

US STEEL KOSICE/SLOVAKIA
50.3023.01

CIRCUIT DIAGRAM
CONTROL PANEL

21.12.2006
H1011551
=E21.ASP
A00
KRAMBECK
KLUGEH

S =E21.ASP

/ A00

No.	Revision	Date	Name
04	AS BUILT SITE	01.12.06	KRA.
03	AS BUI. WORKS.	14.11.05	BER
02	HEATING	23.08.05	BER

025.011551- 5201 04

50.3023.01:000.701.XXX
COVERSHEET

DATE :	17.05.2005
DRAWN :	KRAMBECK
CHECK.:	KLUGE
NORM :	

Schutzvermerk nach DIN 34 beachten!

04
EVA.80
21.12.2006

04	AS BUILT SITE	17.05.2005	US STEEL KOSICE/SLOVAKIA
03	AS BUILT WORKS	14.11.05	BER Beorb KRAMBECK
02	HEATING	23.08.05	BER Bepr KLUGE
Zust.	Änderung	Datum	Norm
	Urspr.	Ers.f.	Ers.d.

2		3		4		5		6		7		8	
Auftraggeber- Unterlagennummer		Ersteller- Unterlagennummer		Änderungs- Zustand		Unterlagen-Kennzeichnung		Blatt		Benennung			
						Art / Zugehörigkeit		Zählnummer					
A	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	A00	1	COVERSHEET			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	A11		TABLE OF CONTENTS			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	A12		TABLE OF CONTENTS			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	B01	4	BLOCK DIAGRAM			
B	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	D01	5	HEATING CB AND ISOLATOR			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	D02	6	HEATING, SOCKET		230V AC CIRCUIT DIAGRAM	
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	G01	7	BUS WIRES DIRECT VOLTAGE			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	L01	8	MOTOR VOLTAGE CIRCUIT BREAKER			
C	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	L02	9	MOTOR VOLTAGE ISOLATOR			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	M01	10	CONTROL CIRCUIT BREAKER			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	M02	11	BLOCKING CIRCUIT BREAKER			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	M03	12	ISOLATOR			
D	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	M04	13	ISOLATOR			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	M05	14	ISOLATOR			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	M06	15	ISOLATOR			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	M07	16	ISOLATOR			
E	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	P01	17	OPENING INHIBIT			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q01	18	AUXILIARY VOLTAGE EQUIPMENT			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q02	19	INPUTS/OUTPUTS 6MB52			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q03	20	INPUTS/OUTPUTS 6MB52			
F	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q04	21	INPUTS/OUTPUTS 6MB52			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q05	22	INPUTS/OUTPUTS 6MB52			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q06	23	INPUTS/OUTPUTS 6MB52			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q07	24	INPUTS/OUTPUTS 8TK			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q08	25	INPUTS/OUTPUTS 8TK			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q09	26	INPUTS/OUTPUTS 8TK			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q10	27	POSITION INDICATION EQUIPMENT			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q11	28	POSITION INDICATION EQUIPMENT			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	Q12	29	POSITION INDICATION EQUIPMENT			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	R01	30	MESSAGES			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP	R02	31	MESSAGES			
	50.3023.01.000.701 .xxx	025.011551-5201 04		02	03	04	S =E21.ASP						
AS BUILT SITE 17.05.2005		US STEEL KOSICE/SLOVAKIA				TABLE OF CONTENTS		150.3023.01.000.701.xxx		S =E21.ASP		/ A11	
AS BUJ. WORKS. 14.11.05		BER BEORBI KRAMBECK										Blatt	
HEATING 23.08.05		BER GEPR. KLUGE										025.011551-5201 04	
Zust. Änderung Datum Name/ Norm		Urspr.: Ersf.: Ersf.:		4		5		6		7		8	

Schutzvermerk nach DIN 34 beachten!

KRAMBECK
KLUEH
601
E21.ASP

21.12.2006
HJ011551
E21.ASP

PROTECTION PANEL

CONTROL PANEL

04	AS BUILT SITE	12.05	KRA	Datum	17.05.2005	US STEEL KOSICE/SLOVAKIA
03	AS BUI. WORKS	14.11.05	BER	Bearb	KRAMBECK	50.3023.01
02	HEATING	23.08.05	BER	Gepr.	KLUGE	
Zust.	Anderung	Datum	Name	Norm	Urspr.:	Ers.f.:



BUS Wires DIRECT VOLTAGE

50.3023.01.000.701.xxx

S-E21.ASP

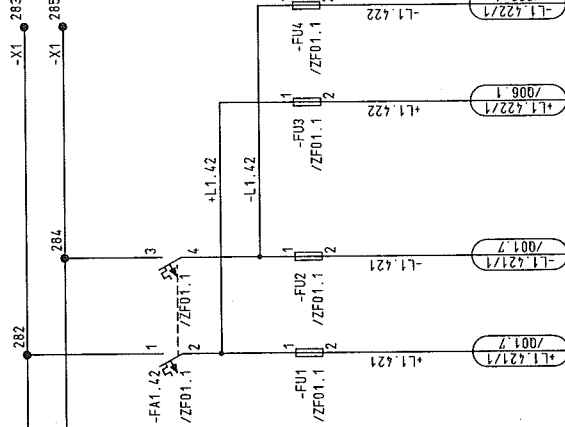
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58BL

=E21.ASR
+ASR

+ASP21

220V DC	E21.ASR/601.2	+L1.11/1	-X1 1	+L1.11
	E21.ASR/601.3	-L1.11/1	-X1 4	-L1.11
	E21.ASR/601.5	+L1.31/1	-X1 8	+L1.21
220V DC	E21.ASR/601.6	-L1.21/1	-X1 11	-L1.21
	E21.ASR/601.8	+L1.31/1	-X1 15	+L1.31J
220V DC	E21.ASR/601.9	-L1.31/1	-X1 17	-L1.31
	E21.ASR/602.2	+L1.41/1	-X1 19	+L1.41
220V DC	E21.ASR/602.3	-L1.41/1	-X1 26	-L1.41
	E21.ASR/601.3	+L1.12/1	-X1 71	+L1.12
220V DC	E21.ASR/601.4	-L1.12/1	-X1 73	-L1.12
	E21.ASR/601.7	+L1.32/1	-X1 75	+L1.32
220V DC	E21.ASR/601.7	-L1.32/1	-X1 77	-L1.32
	E21.ASR/601.7	+L1.4/1	-X1 282	+L1.4
220V DC	E21.ASR/602.7	-L1.4/1	-X1 284	-L1.4

-X1 3	+L1.11/1	/NO1.1
-X1 6	-L1.11/1	/NO1.1
-X1 10	+L1.31/1	/NO3.1
-X1 13	-L1.21/1	/NO1.1
-X1 16	+L1.31/1	/NO3.1
-X1 18	-L1.31/1	/NO3.1
-X1 20	+L1.41/1	/NO1.1
-X1 27	-L1.41/1	/NO1.1
-X1 72	+L1.12/1	/LO1.1
-X1 74	-L1.12/1	/LO1.1
-X1 76	+L1.32/1	/LO2.1
-X1 78	-L1.32/1	/LO2.1



Schutzvermerk nach DIN 34 beachten!

KRAMBECK
HJ011551
E21 ASP
KLUGEH
MOT

21.12.2008

04

AS BUILT SITE

16.11.05

BER

Gebr. KRAMBECK

HEATING

23.08.05

BER

Gebr. KLUGE

Urspr.

Ers.f.

