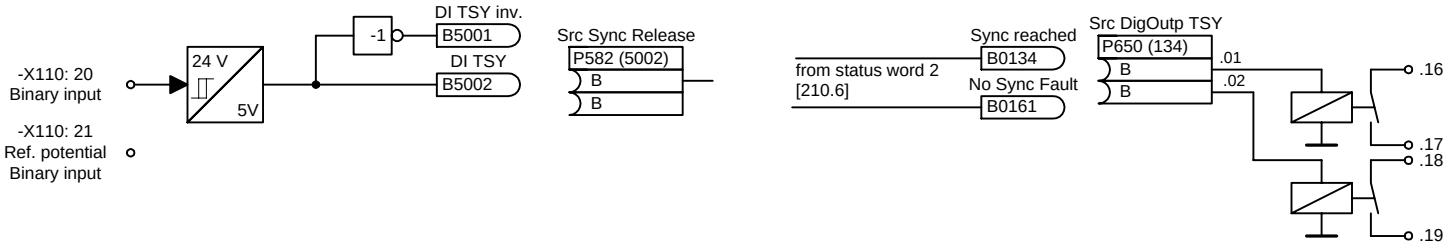
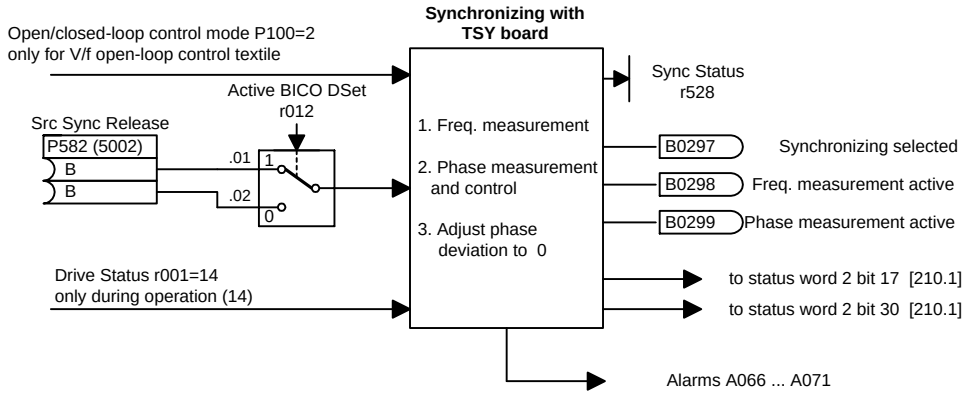
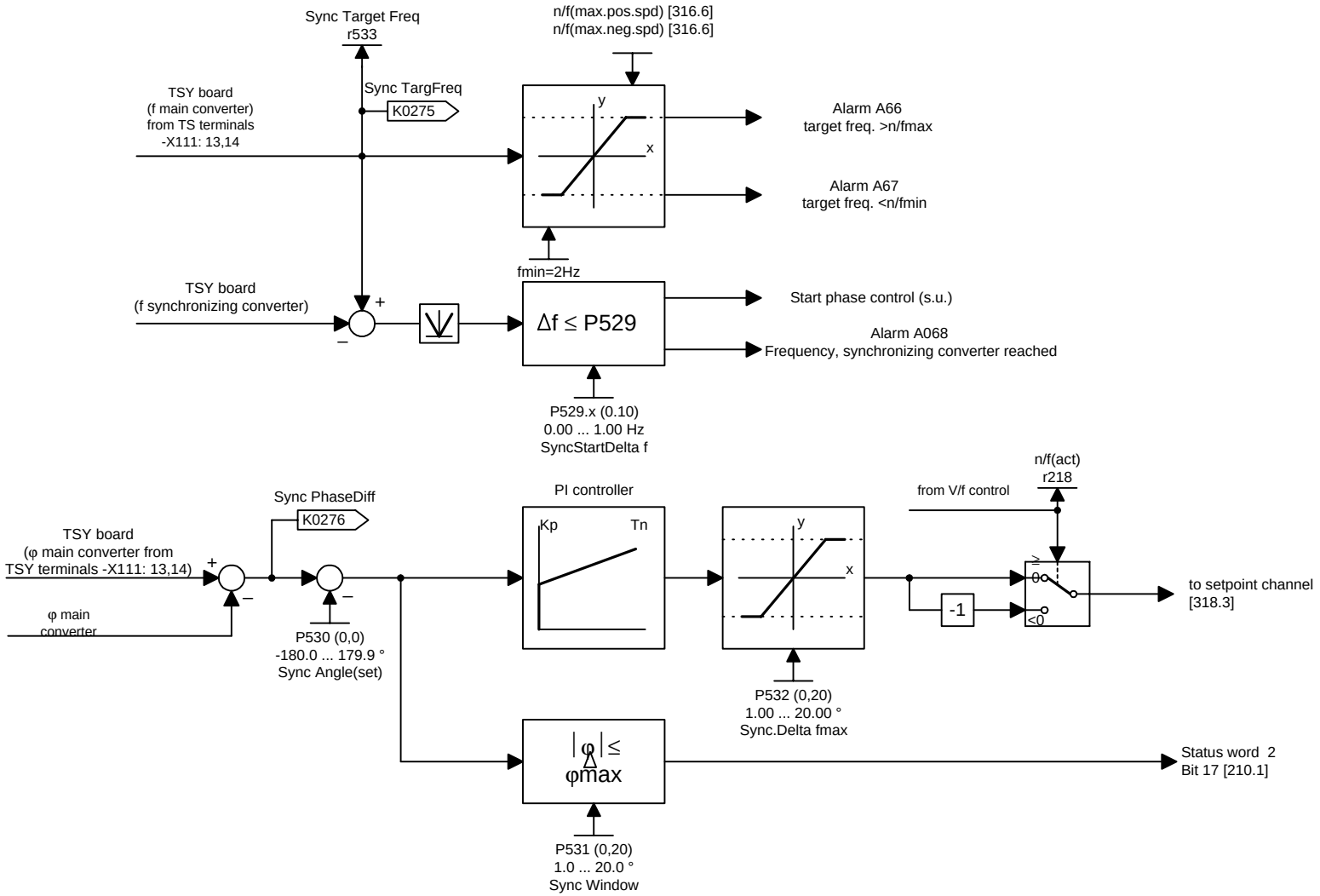
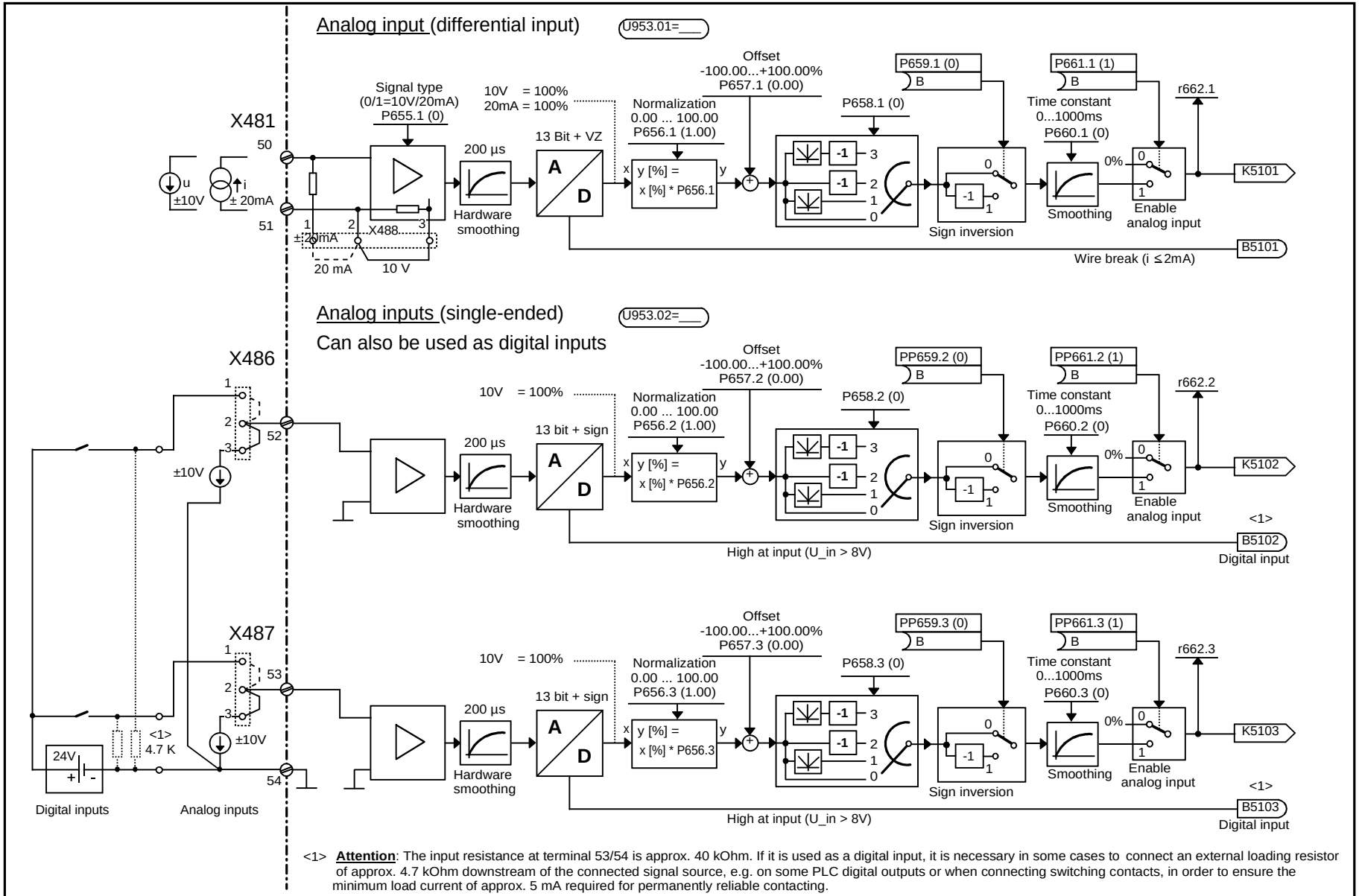




1	2	3	4	5	6	7	8
TSY board					fp_vc_X01_e.vsd	Function diagram	- X01 -
					31.01.98	MASTERDRIVES VC	



1	2	3	4	5	6	7	8
TSY board					fp_vc_X02_e.vsd	Function diagram	- X02 -
Synchronizing status: Phase control and frequency measurement					31.01.98	MASTERDRIVES VC	



