4. Change Motion Direction

If controller pulse train or command is positive direction, but motor moves to negative direction, direction change is needed.

P00.06	Label	Command Pulse Polarity					Valid mode(s)			F
	Range	0~1	Unit	-	Default	0	Activation	Restart	Index	2006h
	Used to change the rotational direction of the motor.									
	Set value	Details								
	0	Polarity of the command is not inverted. The direction of rotation is consistent with the polarity of command.								
	1	Polarity of command is inverted. The direction of rotation is opposite to the polarity of command.								

Method 1: Set with Front Panel

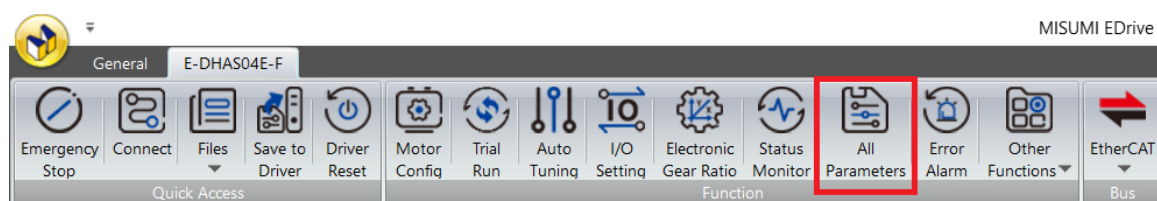
1. Press (1) 'S' button, front panel shows 'd345E'. Press (2) 'M' button, front panel shows 'P00.00'. Press (3) ↑ button and change to 'P00.06', then press (1) 'S' button to show the current 'Command Pulse Polarity' setting.



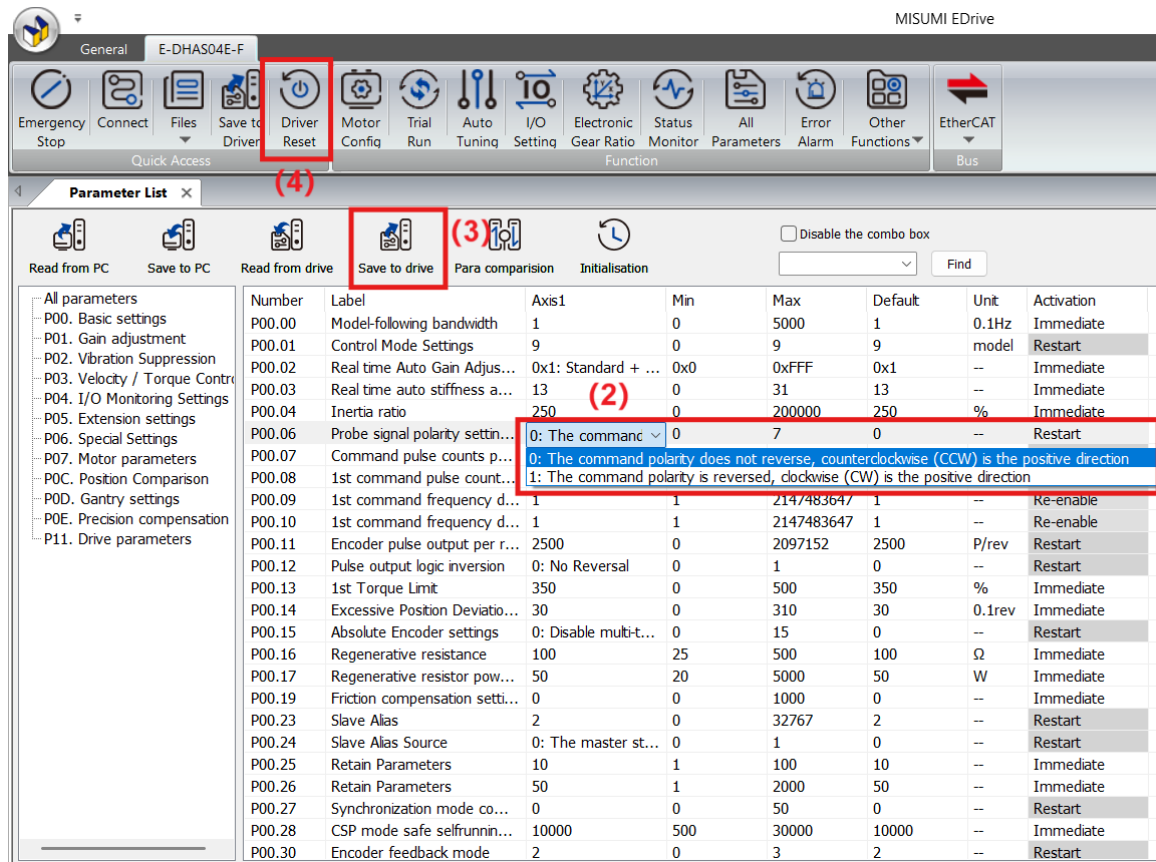
2. If now 'Command Pulse Polarity' setting is '0', press (3) ↑ button and change to '1'. If it's '1', then press (4) ↓ button and change to '0'.
3. After changing the parameter, restart the driver to activate the setting.

Method 2: Change through 'All Parameters' in EDrive software

1. Click 'All Parameters'.

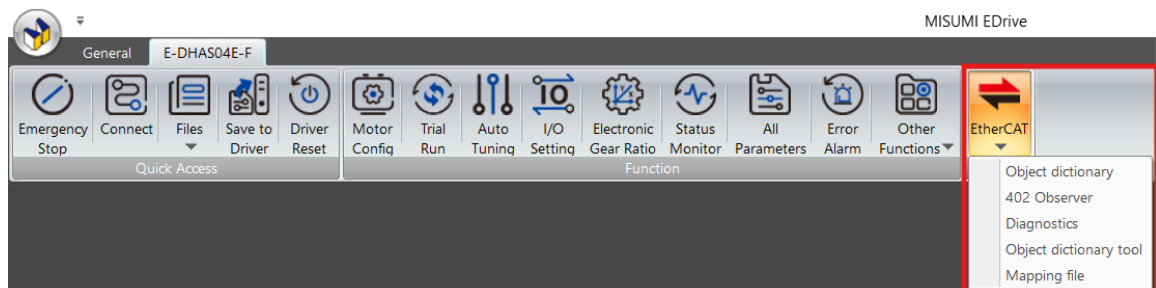


- Change value of (2) P00.06 'Command Pulse Polarity' from '0: Reverse' to '1: Forward' or vice versa. Then click (3) 'Save to drive', and click (4) 'Driver Reset'.



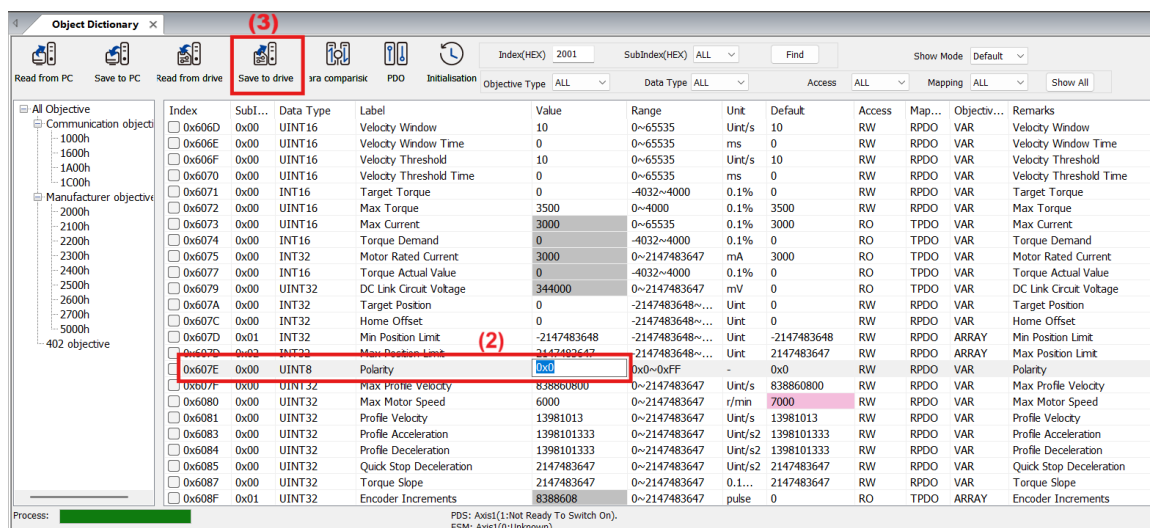
Method 3: Change Object 607E in EDrive software

- Click 'EtherCAT' and open 'Object Dictionary'.



