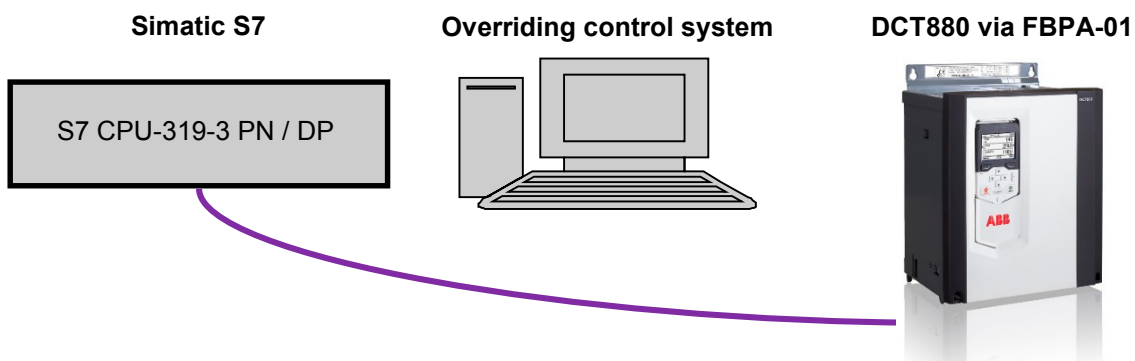


Product information

DCT880 via FPBA-01

Connection of DCT880 via FPBA-01 at Profibus

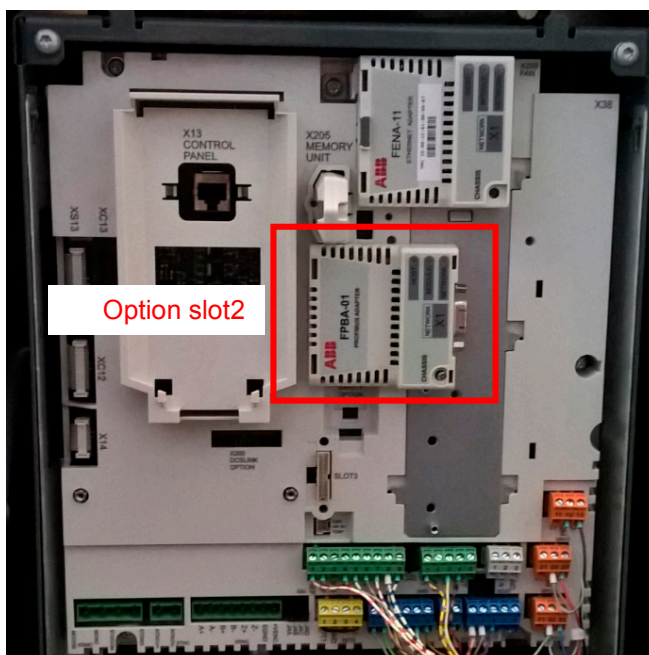


Connector:
Phoenix Contact Subconplus D-Sub Profibus.

DCT880 Configuration as fieldbus device

To connect the DCT880 as fieldbus device, the following parameters need to be set:

Parameter	Setting
50.01 FBA A Enable	0: Disable; 1: Option slot1; 2: Option slot2; recommended. 3: Option slot3;
50.02 FBA A comm loss func	0: No action; 1: Fault; only for profiles ABB DRIVES and PROFIdrive. 2: Warning; 4: Fault always; also for transparent 16. 5: Warning always; also for transparent 16.
50.03 FBA A comm loss t out	0.3 6553.5 seconds.



