KOSBOOST 2004

CONFIGURATION IBIS R+

IBIS-VERSION 3.65

THIS DOCUMENTATION CONTAINS THE CONFIGURATION OF
PROTRONIC 550 CONTROLLER:

FIC 16074 (ANTISURGE CONTROL KOSBOOST)

CONTROLLER VERSION 1.206 M
LIBRARY 3.3.6

AIR LIQUIDE TM

N° D'AFFAIRE *JOB NUMBER*	FMT *FMT*	GROUPE *GROUP*	N° *NBR*	Rev *Rev*
KOSICE 50-3023-01	**A4**	**612**		

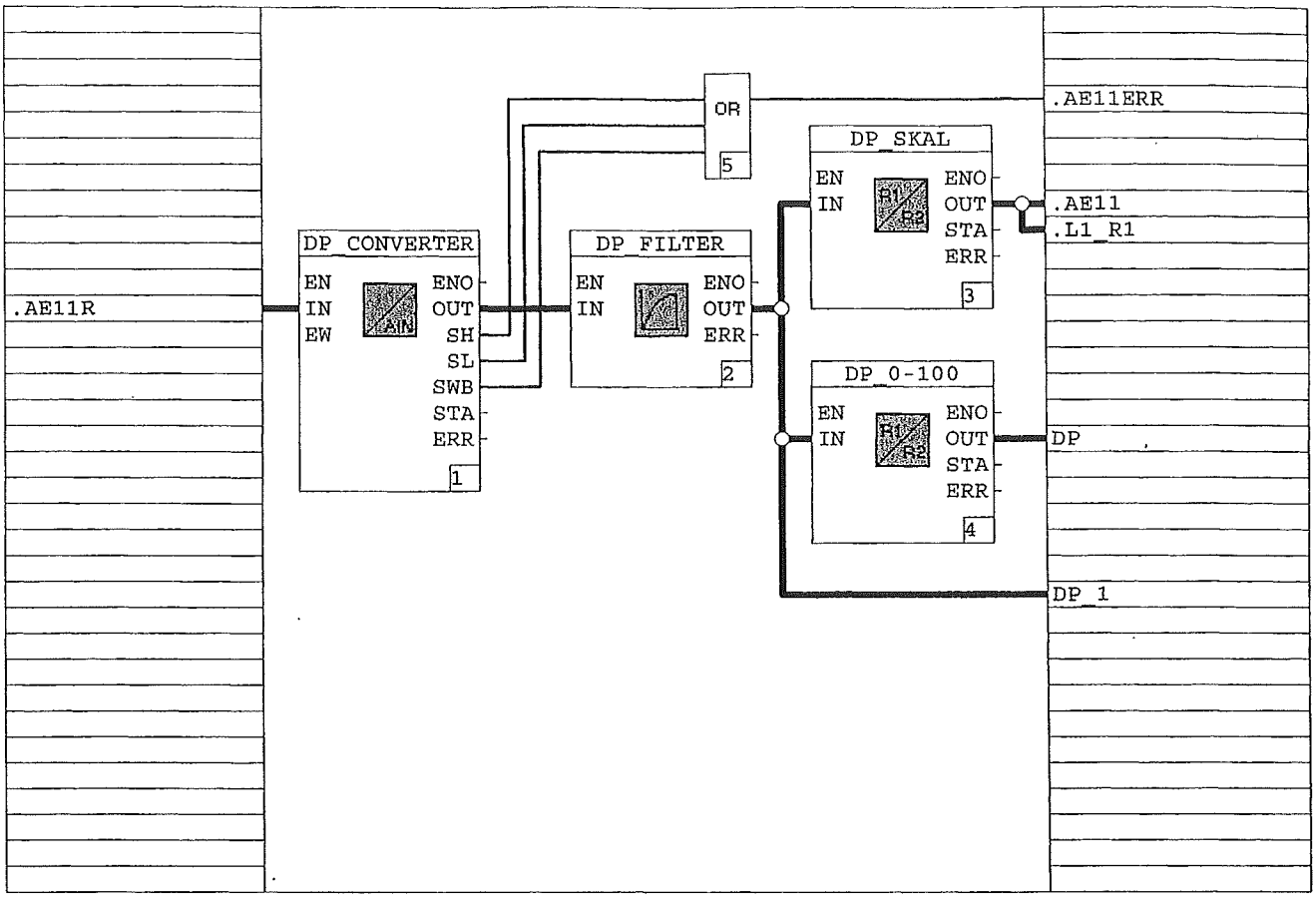
freigegeben

Rev.	Changed	Date	Checked	Date	Change no.	Change description	
	Rindlisbacher H	23.02.2005					
Issued		Date	Checked	Date	Released		Date
Type/Size: **RG 31-4**					Project no.: **N.7100175**		
Description: **CONFIGURATION IBIS R+**					Project: **KOSBOOST 2004**		
Document: **837019325**		Type: **SPE**		Part: **001**	Rev.:	Lang.: **EN**	Page **0** of **33**

- 01 fic16074
  - 01 FIC (P500/550)
    - 01 IN_ANALOG (PL)
      - 01 DP_IN (FBD)
      - 02 P2_IN (FBD)
      - 03 Y_EXT_IN (FBD)
      - 04 P1_IN (FBD)
      - 05 T1_IN (FBD)
      - 06 T2_IN (FBD)
    - 02 IN_DIGITAL (PL)
      - 01 IN_DIGITAL (FBD)
    - 03 REG_PARAM (PL)
      - 01 TABLE (FBD)
      - 02 PARAMETER_1 (FBD)
    - 04 LOOP1 (PL)
      - 01 ADAPTATION (FBD)
      - 02 L1_XW_1 (FBD)
      - 03 L1_GW (FBD)
      - 04 L1_ALV (FBD)
      - 05 L1_DI_GS (FBD)
      - 06 L1_SKALA (FBD)
      - 07 L1_RAMPE (FBD)
      - 08 L1_HIC_1 (FBD)
      - 09 L1_HIC_2 (FBD)
      - 10 L1_PI_PARA (FBD)
      - 11 L1_PID_PRG (FBD)
      - 12 L1_STDBA (FBD)
      - 13 L1_ANZSL (FBD)
      - 14 L1_SORTIE (FBD)
    - 05 OUT_ANALOG (PL)
      - 01 PID_OUT (FBD)
    - 06 OUT_DIGITAL (PL)
      - 01 OUT_DIGIT (FBD)
    - 07 MESSAGES (PL)
      - 01 MESSAGES (FBD)
      - 02 MESSAGES_2 (FBD)
- 02 Pool

List of programms documented below :

Design number	Typ	Designation
- .fic16074/X01/P01/B01-F	FBD	Read differential pressure tra
- .fic16074/X01/P01/B02-F	FBD	Read pressure transmitter
- .fic16074/X01/P01/B03-F	FBD	Input external manual loading
- .fic16074/X01/P01/B04-F	FBD	Read pressure transmitter
- .fic16074/X01/P01/B05-F	FBD	Read thermocouple
- .fic16074/X01/P01/B06-F	FBD	Read thermocouple
- .fic16074/X01/P02/B01-F	FBD	Read digital inputs
- .fic16074/X01/P03/B01-F	FBD	Table with line of interventio
- .fic16074/X01/P03/B02-F	FBD	Read parameters of regulation
- .fic16074/X01/P04/B01-F	FBD	Calculation of PI (P2/P1) and
- .fic16074/X01/P04/B02-F	FBD	Calculation of control deviati
- .fic16074/X01/P04/B03-F	FBD	Limits for intervention line s
- .fic16074/X01/P04/B04-F	FBD	Response line shift
- .fic16074/X01/P04/B05-F	FBD	Dynamic Intervention with sel
- .fic16074/X01/P04/B06-F	FBD	Scaling for analogue display
- .fic16074/X01/P04/B07-F	FBD	Ramp for automatic charge/disc
- .fic16074/X01/P04/B08-F	FBD	manual control
- .fic16074/X01/P04/B09-F	FBD	Limitation of manual control a
- .fic16074/X01/P04/B10-F	FBD	Seize of parameters Kp, Tn, Tv
- .fic16074/X01/P04/B11-F	FBD	Module PID controller
- .fic16074/X01/P04/B12-F	FBD	Switch mode of operation
- .fic16074/X01/P04/B13-F	FBD	Indication loops
- .fic16074/X01/P04/B14-F	FBD	Minimum selection of the contr
- .fic16074/X01/P05/B01-F	FBD	Controller analogue output
- .fic16074/X01/P06/B01-F	FBD	Out digital
- .fic16074/X01/P07/B01-F	FBD	Alarm text on controller displ
- .fic16074/X01/P07/B02-F	FBD	Alarm text on controller displ



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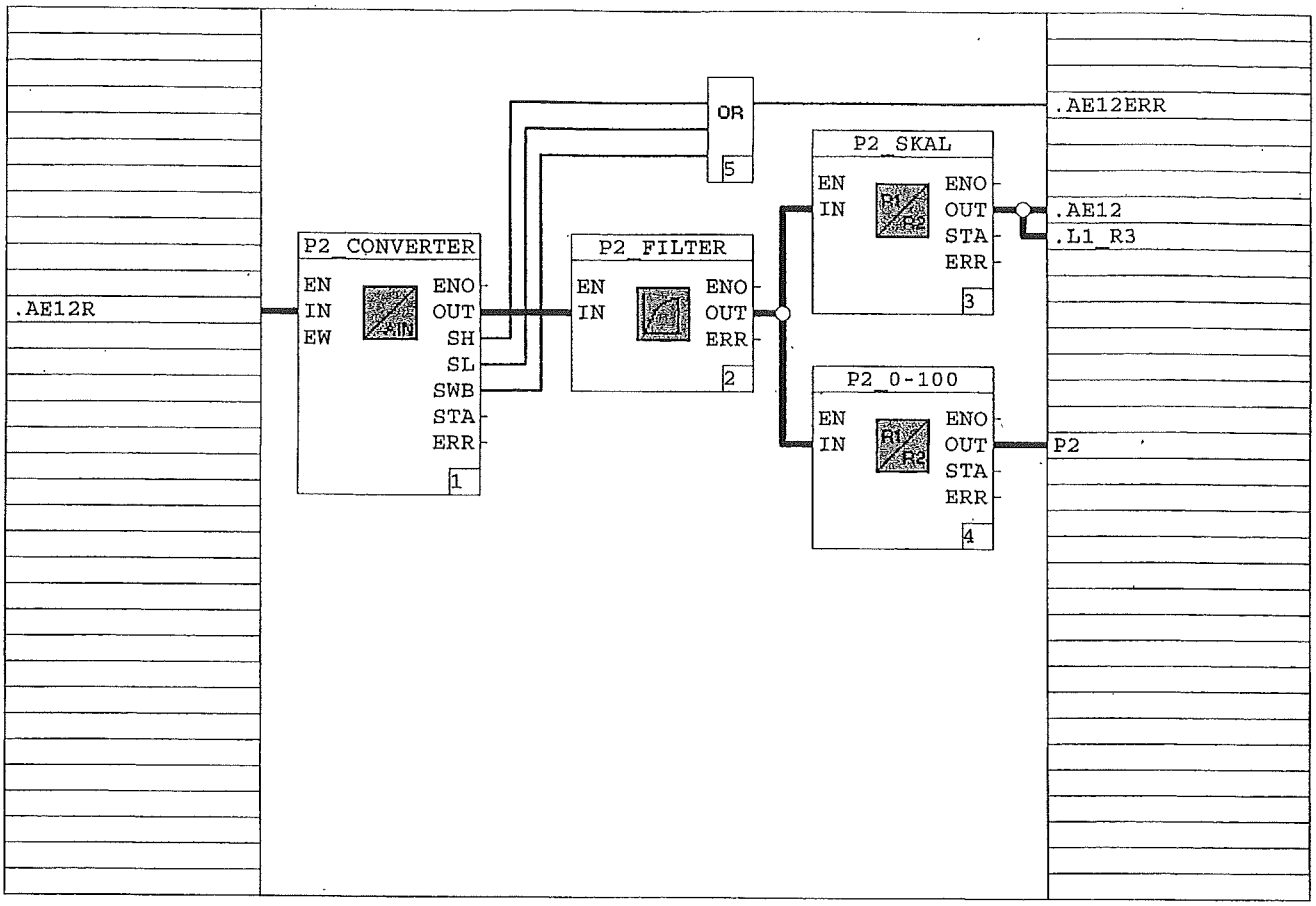
				Norm		Orig. 29.04.2005	Rep.f.	Rep.by		Item	Z. No. P. 3



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				Checke				U:/Protronic/Programs/Ko		ABB No.	ABB - .fic16074/X01/P01/B02-F
AN TURBO AG	Date	Name	Norm		Orig. 29.04.2005	Rep.f.		aboost Rep.by		Item	Z. No. P. 4

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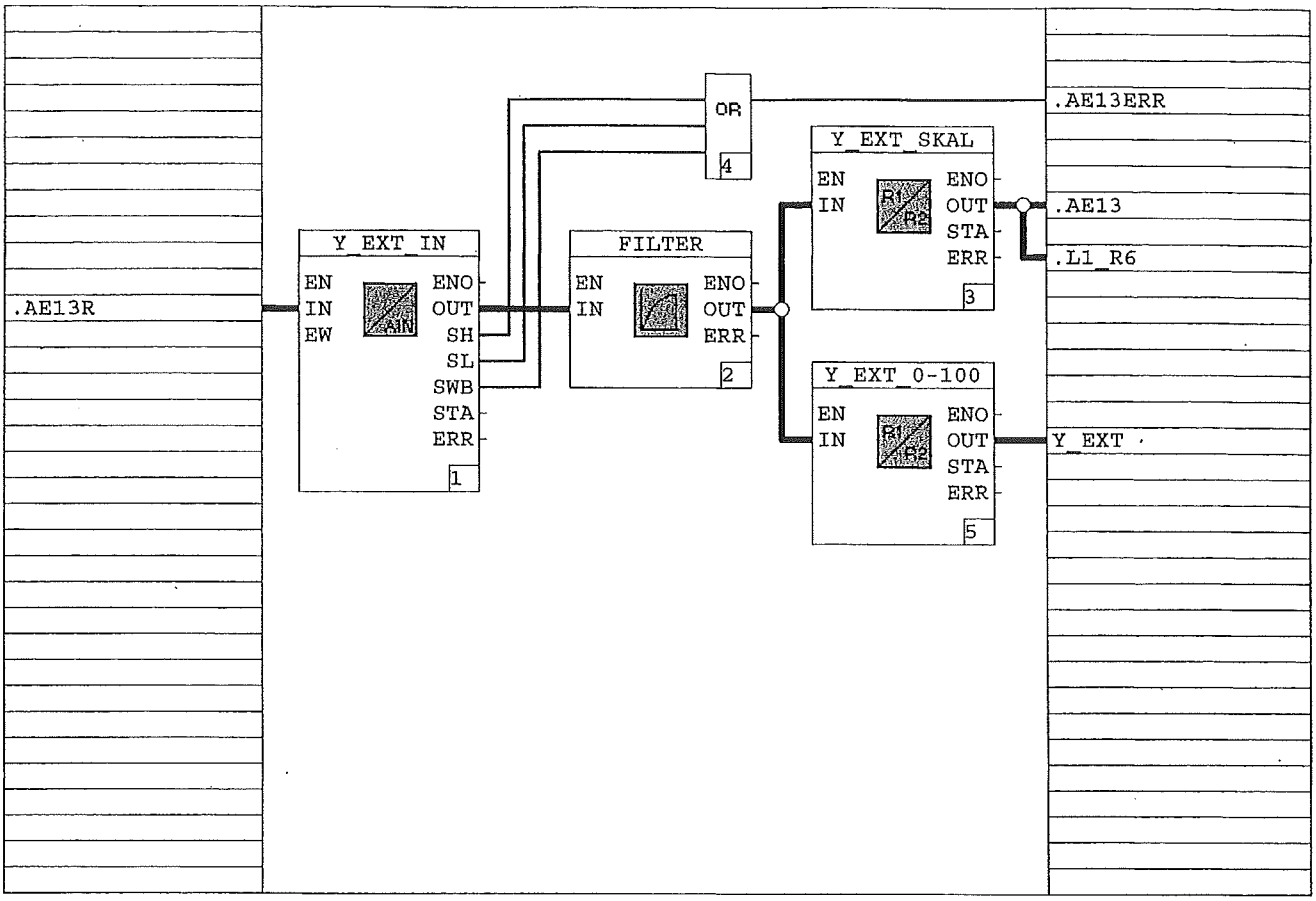

