

Table of Contents

토크 제한 설정

1. **Configurator**에서 **Download** 후 **Dictionary**

2. **SDO** 내에서 **Torque Limit** 설정

1

1

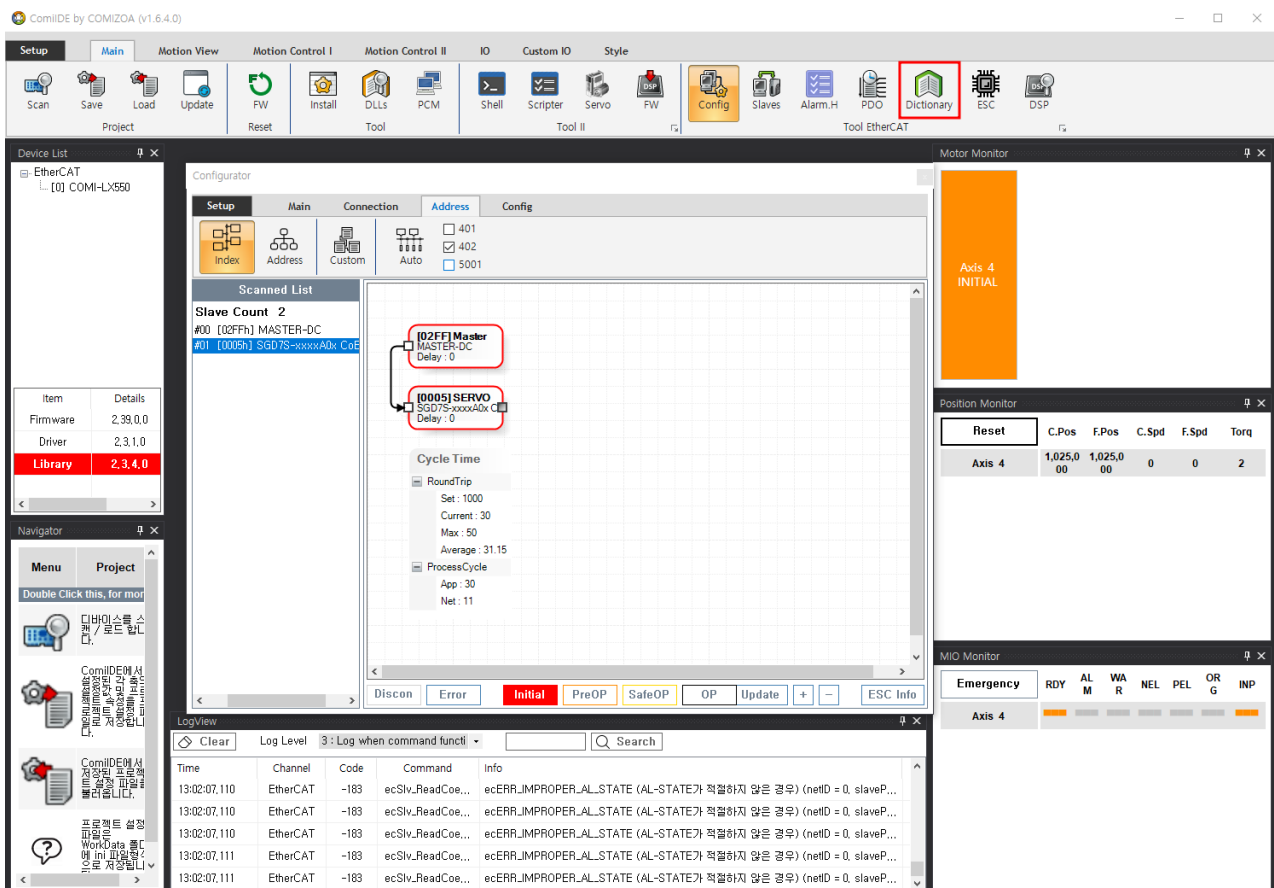
1

토크 제한 설정

× 토크 제한 (Torque Limit) 설정에 대한 안내페이지입니다.