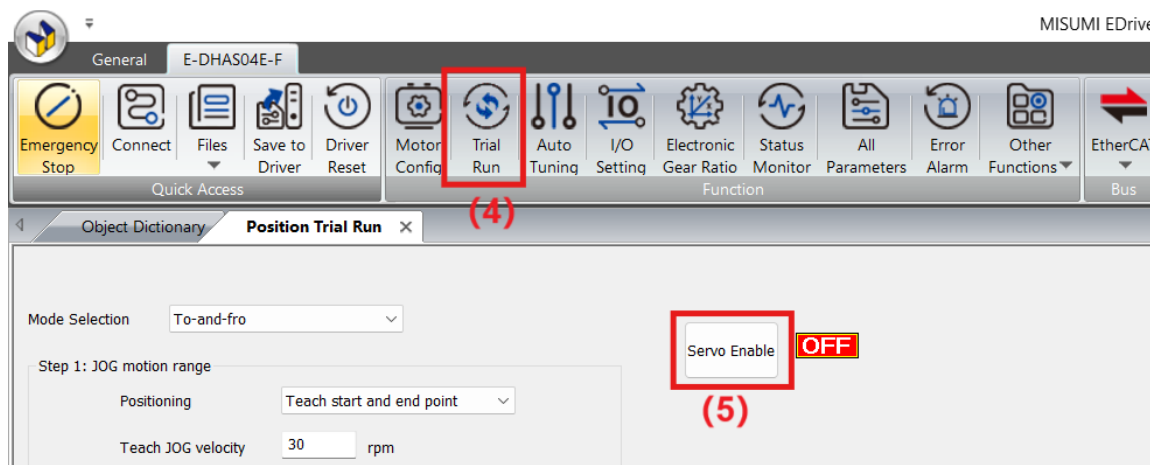
- Click (2) to change the value of Object 607E following below table, then click (3) 'Save to drive'.

E-DHASxxE-F series (EtherCAT type) Quick Start Guide



Mode		Setting Value
Position Mode	PP	0: Rotary direction same as command direction
	HM	128: Rotary direction different from command direction
	CSP	
Velocity Mode	PV	0: Rotary direction same as command direction
	CSV	64: Rotary direction different from command direction
Torque Mode	PT	0: Rotary direction same as command direction
	CST	32: Rotary direction different from command direction
All Mode	F	0: Rotary direction same as command direction
		224: Rotary direction different from command direction

3. Click (4) 'Trial Run' to open the trial run page and click (5) 'Servo Enable' to servo ON.



Note: The motion direction can be changed through object 607E, and suggest changing through 607E.

However, the priority of Parameter P00.06 is higher than Object 607E, which means that Object 607E is active when P00.06 = 0, and Object 607E is inactive when P00.06 = 1.

5. Change Electronic Gear Ratio

If the upper controller's pulse count is insufficient and the speed cannot meet the requirement, the motor command pulse count must be adjusted.

When setting the numerator and denominator for pulse input scaling, set P00.08 to 0 first.

P00.08	Label	1st Command Pulses Count per Revolution					Valid mode(s)			F
	Range	0~67108864	Unit	-	Default	0	Activation	Re-enable	Index	2008h
This parameter sets the number of command pulses required for one full revolution of the motor. Note: This setting can also be configured via the object dictionary entries 608F, 6091, and 6092, but P00.08 takes priority when set.										

P00.09	Label	1st Command Frequency Divider/Multiplier Numerator					Valid mode(s)			F
	Range	0~2147483647	Unit	-	Default	0	Activation	Re-enable	Index	2009h
This parameter sets the numerator for scaling the input command pulses (for frequency division or multiplication). Corresponds to object dictionary 6091-01. Can be modified directly on the control panel to update the value of 6091-01. Effective only when P00.08 = 0.										

P00.10	Label	1st Command Frequency Divider/Multiplier Denominator					Valid mode(s)			F
	Range	0~2147483647	Unit	-	Default	0	Activation	Re-enable	Index	2010h
This parameter sets the denominator for scaling the input command pulses. Also corresponds to object dictionary 6091-01. Can be modified directly on the control panel to update the value of 6091-01. Effective only when P00.08 = 0.										

Method 1: Set with Front Panel

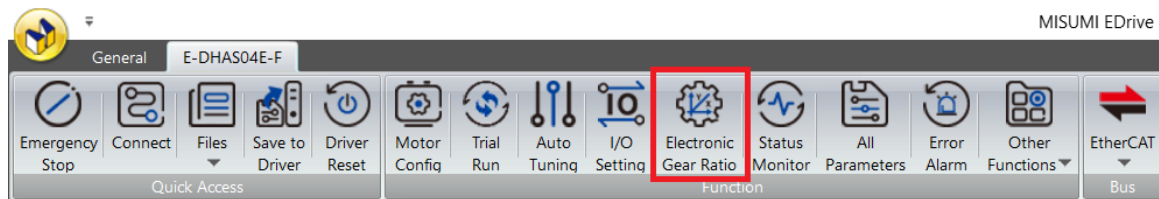
1. Press (1) 'S', display shows d345E. Press (2) 'M', display shows P00.00. Press (3) ↑ to scroll to P00.08. Press (1) 'S' again to enter the parameter setting for command pulses per motor revolution.



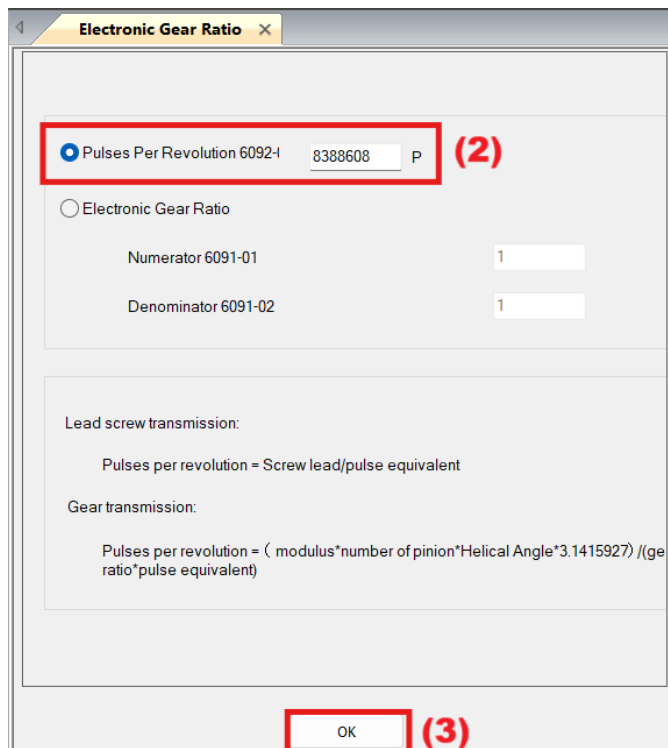
2. P00.08 must be set as an integer. To apply pulse input scaling (division/multiplication), first set P00.08 = 0, then configure P00.09: Numerator of the scaling ratio, P00.10: Denominator of the scaling ratio.
3. After modifying parameters, power cycle the driver for changes to take effect.

Method 2: Change through 'Electronic Gear Ratio' in EDrive software

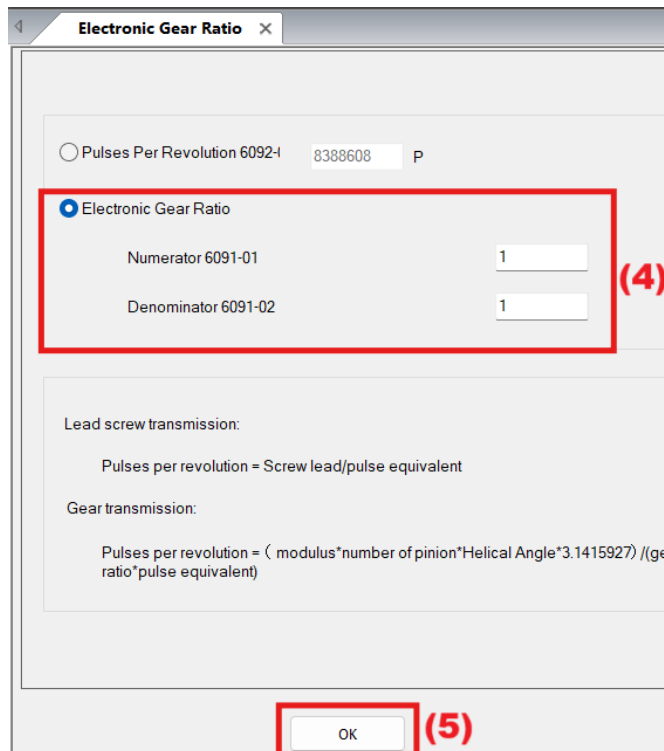
1. Click (1) 'Electronic Gear Ratio'.