Norm

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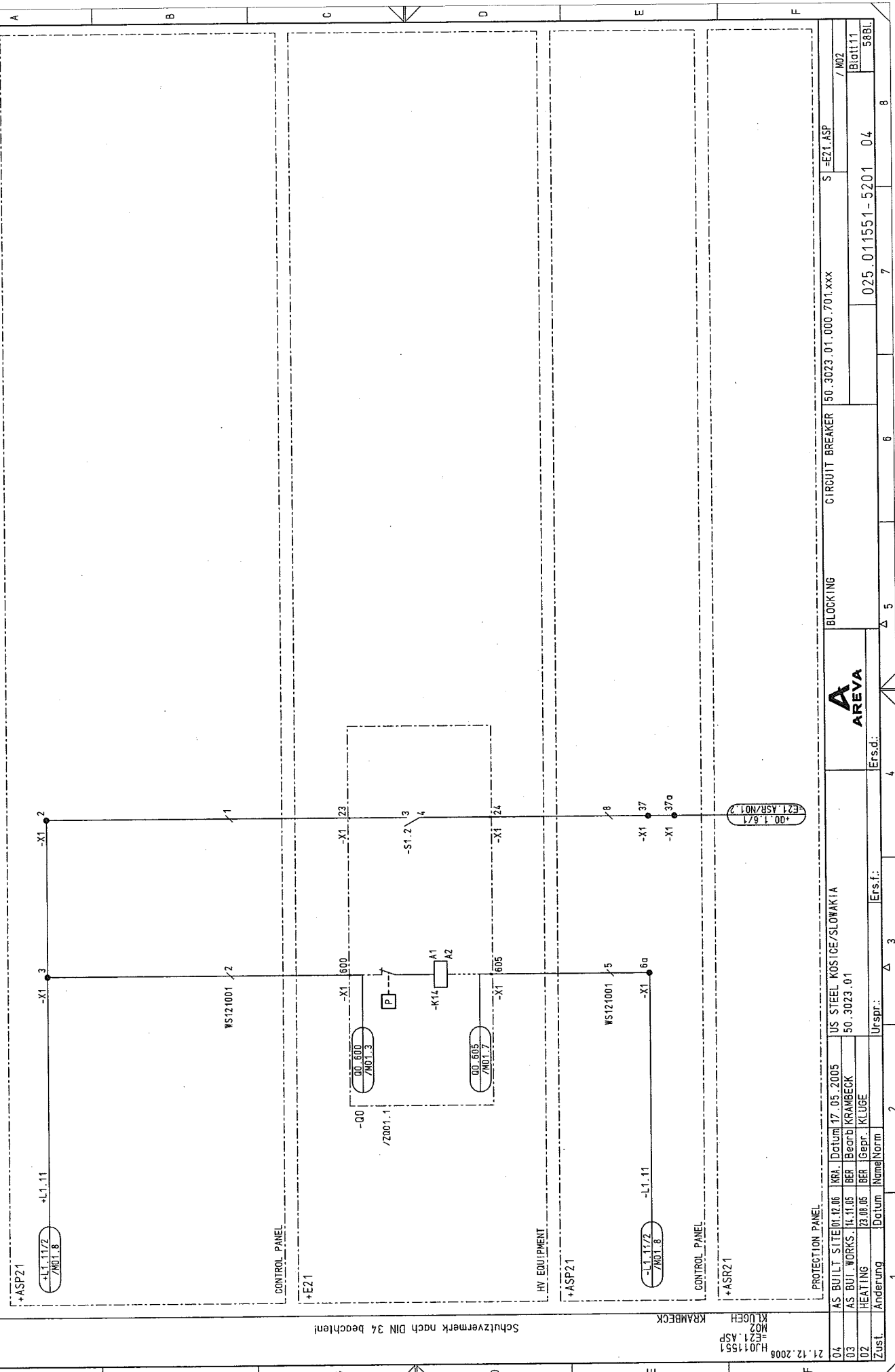
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Schutzvermerk nach DIN 34 beachten!

KRAMBECK
KLÜGEH
HJ011551
E21.ASP
21.12.2006



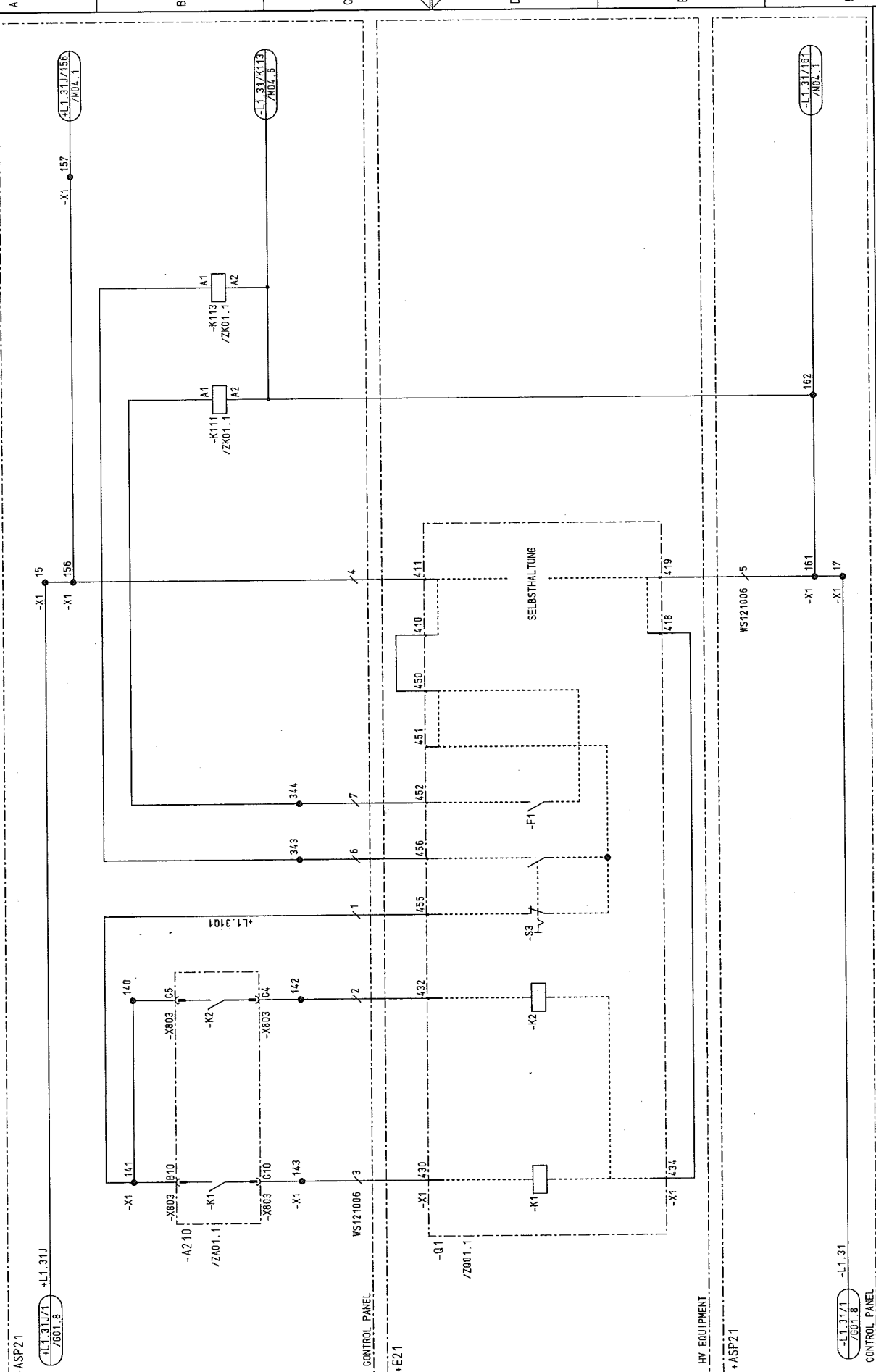
Zust.		Anderung	1	2	3	4	5	6	7	8
HEATING		23.08.05	BER	Gepr.	KLÜGE	Ers.f.:		Ers.d.:		58BL
AS BUILT WORKS		14.11.05	BER	Gepr.	KRAMBECK	50.3023.01		025.011551-5201		04
KRA. Datum		17.05.2005	US STEEL KOSICE/SLOVAKIA		BLOCKING		CIRCUIT BREAKER		S -E21.ASP	
04		17.05.2005		150.3023.01.000.701.xxx		/ NO2		Biot11		8

Schutzvermerk nach DIN 34 beachten!

HJ011551
=E21.ASP
KRAMBECK
KLÜBCH
MO3

21.12.2006

04	AS BUILT SITE/12.05	KRA.	Datum 17.05.2005	US STEEL KOSICE/SLOWAKIA	CONTROL	ISOLATOR	50.3023.01.000.701.xxx	S	-E21.ASP	/ NO3
03	AS BUILT WORKS/14.11.05	BER	Bearb KRAMBECK	50.3023.01						
02	HEATING	23.08.05	BER	Gepr. KLÜBE						
Zust.	Änderung	Datum	Name/Norm	Ur.spr.:	Ers.f.:	Ers.d.:	025.011551-5201	04	58BL	Blatt 12
1	2	3	4	5	6	7	8			



Schutzvermerk nach DIN 34 beachten!

HJ011551
=E21 ASP
KLÜBER
MOL

KRAMBECK

21.12.2006

04 AS BUILT SITE 01.12.06 KRA Datum 17.05.2005

03 AS BUILT WORKS 14.11.05 BER Bearb KRAMBECK

02 HEATING 23.06.05 BER Gepr KLUGE

Zust. Änderung Datum Name Norm Urspr. Ers.f. Ers.d.

