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Telegram 750 for SINAMICS S120 in Startdrive V15

Startdrive V15

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1 Task

You use a SINAMICS S120 at a SIMATIC S7-1500(T) and want to use the torque reduction function in a technology object (TO).

You want to use Startdrive V15 to parameterize the SINAMICS S120.

For torque reduction you need the telegram 750.

2 Solution

In Startdrive V15 it is not possible to select the telegram 750 for the SINAMICS S120.

You have to emulate telegram 750 via the free telegram (999).

The following steps are necessary for this:

2 Solution

1. Insert an additional free telegram for the axis:
2. Select 1 word in sending and 3 words in receiving direction:

Figure 2-1 Free Telegram

Name	Item	Link	Telegram	Length	Extension	Type	Partner	Partner data area
▼ Antriebsregelung-Telegrams 1								
Send (Actual value)		→	SIEMENS telegram 390	2 words	0 words	→ CD	PLC_1	E 264...267
Receive (Setpoint)		←	SIEMENS telegram 390	2 words	0 words	← CD	PLC_1	A 264...267
<Add telegram>								
▼ Einspeisung_1-Telegrams 2								
Send (Actual value)		→	SIEMENS telegram 370	1 words	0 words	→ CD	PLC_1	E 258...259
Receive (Setpoint)		←	SIEMENS telegram 370	1 words	0 words	← CD	PLC_1	A 258...259
<Add telegram>								
▼ Axis1-Telegrams 3								
Send (Actual value)		→	SIEMENS telegram 105	10 words	0 words	→ CD	PLC_1	E 316...335
Receive (Setpoint)		←	SIEMENS telegram 105	10 words	0 words	← CD	PLC_1	A 316...335
Send Additional (Actual v...)		→	Free telegram	1 words	---	→ CD	PLC_1	E 336...337
Receive Additional (Setpoi...)		←	Free telegram	3 words	---	← CD	PLC_1	A 336...341
<Add telegram>								
▼ Axis2-Telegrams 4								
Send (Actual value)		→	SIEMENS telegram 105	10 words	0 words	→ CD	PLC_1	E 500...519
Receive (Setpoint)		←	SIEMENS telegram 105	10 words	0 words	← CD	PLC_1	A 500...519
<Add telegram>								

3. Parameterize the telegram data in SINAMICS S120 with Startdrive as follows:

Figure 2-2 Parameter interconnection

p1511[0]	Supplementary torque 1	➡	r2050[10], IF1 PROFIdrive PZD receive word, PZD 11
p1522[0]	Torque limit upper/motoring	➡	r2050[11], IF1 PROFIdrive PZD receive word, PZD 12
p1523[0]	Torque limit lower/regenerative	➡	r2050[12], IF1 PROFIdrive PZD receive word, PZD 13
▼ p2051	IF1 PROFIdrive PZD send word		
p2051[10]	PZD 11	➡	r80, Torque actual value

2 Solution

- Now you can assign the additional telegram in the configuration of the TO:
In the selection list you must activate "Show all modules" to be able to select the telegram.

Figure 2-3 TO-Configuration