2. Select (2) 'Pulse Per Revolution' to set the parameter, then click (3) 'OK'..

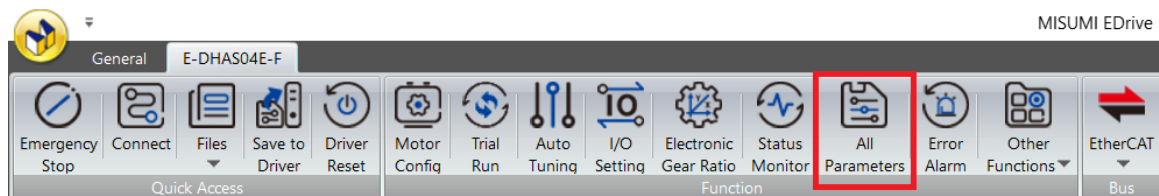


- To apply pulse input scaling, select (4) 'Electronic Gear Ratio', set parameters 'Numerator' and Denominator'. Click (5) 'OK'.

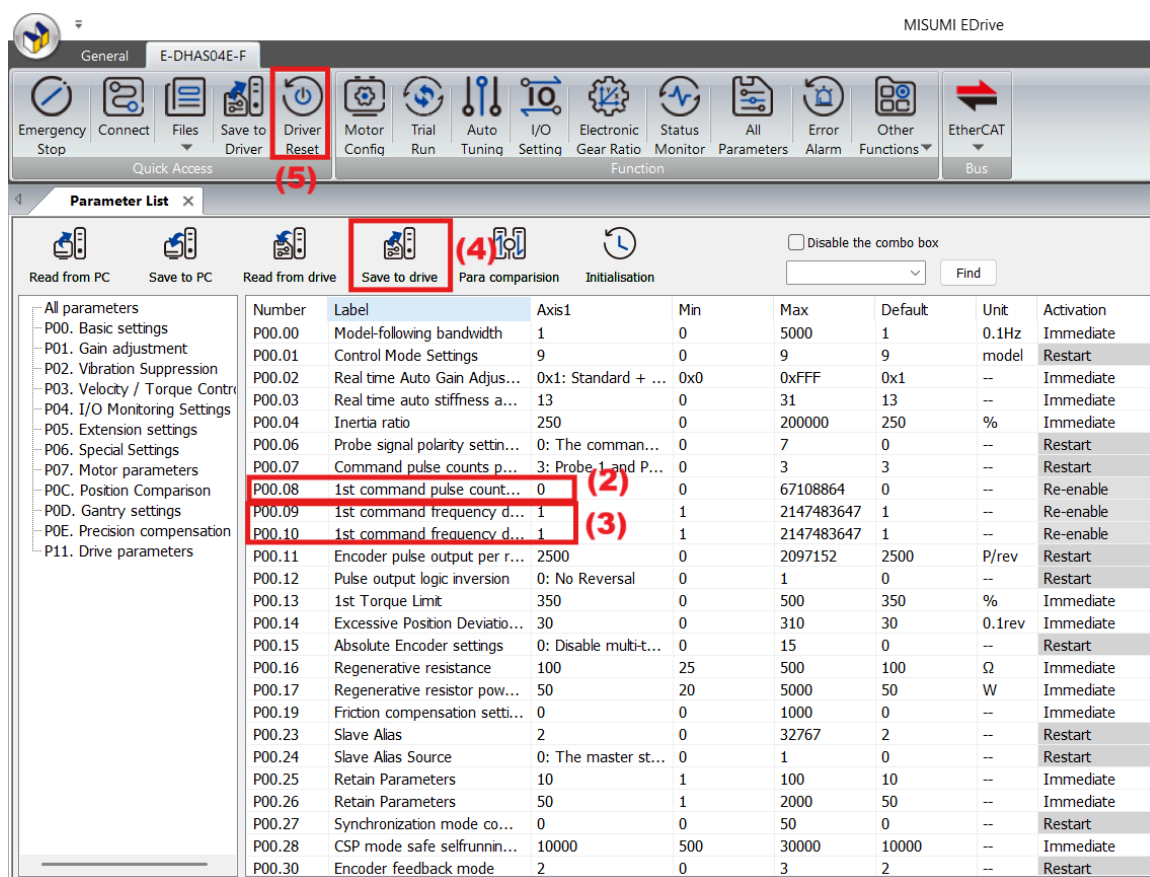


Method 3: Change through 'All Parameters' in EDrive software

- Click 'All Parameters'.



- Modify (2) P00.08 '1st Command Pulses Count per Revolution'. If setting scaling ratio, first set (2) P00.08 to 0, then configure (3) P00.09 '1st Command Frequency Divider/Multiplier Numerator' and P00.10 '1st Command Frequency Divider/Multiplier Denominator'. Click (4) 'Save to drive', then (5) 'Driver Reset'.



Method 4: Send Object Dictionary from Host

When $P00.08 \neq 0$, parameter P00.08 is effective. When $P00.08 = 0$, Object 6092-01h is effective.

If Host cannot recognize parameter P00.08, need to set P00.08 as 0 and use 6092-01h.

The range of Electronic Gear Ratio is between 0.001 to 8000 (23-bit encoder) or 0.001 to 125 (17-bit encoder). When setting the number of command pulses required per motor revolution, the following formula must be satisfied:

$$\text{Command pulses per motor revolution} \geq \text{Encoder pulses per revolution} / 8000$$

608Fh is Internal encoder resolution (read-only). 6092-01h is Command pulses per motor revolution (effective after disabling/enabling). 6091-01h and 6091-02h are Real-time effective scaling parameters.

When $6092-01h \neq 608Fh$:

$$\text{Electronic Gear Ratio} = \text{Encoder resolution} / 6092-01h$$

When $6092-01h = 608Fh$:

$$\text{Electronic Gear Ratio} = 6092-01h / 6092-02h$$

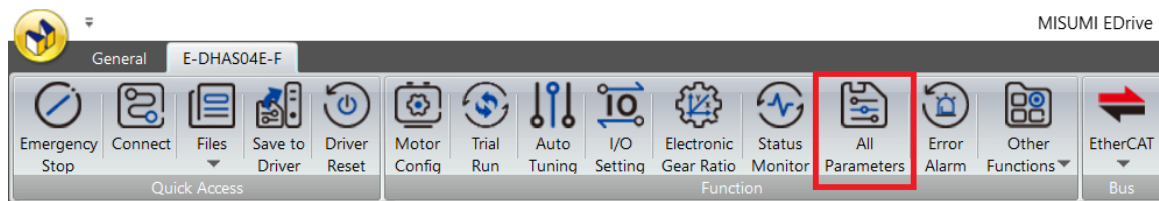
6. Parameter Setting

Method 1: Set with Front Panel

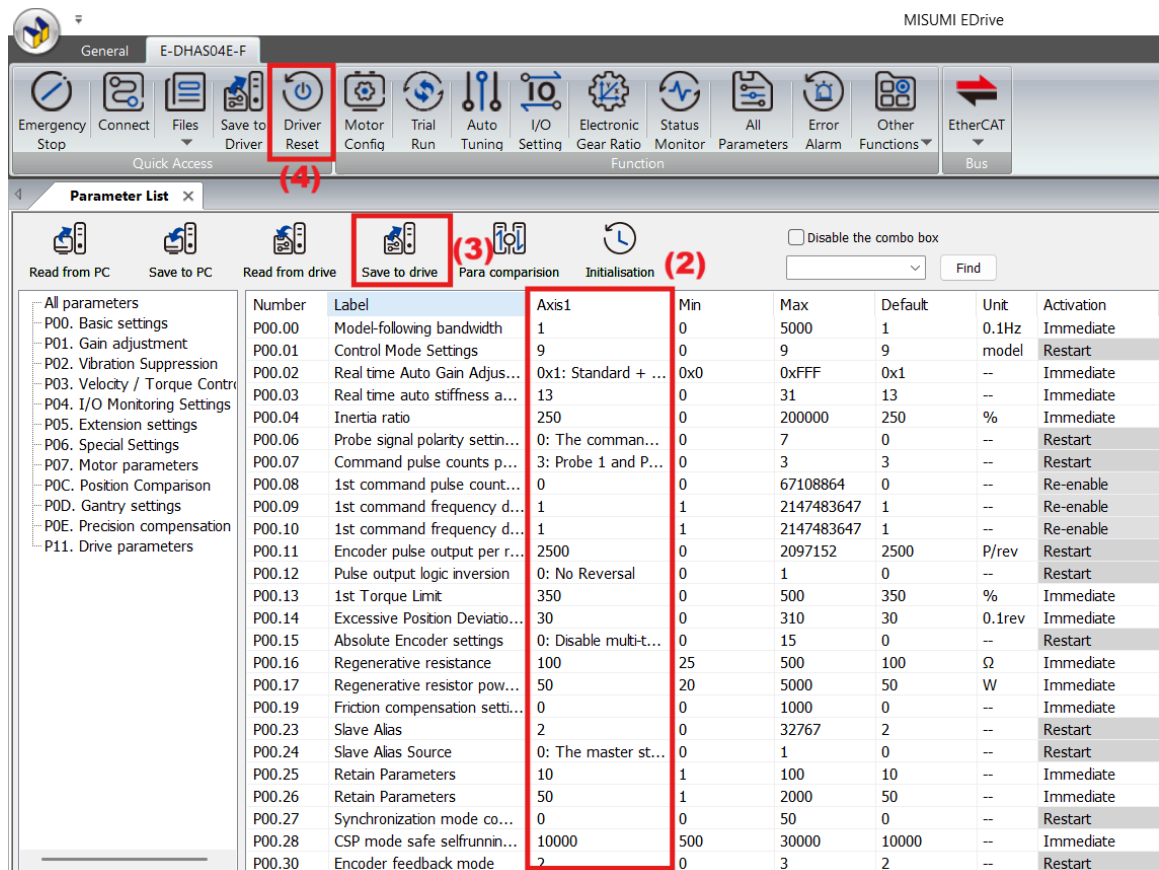
After the servo drive is powered on, Press button 'S', the display shows 'd34 5E'. Press button 'M', the display shows 'P00.00'. Scroll to the parameter code you want to adjust and press button 'S' again to enter the parameter setting page.