CONTROL PANEL

US STEEL KOSICE/SLOVAKIA

50.3023.01

ISOLATOR

50.3023.01.000.701.xxx

S =E21 ASP

/ MOL

Blatt 13

58BI

025.011551-5201 04

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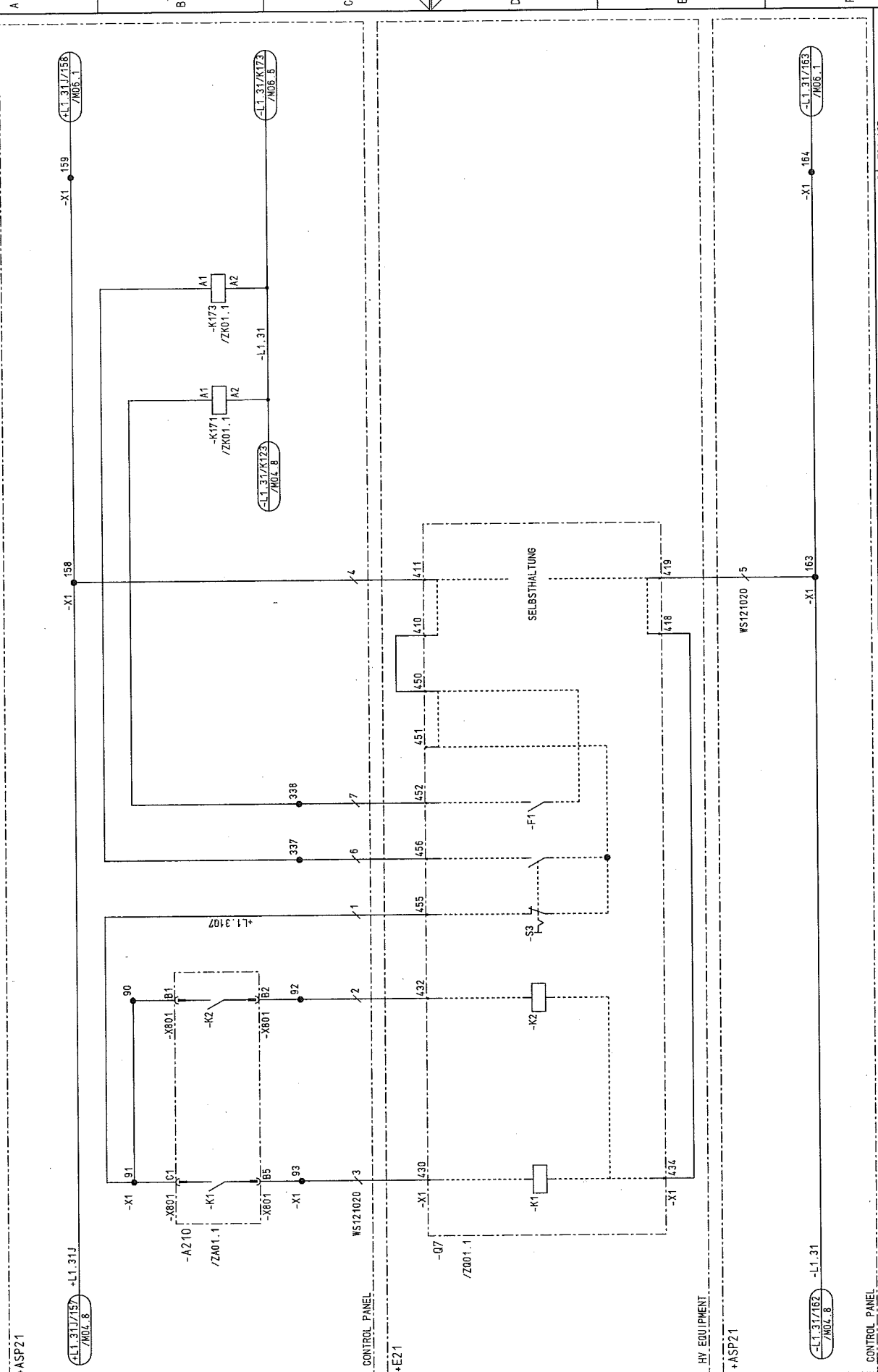
-316

Schutzvermerk nach DIN 34 beachten!

H3011551
E21 ASP
KRAMBECK
KLÜGEH

21.12.2006

04	AS BUILT SITE	14.12.06	KRA.	Datum	17.05.2005	US STEEL KOSICE/SLOWAKIA	CONTROL	ISOLATOR	50.3023.01.000.7701.xxx	S	E21.ASP	/ M05
03	AS BUILT WORKS	14.11.05	BER	Gepr.B	KRAMBECK	50.3023.01						Blatt 14
02	HEATING	23.08.05	BER	Gepr.	KLÜGE				025.011551-5201	04		58BL
Zust.	Änderung	Datum	Norm	Urspr.	Ers.f.	Ers.d.						
1												
2												
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Schutzvermerk nach DIN 34 beachten!

HJ011551
=E21.ASP
KLUGEH
M06

KRAMBECK

21.12.2008

04

03

02

Zust.

Änderung

Heating

AS BUILT WORKS

US STEEL KOSICE/SLOWAKIA

CONTROL PANEL

ISOLATOR

150.3023.01.000.701.xxx

S=E21.ASP

Blot15

588L

025.011551-5201 04

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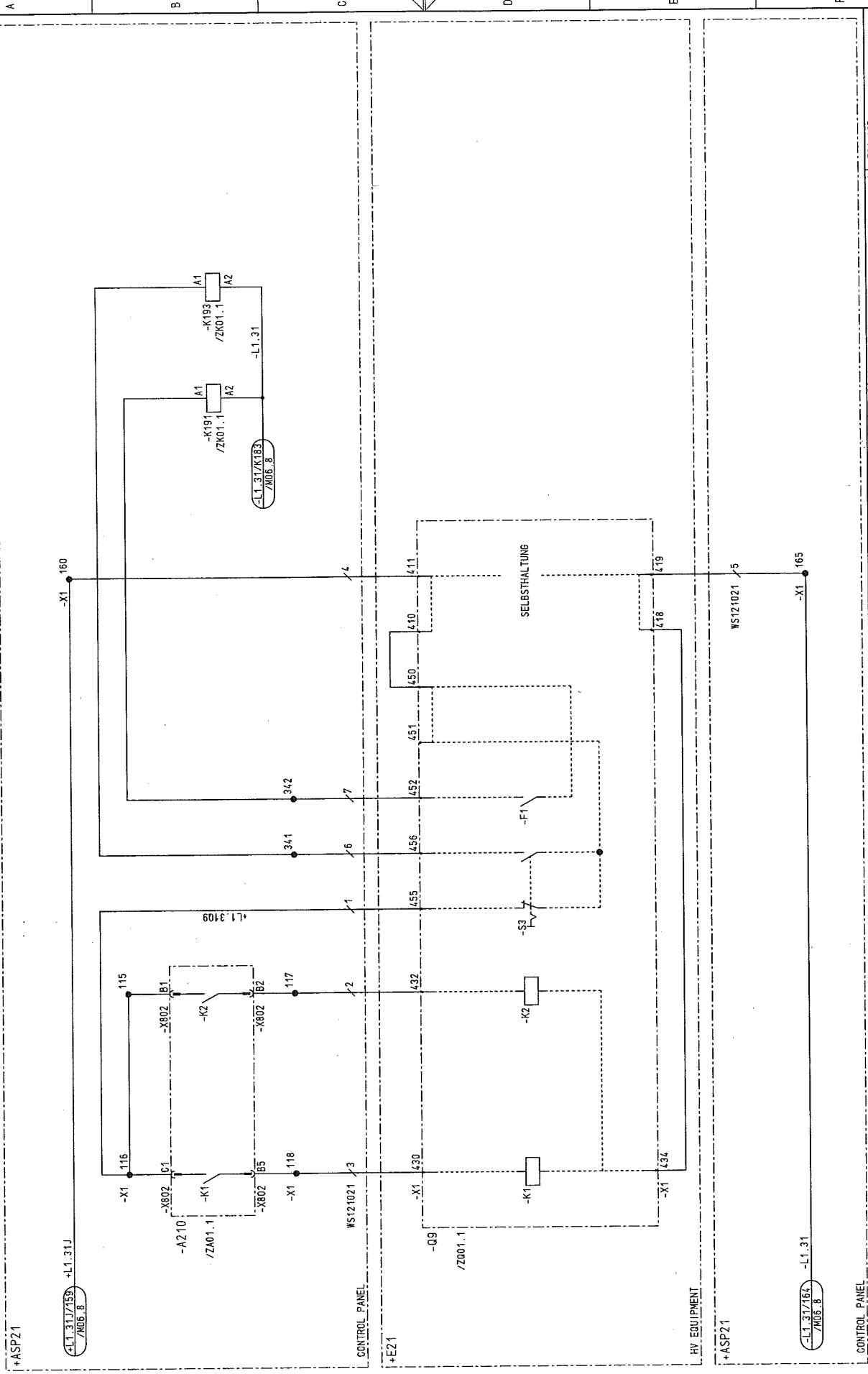
Schutzvermerk nach DIN 34 beachten!