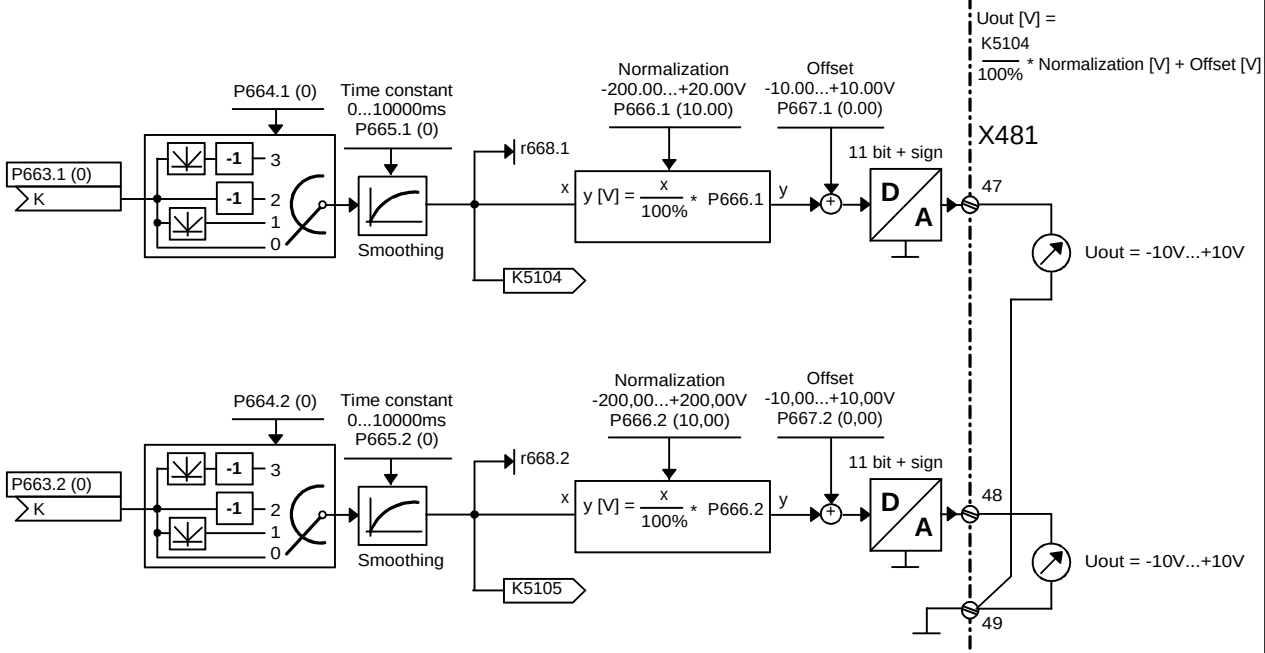
<1> **Attention**: The input resistance at terminal 53/54 is approx. 40 kOhm. If it is used as a digital input, it is necessary in some cases to connect an external loading resistor of approx. 4.7 kOhm downstream of the connected signal source, e.g. on some PLC digital outputs or when connecting switching contacts, in order to ensure the minimum load current of approx. 5 mA required for permanently reliable contacting.

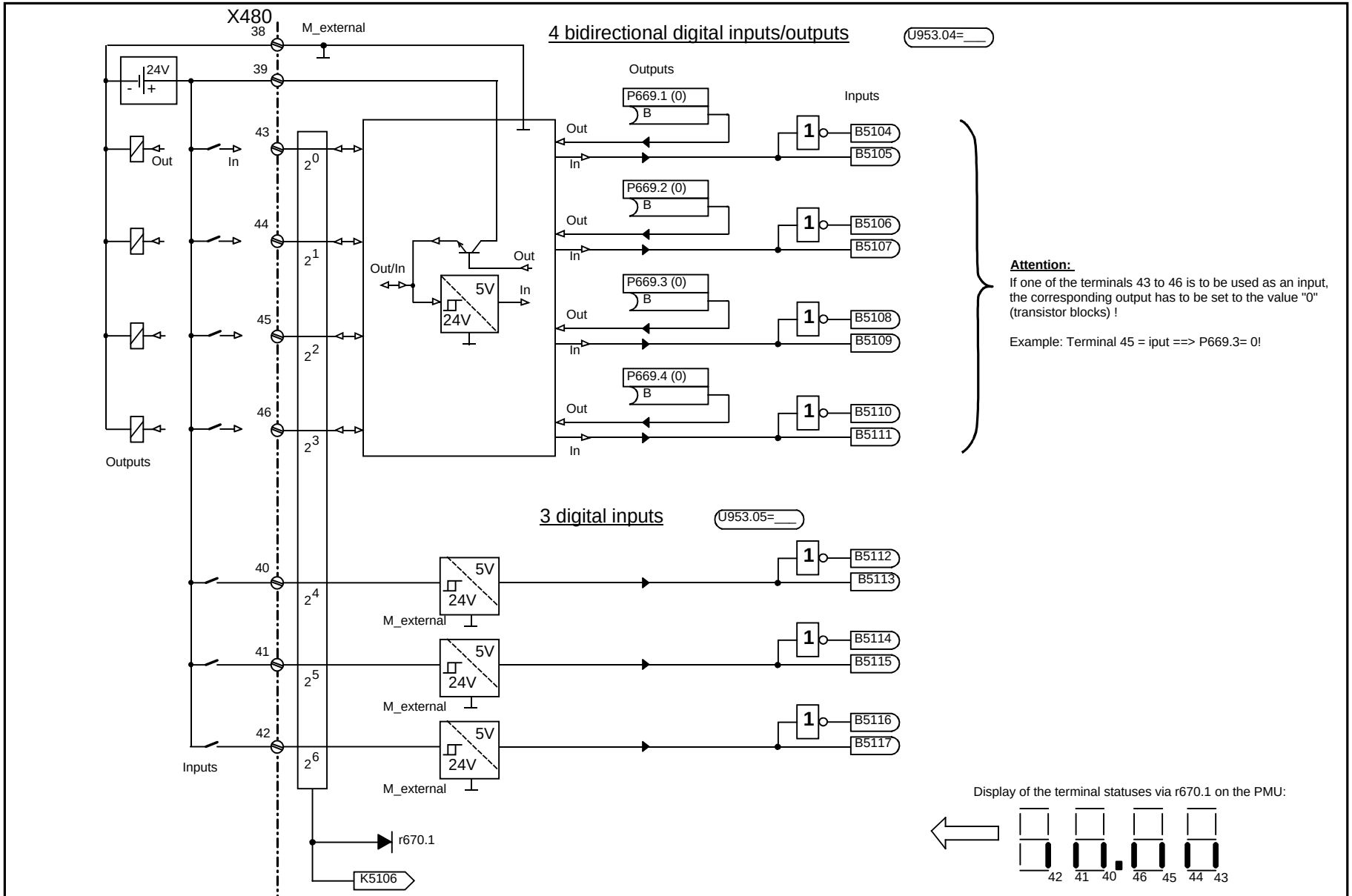
1	2	3	4	5	6	7	8

Terminal expansion EB1 No. 1, analog inputs, combined digital inputs 31.01.98 eb1_11_e.ds4 Function diagram MASTERDRIVES VC **- Y01 -**