Method 2: Change through 'All Parameters' in EDrive software

1. Click 'All Parameters'.



2. In the (2) 'Axis 1' column, modify the desired parameter. After modification, click (3) 'Save to drive'. Then click (4) 'Driver Reset' to apply the changes.



Method 3: Change through EtherCAT BUS from Host

1. Connect the PLC to the servo driver.

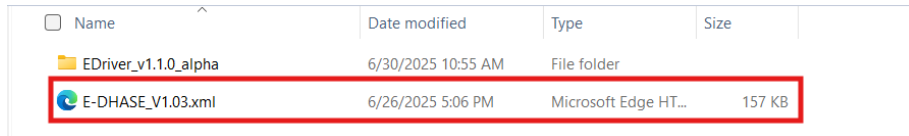
2. Run the PLC.
3. In the programming software, use EtherCAT communication to monitor and control PDO mapping parameters.

Object Index	Object Sub-index	Mapping Content	Mapping Content Break Down			Mapping Content Name
			Index	Sub-index	bits	
RXPDO1 (1600h)	01h	60400010h	6040h	00h	10h (16bit)	01h
	02h	607A0020h	607Ah	00h	20h (32bit)	02h
	03h	60B80010h	60B8h	00h	10h (16bit)	03h
RXPDO2 (1601h)	01h	60400010h	6040h	00h	10h (16bit)	Control Word
	02h	60FF0020h	60FFh	00h	20h (32bit)	Target Velocity
	03h	60B20010h	60B2h	00h	10h (16bit)	Torque Offset
RXPDO3 (1602h)	01h	60400010h	6040h	00h	10h (16bit)	Control Word
	02h	60710010h	6071h	00h	10h (16bit)	Target Torque
	03h	60870020h	6087h	00h	20h (32bit)	Torque Slop
RXPDO4 (1603h)	01h	60400010h	6040h	00h	10h (16bit)	Control Word
	02h	60980008h	6098h	00h	08h (8bit)	Homing Method
	03h	60990120h	6099h	01h	20h (32bit)	Speed During Search For Switch
	04h	60990220h	6099h	02h	20h (32bit)	Speed During Search For Zero
	05h	609A0020h	609Ah	00h	20h (32bit)	Homing Acceleration
	06h	607C0020h	607Ch	00h	20h (32bit)	Home Offset
	07h	60600008h	6060h	00h	08h (8bit)	Mode of Operation
TXPDO1 (1A00h)	01h	603F0010h	603Fh	00h	10h (16bit)	Error Code
	02h	60410010h	6041h	00h	10h (16bit)	Status Word
	03h	60610008h	6061h	00h	08h (8bit)	Mode of Operation Display
	04h	60640020h	6064h	00h	20h (32bit)	Position Actual Value
	05h	60B90010h	60B9h	00h	10h (16bit)	Touch Probe Status
	06h	60BA0020h	60BAh	00h	20h (32bit)	Touch Probe 1 Positive Position
	07h	60FD0020h	60FDh	00h	20h (32bit)	Digital Inputs
TXPOD2 (1A01h)	No Mapping by Default					

7. Controller Axis Configuration Precautions

EtherCAT ESI file is contained in the EDrive software zip file.

E-RME_V1.01_EtherCAT_ESI file



Name	Date modified	Type	Size
EDriver_v1.1.0_alpha	6/30/2025 10:55 AM	File folder	
E-DHASE_V1.03.xml	6/26/2025 5:06 PM	Microsoft Edge HT...	157 KB

ESI file predefined PDO

RPDO1: Position control mode related PDOs

RPDO2: Velocity control mode related PDOs

RPDO3: Torque control mode related PDOs

RPDO4: Homing mode related PDOs

TPDO1: Controller feedback message related PDOs

Example: If use positioning control mode, click RPDO1 and TPDO1, then can achieve positioning control.

8. PLC EtherCAT Communication Example

PLC monitor and modify Servo Driver Object Dictionary via EtherCAT.

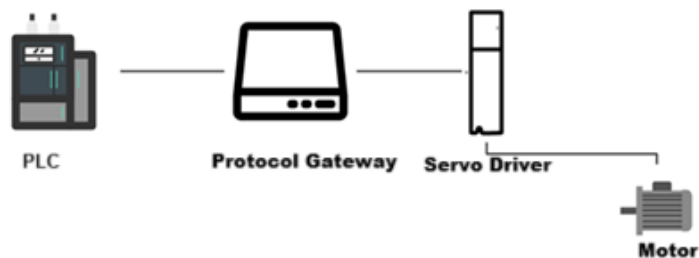
Hardware Used in This Case:

Servo Drive: Misumi E-DHAS01E-F

PLC: Siemens S7-1200, TIA Portal V20

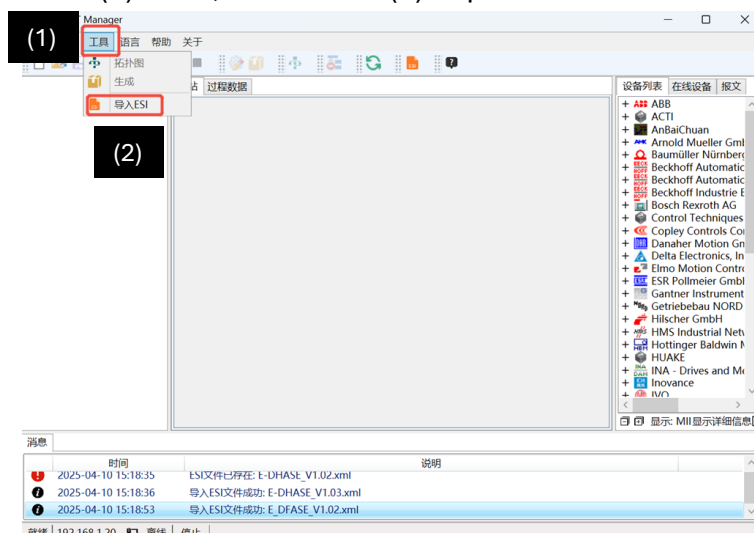
Protocol Conversion Gateway: KJ Smart KJ-PN-ECATM

System wiring diagram



EtherCAT Manager Software Configuration

1. Click (1) Tools, then select (2) Import ESI.



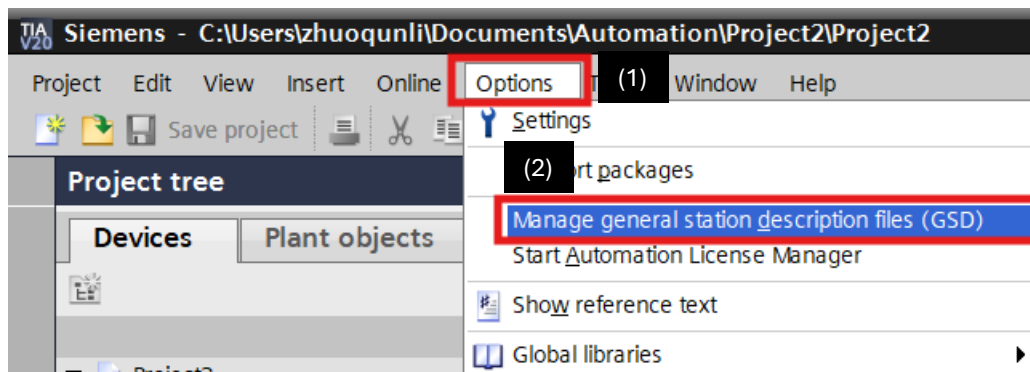
2. Import the axis configuration file.