GSD-File

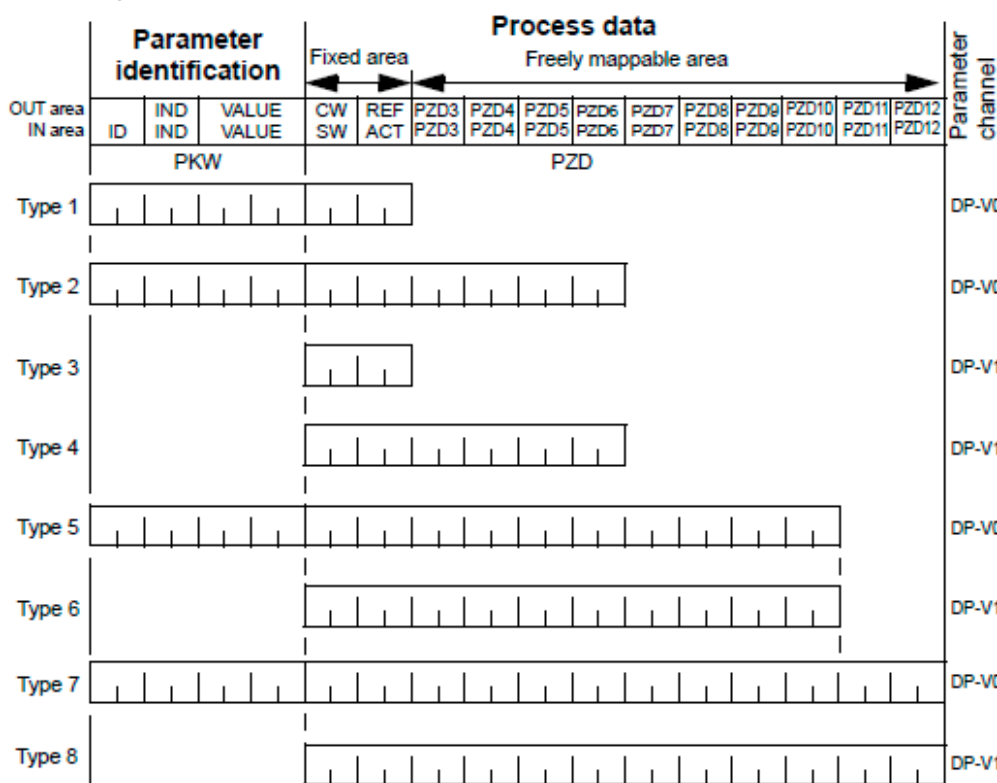
The GSD-file can be found in the internet.

<http://new.abb.com/drives/connectivity/fieldbus-connectivity/profibus/profibus-dp-fpba>