Analog outputs

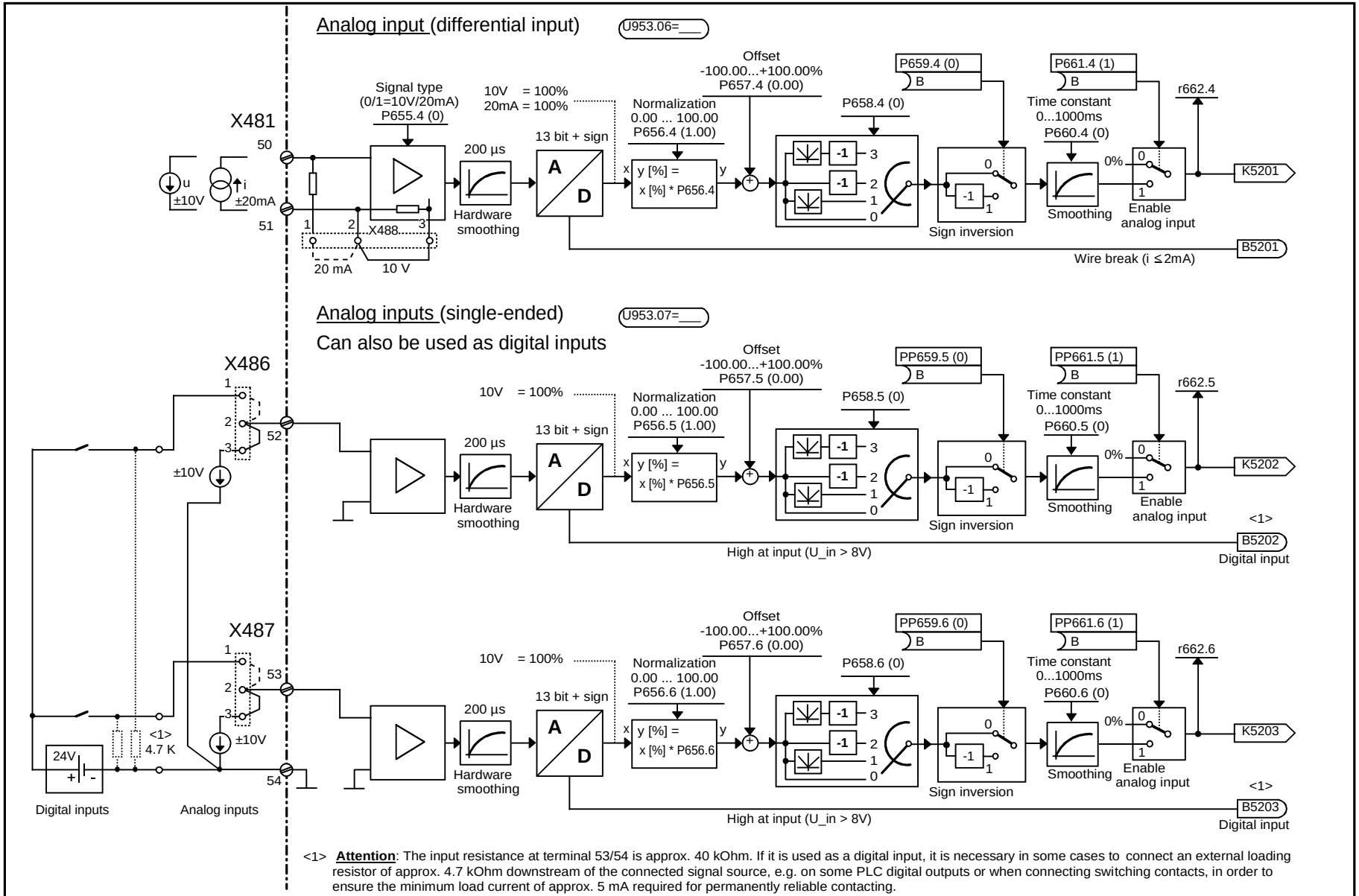
U953.03=___





1	2	3	4	5	6	7	8

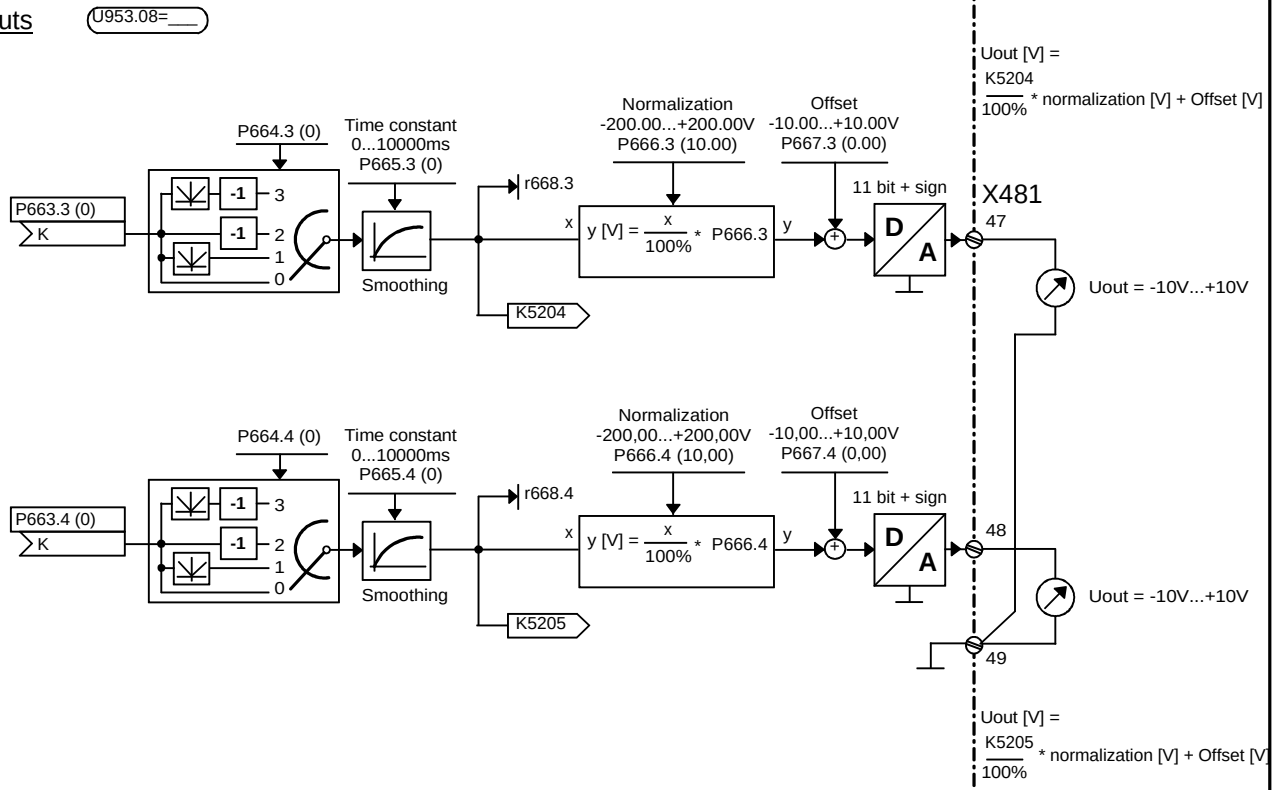
Terminal expansion EB1 No. 1, digital inputs/outputs 31.01.98 eb1_13_e.ds4 Function diagram MASTERDRIVES VC **- Y03 -**

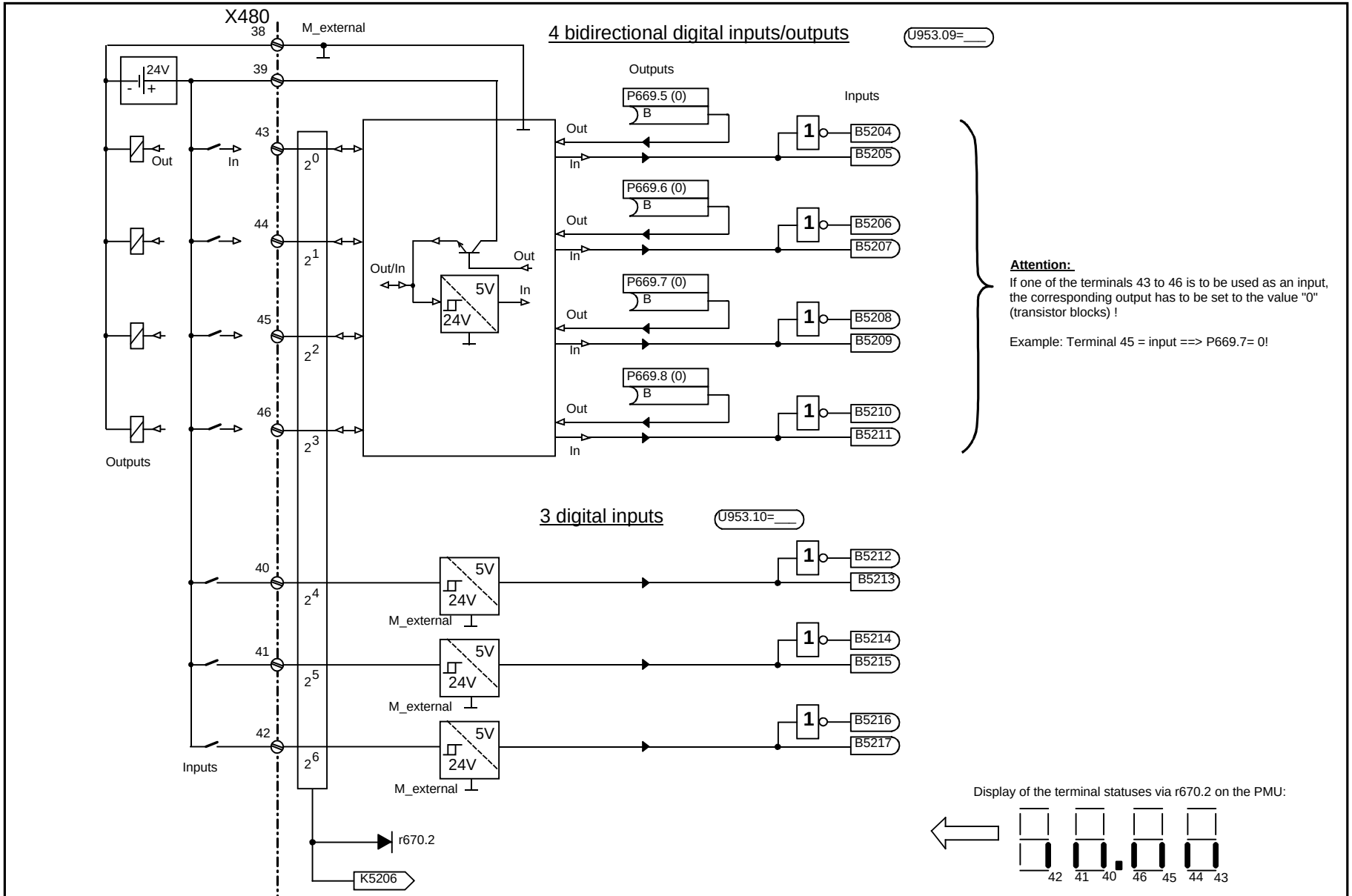


<1> **Attention**: The input resistance at terminal 53/54 is approx. 40 kOhm. If it is used as a digital input, it is necessary in some cases to connect an external loading resistor of approx. 4.7 kOhm downstream of the connected signal source, e.g. on some PLC digital outputs or when connecting switching contacts, in order to ensure the minimum load current of approx. 5 mA required for permanently reliable contacting.