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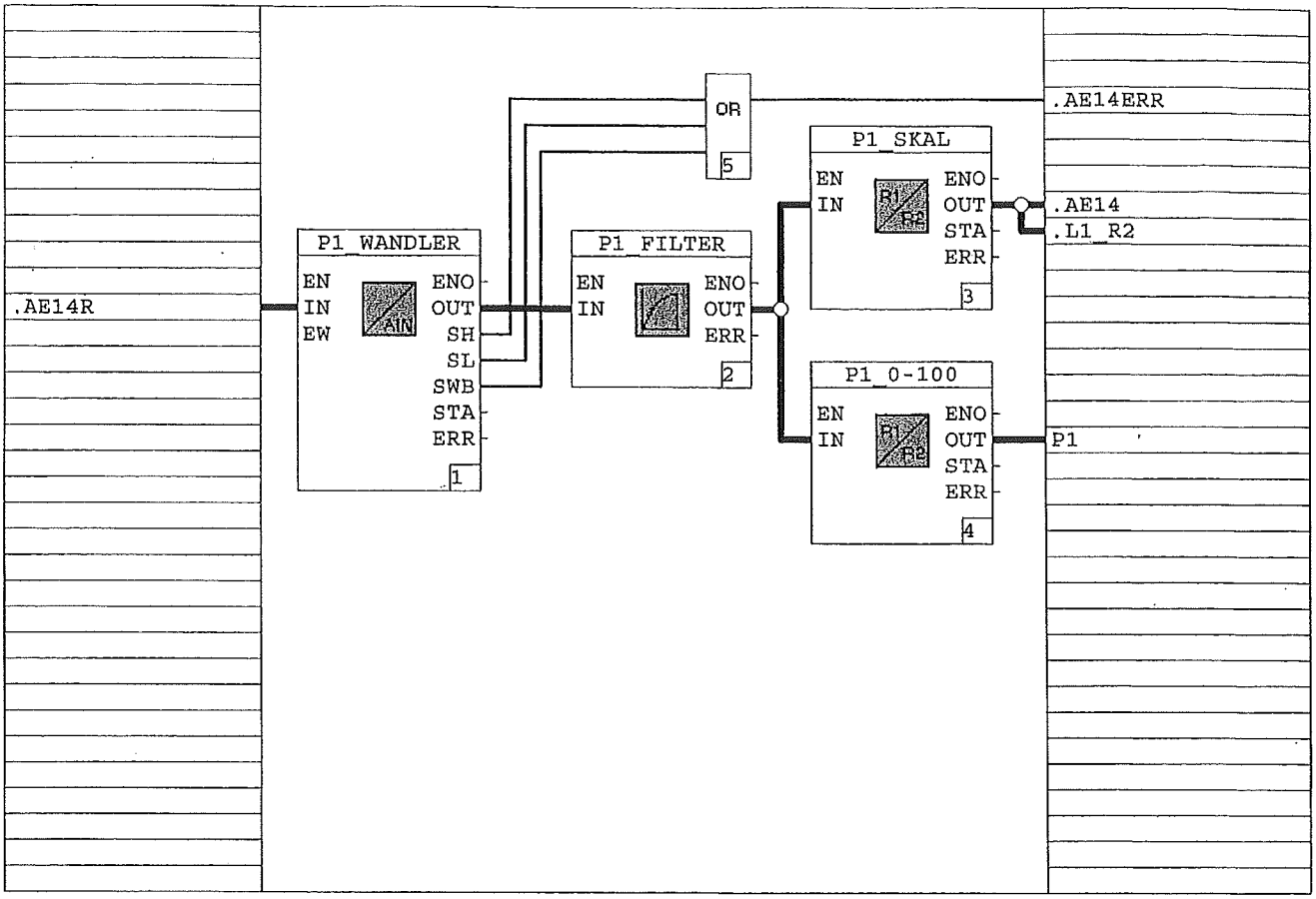
				Checke				aboost		ABB No.	ABB - .fic16074/X01/P01/B03-P
				Norm		Orig. 29.04.2005	Rep.f.	Rep.by		Item	Z. No. P. 1
	Date	Name									



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				Checke				sboost		ABB No.
		Date	Name	Norm		Orig. 29.04.2005	Rep.f.	Rep.by		Item

ABB - .fic16074/X01/P01/B04-P

E. No.

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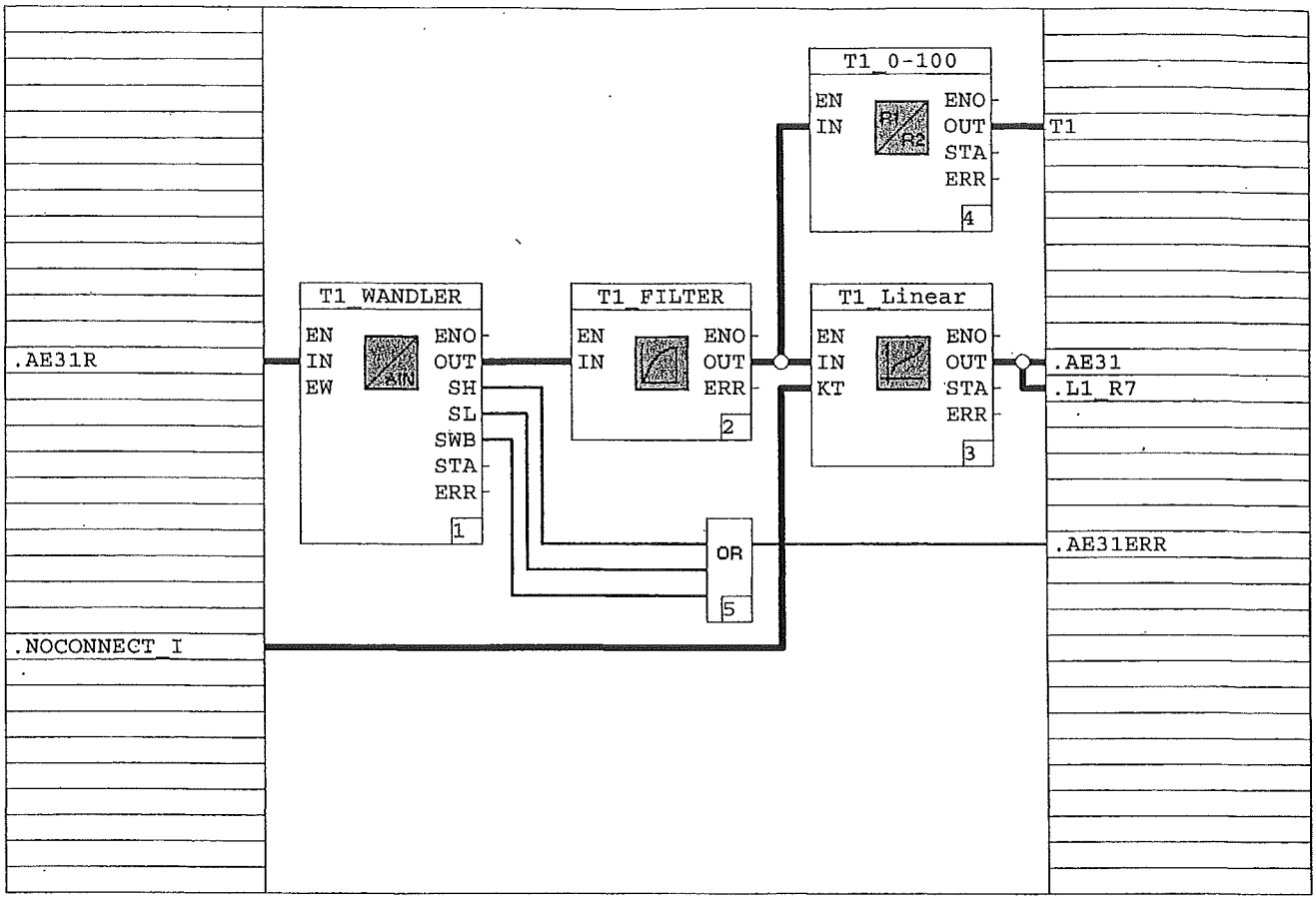

				Date	29.04.2005	N.7100175		Basic Program	T1_IN	Customer	
				Proces	Rihdlinbacher	KOSBOOST 2004		U:/Protronic/Programs/Ko		Z. No.	
				Checke				sboost		ABB No.	ABB - .fic16074/XD1/P01/B05-P
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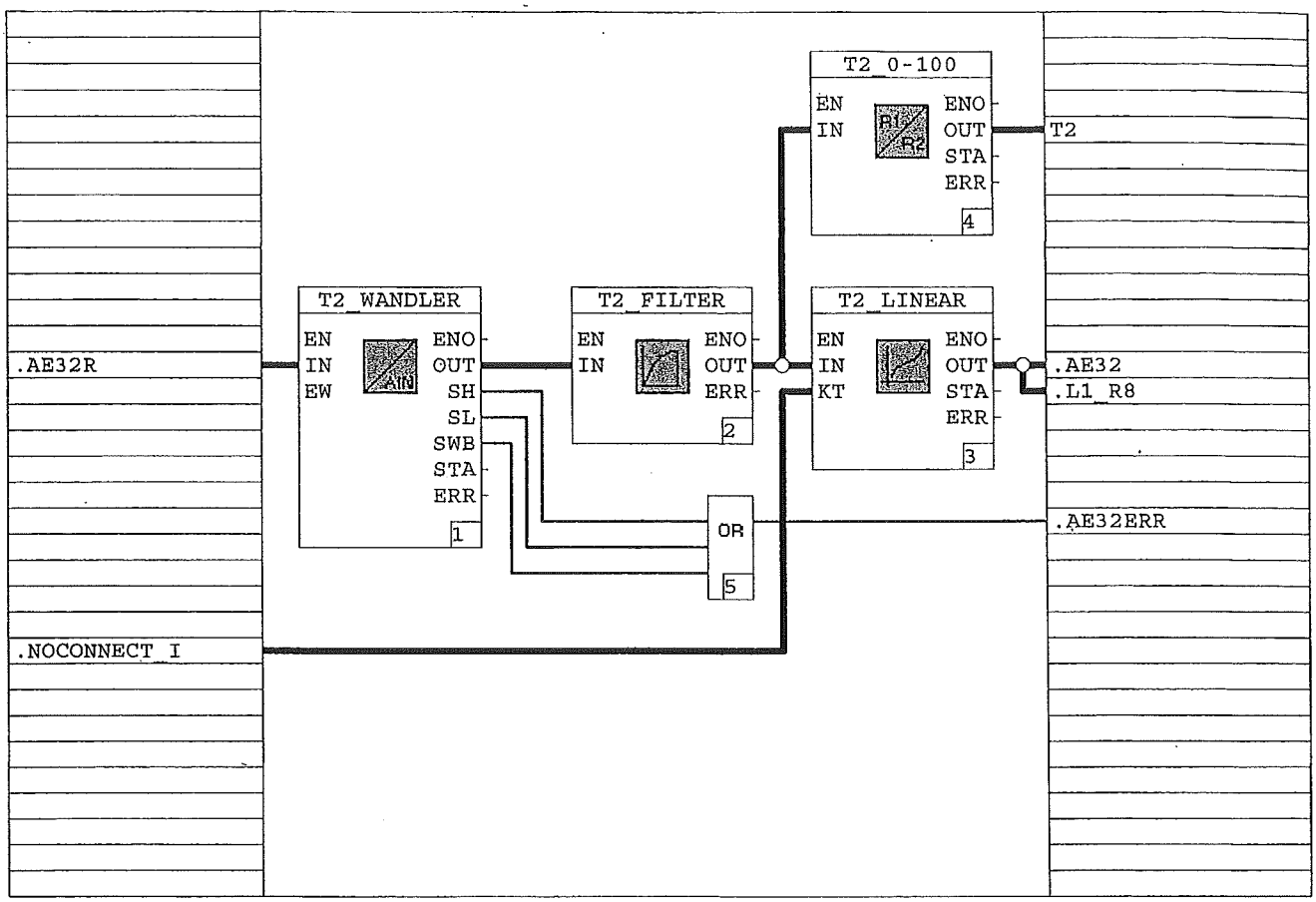

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			Proced	Rindlisbacher	XOSBOOST 2004		U:/Protronic/Programs/Xo		Z. No.		+
			Checke				sboost		ABB No.	ABB - .fic16074/X01/F01/B06-F	
			Horn		Orig. 29.04.2005	Rep.f.	Rep.by		Item	Z. No.	P.

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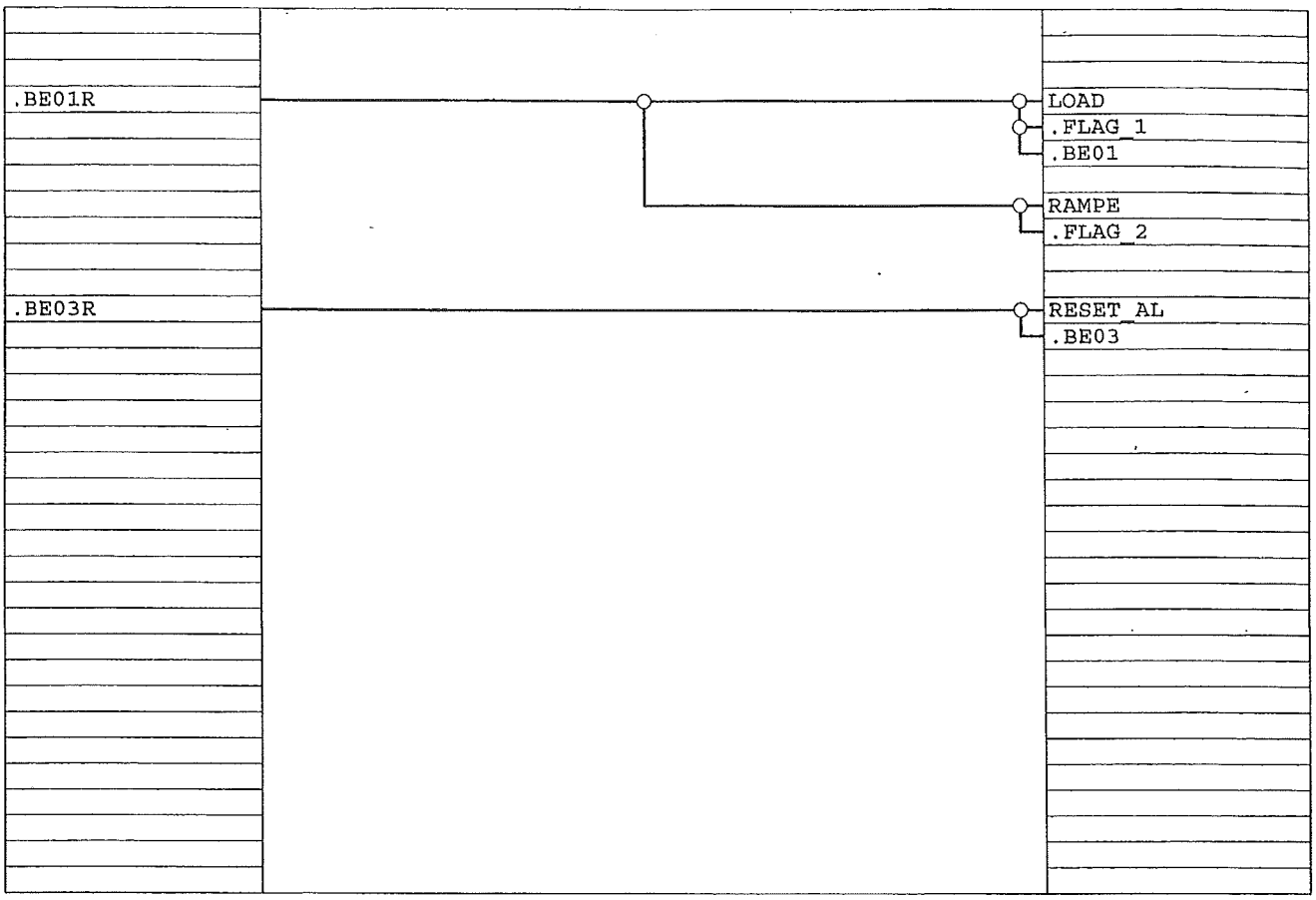

			Date	29.04.2005	N.7100175		Basic Program	IN_DIGI7AL	Customer		-
			Proces	Rindlisbacher	KOSBOOST 2004		U:/Protronic/Programs/Ko		Z. No.		+
			Checke				sboost		ABB No.	ABB -	.fic16074/X01/P02/B01-F
	Date	Name	Norm		Orig. 29.04.2005	Rep.f.	Rep.by		Item	Z. No.	P.