HJ011551
E21 ASP
KLUGEH

KRAMBECK

21.12.2006

04	AS BUILT SITE	12.05	KRA	Datum	17.05.2005	US STEEL KOSICE/SLOWAKIA	CONTROL	ISOLATOR	50.3023.01.000.7701.xxx	S	E21 ASP	8
03	AS BUILT WORKS	14.11.05	BER	Beauftragter	KRAMBECK	50.3023.01						7
02	HEATING	23.08.05	BER	Gepr.	KLUGE							6
Zust.	Änderung	Datum	Norm	Urspr.	Ers.f.	Ers.d.			025.011551-5201	04		5
												4
												3
												2
												1



+ASP21

-L1.31/153
/M05.8

-X1

-X2

-X3

-X4

-X5

-X6

-X7

-X8

-X9

-X10

-X11

-X12

-X13

-X14

-X15

-X16

+ASP21

-L1.31/153
/M05.8

-X1

-X2

-X3

-X4

-X5

-X6

-X7

-X8

-X9

-X10

-X11

-X12

-X13

-X14

-X15

-X16

+ASP21

-L1.31/153
/M05.8

-X1

-X2

-X3

-X4

-X5

-X6

-X7

-X8

-X9

-X10

-X11

-X12

-X13

-X14

-X15

-X16

+ASP21

-L1.31/153
/M05.8

-X1

-X2

-X3

-X4

-X5

-X6

-X7

-X8

-X9

-X10

-X11

-X12

-X13

-X14

-X15

-X16

+ASP21

-L1.31/153
/M05.8

-X1

-X2

-X3

-X4

-X5

-X6

-X7

-X8

-X9

-X10

-X11

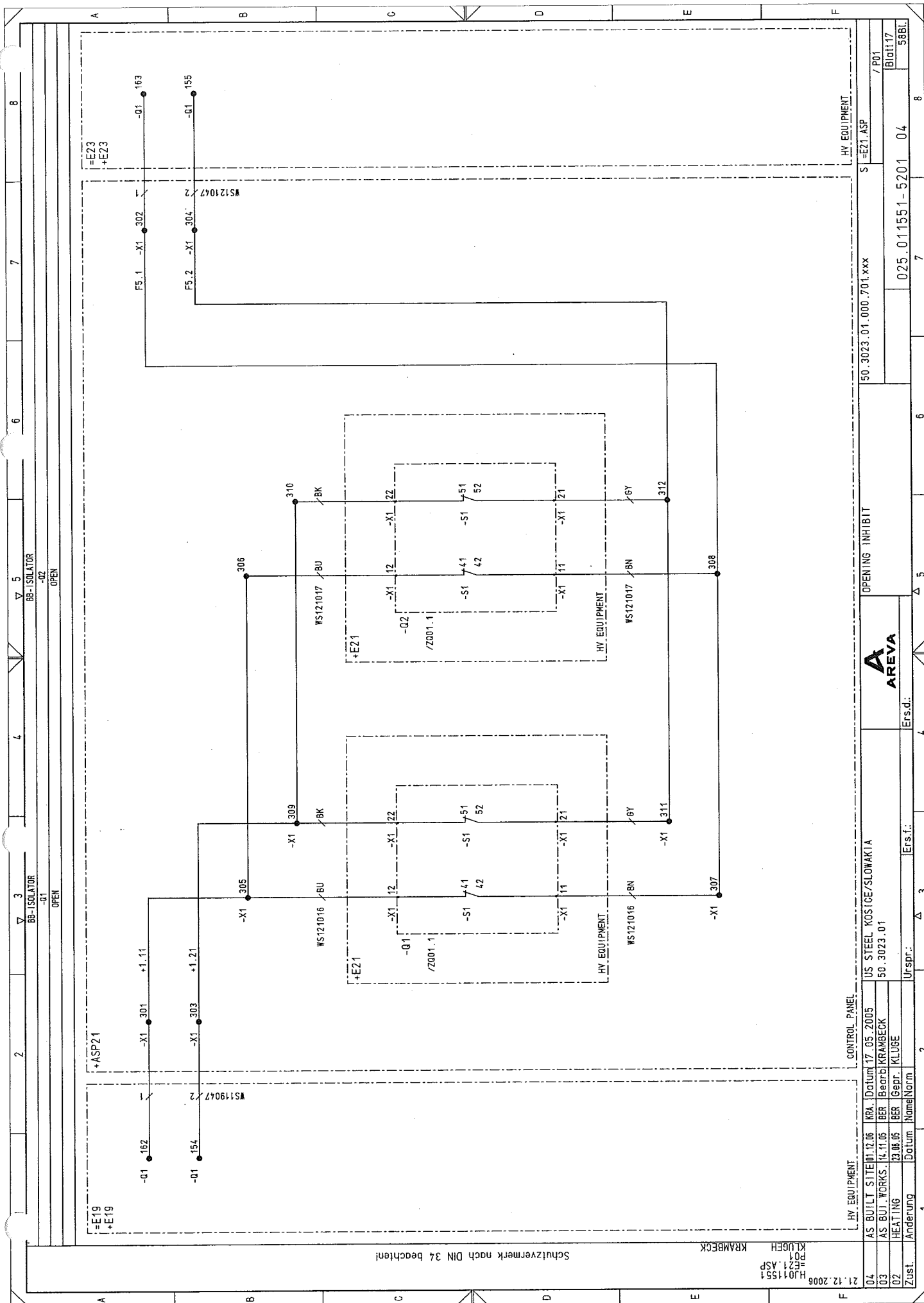
-X12

-X13

-X14

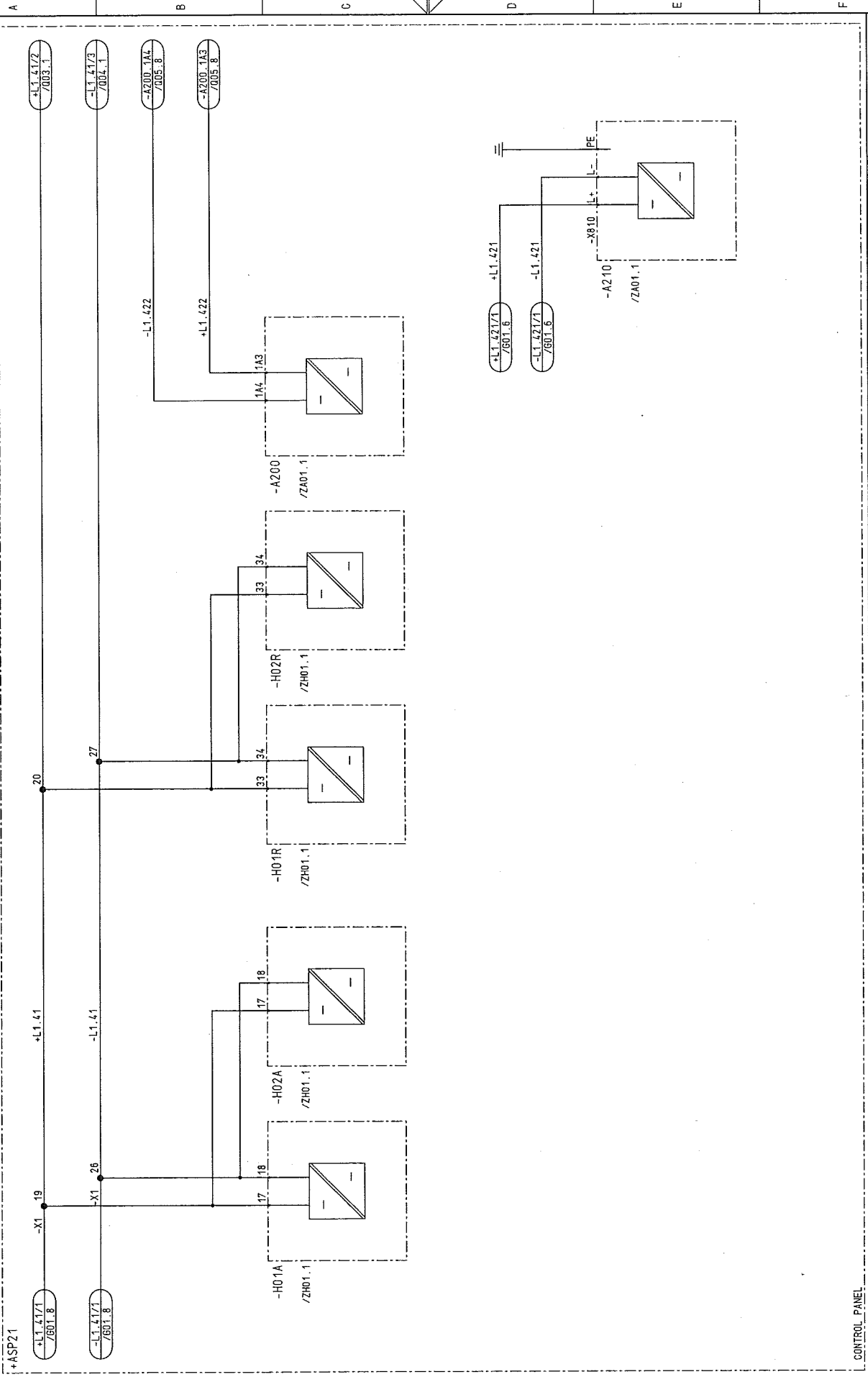
-X15

-X16



21.12.2006 HJ011551
 KLUEH
 E21 ASP
 KRAMBECK

Schaltvermerk nach DIN 34 beachten!



CONTROL PANEL

04	AS BUILT SITE	01.12.06	KRA	Datum	17.05.2005	US STEEL KOSTICE/SLOWAKIA	AUXILIARY VOLTAGE EQUIPMENT	50.3023.01.000.701.xxx	S	E21 ASP	8
03	AS BUI. WORKS	14.11.05	BER	Bearb	KRAMBECK	50.3023.01					
02	HEATING	23.09.05	BER	Gepr.	KLUE						
Zust.	Änderung	Datum	Name	Norm	Urspr.	Ers.f.	Ers.d.	025.011551-5201	04	58BL	8

Schutzvermerk nach DIN 34 beachten!

HJ011551