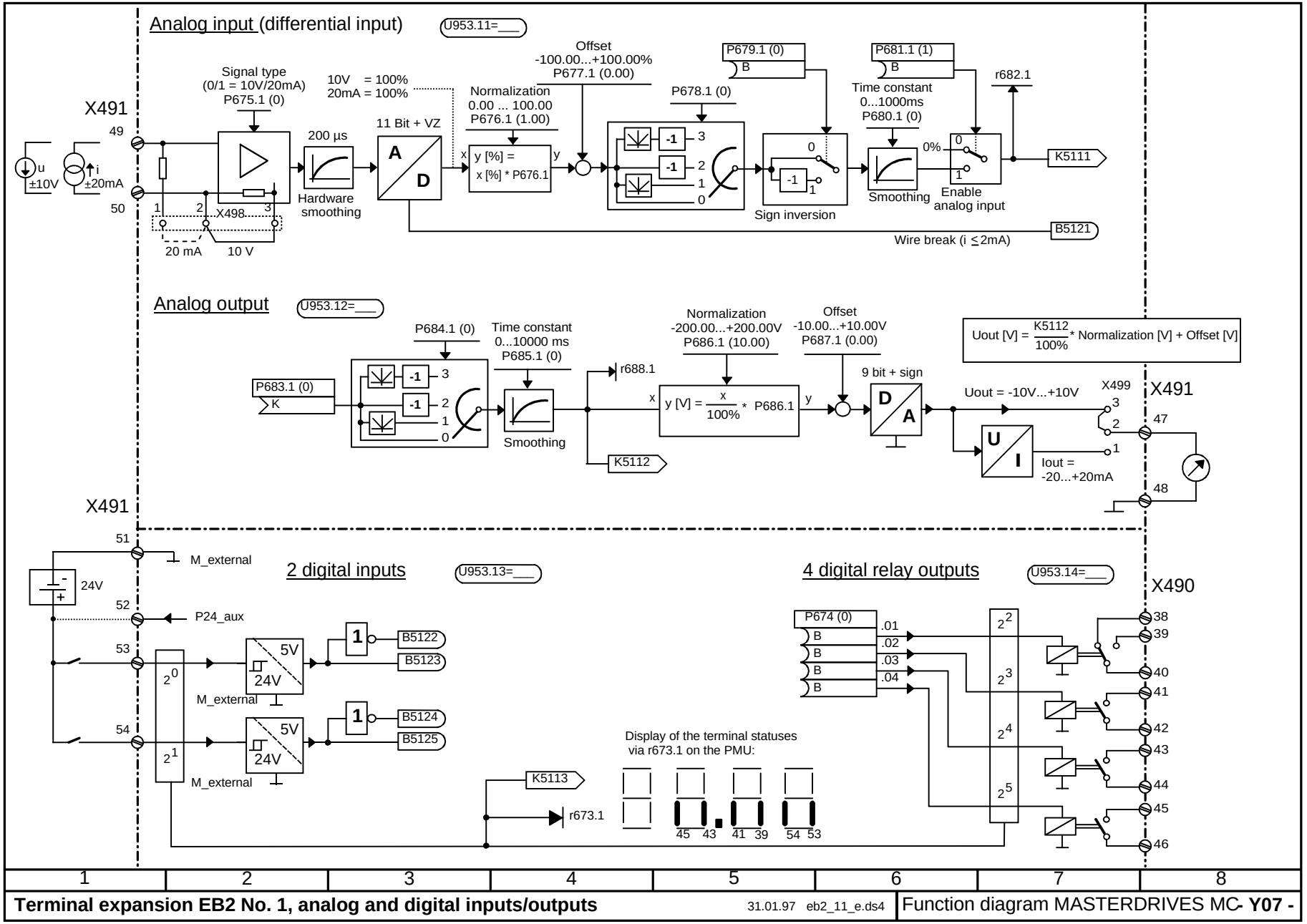
Analog outputs

U953.08=___



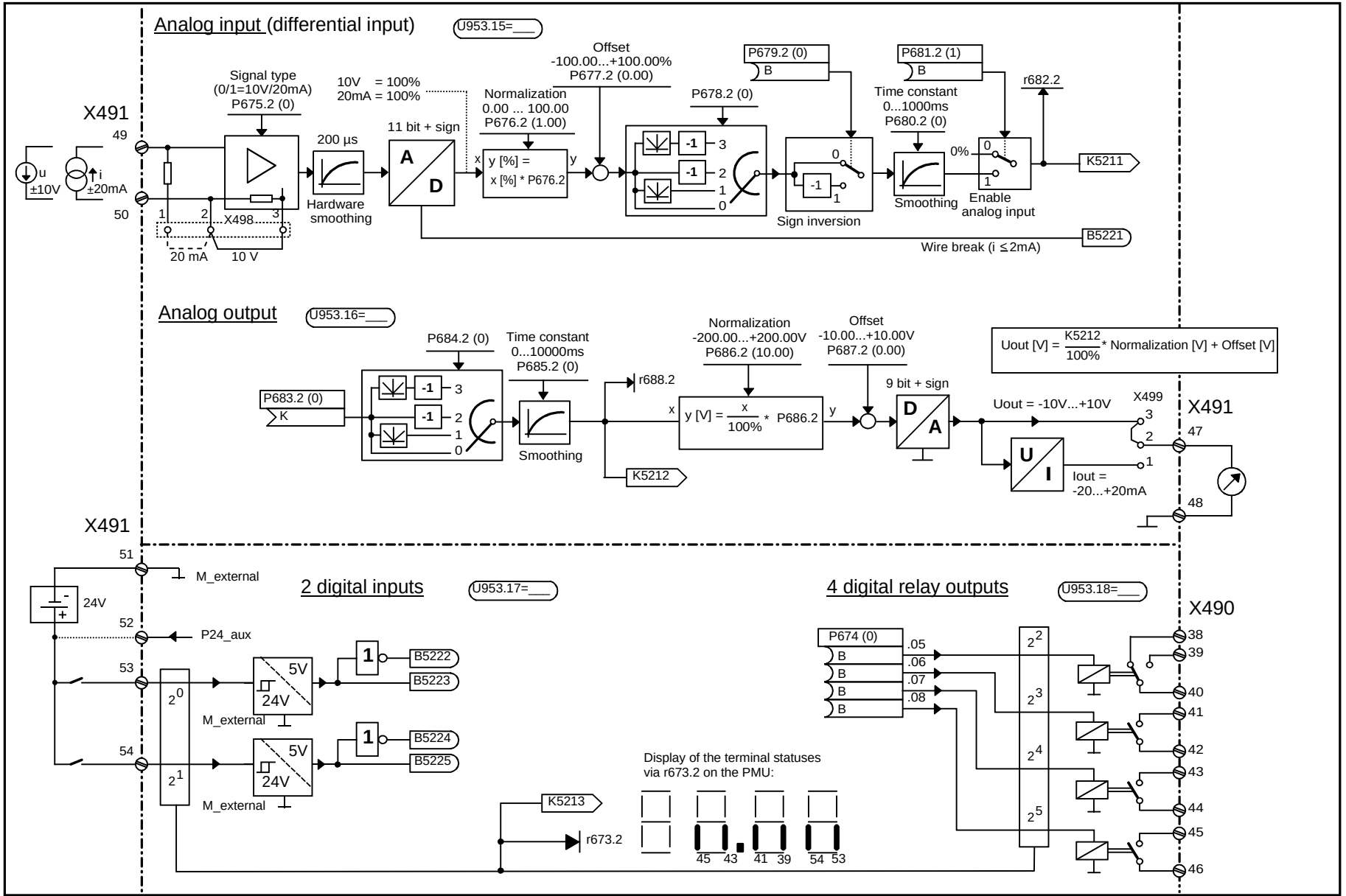

X480
38
M_external
39
24V
-
+
4 bidirectional digital inputs/outputs
U953.09=___
Outputs
Inputs
P669.5 (0)
B
Out
In
B5204
B5205
P669.6 (0)
B5206
B5207
P669.7 (0)
B5208
B5209
P669.8 (0)
B5210
B5211
43
44
45
46
2^0
2^1
2^2
2^3
Out/In
5V
24V
1
Out
In
Outputs
Attention:
If one of the terminals 43 to 46 is to be used as an input, the corresponding output has to be set to the value "0" (transistor blocks) !
Example: Terminal 45 = input ==> P669.7= 0!
3 digital inputs
U953.10=___
40
41
42
2^4
2^5
2^6
B5212
B5213
B5214
B5215
B5216
B5217
M_external
Inputs
r670.2
K5206
Display of the terminal statuses via r670.2 on the PMU:
42 41 40 46 45 44 43

1	2	3	4	5	6	7	8



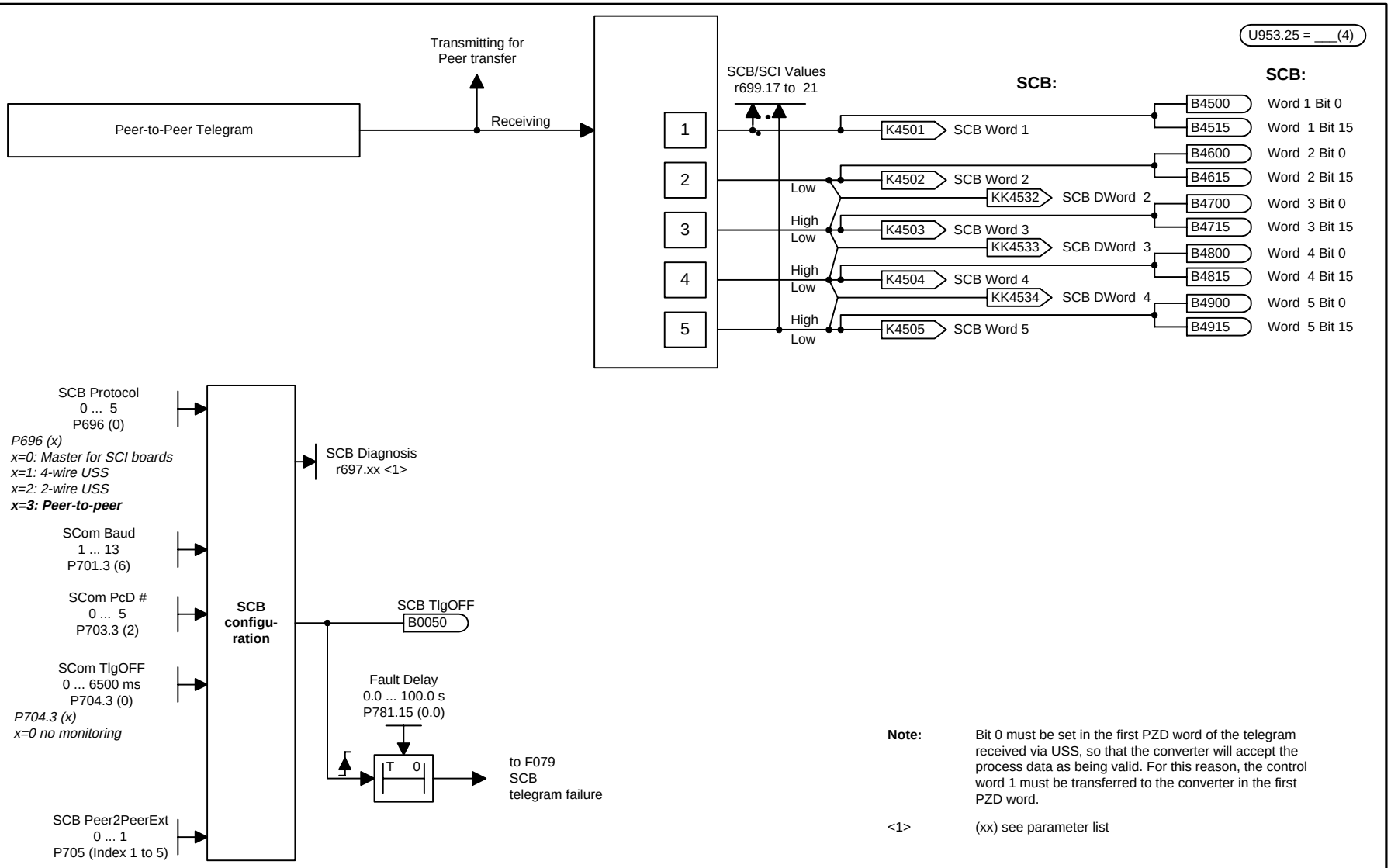
1	2	3	4	5	6	7	8

Terminal expansion EB2 No. 1, analog and digital inputs/outputs 31.01.97 eb2_11_e.ds4 Function diagram MASTERDRIVES MC **- Y07 -**



1	2	3	4	5	6	7	8

Terminal expansion EB2 No. 2, analog and digital inputs/outputs 31.01.98 eb2_21_e.ds4 Function diagram MASTERDRIVES MC **- Y08 -**

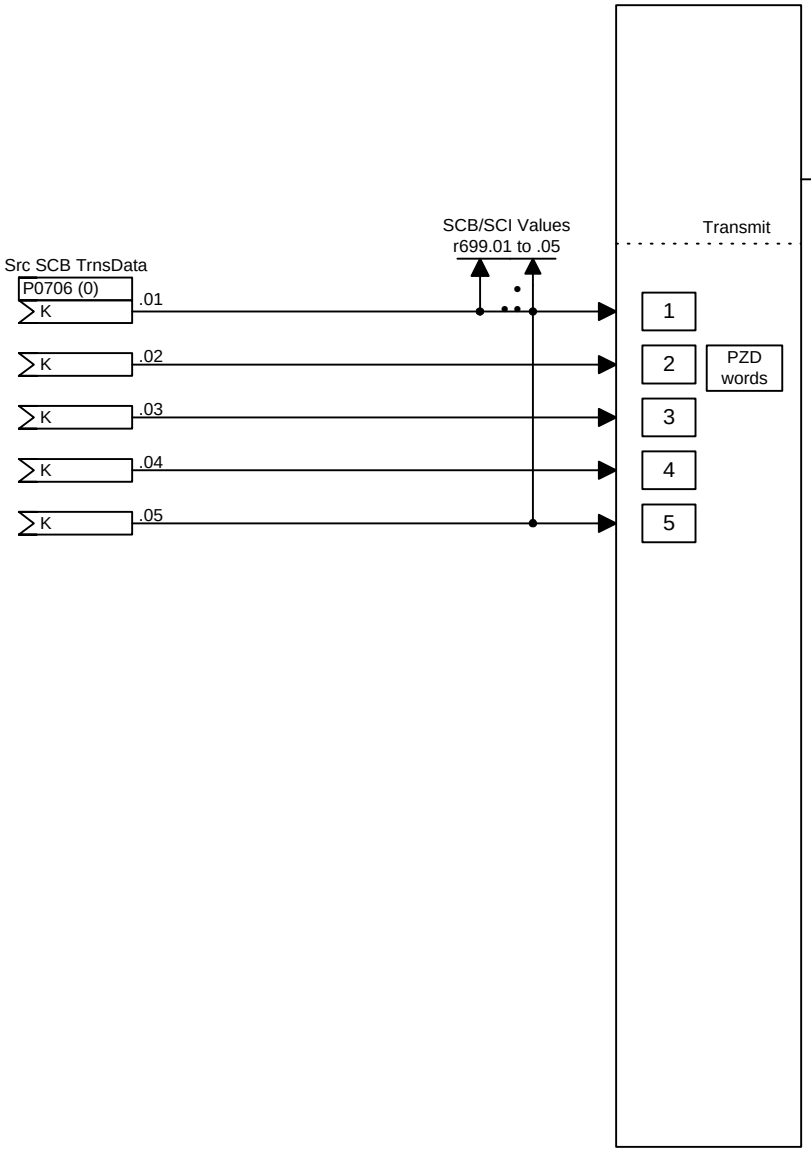


Note: Bit 0 must be set in the first PZD word of the telegram received via USS, so that the converter will accept the process data as being valid. For this reason, the control word 1 must be transferred to the converter in the first PZD word.

<1> (xx) see parameter list

1	2	3	4	5	6	7	8
SCB1/2					fp_vc_Z01_e.vsd	Function diagram	- Z01 -
Peer-to-peer receiving					31.01.98	MASTERDRIVES VC	

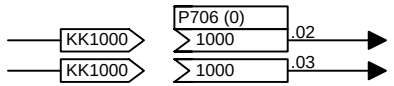
U953.26 = ___(4)



Transmitting 32 bit words:
If the same double-word connector is interconnected to two consecutive connector numbers, this is transferred as a 32-bit word.