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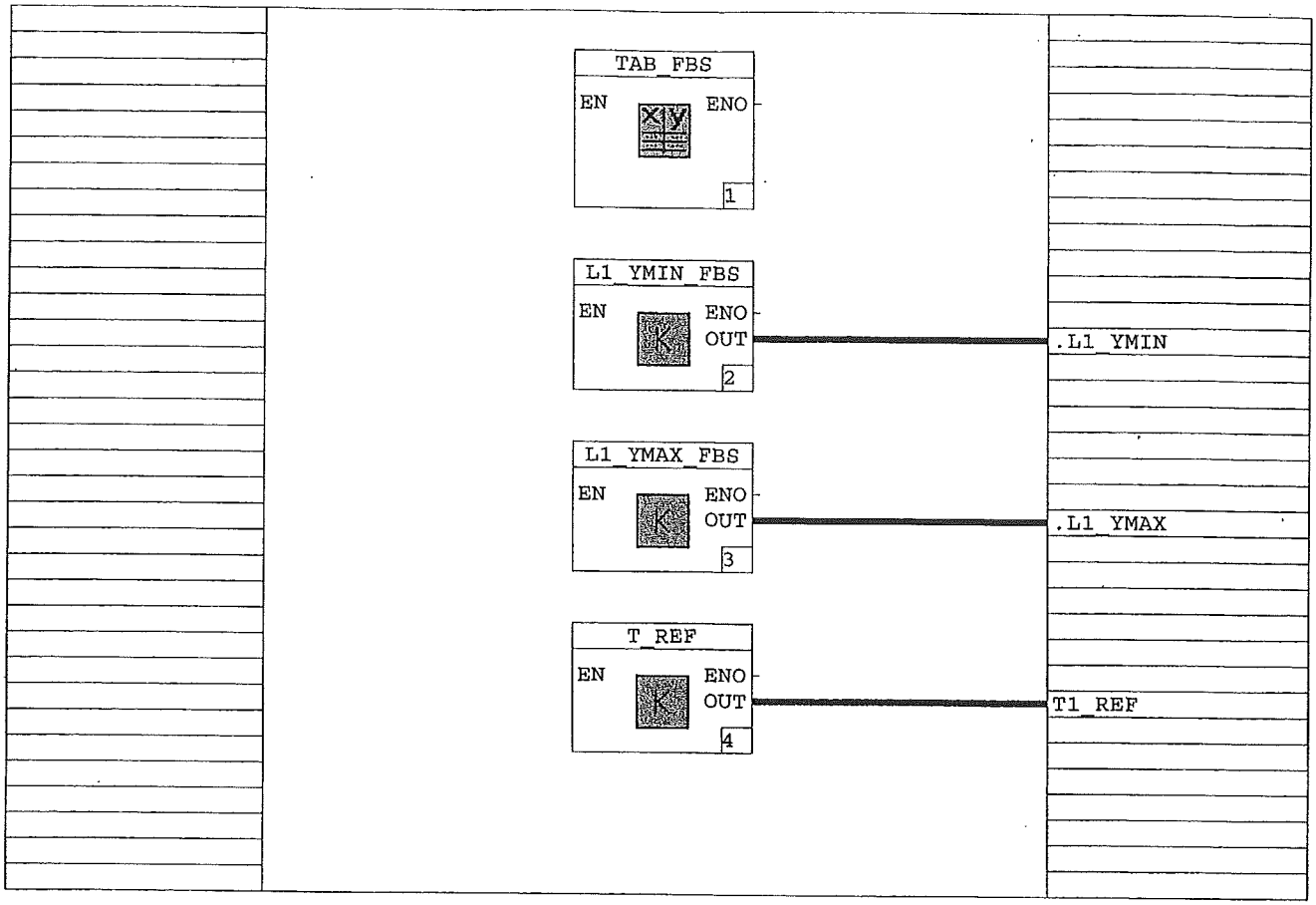

				Date	29.04.2005	H.7100175	Basic Program	TABLE	Customer		-
				Proces	Rindlisbacher	KOSBOOST 2004			Z. No.		+
				Checke			U:/Protronic/Programs/Ko		ABB No.	ABB -	.fic16074/X01/P03/B01-F
	Date	Name		Norm		Orig. 29.04.2005	Rep.f.	Rep.by	Item	Z. No.	P. 10

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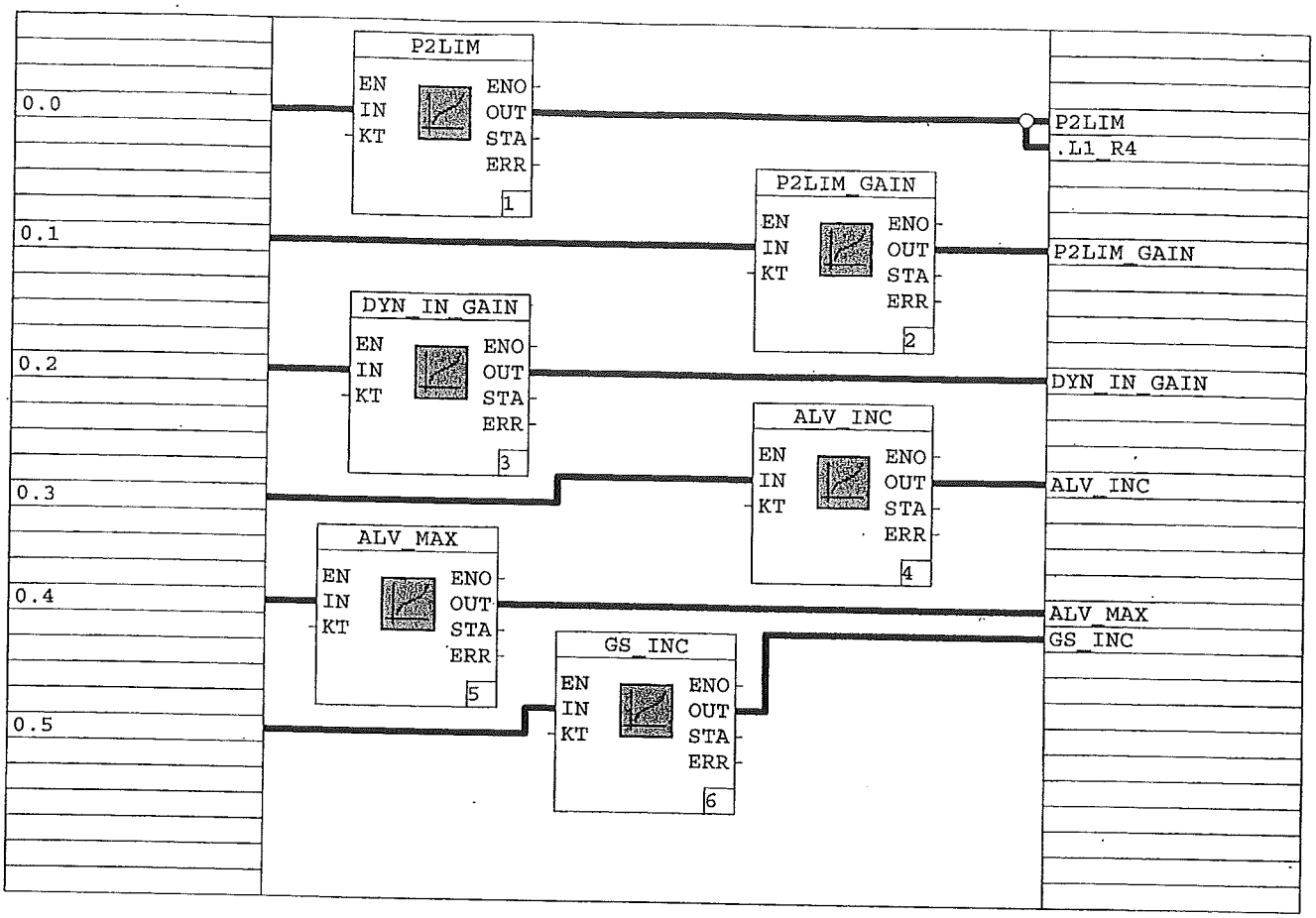

				Date	29.04.2005	N.7100175 KOSBOOST 2004		Basic Program	PARAMETER_1	Customer	-
				Proces	Rindlisbacher			U:/Protronic/Programz/Ko sboost		Z. No.	+
				Checke						ABB No.	ABB - .fic16074/X01/P03/B02-P
				Norm		Orig. 29.04.2005	Rep.f.	Rep.by		Item	Z. No. P. 11
	Date	Name									

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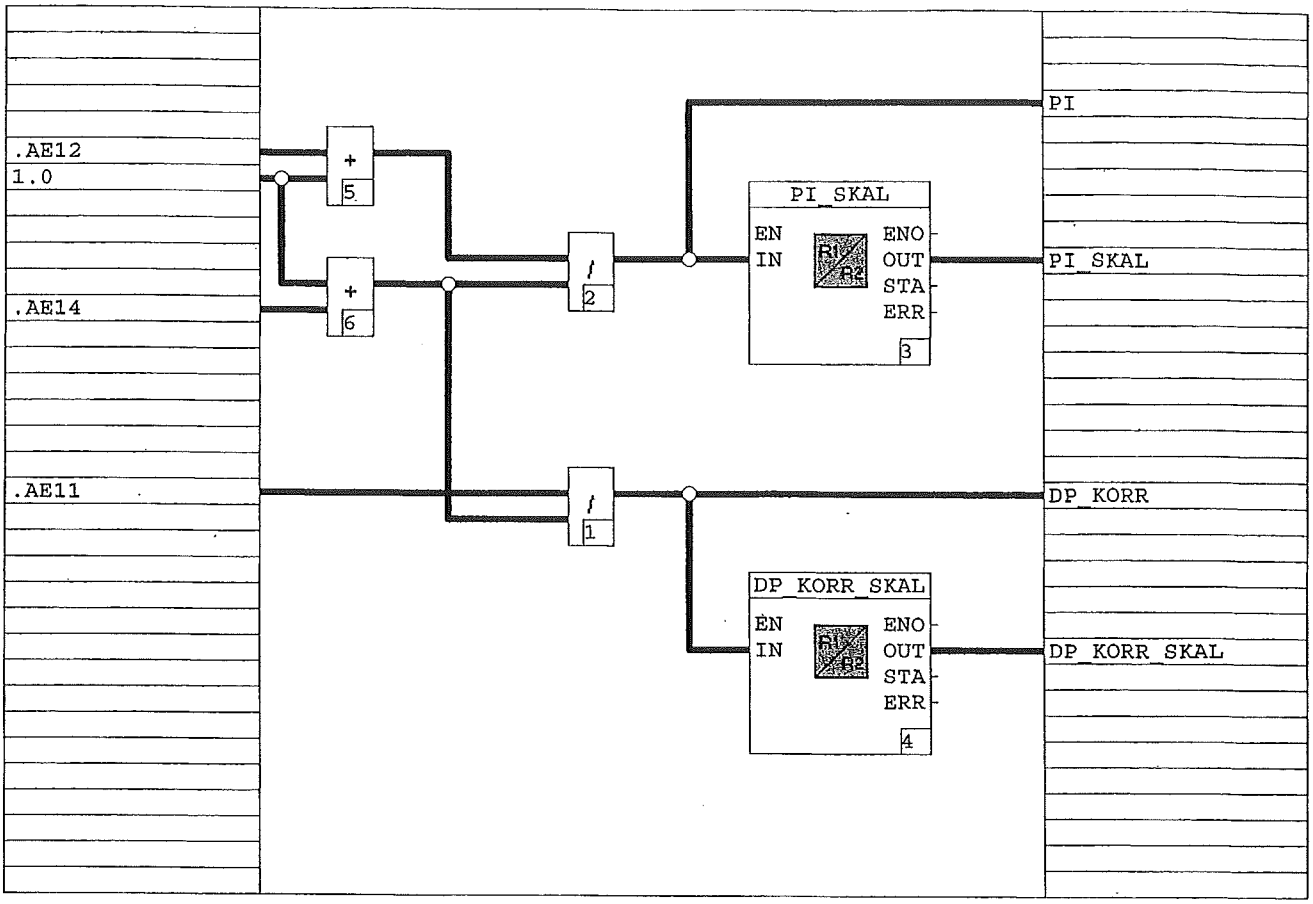