[야스카와 서보 사용]

1. Configurator에서 Download후 Dictionary



- Config→ Download 후 Main에서 Dictionary 클릭

2. SDO 내에서 Torque Limit 설정

ComiIDE by COMIZOA (v1.6.4.0)

Setup Main Motion View Motion Control I Motion Control II IO Custom IO Style

Scan Save Load Update FW Install DLLs PCM Shell Scripter Servo FW Config Slaves Alarm.H PDO Dictionary ESC DSP

Device List EtherCAT [0] COMI-LX550

Object Dictionary

01 : [0005] SGD7S-xxxxA0x CoE Drive

Update ☐ Auto Update Update Interval [200] Config

Index	Name	Type	Size	Value	Value_Hex	Flags
0x609A	Homing acceleration	UDINT	4	0	0x0000	rw RT
0x60A4	Profile jerk	DT60A4	6	0	0x0	ro
0x60B1	Velocity Offset	DINT	4	0	0x0000	rw RT
0x60B2	Torque Offset	INT	2	0	0x00	rw RT
0x60B8	Touch probe function	UINT	2	0	0x00	rw RT
0x60B9	Touch probe status	UINT	2	0	0x00	ro T
0x60BA	Touch probe 1 position value	DINT	4	0	0x0000	ro T
0x60BC	Touch probe 2 position value	DINT	4	0	0x0000	ro T
0x60C1	Interpolation data record	DT60C1	6	0	0x0	ro
0x60C2	Interpolation time period	DT60C2	4	0	0x0	ro
0x60E0	Positive Torque Limit Value	UINT	2	0	0x00	rw RT
0x60E1	Negative Torque Limit Value	UINT	2	0	0x00	rw RT
0x60E4	Additional Position Actual Value	DT60E4	6	0	0x0	ro
0x60F2	Positioning option code	UINT	2	0	0x00	rw R
0x60F4	Following error actual value	DINT	4	0	0x0000	ro T
0x60FC	Position demand internal value	DINT	4	0	0x0000	ro T
0x60FD	Digital inputs	UDINT	4	0	0x0000	ro T
0x60FE	Digital outputs	DT60FE	10	0	0x0	ro
0x60FF	Target velocity	DINT	4	0	0x0000	rw RT
0x6502	Supported drive modes	UDINT	4	0	0x0000	ro
0x60C0	Interpolation sub mode select	INT	2	0	0x00	rw
0x2730	Interpolation data configuration for 1st pr	DT2730	18	0	0x0	ro
0x2731	Interpolation data configuration for 2nd pr	DT2731	18	0	0x0	ro
0x2732	Interpolation profile select	USINT	1	0	0x0	rw RT

Item Details

Firmware 2.39.1

Driver 2.3.1

Library 2.3.1

Navigator

Menu Project

Double Click this, for m...

LogView

Clear Log Level 3: Log when command functi Search

Time	Channel	Code	Command	Info
13:05:31.691	EtherCAT	-183	ecSlv_ReadCoe...	ecERR_IMPROPER_AL_STATE (AL-STATE가 적절하지 않은 경우) (netID = 0, slaveP...
13:05:31.691	EtherCAT	-183	ecSlv_ReadCoe...	ecERR_IMPROPER_AL_STATE (AL-STATE가 적절하지 않은 경우) (netID = 0, slaveP...
13:05:31.692	EtherCAT	-183	ecSlv_ReadCoe...	ecERR_IMPROPER_AL_STATE (AL-STATE가 적절하지 않은 경우) (netID = 0, slaveP...
13:05:31.692	EtherCAT	-183	ecSlv_ReadCoe...	ecERR_IMPROPER_AL_STATE (AL-STATE가 적절하지 않은 경우) (netID = 0, slaveP...
13:05:31.692	EtherCAT	-183	ecSlv_ReadCoe...	ecERR_IMPROPER_AL_STATE (AL-STATE가 적절하지 않은 경우) (netID = 0, slaveP...