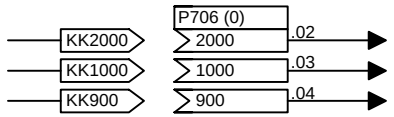
Examples:

1.



KK1000 is transferred as a 32-bit word

2.

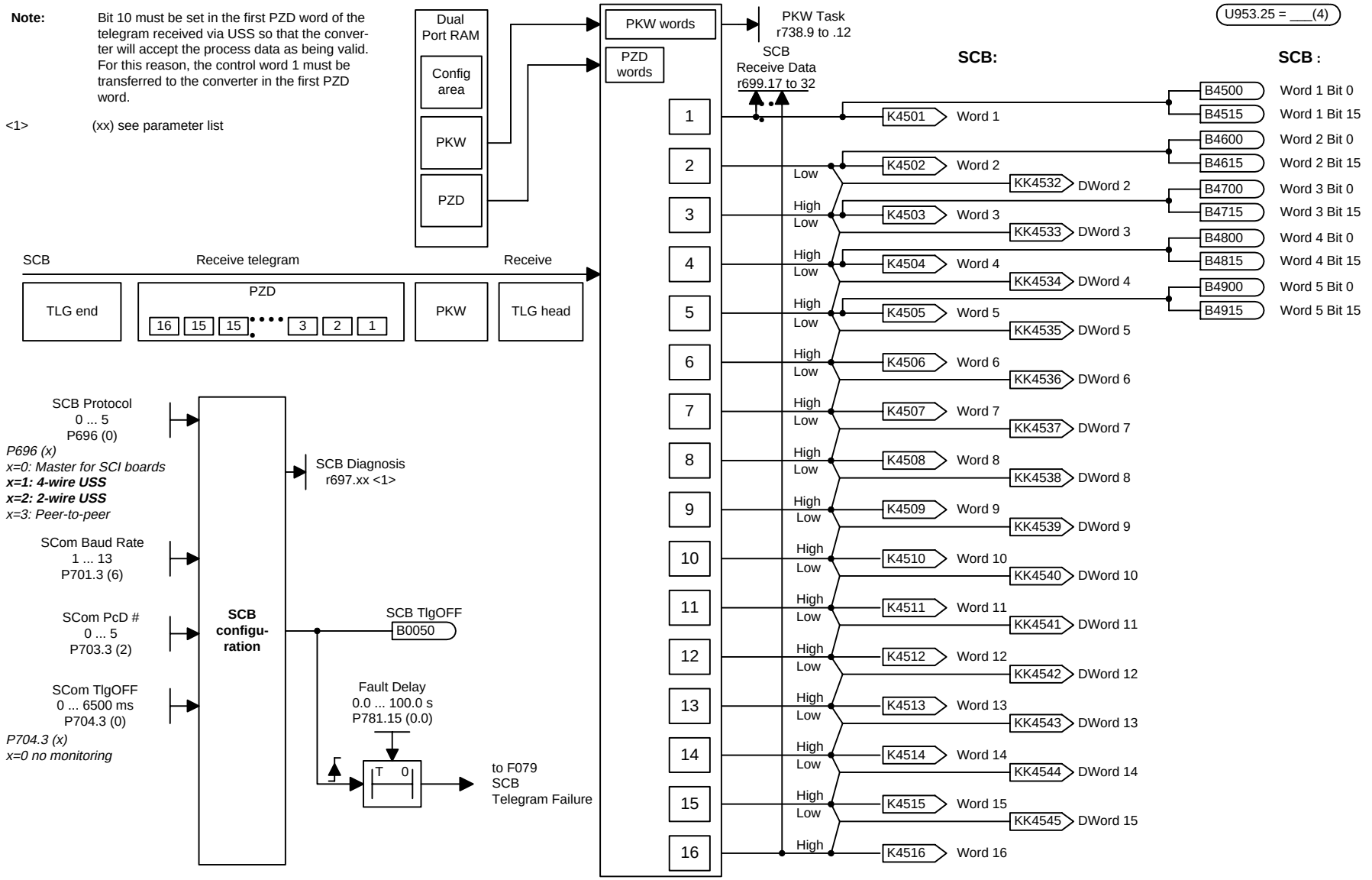


Only the high part of KK1000 and KK2000 is transferred as a 16-bit word

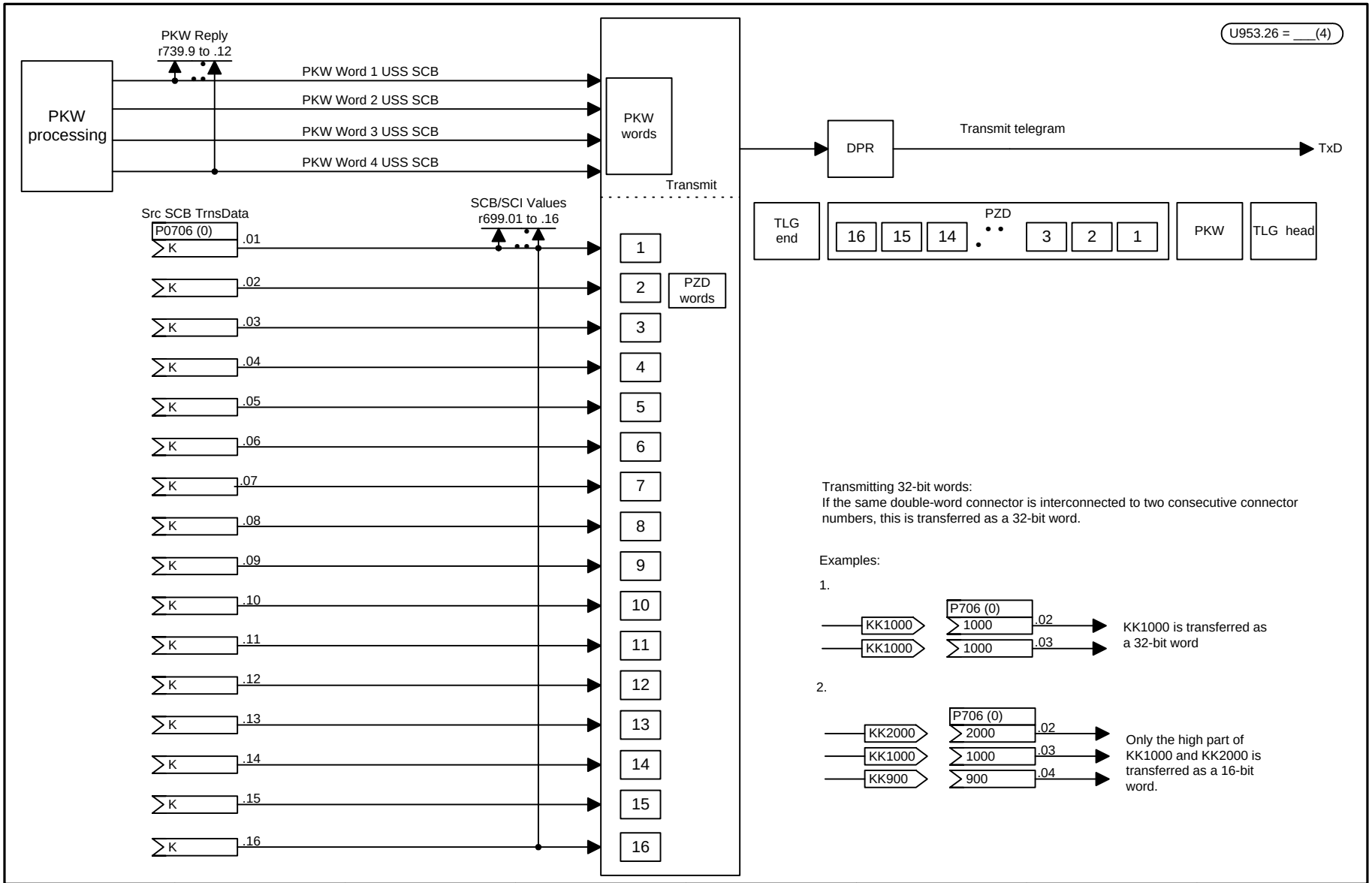
1	2	3	4	5	6	7	8
SCB1/2					fp_vc_Z02_e.vsd	Function diagram	- Z02 -
Peer-to-peer transmitting					31.01.98	MASTERDRIVES VC	

Note: Bit 10 must be set in the first PZD word of the telegram received via USS so that the converter will accept the process data as being valid. For this reason, the control word 1 must be transferred to the converter in the first PZD word.