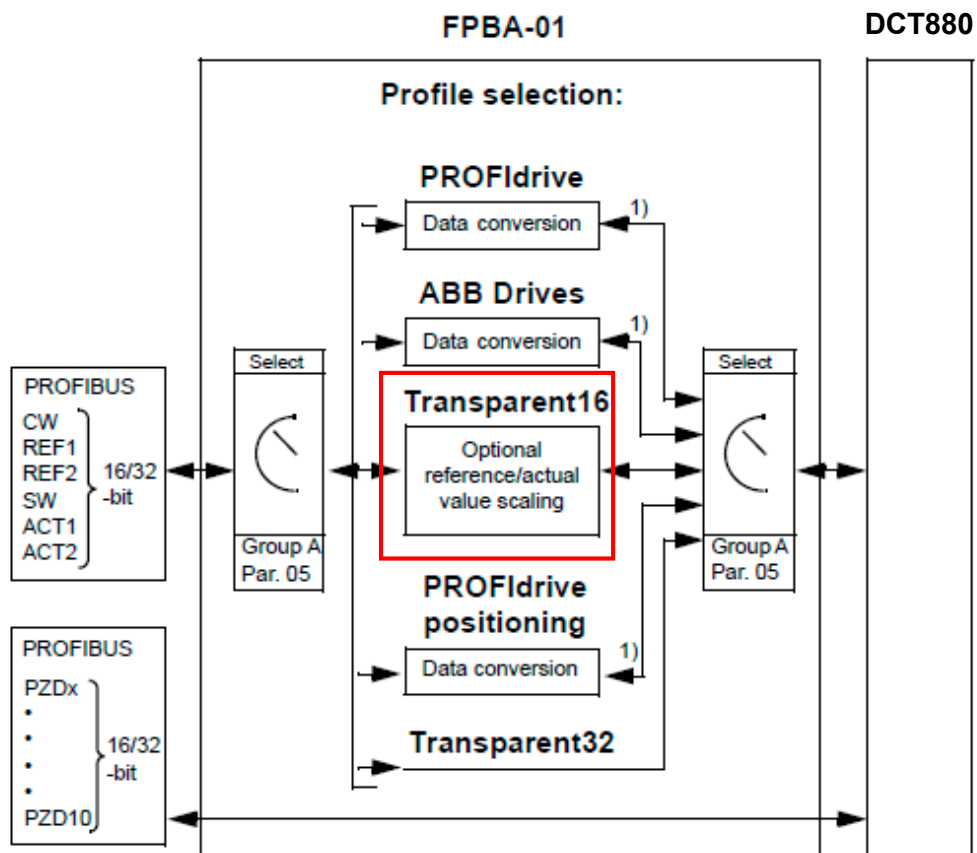
Links and downloads



PPO Types



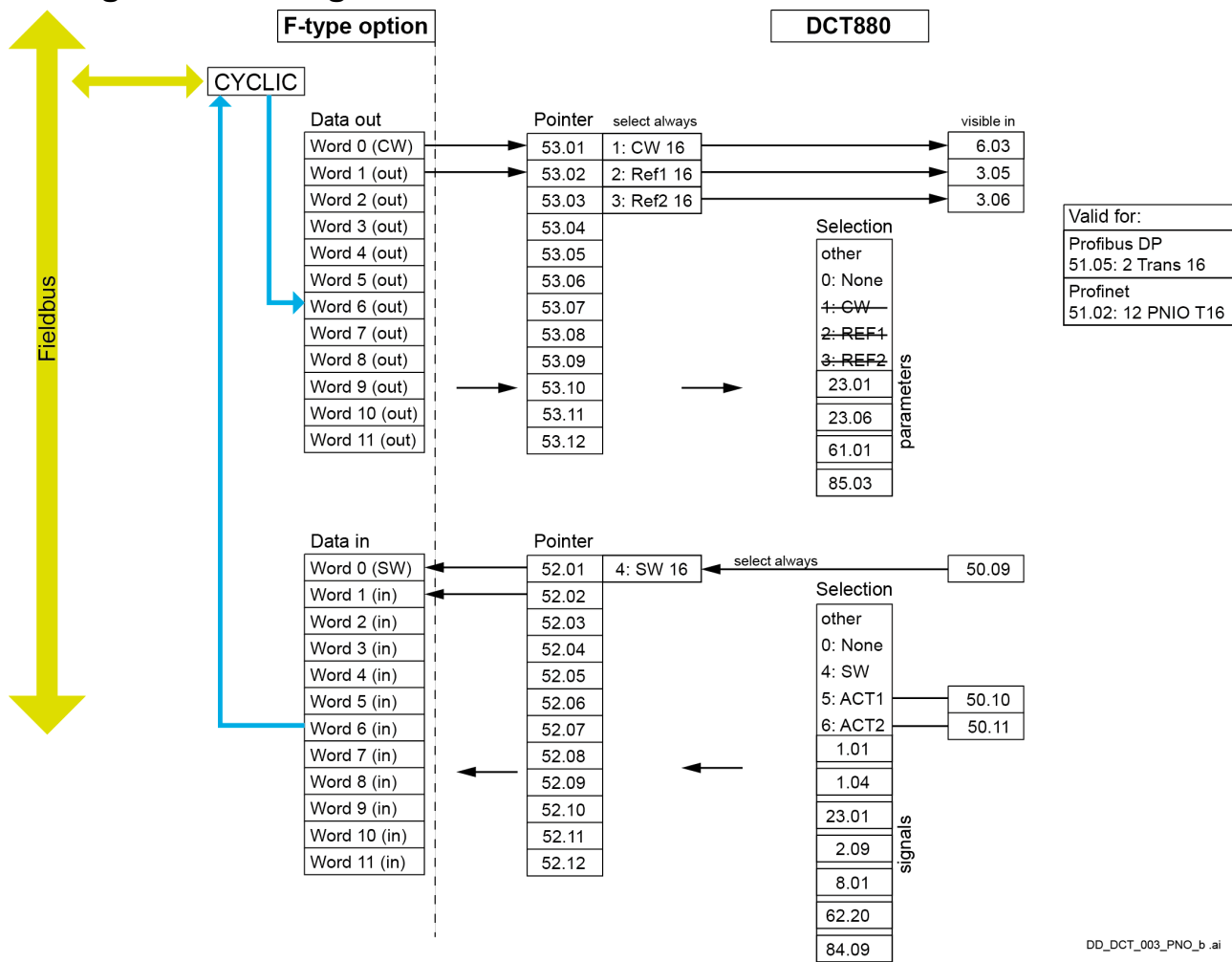
Communication Profiles




Parameter Group 51

Parameter	Setting
51.01 FBA A type	1: Profibus-DP; This parameter is read-only.
51.02 Node address	3; example.
51.03 Baud rate	1500; Indicates the detected communication speed in kbit/s (automatically set by PLC). Default value is 0 if there is no connection to the PLC. This parameter is read-only.
51.04 MSG type	1: PPO1; Indicates the telegram type (PPO) selected for PROFIBUS communication (automatically set by PLC). Default value is Not detected if there is no connection to the PLC. This parameter is read-only.
51.05 Profile	0: PROFIdrive; 1: ABB DRIVES; 2: Trans16; 3. Trans32; 4: PROFIdrive P;
51.06 T16 scale	0; Scaling: 10,000 == 100.00 %.

Configuration using Ref1 and Ref2



	<p>Setting of parameters 53.01 ... 53.03 see above drawing.</p> <p>For parameters 53.04 ... 53.12 use Other; source selection.</p> <p>Mappings</p> <p>1: CW 16bit;</p> <p>2: Ref1 16bit;</p> <p>3: Ref2 16bit;</p> <p>are not allowed.</p>
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Parameter Group 53

Defining the reference values in group 53: PLC ⇒ DCT880.			
PZD	Pointer	Setting	Remarks
1	53.01	1: CW 16bit;	Control Word; visible in 6.03 FBA A CW.
2	53.02	2: Ref1 16bit;	Reference value 1; visible in 3.05 FB A reference 1. Scaling: 10,000 == 100.00 %.
3	53.03	3: Ref2 16bit;	Reference value 2; visible in 3.06 FB A reference 2. Scaling: 10,000 == 100.00 %.
4	53.04	Other; e.g. 21.11	Reference value 3; visible in 21.11 Ext reference 1. Scaling: 10,000 == 100.00 %.
	...		
12	53.12	...	Reference value 12; ... Scaling: 10,000 == 100.00 %.