=E21 ASP
KLÜGE

KRAMBECK

21.12.2006

04	AS BUILT SITE	12.06.1994	Datum	17.05.2005	US STEEL KOSICE/SLOWAKIA	50.3023.01.000.701.xxx	S	E21 ASP	/ 002
03	AS BUILT WORKS	14.11.05	BER	Bearb	KRAMBECK	50.3023.01			
02	HEATING	12.08.05	BER	Bepr.	KLÜGE				
Zust.	Änderung	Datum	Name	Norm	Urspr.	Ers.f.			
1									
2									
3									
4									
5									
6									
7									
8									

+ASP21

+L1.41/202
/004.1

212a

212

202a

202

-X1

+L1.41

-A210

/ZA01.1

-X801

A3

-K10 OPEN

-K9 CLOSED

-K12 OPEN

-K11 CLOSED

-X801 A8

-X801 A7

-X801 A10

-X801 A9

-X801 A3

-X801 A8

-X801 A7

-X801 A10

-X801 A9

-X801 A3

-X801 A8

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-X801 A9

-X801 A3

-X801 A8

-X801 A7



Schutzvermerk nach DIN 34 beachten!

KRAMBECK
KLUEGE
006

HJ011551
=E21 ASP

21.12.2006

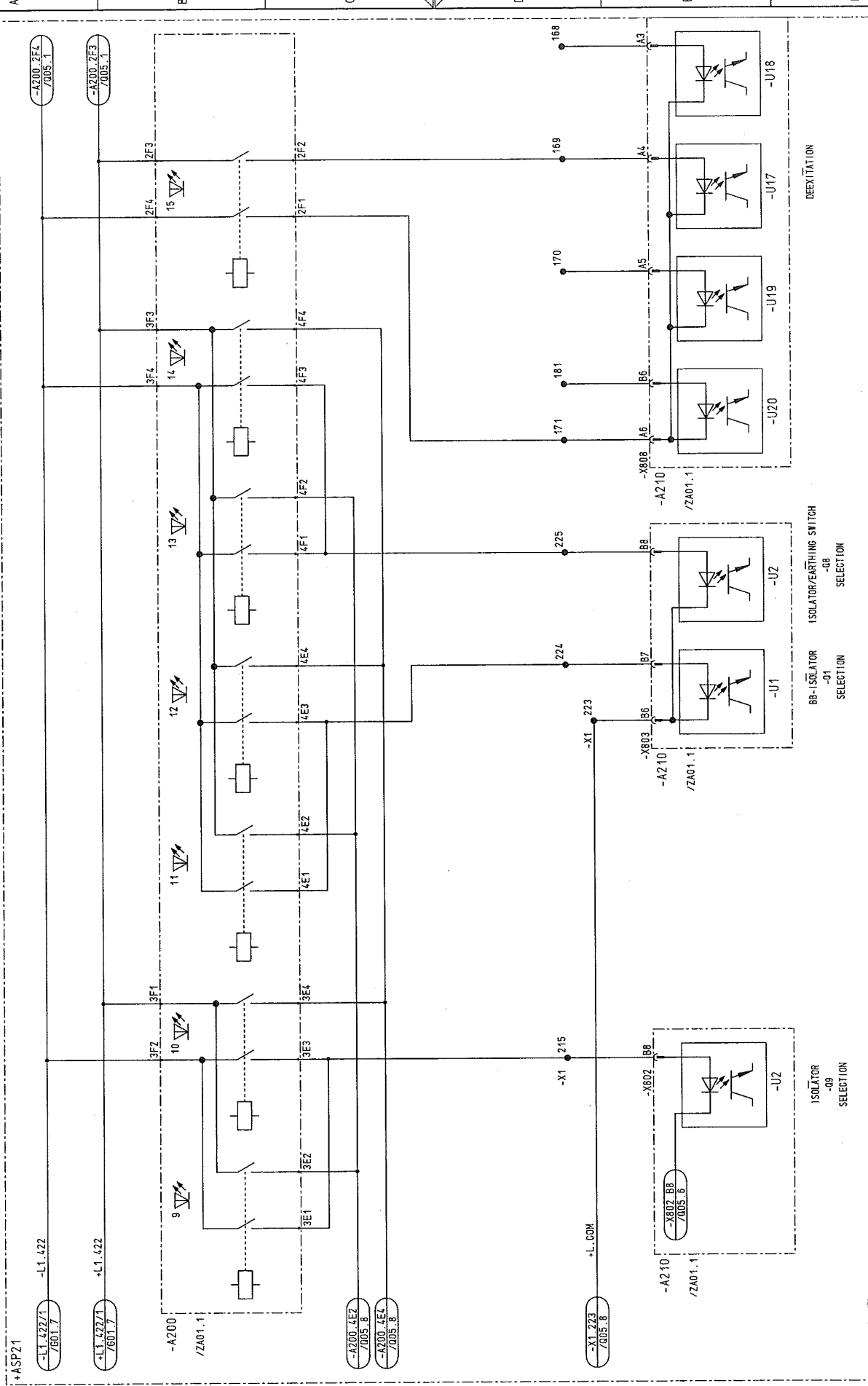
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03	AS BUILT WORKS	12.11.05	BER	Beauftragter	KRAMBECK		
02	HEATING	23.08.05	BER	Gepr.	KLUEGE		
Zust.	Änderung	Datum	Name	Norm	Ur-spr.	Ers.f.	Ers.d.



INPUTS/OUTPUTS 6MB52

S=E21.ASP

Blatt 123
588L



1	2	3	4	5	6	7	8
COMMAND		COMMAND		COMMAND		RELISE	
OPEN		CLOSE		OPEN		CLOSE	
-09		-01		-08		-08	

Schutzvermerk nach DIN 34 beachten!

KRAMBECK

HJ011551
=E21.ASP
KLÜBEH
008

21.12.2006

CONTROL PANEL

04	AS BUILT SITE	12.06	KRA	Datum	17.05.2005	US STEEL KOSICE/SLOWAKIA
03	AS BUILT WORKS	14.11.05	BER	Bearb	KRAMBECK	50.3023.01
02	HEATING	23.08.05	BER	Gepr.	KLÜBE	
Zust.	Änderung	Datum	Name	Norm	Urspr.	Ers.f.