Note: Run the software as administrator when importing ESI files.

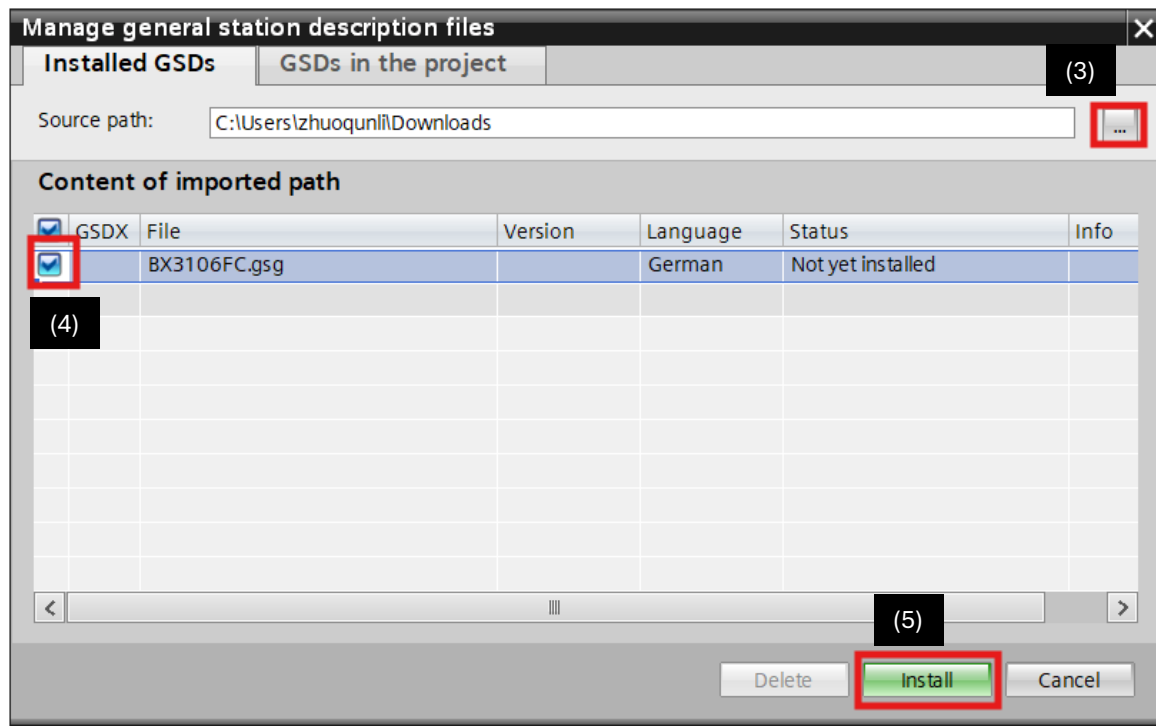
☐ Name	Date modified	Type	Size
EDriver_v1.1.0_alpha	6/30/2025 10:55 AM	File folder	
E-DHASE_V1.03.xml	6/26/2025 5:06 PM	Microsoft Edge HT...	157 KB

TIA Portal (Siemens STEP 7) Configuration

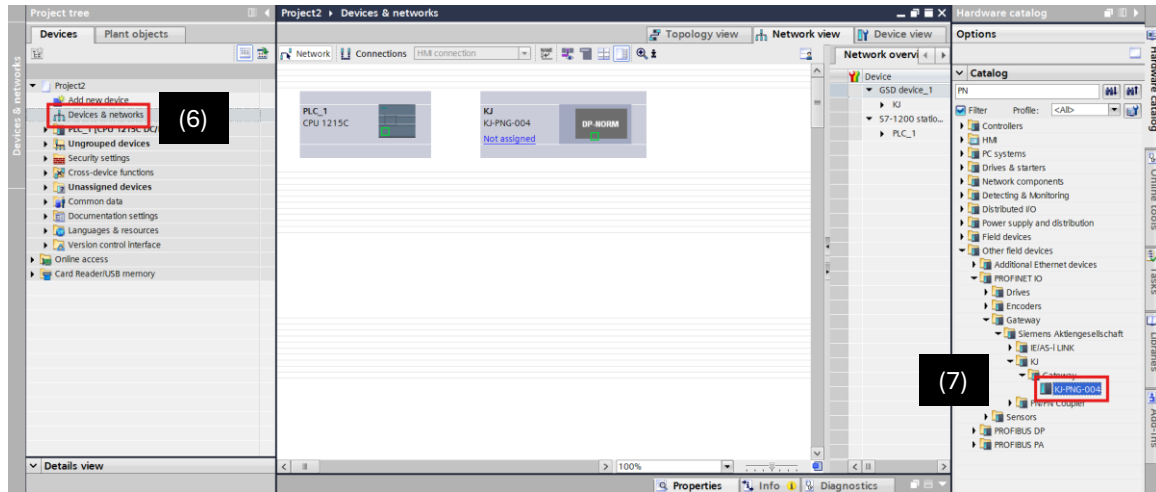
1. In TIA Portal, install the GSD file for the protocol conversion gateway: Click (1) Options, then (2) Manage General Station Description Files (GSD).



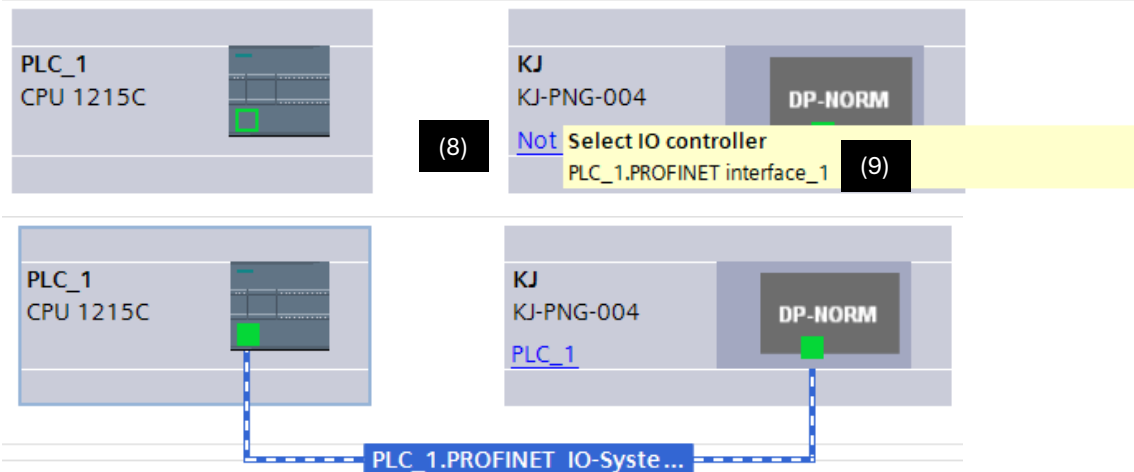
2. Click (3) Browse to locate the downloaded GSD file and click 'Install'. Check (4) and click (5) 'Install'.



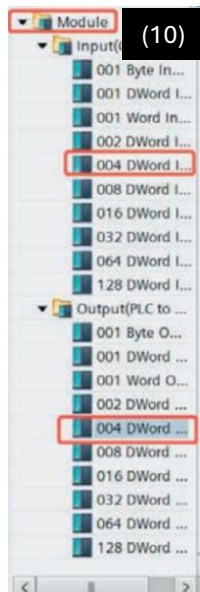
- Open (6) Devices and Networks, find added device, and double click to add the protocol conversion device.



- Click (8) 'Not assigned', then select (9) IO Controller to link the PLC with the gateway.



- Double-click the protocol conversion device, then in the right panel. Click (10) Module, select Input 004 DWord and Output 004 DWord to view their addresses.