01	02	03	04	05	06	...	23	24
Control Word		Reference 1		Reference 2		

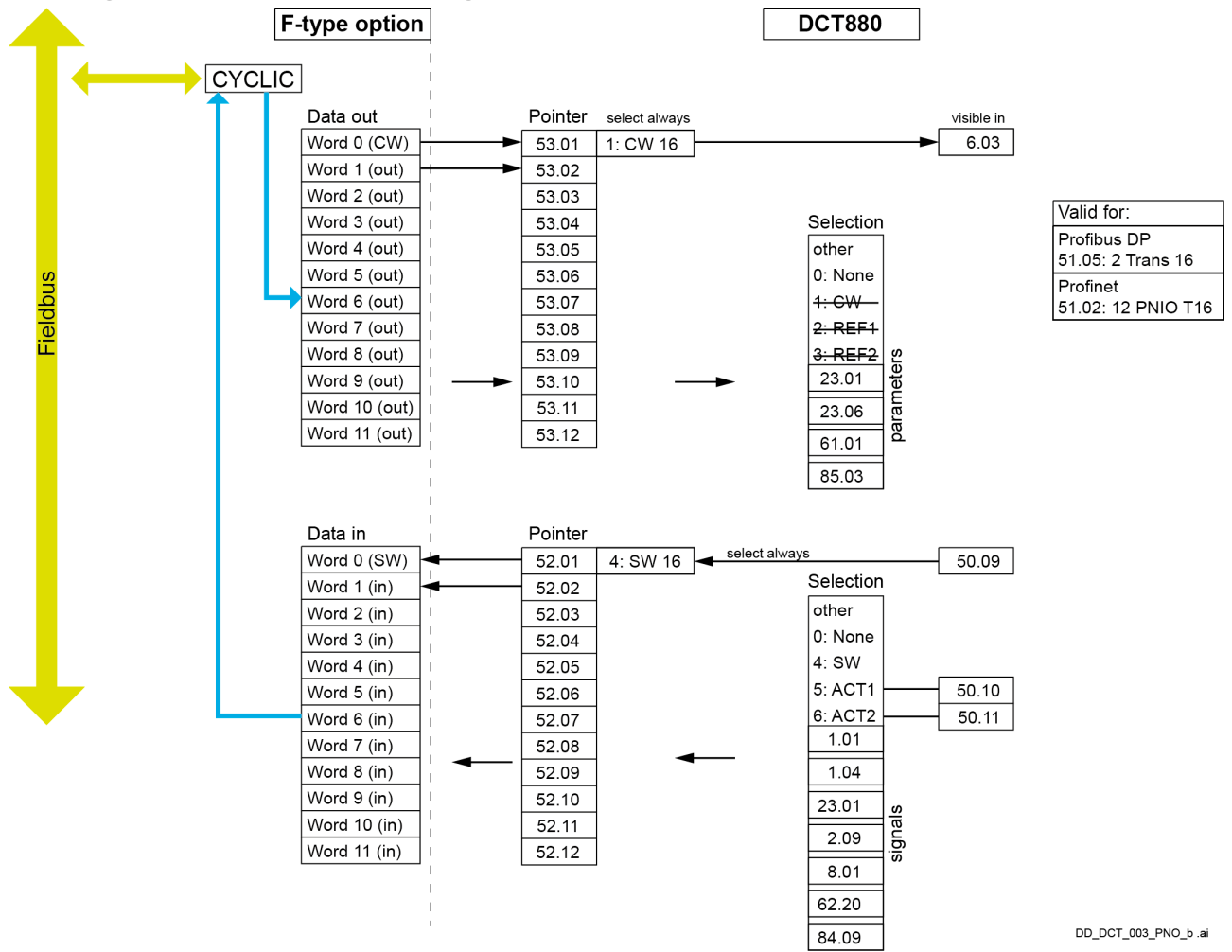
Defining the actual values in group 53: PLC ⇐ DCT880.			
PZD	Pointer	Setting	Remarks
1	52.01	4: SW 16bit;	50.09 FBA A SW transparent source = Other; e.g. 06.13 Global Status Word.
2	52.02	Other; e.g. 01.53	Actual value1; e.g. 01.53 Leg 1 Power relative actual. Scaling: 10,000 == 100.00 %.
3	52.03	Other; e.g. 01.54	Actual value 2; e.g. 01.54 Leg 2 Power relative actual. Scaling: 10,000 == 100.00 %.
4	52.04	Other; e.g. 01.55	Actual value 3; e.g. 01.55 Leg 3 Power relative actual. Scaling: 10,000 == 100.00 %.
	...		
12	52.12	...	Actual value12; ... Scaling: 10,000 == 100.00 %.

01	02	03	04	05	06	07	08	23	24
Status Word		Power Leg 1		Power Leg 2		Power Leg 3		




Each change in parameter groups 50, 51, 52 and 53 must be validated using 51.27 FBA A par refresh = Refresh.

Configuration without using Ref1 and Ref2 (for information)



DD_DCT_003_PNO_b.ai

	<p>Setting of parameter 53.01 see above drawing.</p> <p>For parameters 53.02 ... 53.12 use Other; source selection.</p> <p>Mappings</p> <p>1: CW 16bit;</p> <p>2: Ref1 16bit;</p> <p>3: Ref2 16bit;</p> <p>are not allowed.</p>
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Scaling the reference values