INPUTS/OUTPUTS 8TK

50.3023.01.000.701.xxx

S=E21.ASP

/ 008

Blatt125

025.011551-5201 04

588L

+ASP21

-A210

/ZAO1.1

-K1

ON

-K2

OFF

-K3

OFF

-K4

OFF

-X802

139

138

137

136

135

134

133

132

131

129

130

-X1

136

135

134

133

132

131

129

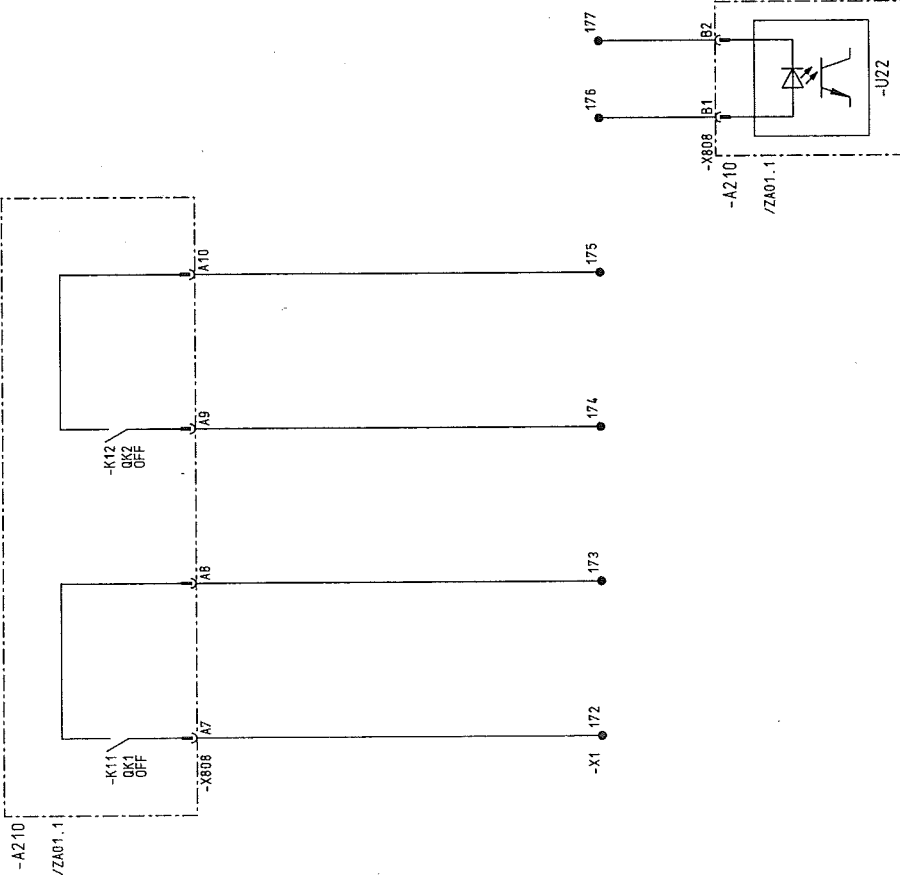
130

Schutzvermerk nach DIN 34 beachten!

HJ011551
=E21.ASP
609
KLUGEH

KRAMBECK

+ASP21



CONTROL PANEL

04 AS BUILT SITE 17.05.2005 KRA Datum 17.05.2005 US STEEL KOSICE/SLOWAKIA
03 AS BUILT WORKS 14.11.05 BER Bearb KRAMBECK 50.3023.01
02 HEATING 23.08.05 BER Bepr KLUGE

Zust. Änderung Datum Name Norm Urspr.: Ers.f.: Ers.d.:
1 2 3 4 5 6 7 8

AREVA

INPUTS/OUTPUTS 8TK

150.3023.01.000.701.xxx

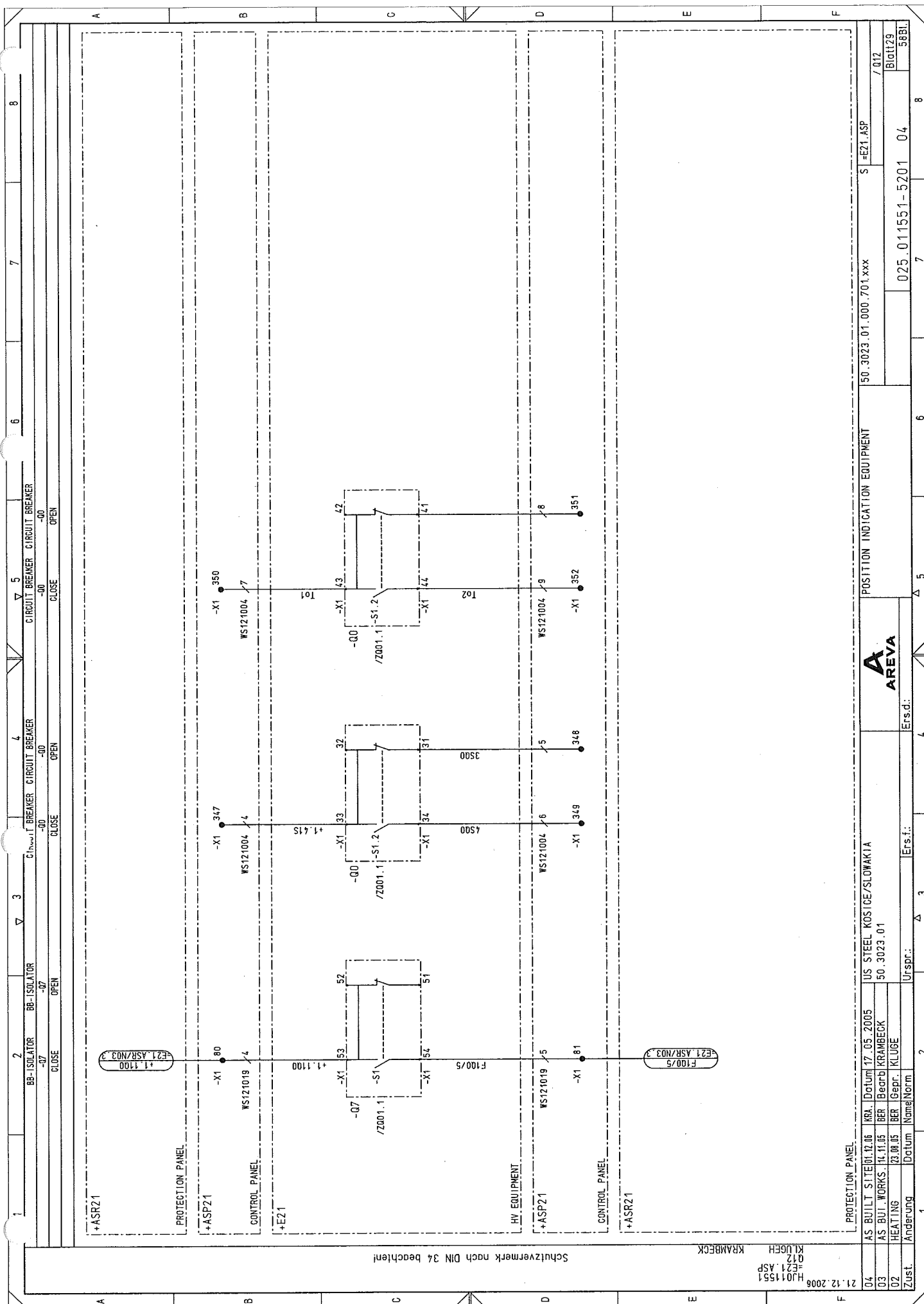
S-E21.ASP

/009

Blatt 126

025.011551-5201 04

5881



Schutzvermerk nach DIN 34 beachten!

HJ011551
=E21.ASP
R01
KLUGEH

KRAMBECK

CONTROL PANEL

04	AS BUILT SITE	12.06	KRA	Datum	17.05.2005	US STEEL KOSICE/SLOWAKIA
03	AS BUILT WORKS	14.11.05	BER	Bearb	KRAMBECK	50.3023.01
02	HEATING	23.08.05	BER	Bepr.	KLUGE	
Zust.	Änderung	Datum	Name	Norm	Urspr.	Ers.f.
						Ers.d.