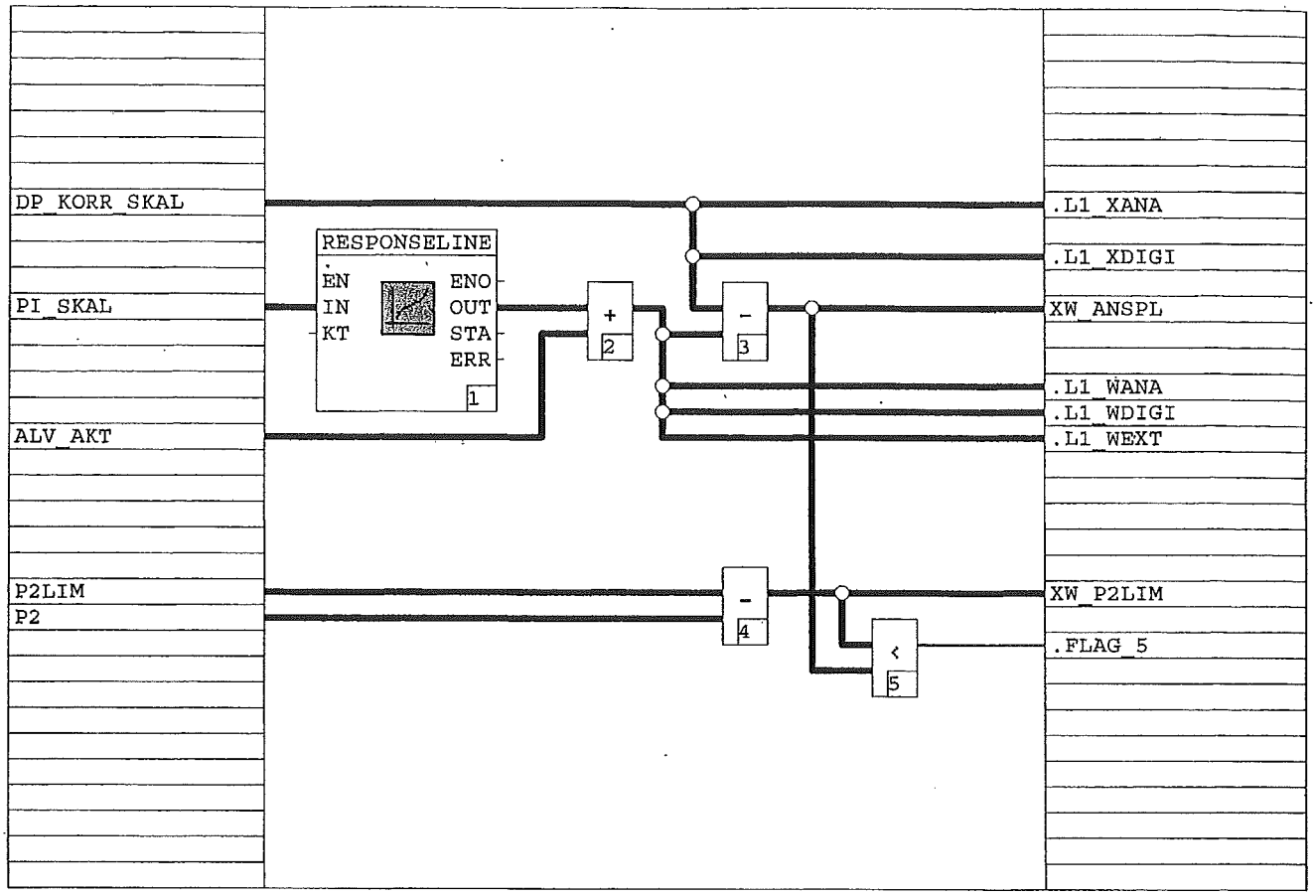

				Date	29.04.2005	H.7100175 KOSEOOST 2004		Basic Program	L1_XH_1	Customer	-
				Proce	Rindlisbacher			U:/Protronic/Programs/Ko		Z. No.	+
				Checke				sboost		ABB No.	ABB - .fic16074/X01/P04/B02-F
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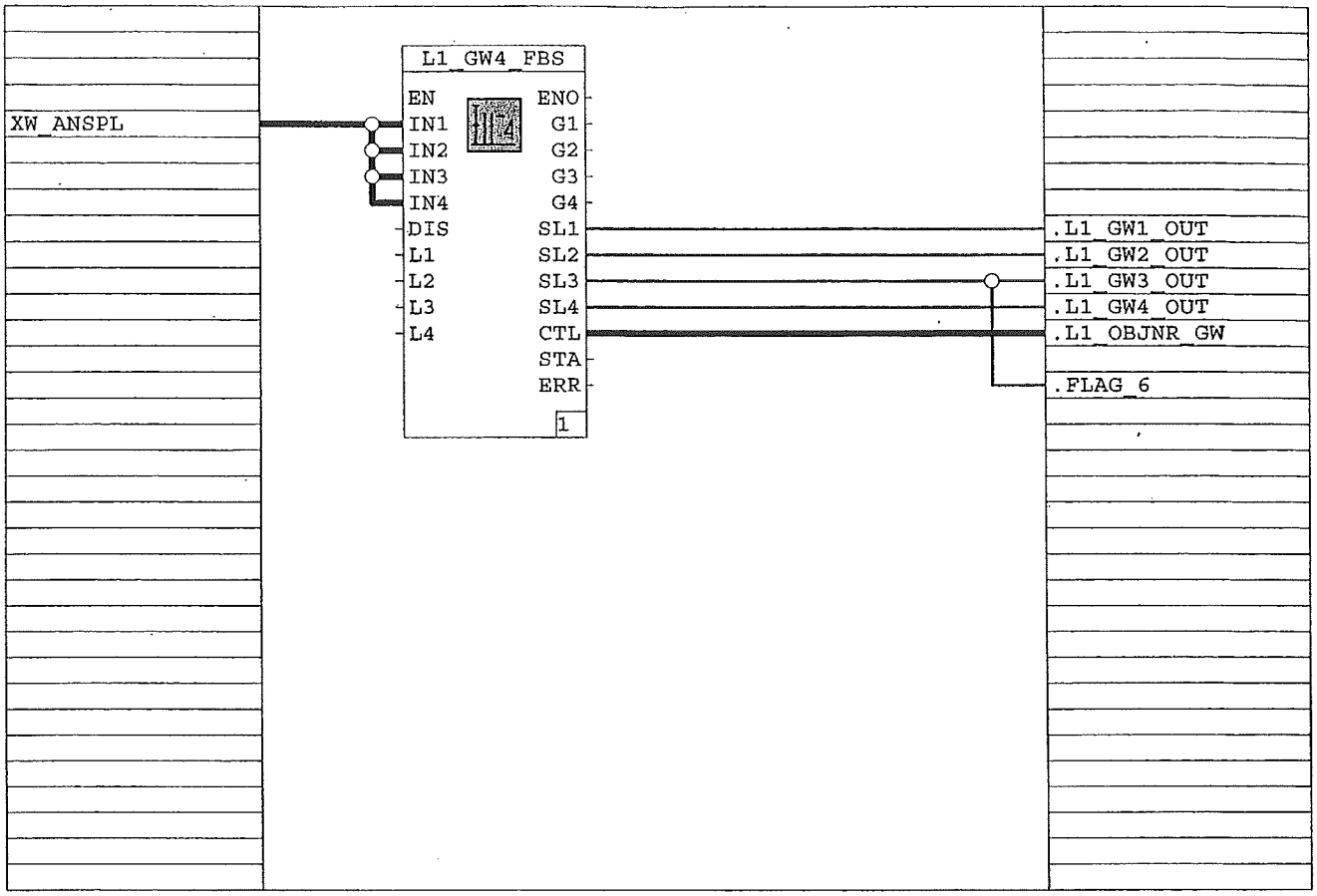
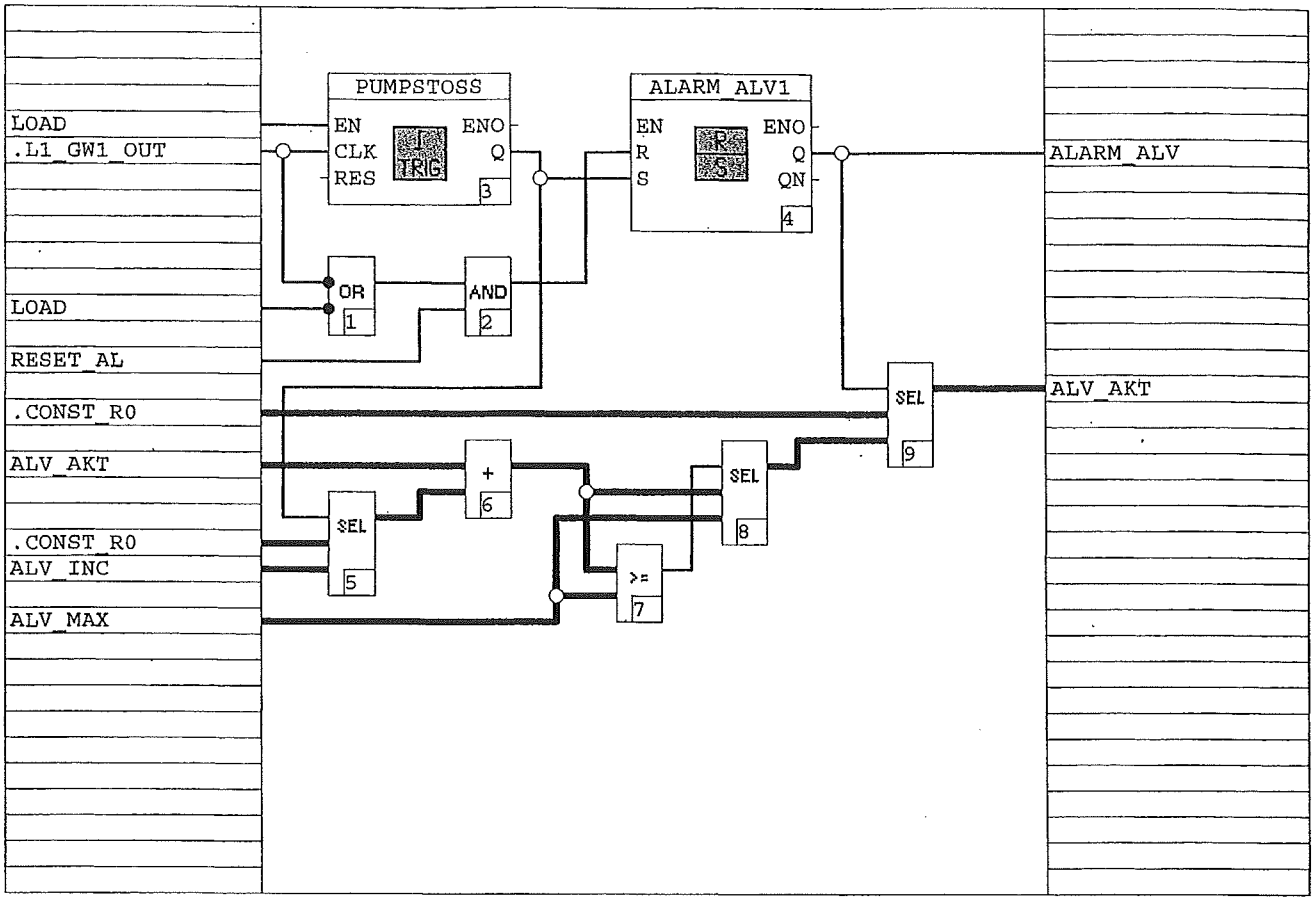
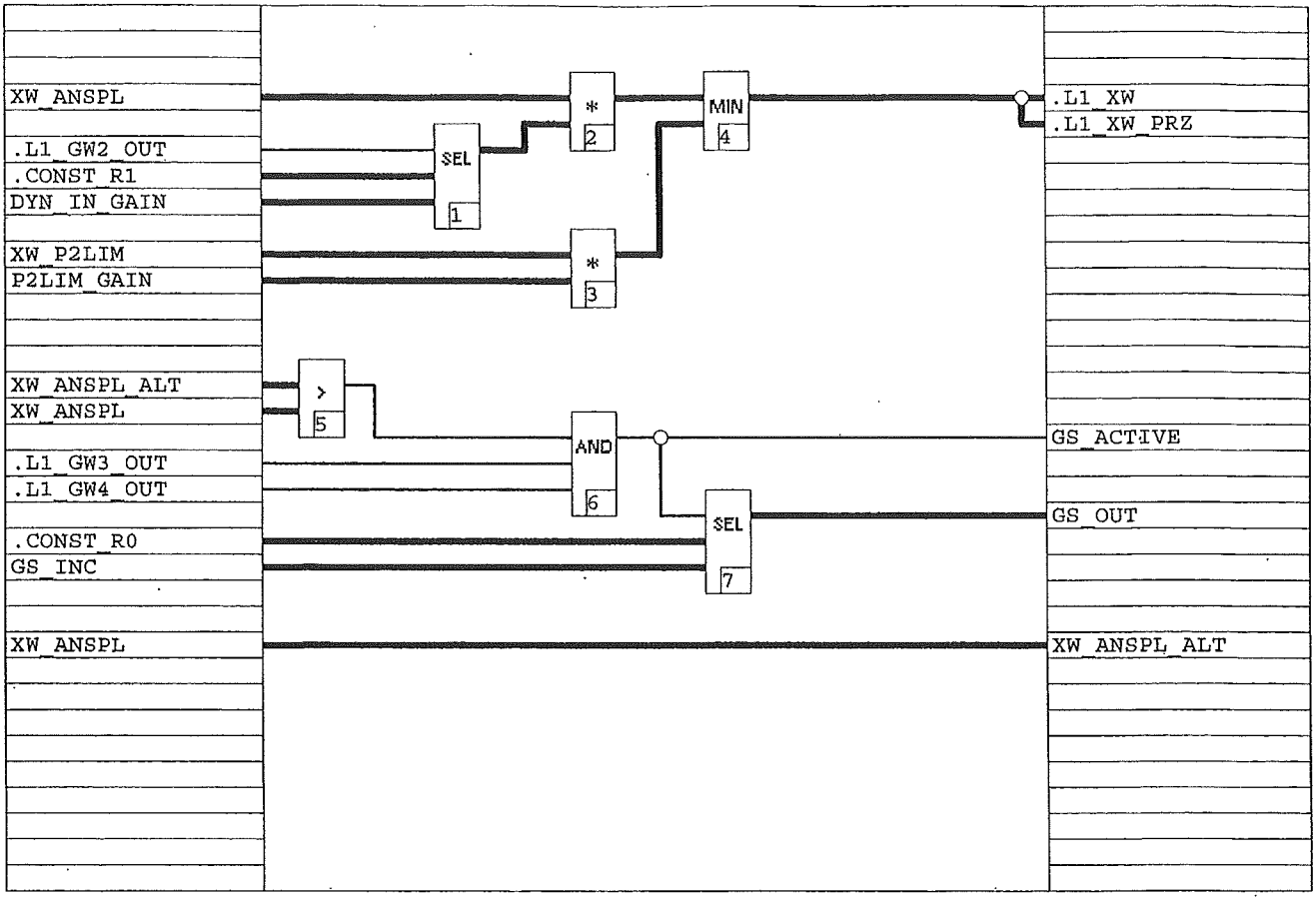


				Date	29.04.2005	M.7100175 KOSBOOST 2004		Basic Program	L1_GW	Customer		=
				Proces	Rindlisbacher			U:/Protronic/Programs/Ko		Z. No.		+
				Checke				sboost		ABB No.	ABB - .fic16074/X01/P04/B03-F	
AN TURBO AG	Date	Name	Norm		Orig. 29.04.2005	Rep.f.		Rep.hy		Item	Z. No.	P. 14