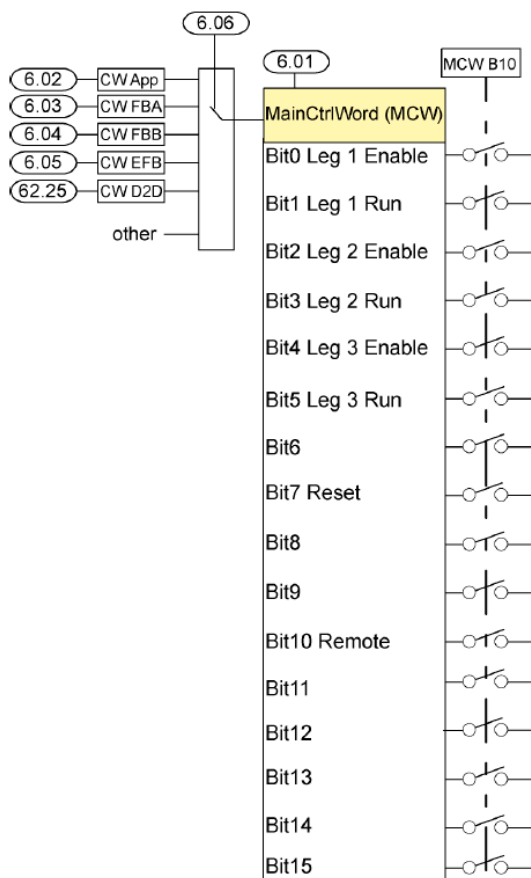
The reference values are scaled to ±10,000 (decimal), this equals ±100.00 %.

Additional Parameters

Start / Stop

Parameter	Setting
06.06 MCW Source	1: FBA A (6.03);
19.10 Leg 1 Command Location Selector	0: MCW 6.01;
19.11 Leg 2 Command Location Selector	0: MCW 6.01;
19.12 Leg 3 Command Location Selector	0: MCW 6.01;

06.01 Main Control Word active



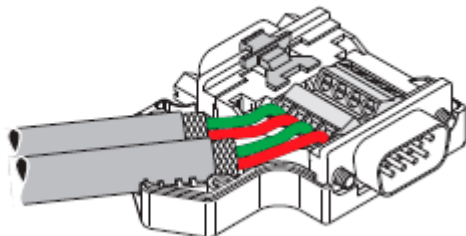
Reference Chain

Parameter	Setting
22.15 Leg 1 Cha A Main Ref Selector	4: FB A reference 1 (3.05);
24.15 Leg 2 Cha A Main Ref Selector	5: FB A reference 2 (3.06);
26.15 Leg 3 Cha A Main Ref Selector	Other; e.g. 21.11 Ext reference 1.

Profibus Connector

Convert Profibus connector from left-hand side cable entry to right-hand side cable entry. In this example Phoenix Contact Subconplus D-Sub Profibus:

Left-hand side cable entry



Right-hand side cable entry

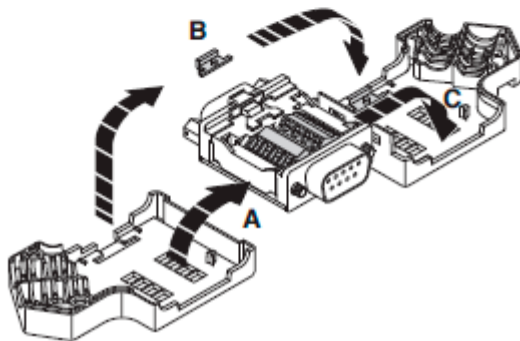
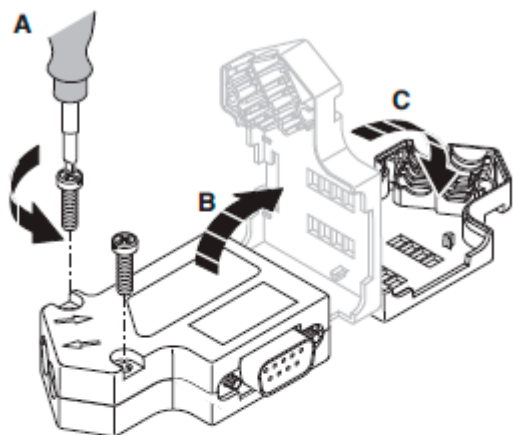


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