E-DHASxxE-F series (EtherCAT type) Quick Start Guide

PN-ECAT	0	0		PN-ECAT	ETxxx
Interface	0	0 X1		PN-ECAT	
004 DWord Input_1	0	1	68...83	004 DWord Input	
004 DWord Output_1	0	2	68...83	004 DWord Output	

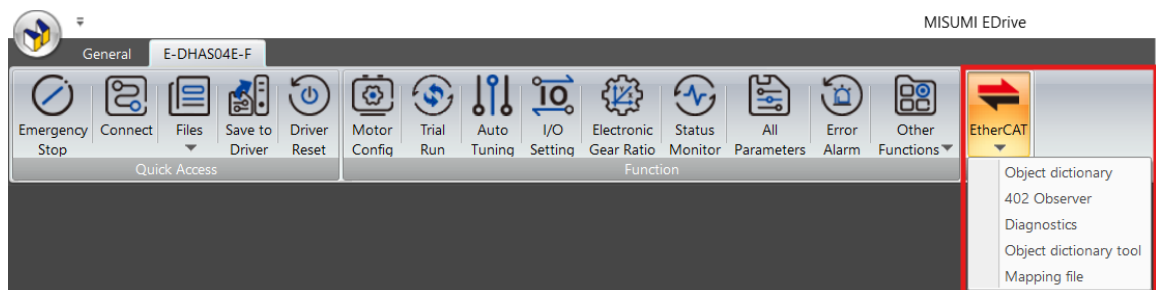
Servo ON steps

Write the values of PDO parameter 6041 in the following order: 6—7—15

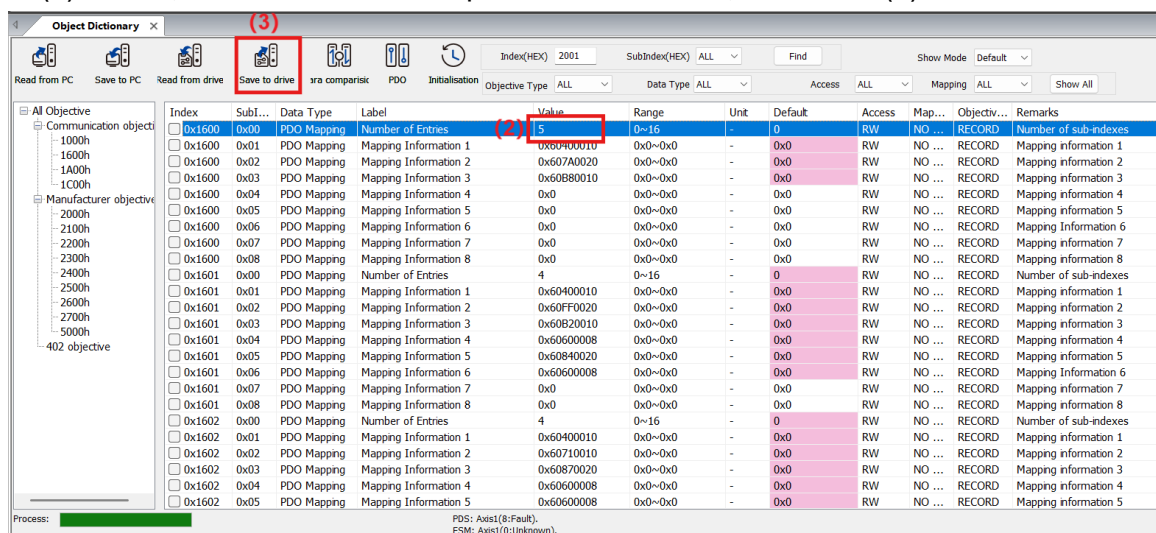
Convert Command	Combination of bit 7 and 0~3				0: Start	6040h Typical Value	402 State Machine Transition
	7: Fault reset	3: Servo running	2: Quick stop	1: Main circuit power on			
Power OFF	0	X	1	1	0	0006h	2, 6, 8
Start	0	0	1	1	1	0007h	3
Start	0	1	1	1	1	000Fh	3

Writing Parameter Values

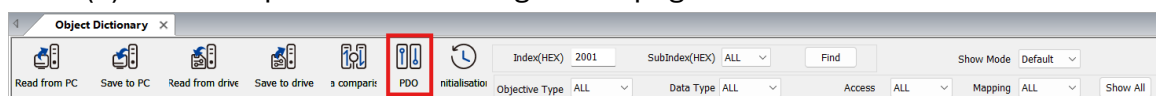
1. Open the debugging software and connect to the servo drive. Click 'EtherCAT' and open 'Object Dictionary'.