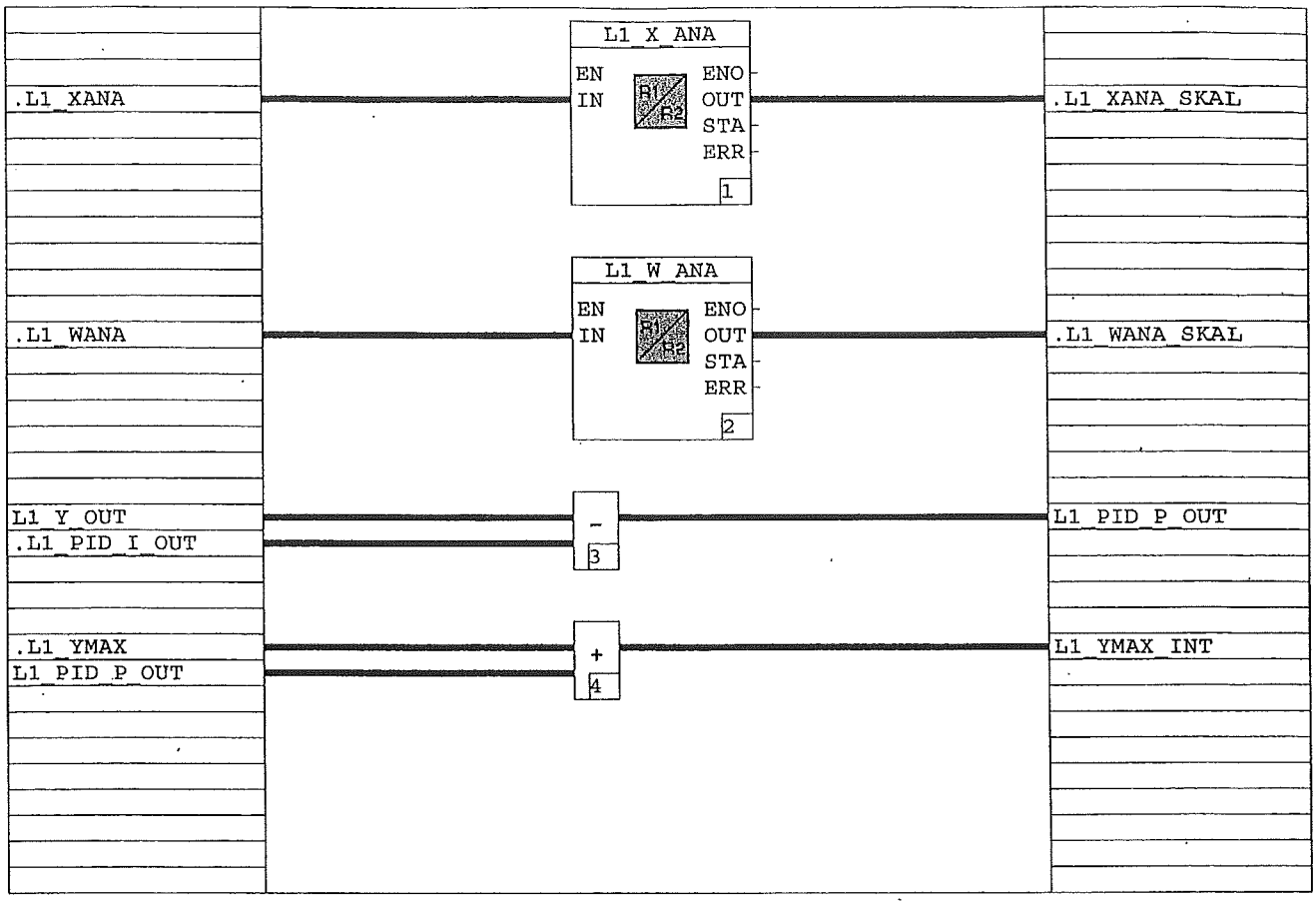


				Date	29.04.2005	N.7100175		Basic Program	L1_ALV	Customer	-
				Proces	Rindlisbacher	XOSBOOST 2004				Z. No.	+
				Checke				U:/Protronic/Programs/Xo			
AN TURBO AG	Date	Name	Norm		Orig. 29.04.2005	Rep.f.		sboost		ABB No.	ABB - .fic16074/X01/P04/B04-F
								Rep.by		Item	Z. No. P. 1



				Date	29.04.2005	N.7100175 KOSBOOST 2004		Basic Program	L1_DI_GS	Customer	
				Procen	Rindlisbacher			U:/Protronic/Programs/Ko		Z. No.	
				Checke				aboost		ABB No.	ABB - .fic16074/X01/P04/BOS-F
AN TURBO AG	Date	Name	Norm		Orig. 29.04.2005	Rep.f.		Rep.by		Item	Z. No. P.

Claudia Patruno RRM4 SPE 837019325 001 00 18.07.2005



			Date	29.04.2005	N.7100175	Basic Program	L1_SKALA	Customer		
			Proces	Rindlisbacher	KOSBOOST 2004			Z. No.		
			Checke			U:/Protronic/Programs/Ko		ABB No.	ABB - .fic14074/X01/P04/B06-P	
Date	Name	Norm		Orig. 29.04.2005	Rep.f,	cboost Rep.by		Item	Z. No.	P.

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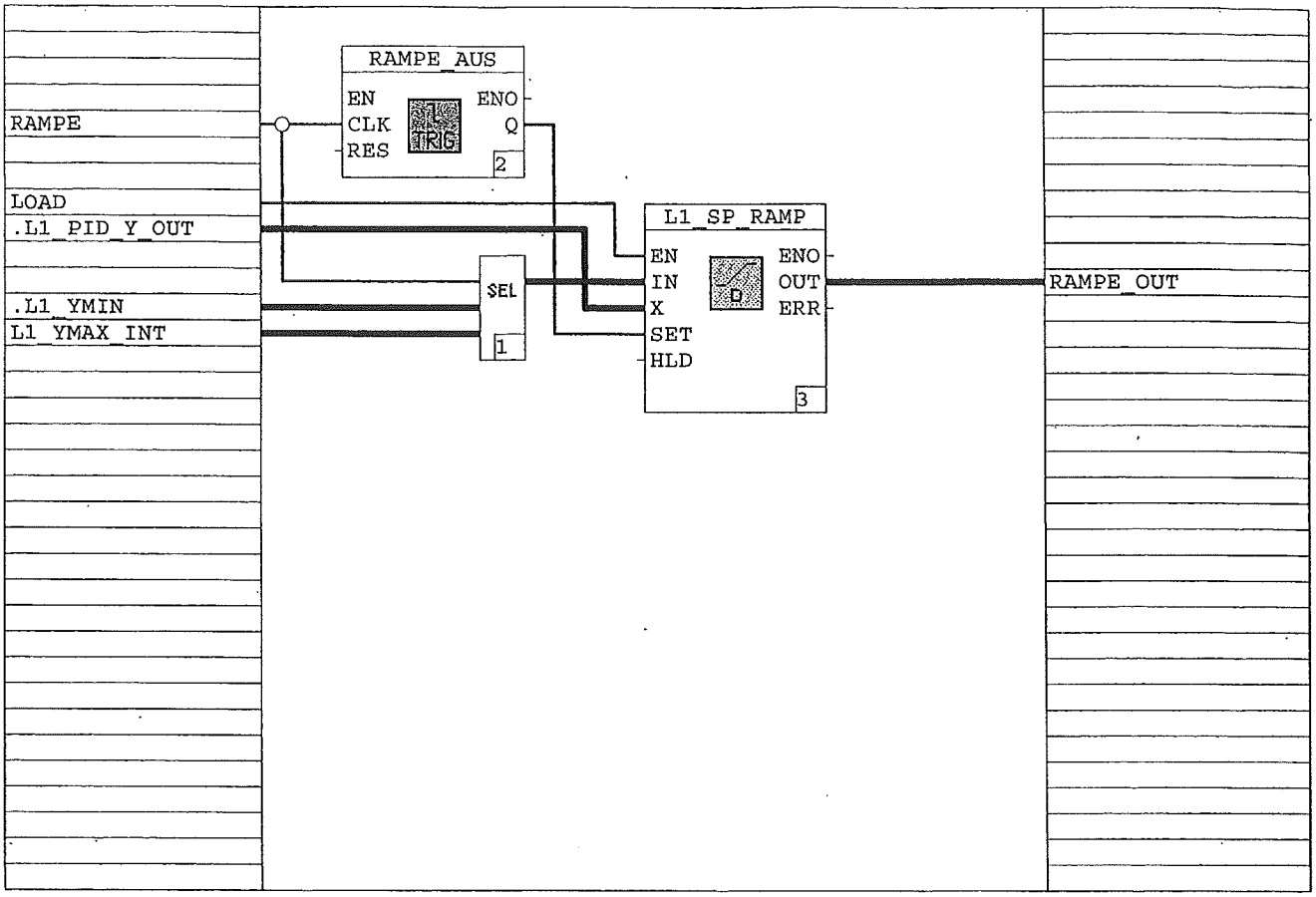
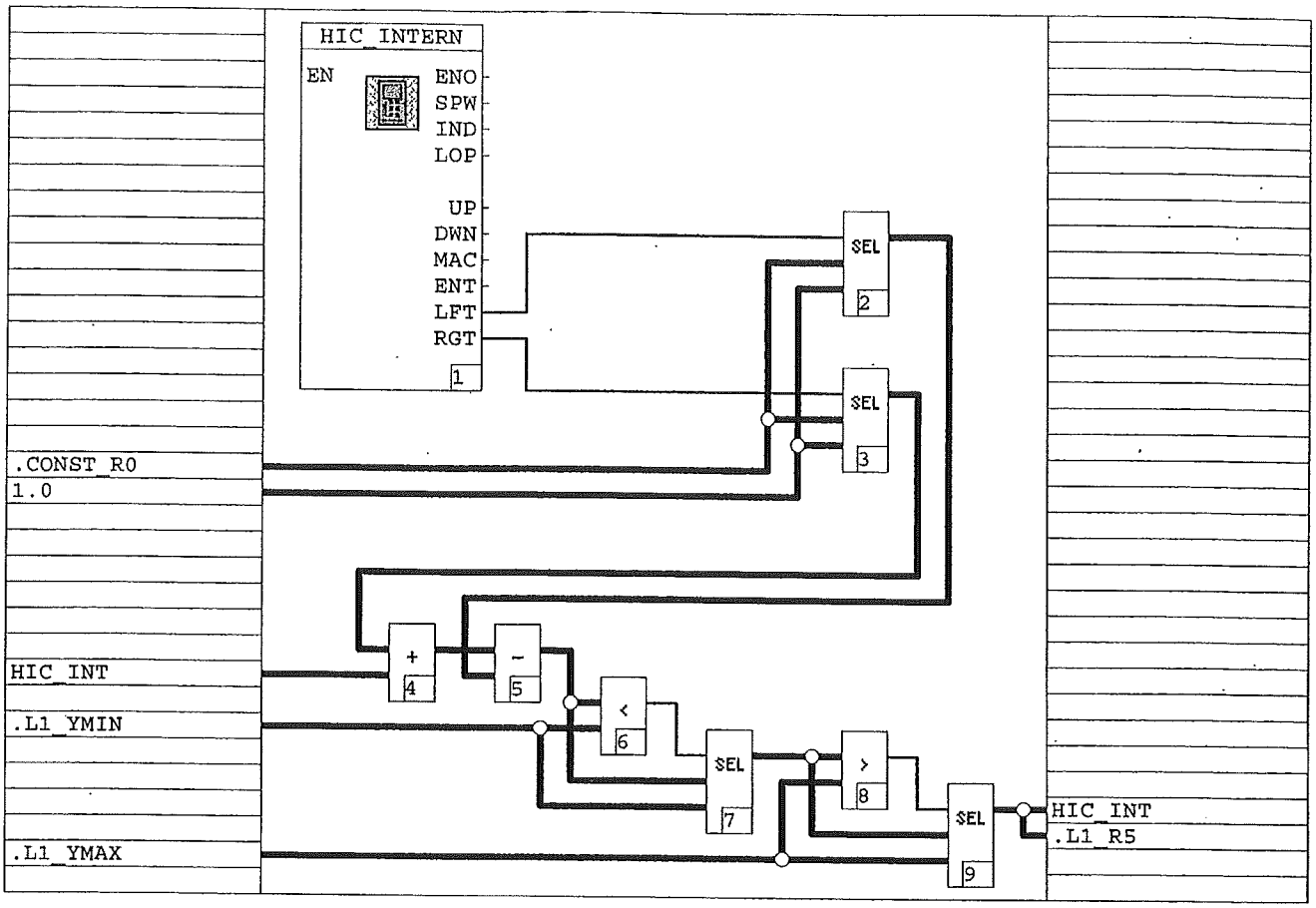


				Date	29.04.2005	N.7100175 KOSBOOST 2004		Basic Program	LL_RAMPE	Customer	-
				Proces	Rindlisbacher					Z. No.	+
				Checke				U:/Protronic/Programs/Ko sboost		ABB No.	ABB - .ffc16074/X01/F04/B07-F
AN TURBO AG	Date	Name	Norm		Orig. 29.04.2005	Rep.f.		Rep.by		Item	Z. No. P. 1.

Claudia Patruno RRM4 SPE 837019325 001 00 18.07.2005



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			Checke						ABB No.	ABB - .fic16074/X01/P04/B08-P	
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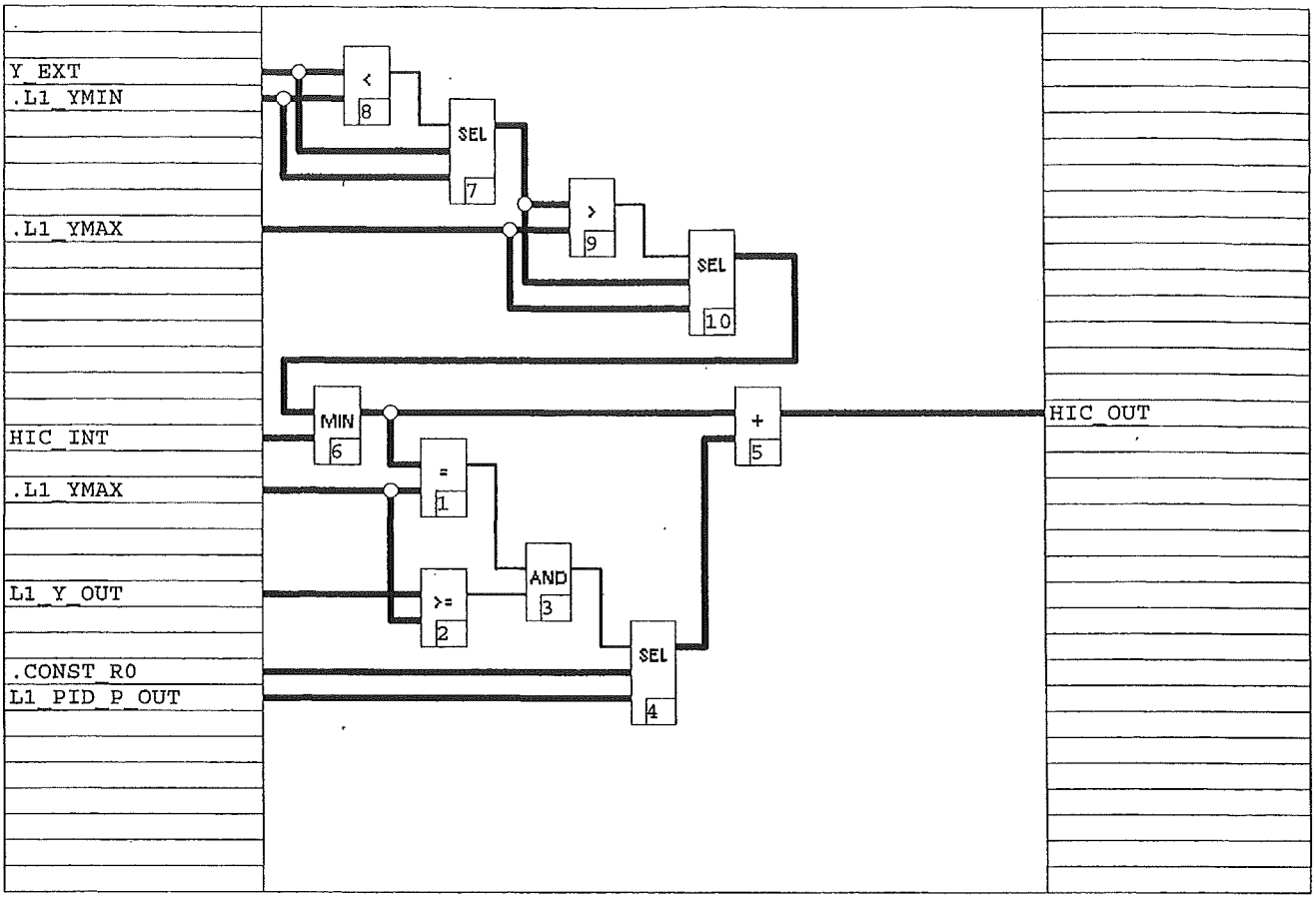