Emergency RDY AL M WA R NEL PEL OR G INP

Axis 4

- 해당 서보 내의 SDO에서 Torque Limit 관련 설정 찾기

ComiIDE by COMIZOA (v1.6.4.0)

Setup Main Motion View Motion Control I Motion Control II IO Custom IO Style

Scan Save Load Update FW Install DLLs PCM Shell Scripter Servo FW Config Slaves Alarm.H PDO Dictionary ESC DSP

Device List EtherCAT [0] COMI-LX550

Object Dictionary

01 : [0005] SGD7S-xxxxA0x CoE Drive

Update ☐ Auto Update Update Interval [200] Config

Index	Name	Type	Size	Value	Value_Hex	Flags
0x609A	Homing acceleration	UDINT	4	0	0x0000	rw RT
0x60A4	Profile jerk	DT60A4	6	0	0x0	ro
0x60B1	Velocity Offset	DINT	4	0	0x0000	rw RT
0x60B2	Torque Offset	INT	2	0	0x00	rw RT
0x60B8	Touch probe function	UINT	2	0	0x00	rw RT
0x60B9	Touch probe status	UINT	2	0	0x00	ro T
0x60BA	Touch probe 1 position value	DINT	4	0	0x0000	ro T
0x60BC	Touch probe 2 position value	DINT	4	0	0x0000	ro T
0x60C1	Interpolation data record	DT60C1	6	0	0x0	ro
0x60C2	Interpolation time period	DT60C2	4	0	0x0	ro
0x60E0	Positive Torque Limit Value	UINT	2	0	0x00	rw RT
0x60E1	Negative Torque Limit Value	UINT	2	0	0x00	rw RT
0x60E4	Additional Position Actual Value	DT60E4	6	0	0x0	ro
0x60F2	Positioning option code	UINT	2	0	0x00	rw R
0x60F4	Following error actual value	DINT	4	0	0x0000	ro T
0x60FC	Position demand internal value	DINT	4	0	0x0000	ro T
0x60FD	Digital inputs	UDINT	4	0	0x0000	ro T
0x60FE	Digital outputs	DT60FE	10	0	0x0	ro
0x60FF	Target velocity	DINT	4	0	0x0000	rw RT
0x6502	Supported drive modes	UDINT	4	0	0x0000	ro
0x60C0	Interpolation sub mode select	INT	2	0	0x00	rw
0x2730	Interpolation data configuration for 1st pr	DT2730	18	0	0x0	ro
0x2731	Interpolation data configuration for 2nd pr	DT2731	18	0	0x0	ro
0x2732	Interpolation profile select	USINT	1	0	0x0	rw RT

Item Details

Firmware 2.39.1

Driver 2.3.1

Library 2.3.1

Navigator

Menu Project

Double Click this, for m...