MESSAGES

150.3023.01.000.701.xxx

S=E21.ASP

/R01

Blott130

025.011551-5201_04

588L

+ASP21

-L1.41/5
/R01.8

-X1 20

+L1.41

-X1 22

-L1.41/6
/R02.1

21 -FA101
/ZF01.1 22

21 -FA100
/ZF01.1 22

21 -FA1.42
/ZF01.1 22

13 -K193
/ZK01.1 14

13 -K183
/ZK01.1 14

13 -K173
/ZK01.1 14

13 -K123
/ZK01.1 14

13 -K113
/ZK01.1 14

13 -K191
/ZK01.1 14

13 -K181
/ZK01.1 14

13 -K171
/ZK01.1 14

13 -K121
/ZK01.1 14

13 -K111
/ZK01.1 14

+MCB-AC
/R03.6

+MCB-MEA
/R02.7

+LOCAL
/R02.7

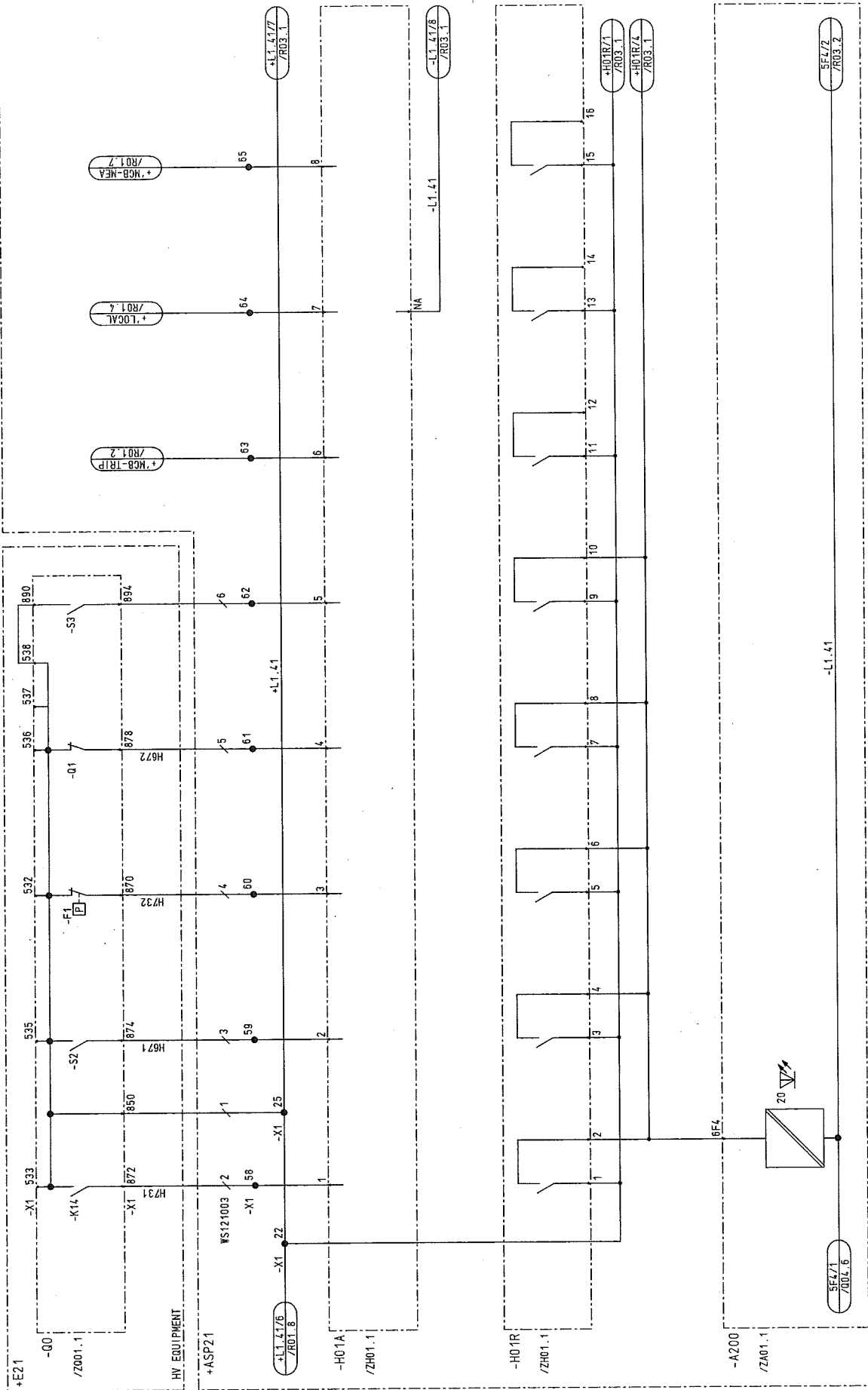
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/R02.6

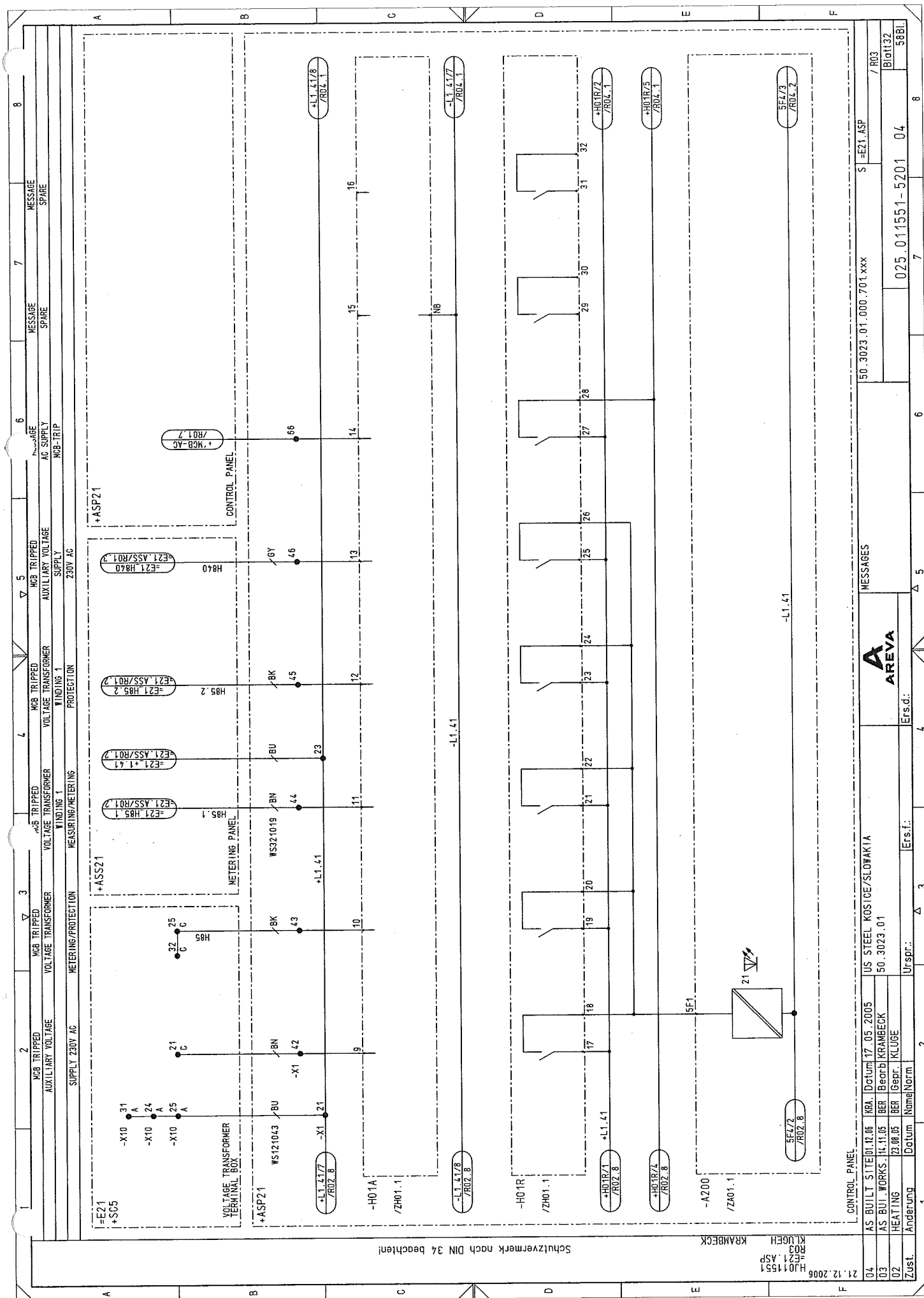
Schutzvermerk nach DIN 34 beachten!