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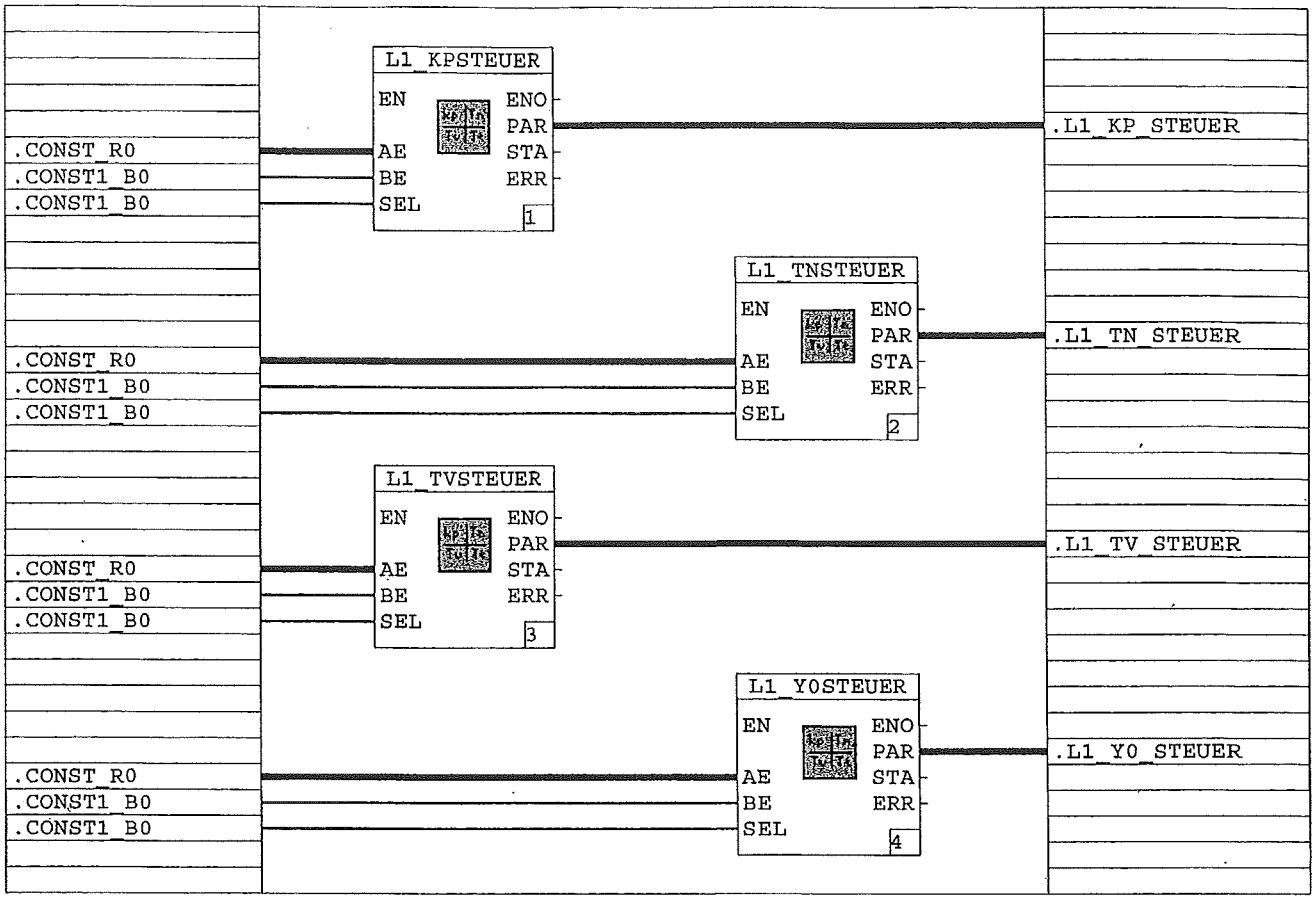
				Checke				sboost		ABB No.	ABB - .fic16074/X01/P04/B09-F	
AN TURBO AG	Date	Name		Norm		Orig. 29.04.2005	Rep.f.	Rep.by		Item	Z. No.	P.

Claudia Patruno RRM4 SPE 837019325 001 00 18.07.2005



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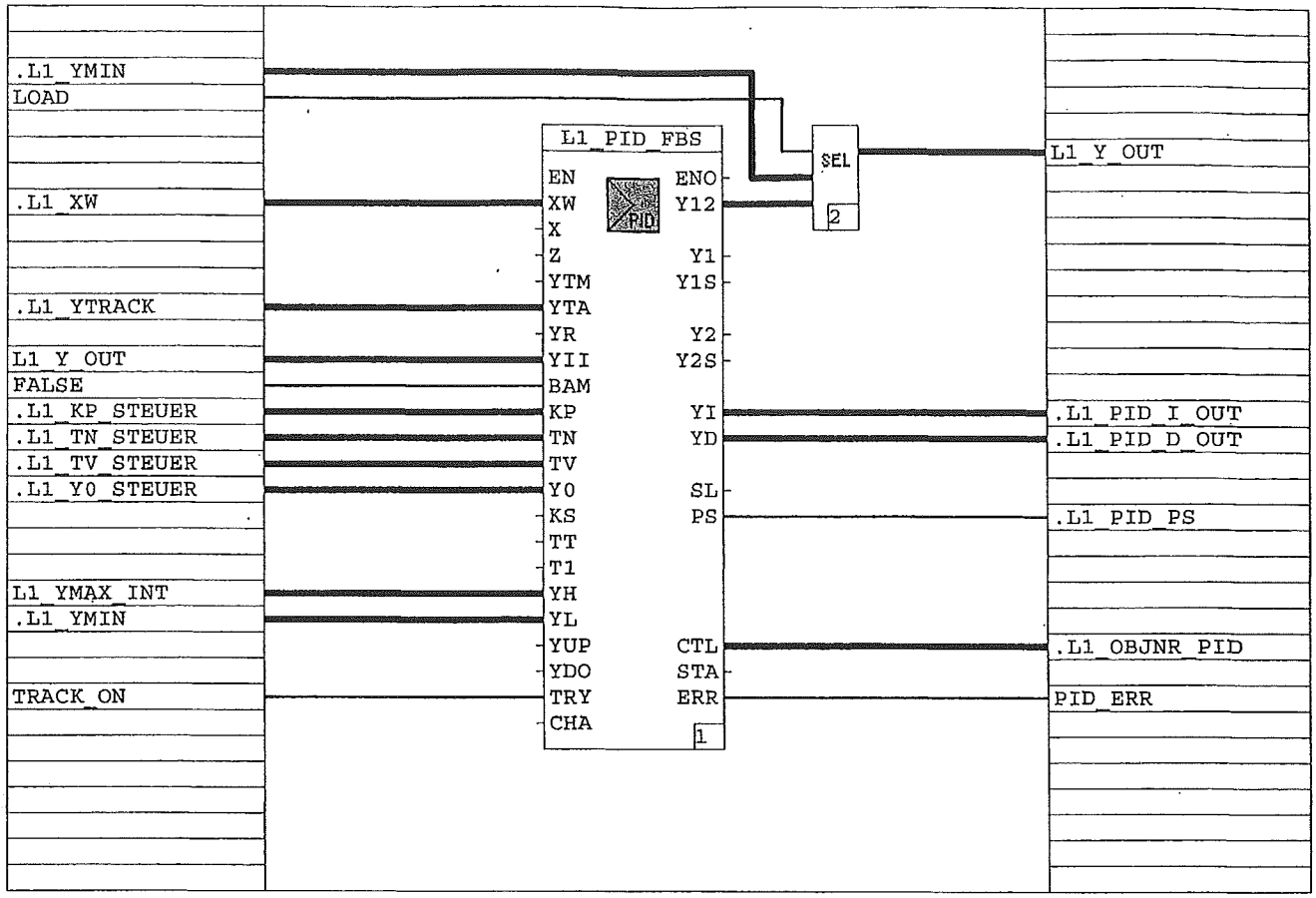
AN TURBO AG	Date	Name	Norm		Orig. 29.04.2005	Rep.f.		Rep.by		Item	Z. No. P. :

Claudia Patruno RRM4 SPE 837019325 001 00 18.07.2005



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			Checke				sboost		ABB No.	ABB - .fic16074/X01/P04/911-F	
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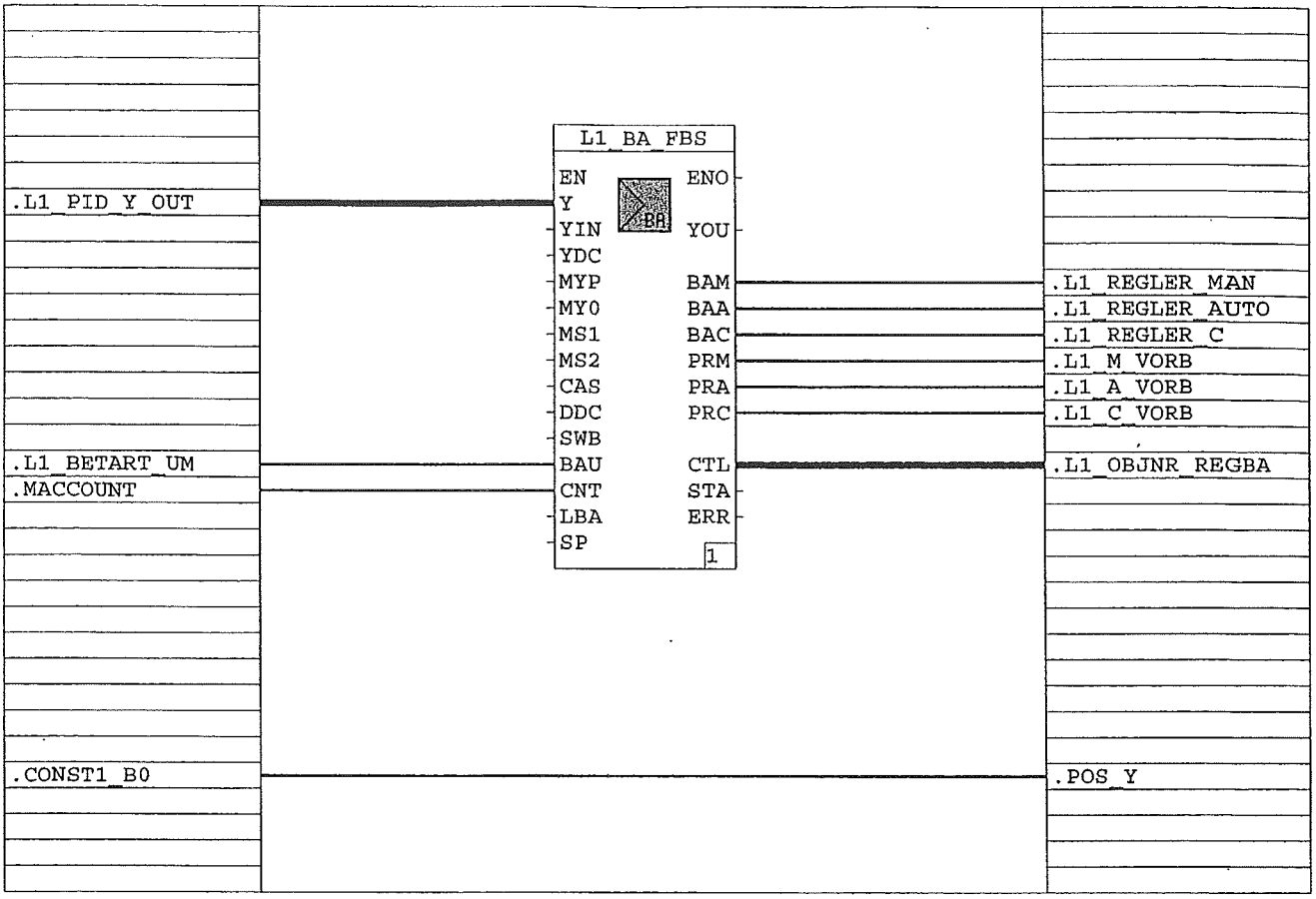

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				Checke				sboost		ABB No.	ABB - .fic16074/X01/P04/B12-F
				Norm		Orig. 29.04.2005	Rep.f.	Rep.by		Item	Z. No. P. :

AN TURBO AG

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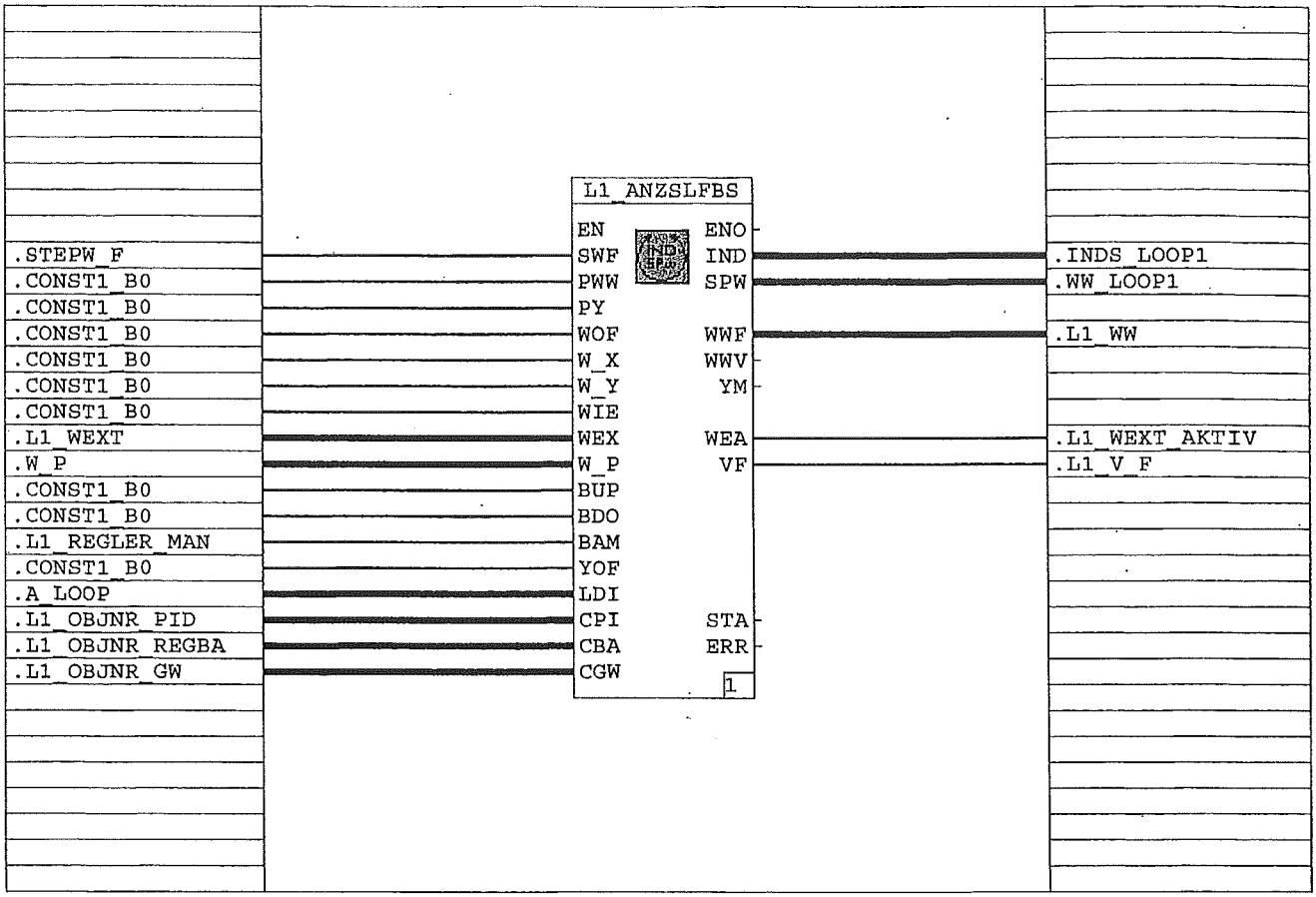