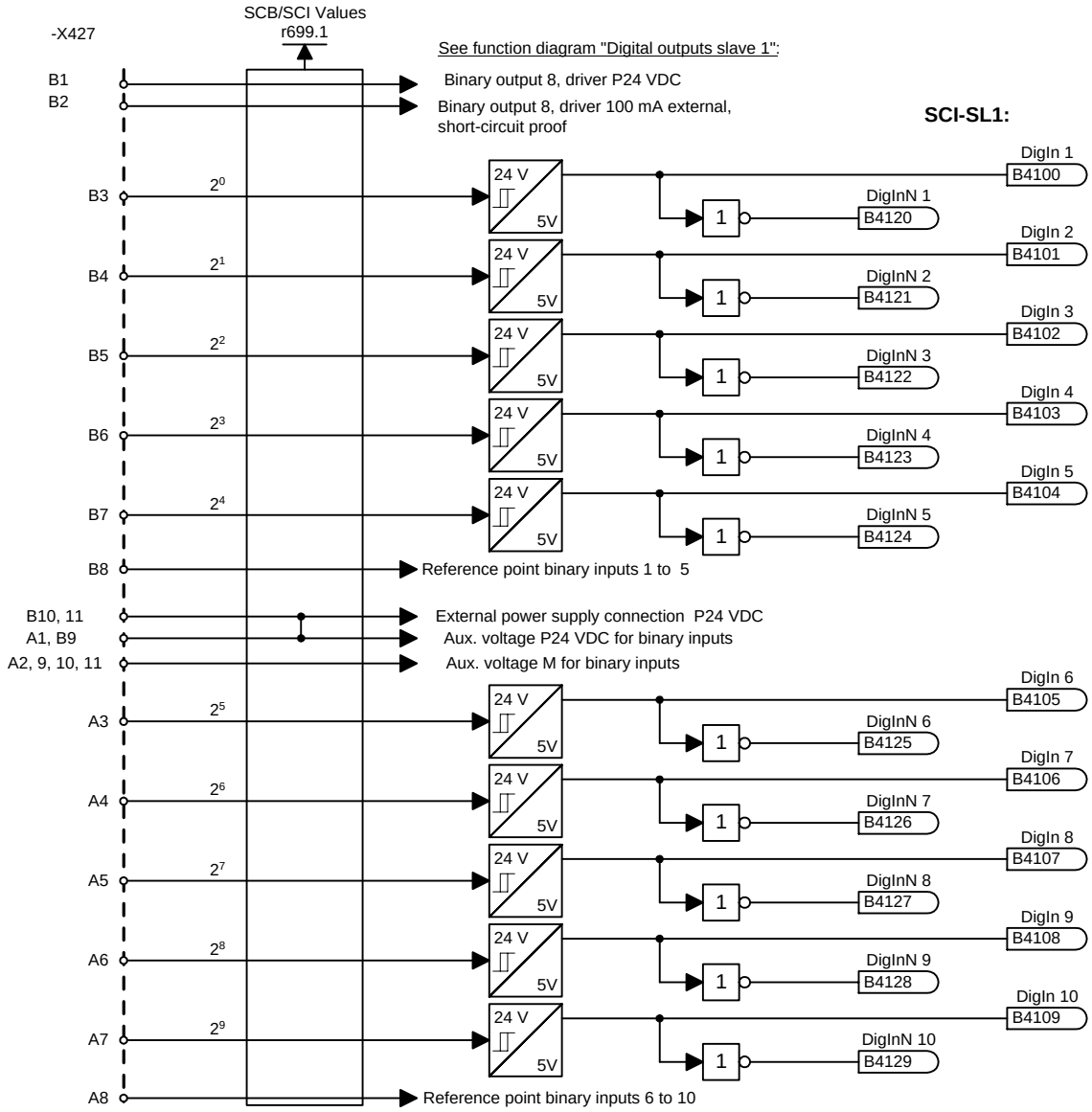
<1> (xx) see parameter list



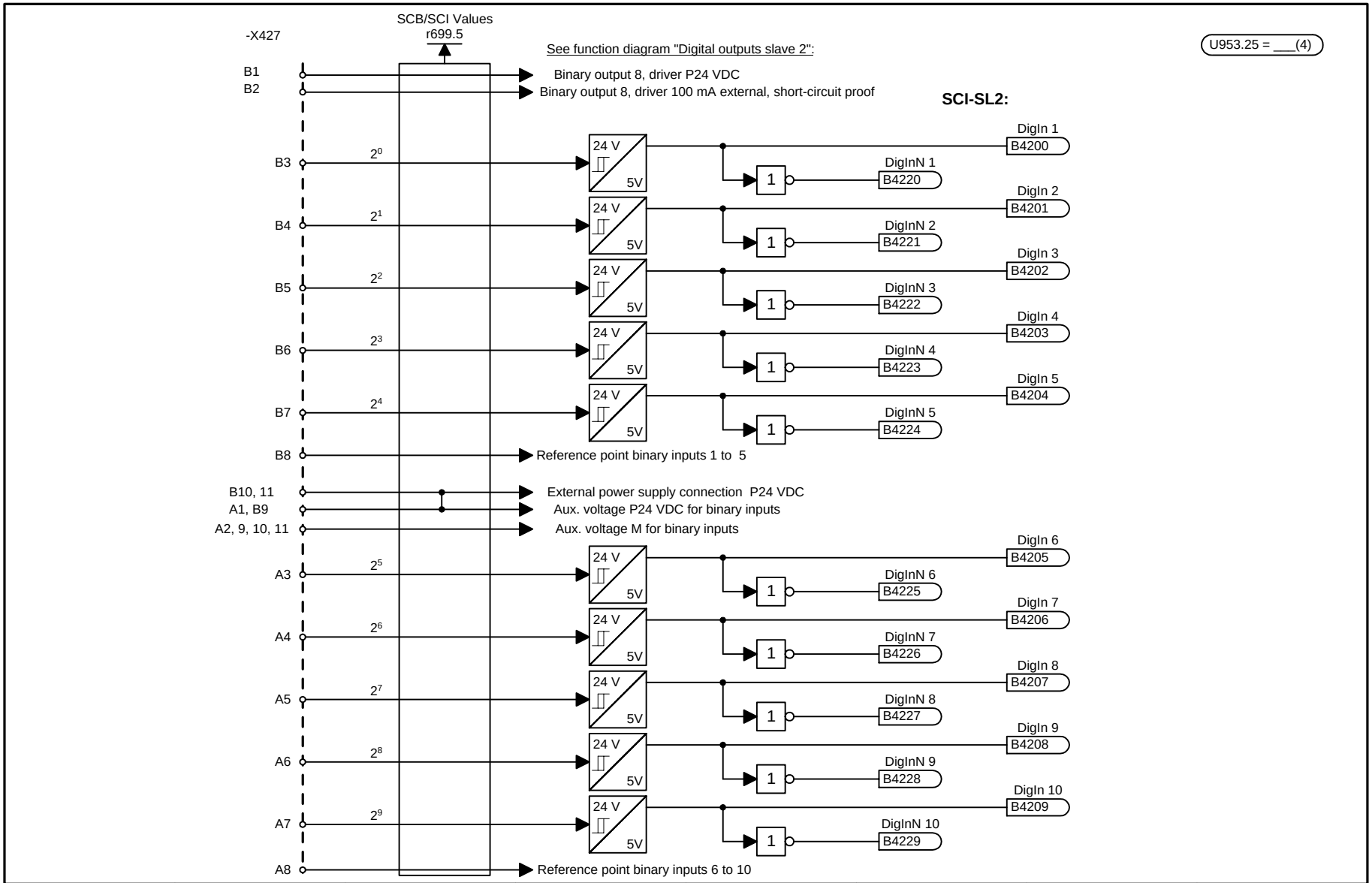
1	2	3	4	5	6	7	8
SCB2					fp_vc_Z05_e.vsd	Function diagram	- Z05 -
USS receiving					31.01.98	MASTERDRIVES VC	



1	2	3	4	5	6	7	8
SCB2					fp_vc_Z06_e.vsd	Function diagram	- Z06 -
USS transmitting					31.01.98	MASTERDRIVES VC	

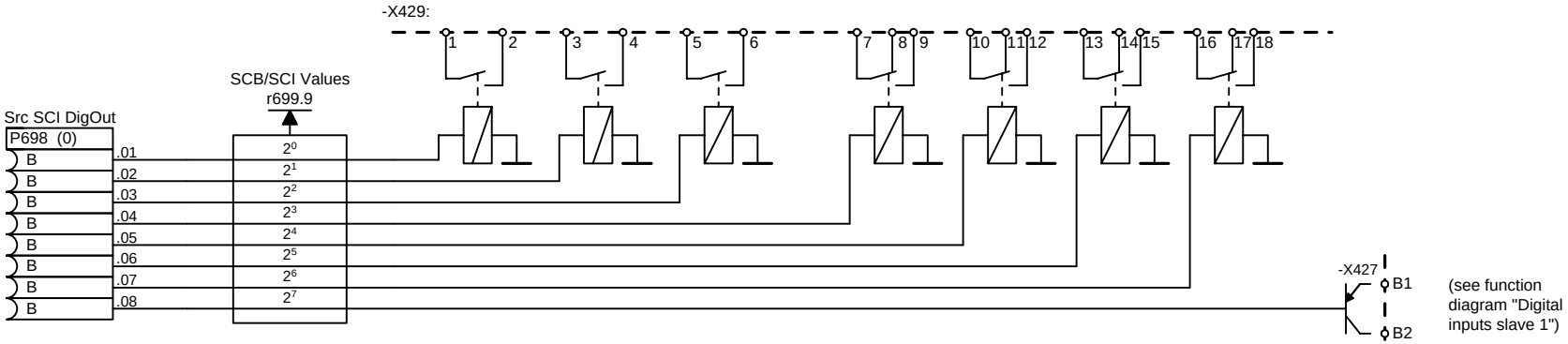


1	2	3	4	5	6	7	8
SCB1 with SCI1					fp_vc_Z10_e.vsd	Function diagram	- Z10 -
Digital inputs slave 1					31.01.98	MASTERDRIVES VC	



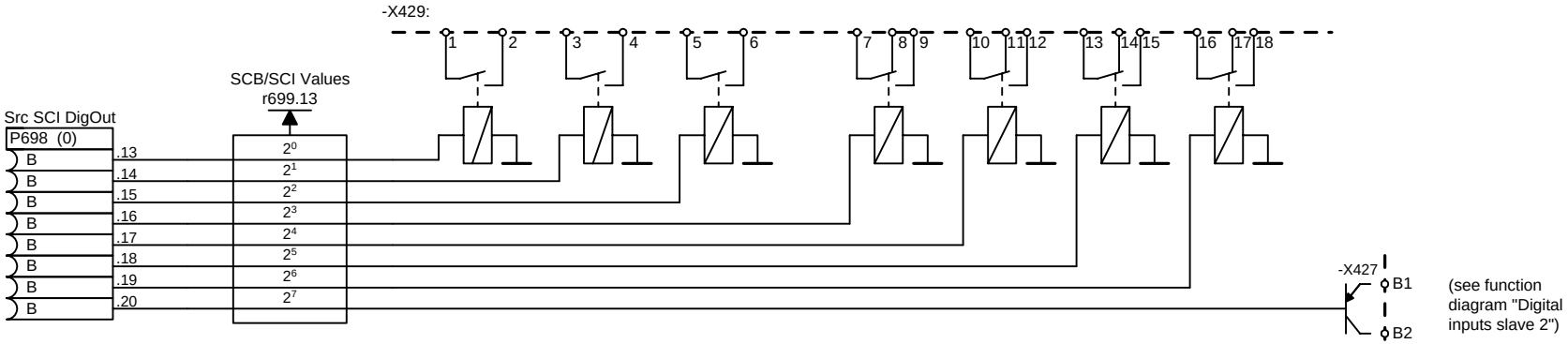
1	2	3	4	5	6	7	8
SCB1 with SCI1					fp_vc_Z11_e.vsd	Function diagram	- Z11 -
Digital inputs slave 2					31.01.98	MASTERDRIVES VC	

U953.26 = ___(4)