2. In (2) 'Value', enter the number of parameters to read, then click (3) 'Save to drive'.



3. Click (4) 'PDO' to open the PDO configuration page.



4. Click (5) 'Receive PDO 1', then (6) 'Add'.

Tip: Double click to edit PDO

Tip: EtherCAT can only check two groups per axis

5. Select the sub-index to add (7), then click (8) 'OK'.

Label : Home Offset

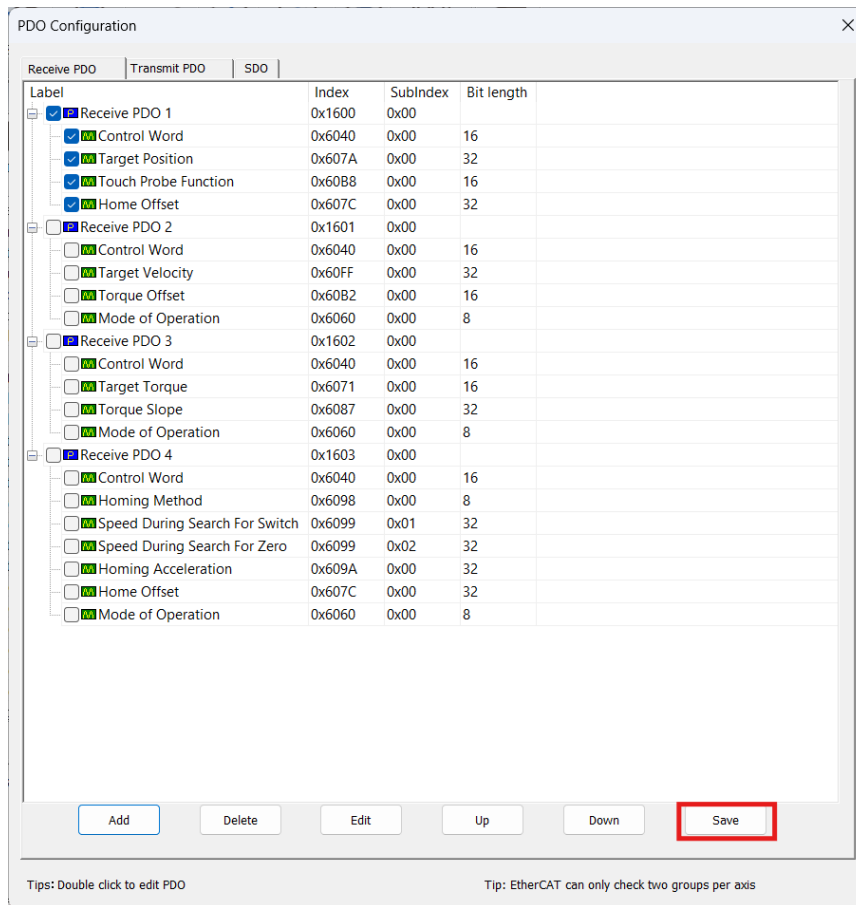
Index : 0x607C

SubIndex : 00

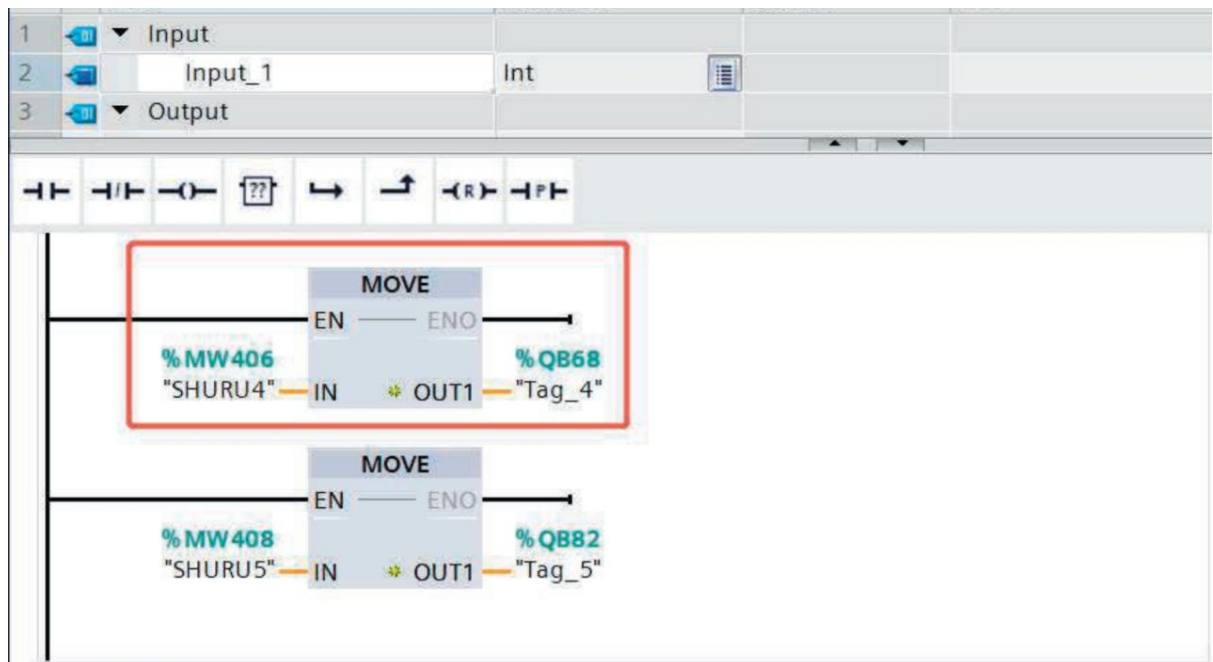
Bit length : 32

(8) OK

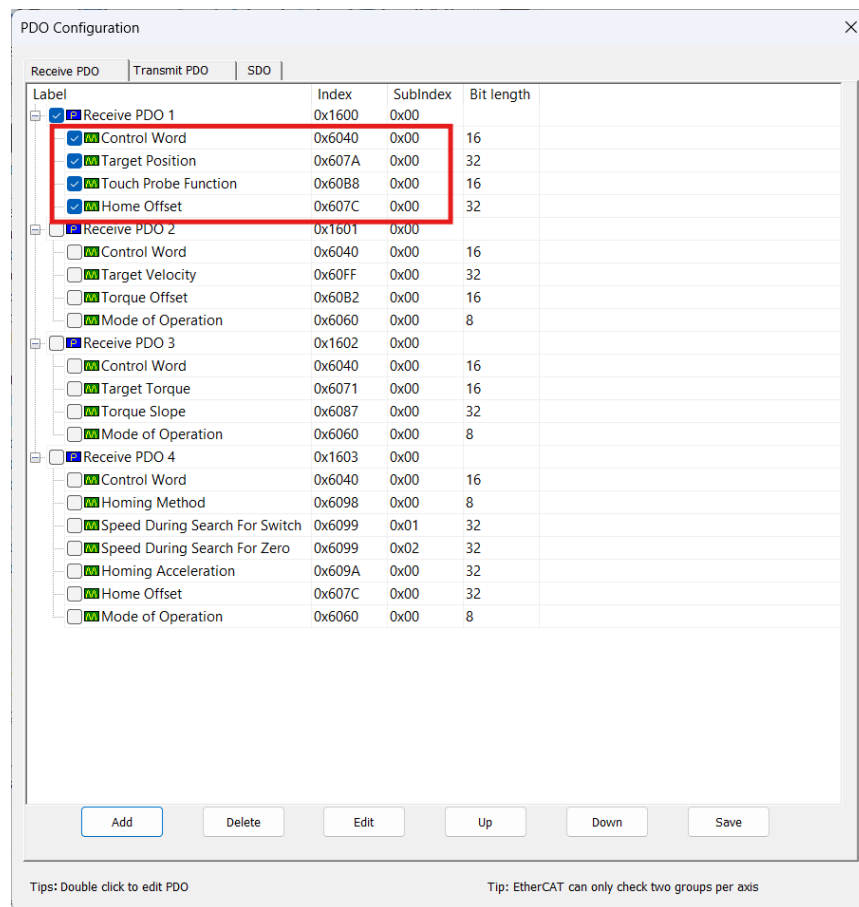
- Click (9) 'Save' to write into driver.



- In TIA Portal, create a new INT variable as input. Use a MOVE instruction to write values into the servo drive parameters.



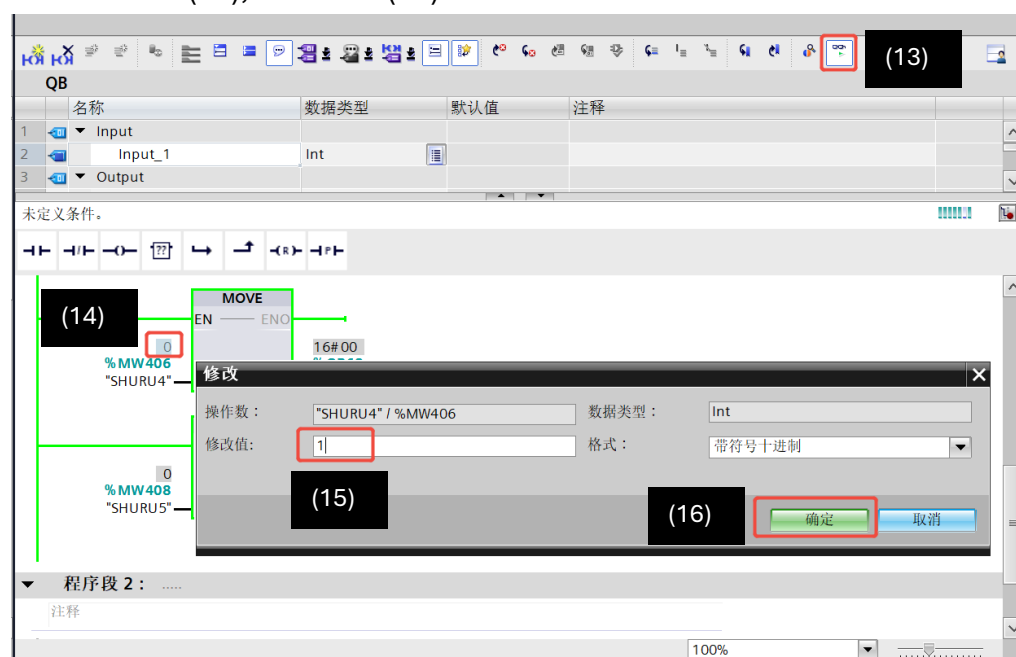
Addresses are arranged according to the PDO order.



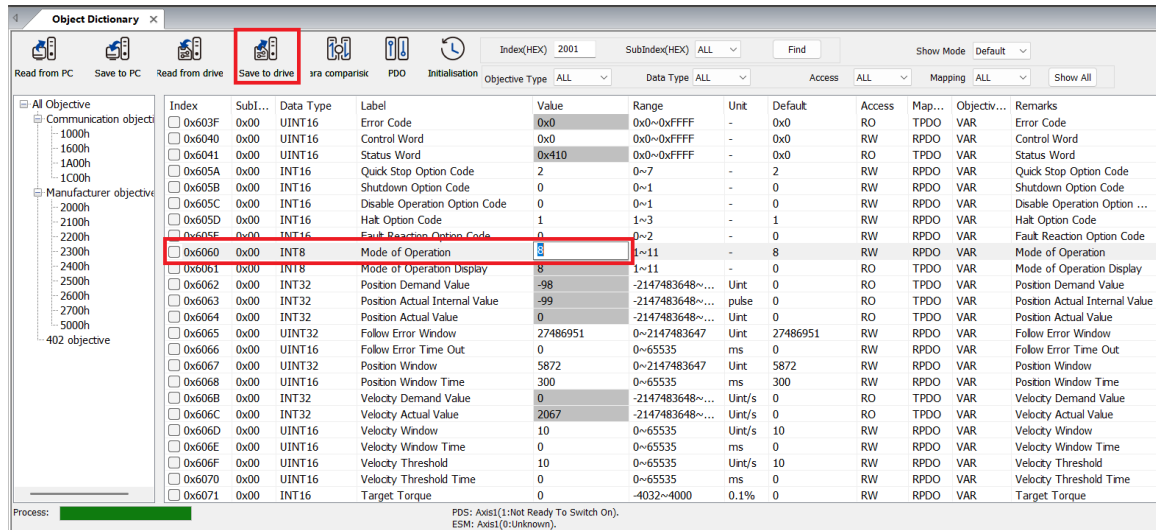
8. Click (10) Download Program to CPU, then (11) Go Online, and (12) Run CPU.



9. Click (13) Monitor Program, double-click (14) to modify parameter values, enter the new value in (15), and click (16) Confirm.