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			Checke				sboost		ABB No.	ABB - .fic16074/X01/P04/B13-P
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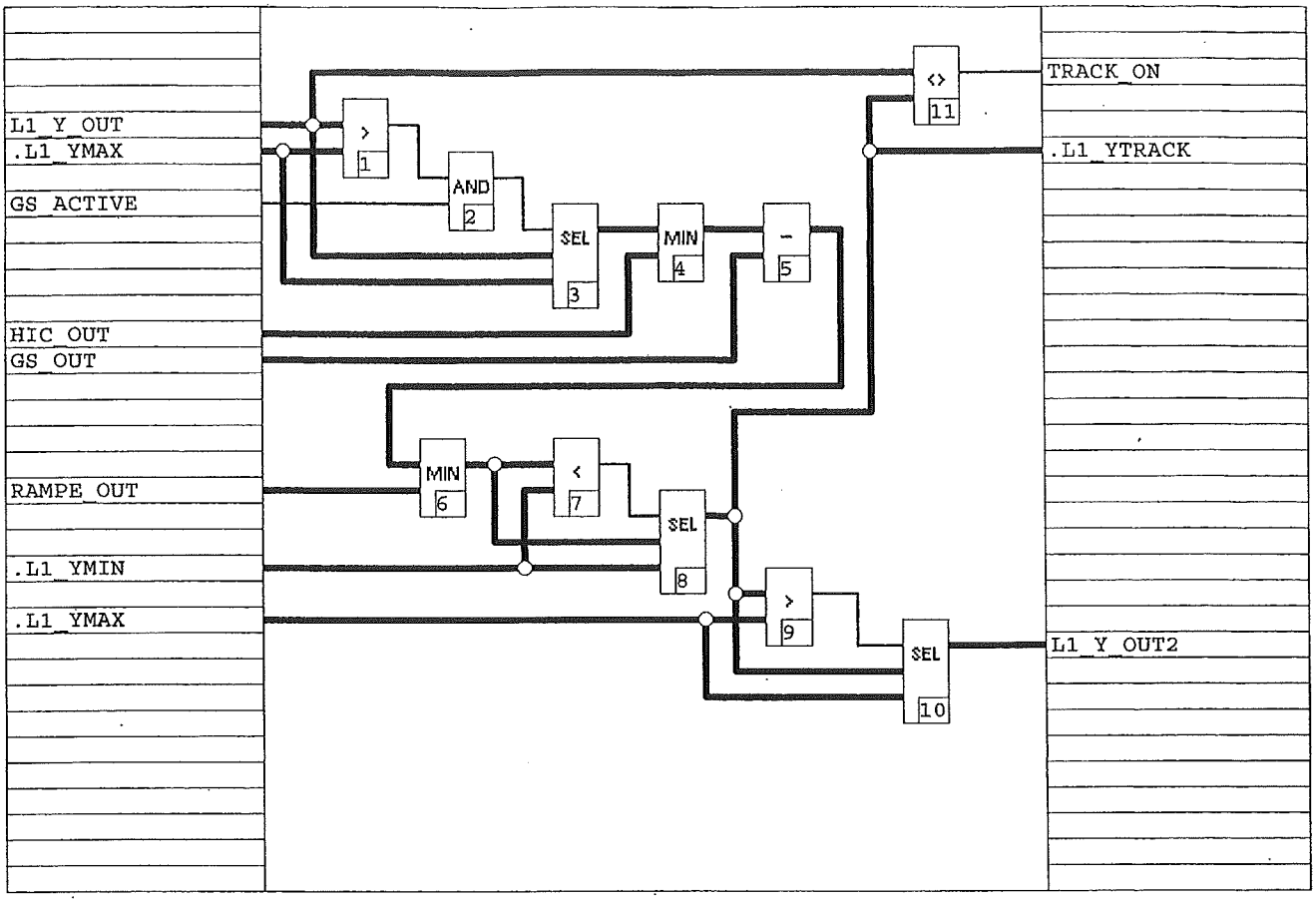

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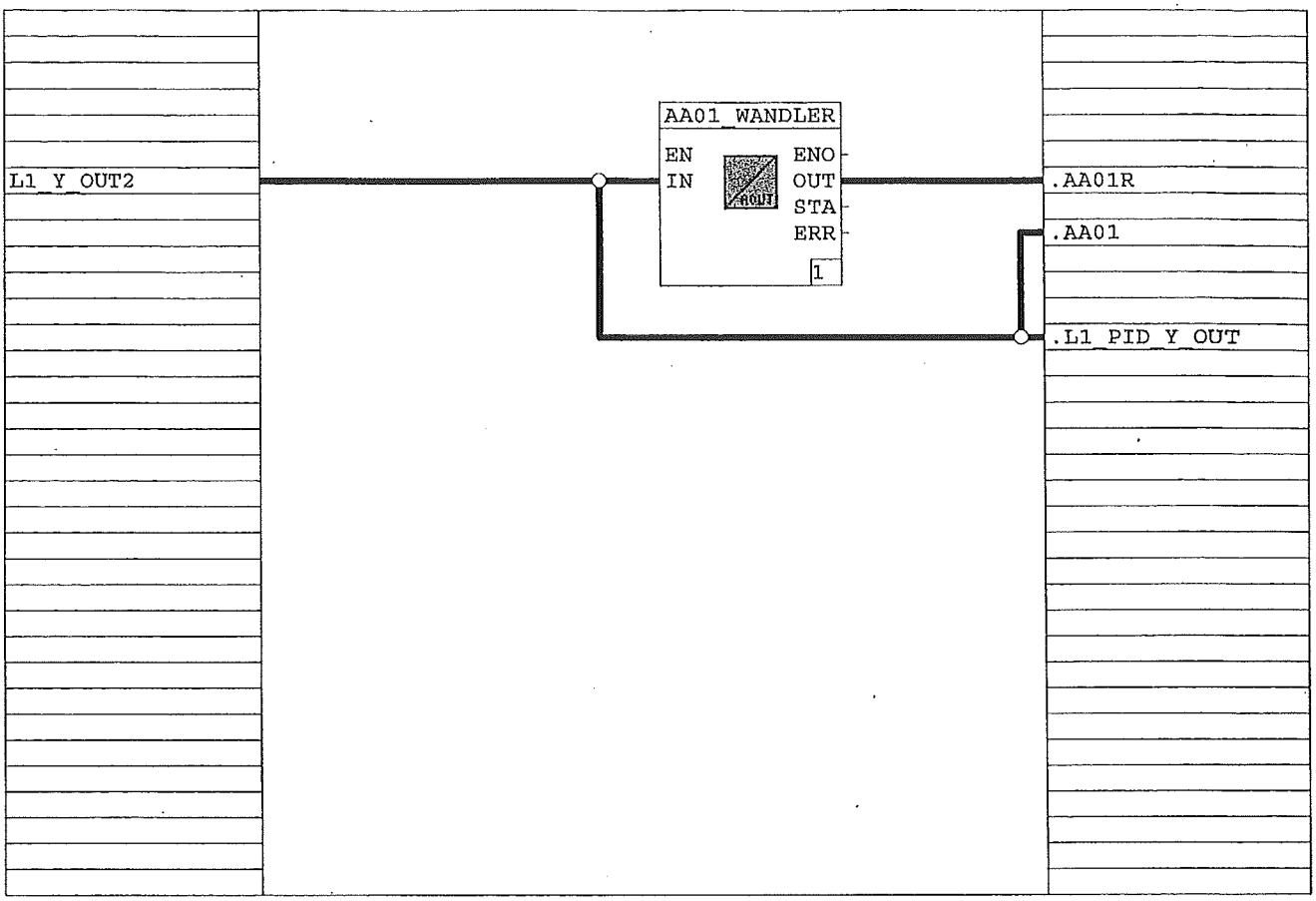
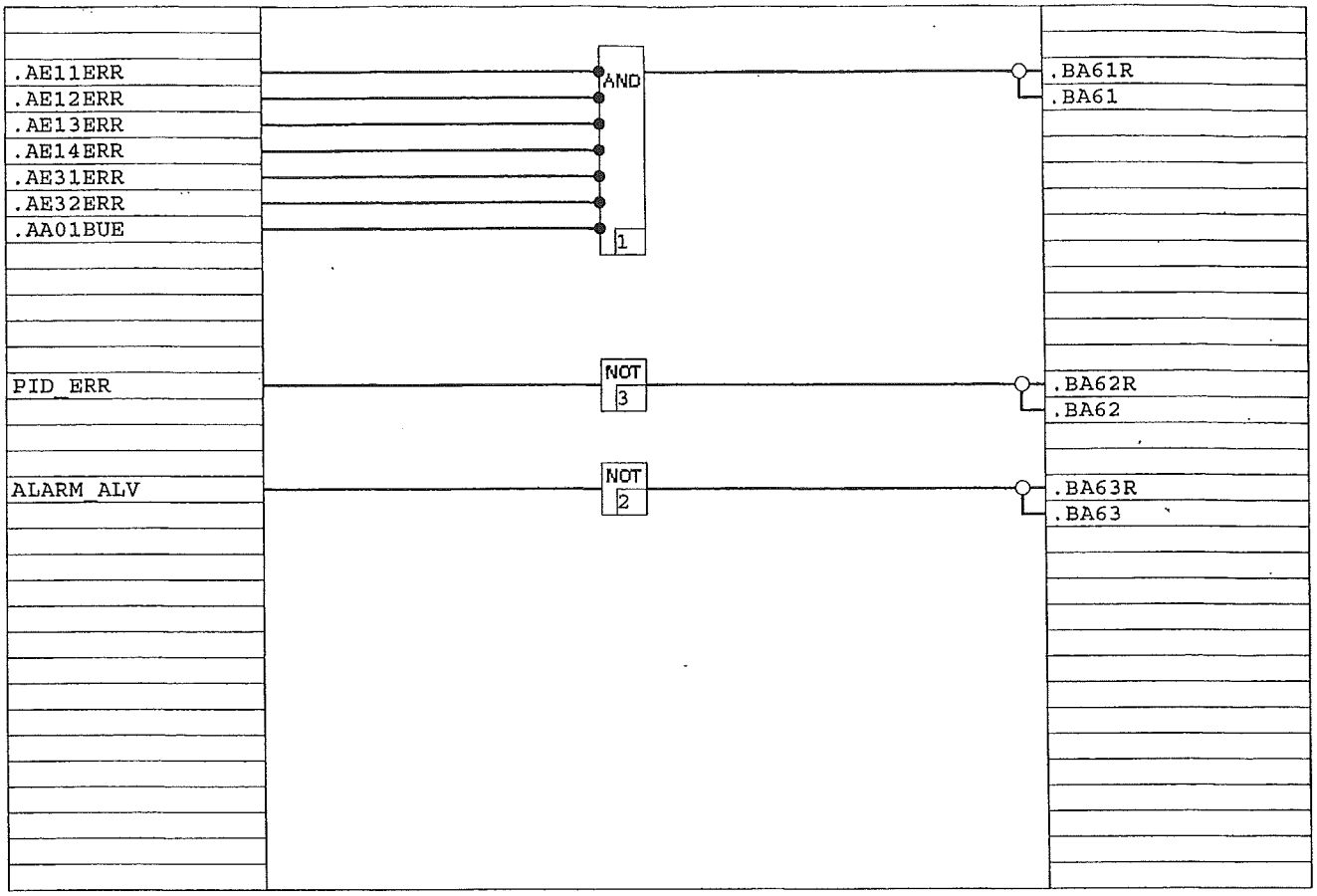
			Checke						ABB No.	ABB - .fic16074/X01/P04/B14-P	
AN TURBO AG	Date	Name	Norm		Orig. 29.04.2005	Rep.f.	Rep.by		Item	Z. No.	P. 2



			Data	29.04.2005	N.7100175		Basic Program	PID_OUT	Customer		
			Proces	Rindlisbacher	XOSBOOST 2004		U:/Protronic/Programs/Xo		z. No.		
			Check				sboost		ABB No.	ABB - .fic16074/X01/F05/B01-F	
	Date	Name	Norm		Orig. 29.04.2005	Rep.f.	Rep.by		Item	Z. No.	P. 2



			Date	29.04.2005	N.7100175	Basic Program	OUT_DIGIT	Customer		-
			Proced	Rindlisbacher	KOSBOOST 2004	U:/Protronic/Programs/Ko		Z. No.		+
			Checke			sboost		ABB No.	ABB - .fic16074/X01/P06/B01-F	
	Date	Name	Norm		Orig. 29.04.2005	Rep.f.	Rep.by	Item	Z. No.	P.

AN TURBO AG

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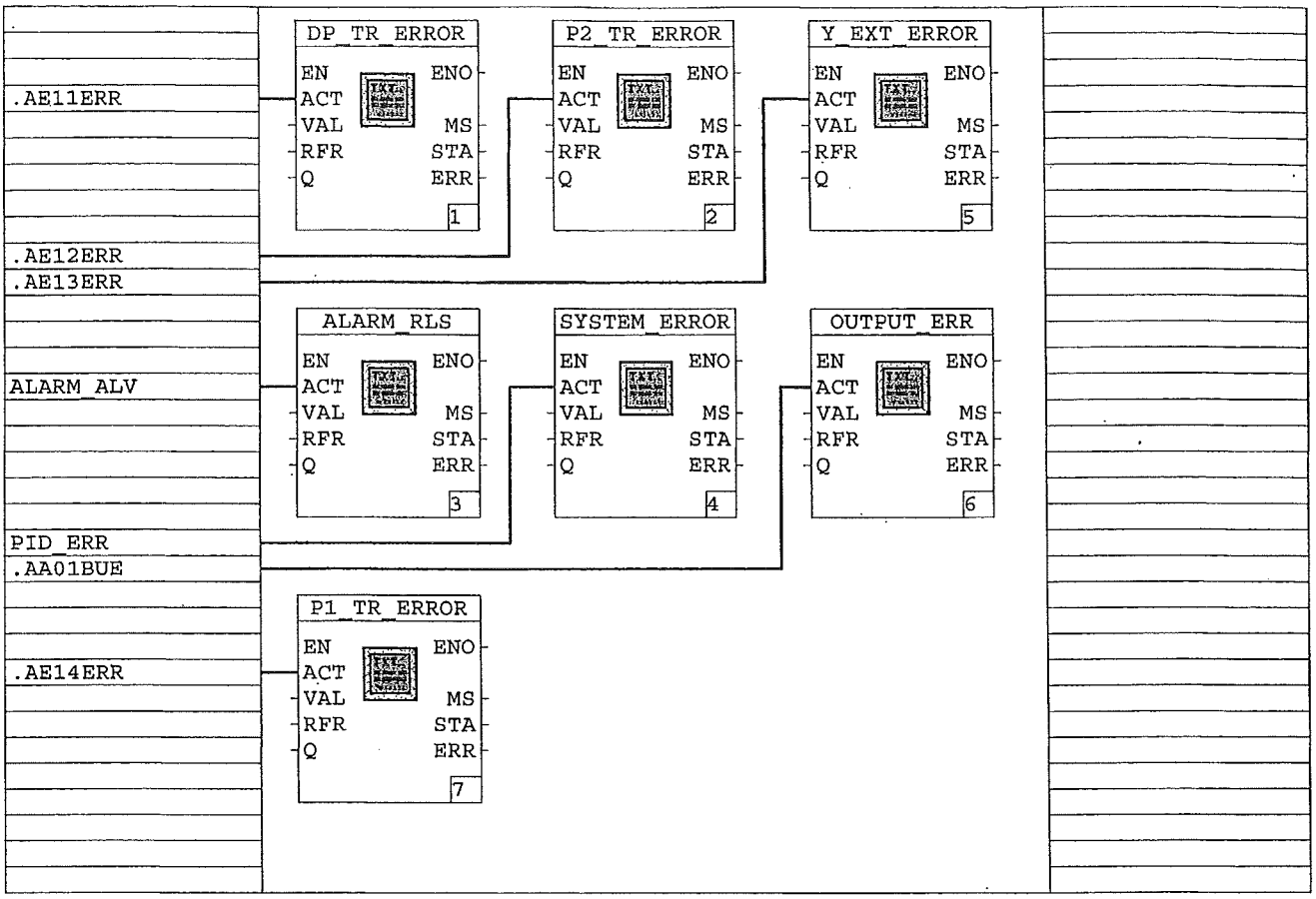