LogView

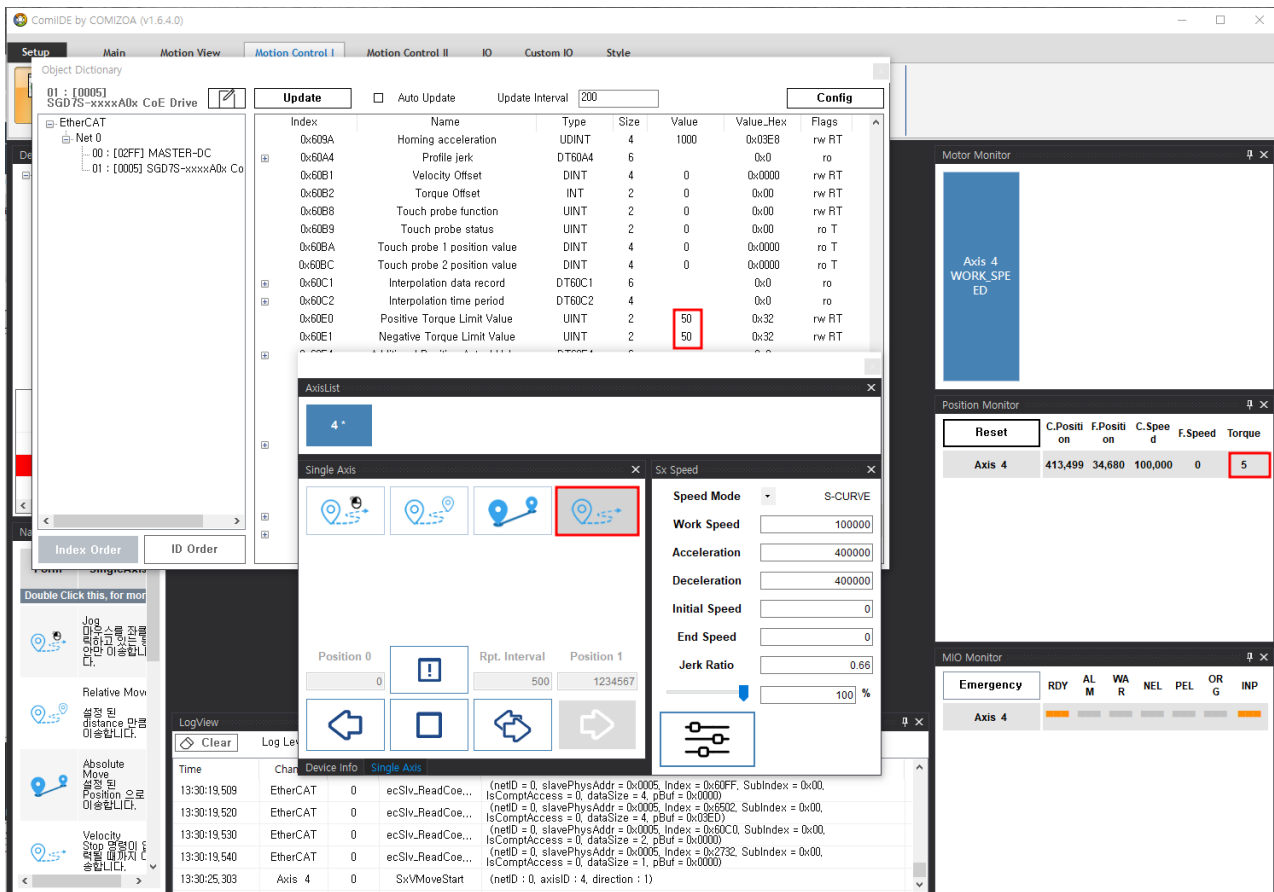
Clear Log Level 3: Log when command functi Search

Time	Channel	Code	Command	Info
13:06:32.775	EtherCAT	-183	ecSlv_ReadCoe...	ecERR_IMPROPER_AL_STATE (AL-STATE가 적절하지 않은 경우) (netID = 0, slaveP...
13:06:32.775	EtherCAT	-183	ecSlv_ReadCoe...	ecERR_IMPROPER_AL_STATE (AL-STATE가 적절하지 않은 경우) (netID = 0, slaveP...
13:06:32.775	EtherCAT	-183	ecSlv_ReadCoe...	ecERR_IMPROPER_AL_STATE (AL-STATE가 적절하지 않은 경우) (netID = 0, slaveP...
13:06:32.775	EtherCAT	-183	ecSlv_ReadCoe...	ecERR_IMPROPER_AL_STATE (AL-STATE가 적절하지 않은 경우) (netID = 0, slaveP...
13:06:32.776	EtherCAT	-183	ecSlv_ReadCoe...	ecERR_IMPROPER_AL_STATE (AL-STATE가 적절하지 않은 경우) (netID = 0, slaveP...

Emergency RDY AL M WA R NEL PEL OR G INP

Axis 4

1. 해당 Value 더블 클릭.
2. Value 값 수정 후 enter.



* 단축 이동에서 V 외부적인 힘을 가해 Limit이 설정한 값으로 올라오는지 확인

* **Torque Limit** 설정이 없거나 서보의 다른 기능으로 **Torque Limit**과 비슷한 제어를 할 시, 해당 서보 업체에 확인 필요. (Ex: 웰콘 서보 = **Maximum Current**)

From:

<http://comizoa.co.kr/info/> - -

Permanent link:

http://comizoa.co.kr/info/doku.php?id=faq:motion:ethercat:07_torque_limit_setup&rev=1659507476

Last update: **2024/07/08 18:22**