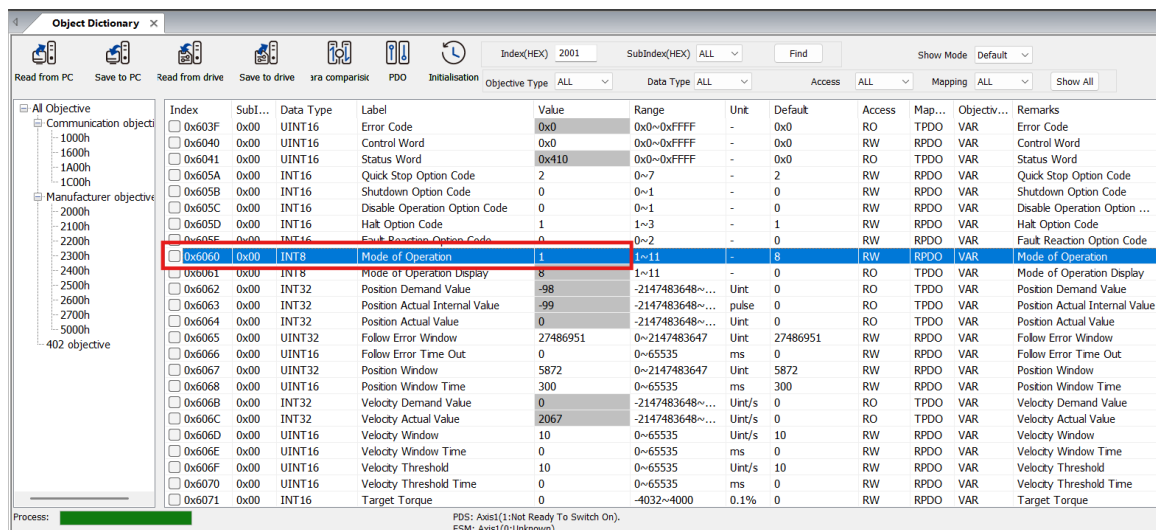


10. In this case, the PDO mapped to %68 is 0x6060. You can see the current value is 8. Click (17) 'Read from drive' to write the parameter value from the PLC to the drive.



Index	SubIndex	Data Type	Label	Value	Range	Unit	Default	Access	Map...	Objectiv...	Remarks
0x603F	0x00	UINT16	Error Code	0x0	0x0~0xFFFF	-	0x0	RO	TPDO	VAR	Error Code
0x6040	0x00	UINT16	Control Word	0x0	0x0~0xFFFF	-	0x0	RW	RPDO	VAR	Control Word
0x6041	0x00	UINT16	Status Word	0x410	0x0~0xFFFF	-	0x0	RO	TPDO	VAR	Status Word
0x605A	0x00	INT16	Quick Stop Option Code	2	0~7	-	2	RW	RPDO	VAR	Quick Stop Option Code
0x605B	0x00	INT16	Shutdown Option Code	0	0~1	-	0	RW	RPDO	VAR	Shutdown Option Code
0x605C	0x00	INT16	Disable Operation Option Code	0	0~1	-	0	RW	RPDO	VAR	Disable Operation Option ...
0x605D	0x00	INT16	Halt Option Code	1	1~3	-	1	RW	RPDO	VAR	Halt Option Code
0x605E	0x00	INT16	Fault Reaction Option Code	0	0~2	-	0	RW	RPDO	VAR	Fault Reaction Option Code
0x6060	0x00	INT8	Mode of Operation	8	1~11	-	8	RW	RPDO	VAR	Mode of Operation
0x6061	0x00	INT8	Mode of Operation Display	8	1~11	-	0	RO	TPDO	VAR	Mode of Operation Display
0x6062	0x00	INT32	Position Demand Value	-98	-2147483648~...	Unit	0	RO	TPDO	VAR	Position Demand Value
0x6063	0x00	INT32	Position Actual Internal Value	-99	-2147483648~...	pulse	0	RO	TPDO	VAR	Position Actual Internal Value
0x6064	0x00	INT32	Position Actual Value	0	-2147483648~...	Unit	0	RO	TPDO	VAR	Position Actual Value
0x6065	0x00	UINT32	Follow Error Window	27486951	0~2147483647	Unit	27486951	RW	RPDO	VAR	Follow Error Window
0x6066	0x00	UINT16	Follow Error Time Out	0	0~65535	ms	0	RW	RPDO	VAR	Follow Error Time Out
0x6067	0x00	UINT32	Position Window	5872	0~2147483647	Unit	5872	RW	RPDO	VAR	Position Window
0x6068	0x00	UINT16	Position Window Time	300	0~65535	ms	300	RW	RPDO	VAR	Position Window Time
0x606B	0x00	INT32	Velocity Demand Value	0	-2147483648~...	Unit/s	0	RO	TPDO	VAR	Velocity Demand Value
0x606C	0x00	INT32	Velocity Actual Value	2067	-2147483648~...	Unit/s	0	RO	TPDO	VAR	Velocity Actual Value
0x606D	0x00	UINT16	Velocity Window	10	0~65535	Unit/s	10	RW	RPDO	VAR	Velocity Window
0x606E	0x00	UINT16	Velocity Window Time	0	0~65535	ms	0	RW	RPDO	VAR	Velocity Window Time
0x606F	0x00	UINT16	Velocity Threshold	10	0~65535	Unit/s	10	RW	RPDO	VAR	Velocity Threshold
0x6070	0x00	UINT16	Velocity Threshold Time	0	0~65535	ms	0	RW	RPDO	VAR	Velocity Threshold Time
0x6071	0x00	INT16	Target Torque	0	-4032~4000	0.1%	0	RW	RPDO	VAR	Target Torque

11. The value of 0x6060 changes to 1, indicating the parameter has been successfully written.



Index	SubIndex	Data Type	Label	Value	Range	Unit	Default	Access	Map...	Objectiv...	Remarks
0x603F	0x00	UINT16	Error Code	0x0	0x0~0xFFFF	-	0x0	RO	TPDO	VAR	Error Code
0x6040	0x00	UINT16	Control Word	0x0	0x0~0xFFFF	-	0x0	RW	RPDO	VAR	Control Word
0x6041	0x00	UINT16	Status Word	0x410	0x0~0xFFFF	-	0x0	RO	TPDO	VAR	Status Word
0x605A	0x00	INT16	Quick Stop Option Code	2	0~7	-	2	RW	RPDO	VAR	Quick Stop Option Code
0x605B	0x00	INT16	Shutdown Option Code	0	0~1	-	0	RW	RPDO	VAR	Shutdown Option Code
0x605C	0x00	INT16	Disable Operation Option Code	0	0~1	-	0	RW	RPDO	VAR	Disable Operation Option ...
0x605D	0x00	INT16	Halt Option Code	1	1~3	-	1	RW	RPDO	VAR	Halt Option Code
0x605E	0x00	INT16	Fault Reaction Option Code	0	0~2	-	0	RW	RPDO	VAR	Fault Reaction Option Code
0x6060	0x00	INT8	Mode of Operation	1	1~11	-	8	RW	RPDO	VAR	Mode of Operation
0x6061	0x00	INT8	Mode of Operation Display	8	1~11	-	0	RO	TPDO	VAR	Mode of Operation Display
0x6062	0x00	INT32	Position Demand Value	-98	-2147483648~...	Unit	0	RO	TPDO	VAR	Position Demand Value
0x6063	0x00	INT32	Position Actual Internal Value	-99	-2147483648~...	pulse	0	RO	TPDO	VAR	Position Actual Internal Value
0x6064	0x00	INT32	Position Actual Value	0	-2147483648~...	Unit	0	RO	TPDO	VAR	Position Actual Value
0x6065	0x00	UINT32	Follow Error Window	27486951	0~2147483647	Unit	27486951	RW	RPDO	VAR	Follow Error Window
0x6066	0x00	UINT16	Follow Error Time Out	0	0~65535	ms	0	RW	RPDO	VAR	Follow Error Time Out
0x6067	0x00	UINT32	Position Window	5872	0~2147483647	Unit	5872	RW	RPDO	VAR	Position Window
0x6068	0x00	UINT16	Position Window Time	300	0~65535	ms	300	RW	RPDO	VAR	Position Window Time
0x606B	0x00	INT32	Velocity Demand Value	0	-2147483648~...	Unit/s	0	RO	TPDO	VAR	Velocity Demand Value
0x606C	0x00	INT32	Velocity Actual Value	2067	-2147483648~...	Unit/s	0	RO	TPDO	VAR	Velocity Actual Value
0x606D	0x00	UINT16	Velocity Window	10	0~65535	Unit/s	10	RW	RPDO	VAR	Velocity Window
0x606E	0x00	UINT16	Velocity Window Time	0	0~65535	ms	0	RW	RPDO	VAR	Velocity Window Time
0x606F	0x00	UINT16	Velocity Threshold	10	0~65535	Unit/s	10	RW	RPDO	VAR	Velocity Threshold
0x6070	0x00	UINT16	Velocity Threshold Time	0	0~65535	ms	0	RW	RPDO	VAR	Velocity Threshold Time
0x6071	0x00	INT16	Target Torque	0	-4032~4000	0.1%	0	RW	RPDO	VAR	Target Torque