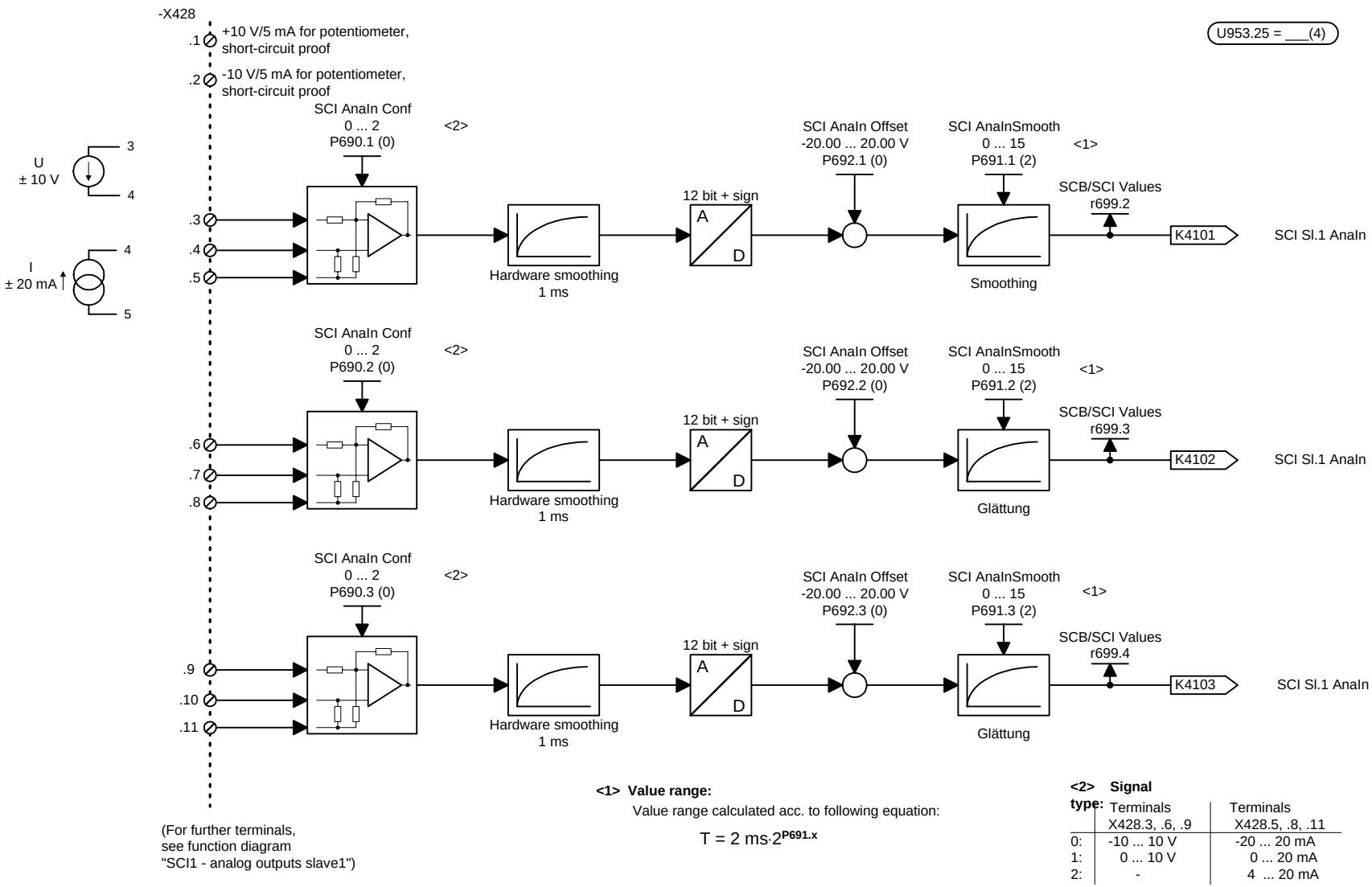


1	2	3	4	5	6	7	8
SCB1 with SCI1					fp_vc_Z15_e.vsd	Function diagram	- Z15-
Digital outputs slave 1					31.01.98	MASTERDRIVES VC	

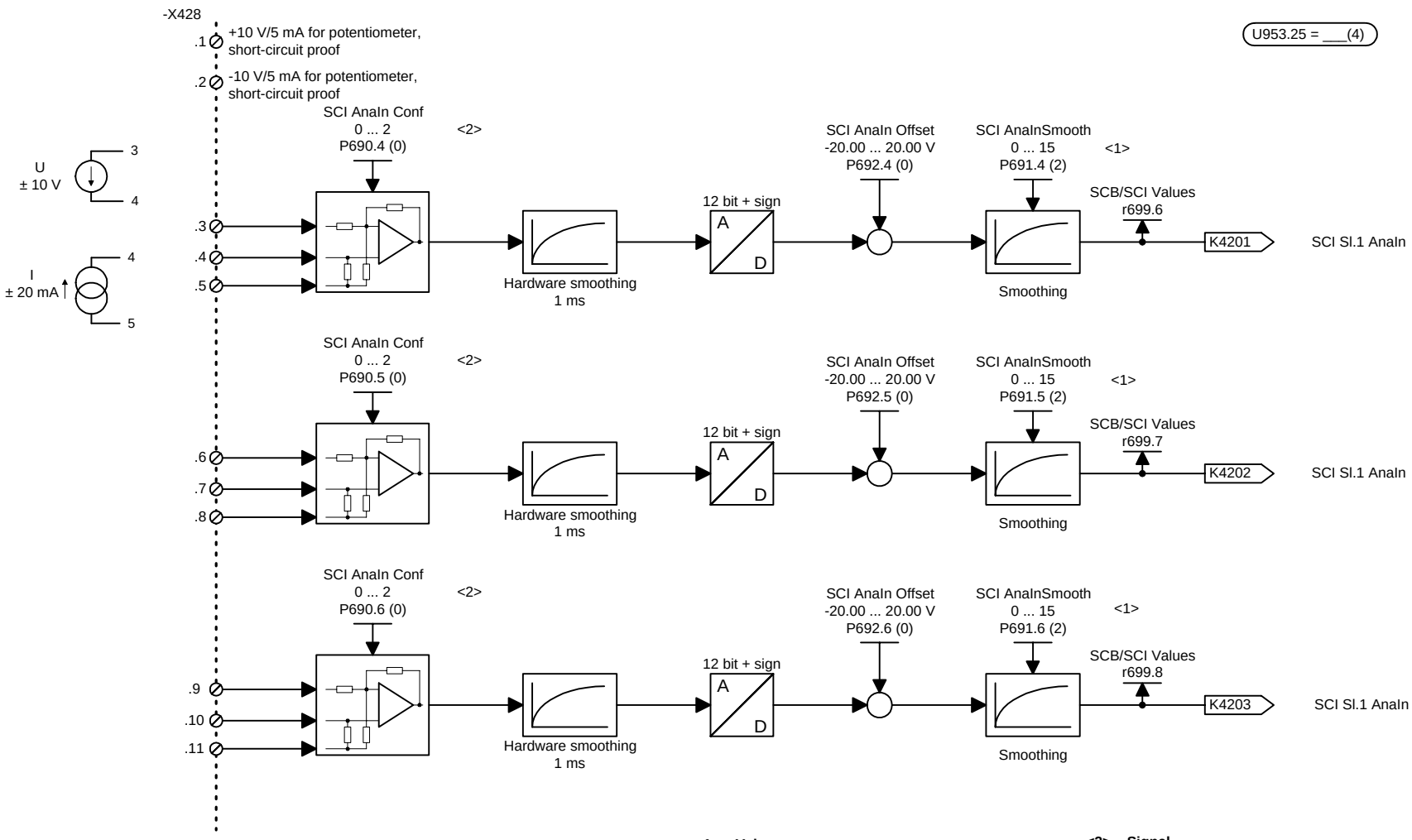
U953.26 = ___(4)



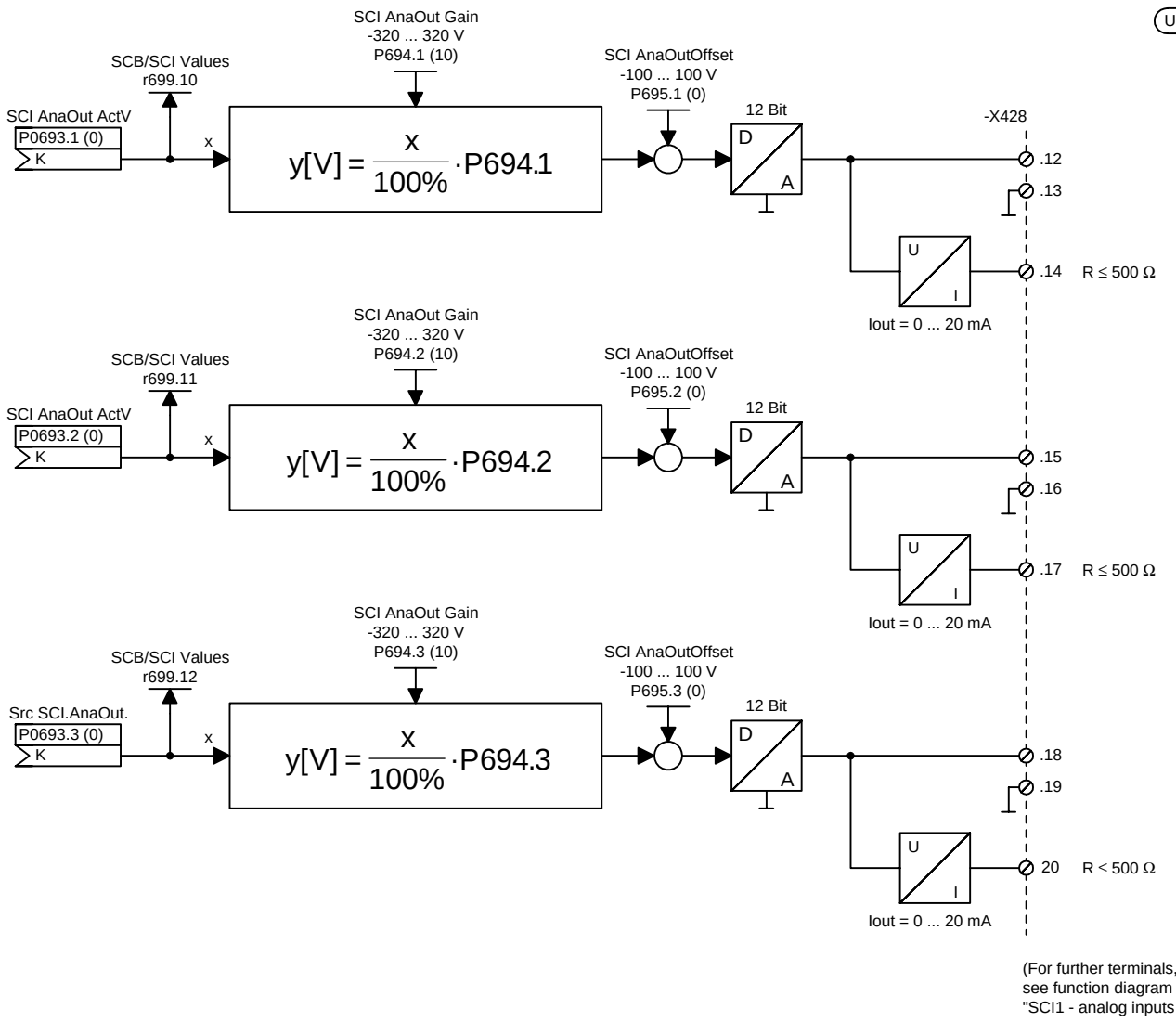
1	2	3	4	5	6	7	8
SCB1 with SCI1					fp_vc_Z16_e.vsd	Function diagram	- Z16 -
Digital outputs slave 2					31.01.98	MASTERDRIVES VC	