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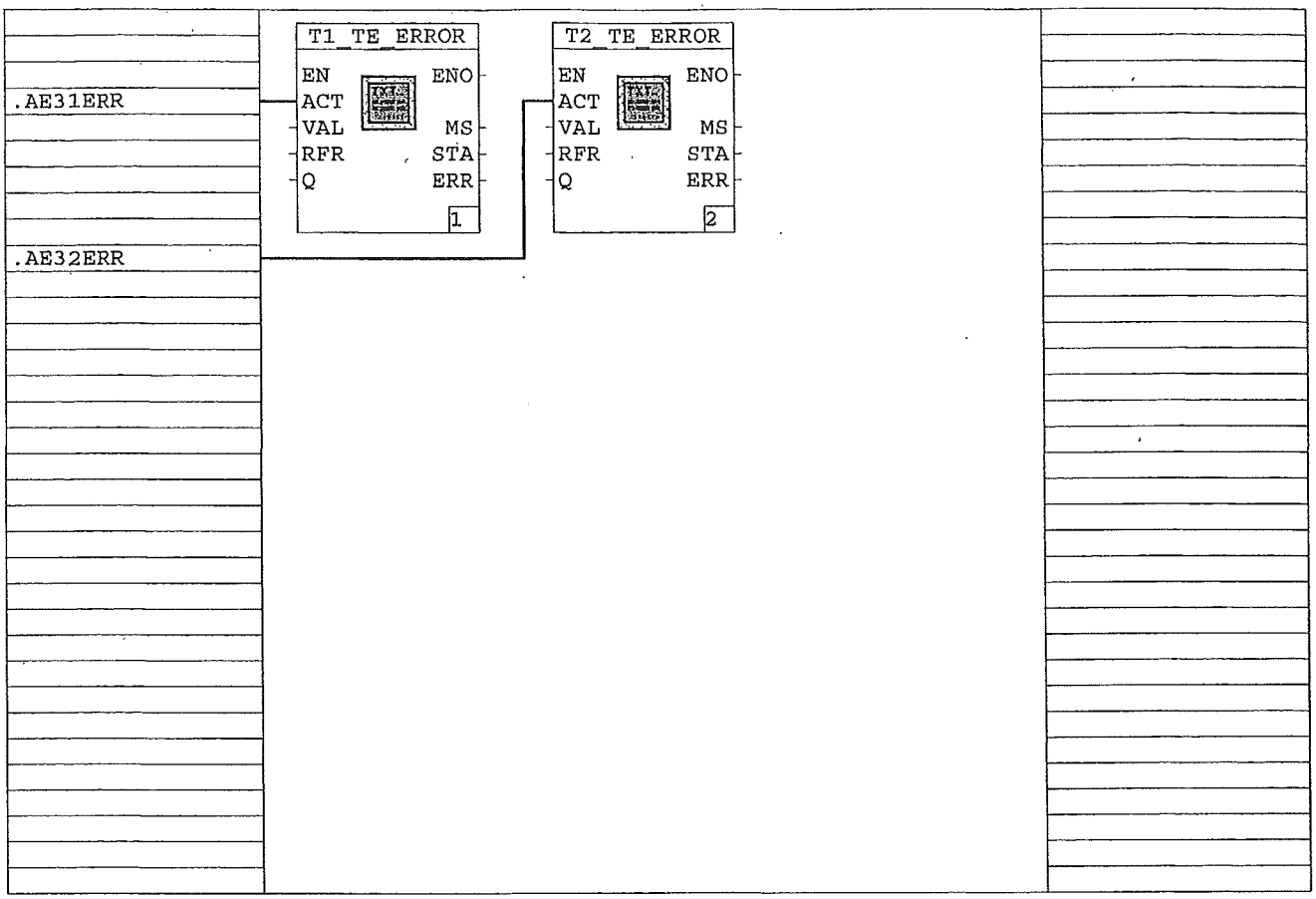
				Proces	Rindlisbacher			U:/Protronic/Programs/Kosboost			Z. No.		
				Checke							ABB No.	ABB - .fic16074/X01/P07/B01-F	
AN TURBO AG	Date	Name	Norm		Orig. 29.04.2005	Rep.f.		Rep.by			Item	Z. No.	P.



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				Checke						ABB No.	ABB - .fic16074/X01/P07/B02-F
AN TURBO AG	Date	Name		Norm		Orig. 29.04.2005	Rep.f.	Rep.by		Item	Z. No. P. 2.

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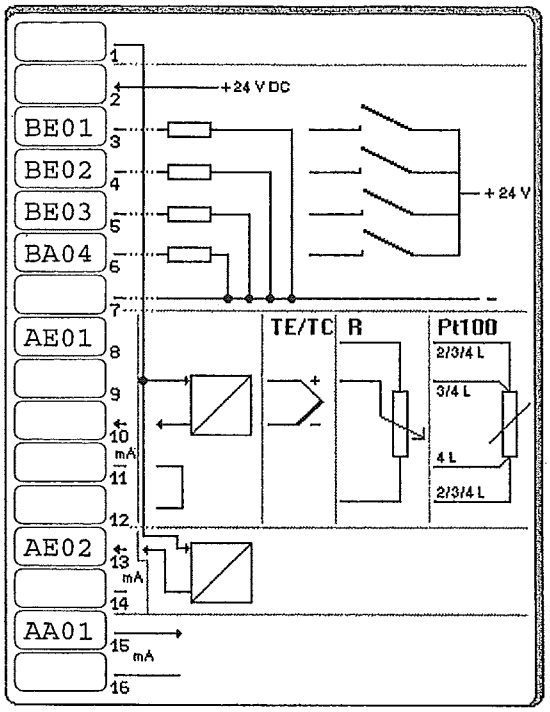
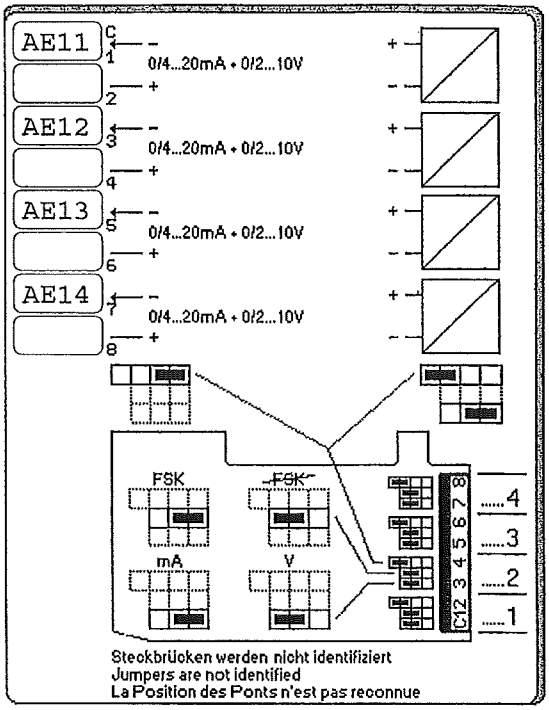
Standard instrument:



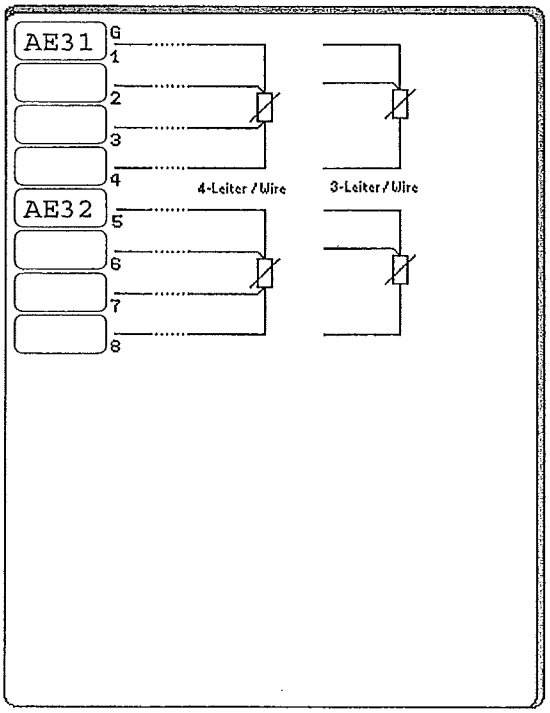
Module slot 1:

AI 4 * mA with TPS



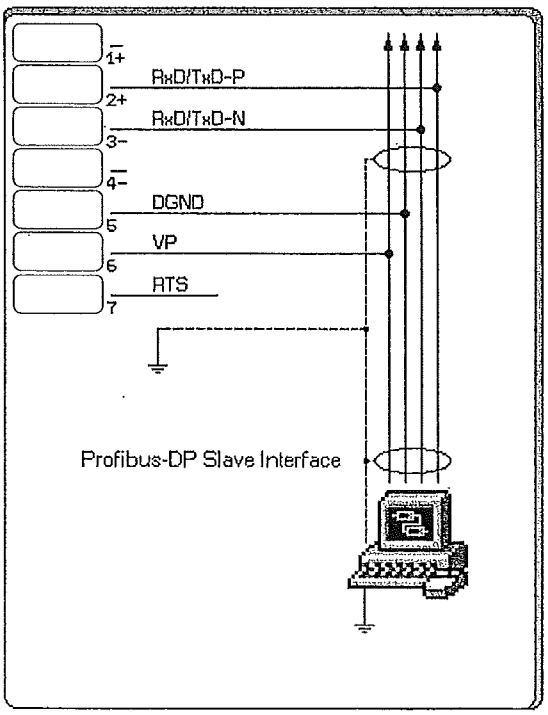
Module slot 3:

AI Pt100 2*3/4 wire



Module slot 5:

Profibus-DP Slave



				Date	29.04.2005	N.7100175		Basic Program	Configuration list	Customer	
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				Checke						ABB No.	ABB
AN TURBO AG	Date	Name		Norm		Orig. 29.04.2005	Rep.f.	Rep.by		Item	Z. No.

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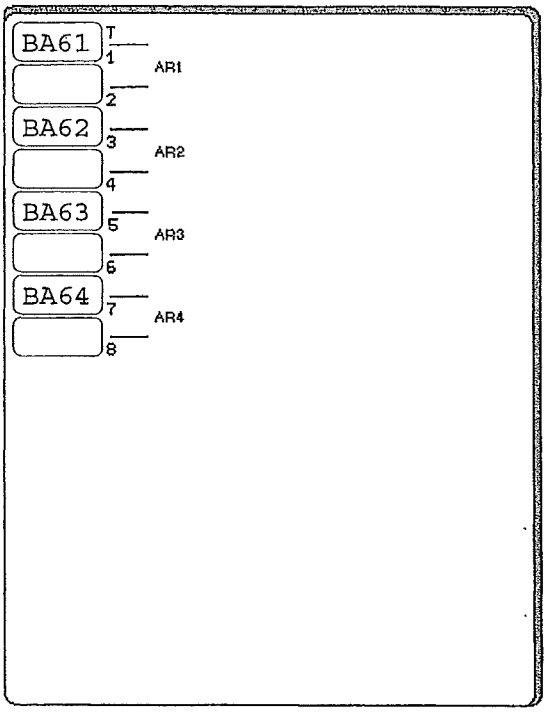
Module slot 6:

BO 4 * relay



Device configuration

Languages
B01-Q01: Language: 2 - English

Binary inputs
B02-Q01: Lock-out, confi & param. menus: 0 - # not by BI
B02-Q02: Block all control actions: 0 - # not by BI
B02-Q03: Alarm acknowledgement: 0 - # not by BI
B02-Q04: Locking Menu-Key: 0 - # not by BI

Remote control
B04-Q01: Remote control: 1 - # LOCAL only

Alarm management
B10-Q01: Text/Alarm display: 1 - on the front panel
B10-Q02: Acknowledgement: 0 - # none

Set Module type
B12-Q01: Slot 1: 25 - Analoginput 4*mA+SUP
B12-Q02: Slot 2: 0 - # unoccupied
B12-Q03: Slot 3: 35 - Pt100 2-fold
B12-Q04: Slot 4: 0 - # unoccupied
B12-Q05: Slot 5: 4 - Profibus DP Slave module
B12-Q06: Slot 6: 70 - Relay 4-fold
B12-Q07: Slot 7: 0 - # unoccupied

Password
B20-Q01: Password: 2 - on + 30 sec.
B20-P02: Password: 2004

Communication
B30-P01: Modbus-Address: 1
B30-Q02: Baud rate: 9 - 57600
B30-Q03: Protocol: 2 - # Modbus RTU
B30-Q04: Parity: 2 - # even
B30-Q05: Time out: 1 - # 1 sec.
B30-P06: Profibus-DP-Slave address: 1
B30-Q07: Default_CFG_I: 0 - # not used
B30-Q08: Default_CFG_O: 0 - # not used
B30-Q09: Time out for: 1 - # Modbus

Configuration loop 1

Control function
B01-Q01: Control function: 1 - # Single loop controller
B01-Q04: Position feedback signal: 0 - # none
B01-Q05: Selftune: 0 - # off

Setpoints
B05-Q09: Setpoint display: 1 - # Target setpoint

Display
B06-Q01: Time period in trend window: 1 - # 75 seconds

Configuration loop 2

Control function
B01-Q01: Control function: 0 - # unused
B01-Q04: Position feedback signal: 0 - # none
B01-Q05: Selftune: 0 - # off

Configure AI

Analog input 01
B01-Q01: Signal type: 2 - # 4..20mA

Analog input 02
B02-Q01: Signal type: 2 - # 4..20mA

Analog input 11
B11-Q01: Signal type: 2 - 4..20mA
B11-Q15: Frequency input: 4 - # DIN 19240 pos.

Analog input 12
B12-Q01: Signal type: 2 - 4..20mA
B12-Q15: Frequency input: 4 - # DIN 19240 pos.

Analog input 13
B13-Q01: Signal type: 2 - 4..20mA
B13-Q15: Frequency input: 4 - # DIN 19240 pos.

Analog input 14
B14-Q01: Signal type: 2 - 4..20mA
B14-Q15: Frequency input: 4 - # DIN 19240 pos.

Analog input 31
B31-Q01: Signal type: 5 - Pt100 3-wire
B31-Q15: Frequency input: 4 - # DIN 19240 pos.

Analog input 32
B32-Q01: Signal type: 5 - Pt100 3-wire
B32-Q15: Frequency input: 4 - # DIN 19240 pos.

Configure AO

Analog output 01
B01-Q01: Signal type: 2 - # 4..20mA

Configure binary I/O

binary-input/output 01
B01-Q01: Signal type: 1 - # Binary input, control action, direct

binary-input/output 02
B02-Q01: Signal type: 1 - # Binary input, control action, direct

binary-input/output 03
B03-Q01: Signal type: 1 - # Binary input, control action, direct

binary-input/output 04
B04-Q01: Signal type: 3 - Binary output, normally open (0)

binary-input/output 61
B61-Q01: Signal type: 3 - Binary output, normally open (0)

binary-input/output 62
B62-Q01: Signal type: 3 - Binary output, normally open (0)

binary-input/output 63
B63-Q01: Signal type: 3 - Binary output, normally open (0)

binary-input/output 64
B64-Q01: Signal type: 3 - Binary output, normally open (0)

Online parameter loop 1

Selftune
P125: Max output bump: 5.0
P126: Max bump duration: T#00h00m15s
P127: Max +PV bump: 99999.0
P128: Max -PV bump: 99999.0

Tag name
P199: Tag name: FIC 16074