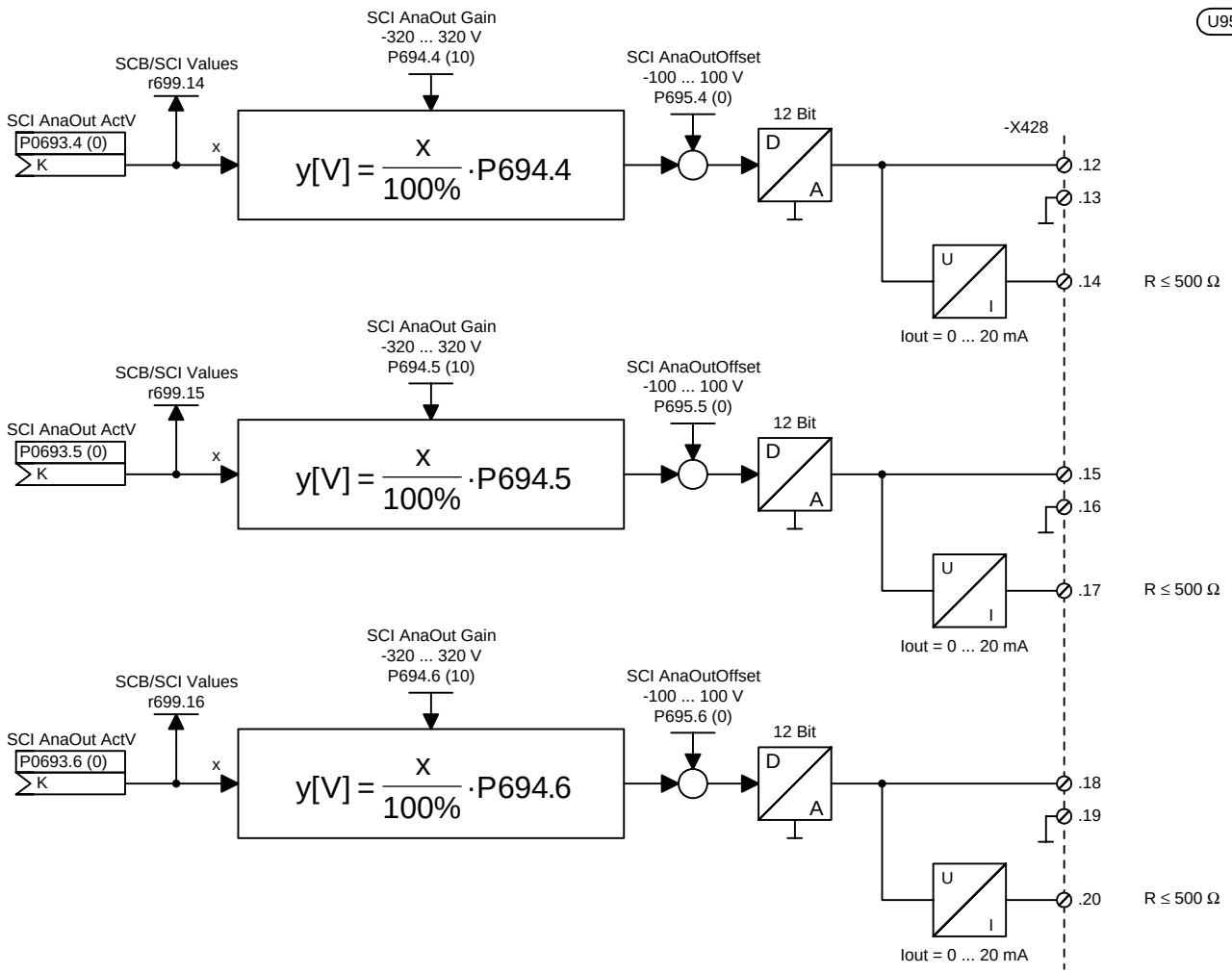
1	2	3	4	5	6	7	8
SCB1 with SCI1					fp_vc_Z20_e.vsd	Function diagram	- Z20 -
SCI1 - analog inputs slave 1					31.01.98	MASTERDRIVES VC	



1	2	3	4	5	6	7	8
SCB1 with SCI1					fp_vc_Z21_e.vsd	Function diagram	- Z21 -
SCI1 - analog inputs slave 2					31.01.98	MASTERDRIVES VC	

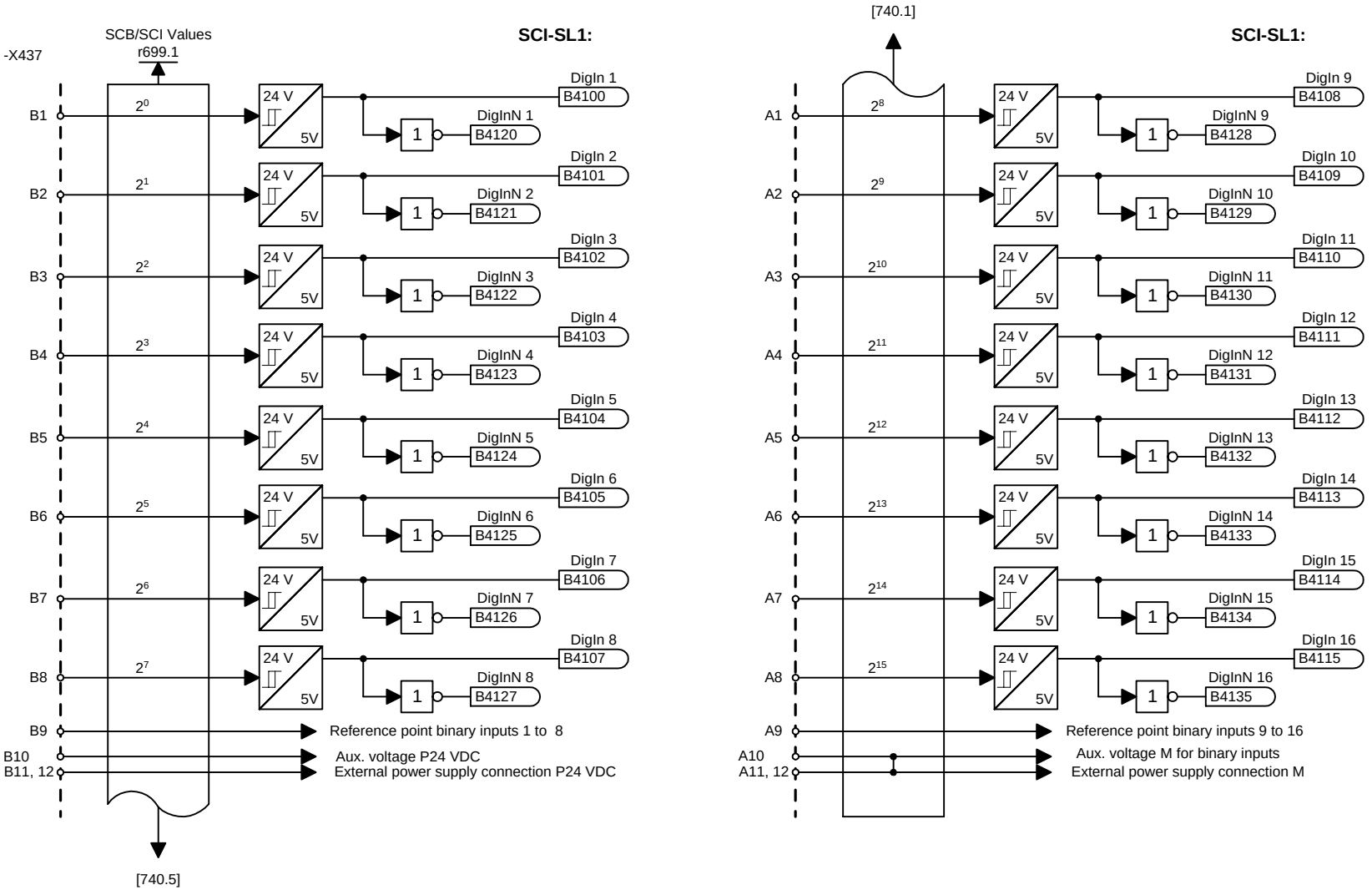


1	2	3	4	5	6	7	8
SCB1 with SCI1					fp_vc_Z25_e.vsd	Function diagram	- Z25 -
SCI1 analog outputs slave 1					09.04.98	MASTERDRIVES VC	



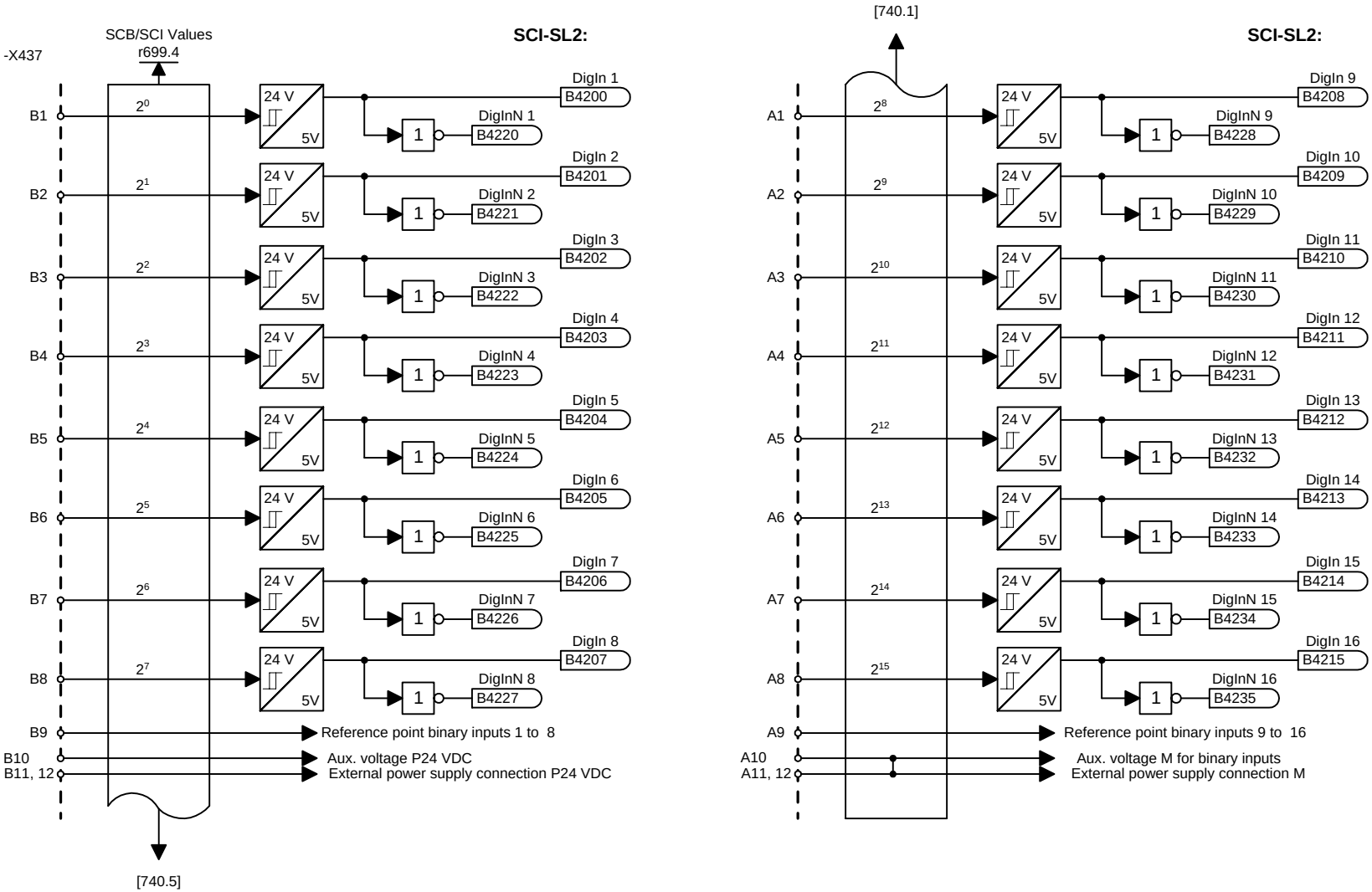
1	2	3	4	5	6	7	8
SCB1 with SCI1					fp_vc_Z26_e.vsd	Function diagram	- Z26 -
SCI1 analog outputs slave 2					09.04.98	MASTERDRIVES VC	

U953.25 = ___(4)



1	2	3	4	5	6	7	8
SCB1 with SCI2					fp_vc_Z30_e.vsd	Function diagram	- Z30 -
Digital inputs slave 1					31.01.98	MASTERDRIVES VC	

U953.25 = ___(4)



1	2	3	4	5	6	7	8
SCB1 with SCI2					fp_vc_Z31_e.vsd	Function diagram	- Z31 -
Digital inputs slave 2					31.01.98	MASTERDRIVES VC	