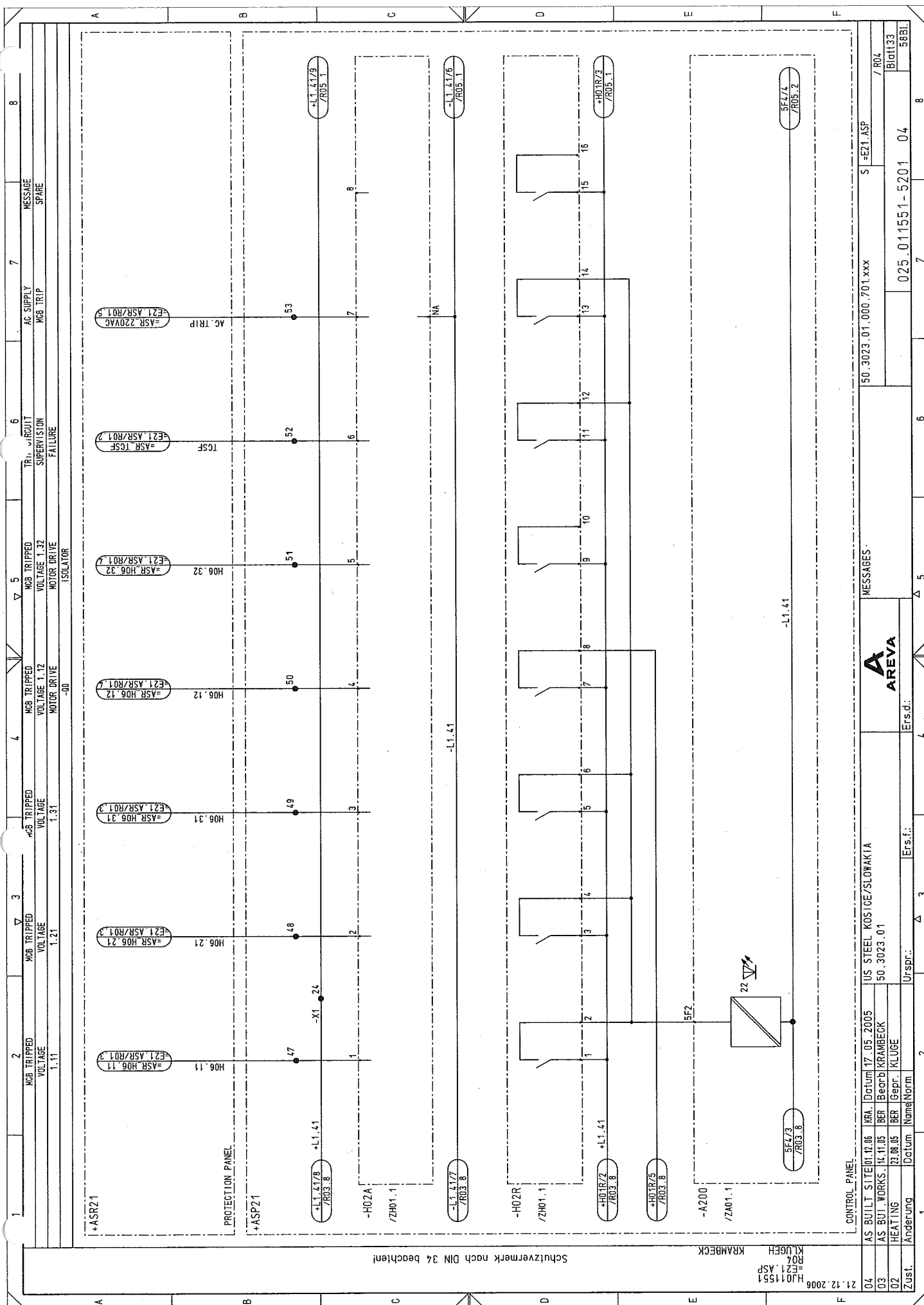
HJ011551
=E21 ASP
KLUEGE
KRAMBECK

21.12.2006

04	AS BUILT SITE/12.06	KRA	Datum 17.05.2005	US STEEL KOSTICE/SLOVAKIA	MESSAGES	50.3023.01.000.701.xxx	S-E21.ASP	/R02
03	AS BUT. WORKS: 14.11.05	BER	Bearb: KRAMBECK	50.3023.01				Blatt 131
02	HEATING	23.08.05	BER	Gepr.: KLUGE				588L
Zust.	Änderung	Datum	Norm	Urspr.:	Ersd.:			
1				2	3	4	5	6
								7
								8







Schutzvermerk nach DIN 34 beachten!

HJ011551
=E21.ASP
KLÜGE
KRAMBECK

21.12.2006

STATION BUILDING

04 AS BUILT SITE 17.05.2005 KRA Datum 17.05.2005 US STEEL KOSICE/SLOVAKIA
03 AS BUI. WORKS: 14.11.05 BER Bearb. KRAMBECK 50.3023.01
02 HEATING 22.08.05 BER Gepr. KLUGE
Zust. Änderung Datum Norm Urspr.: Ers.f.: Ers.d.: AREVA

AREVA

MESSAGES REMOTE

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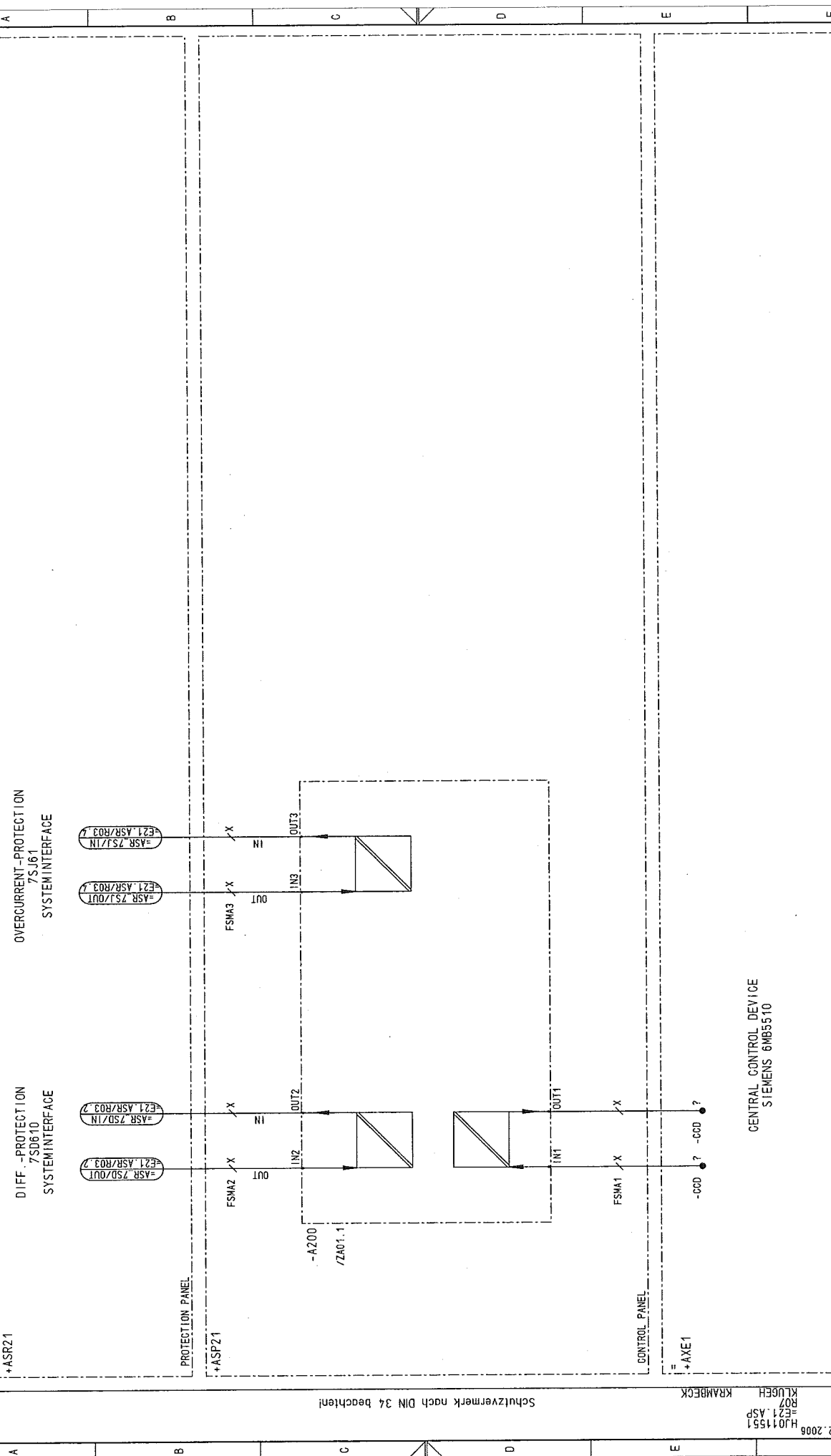
S=E21.ASP

/ R07

Blatt 35

025.011551-5201 04

58BL



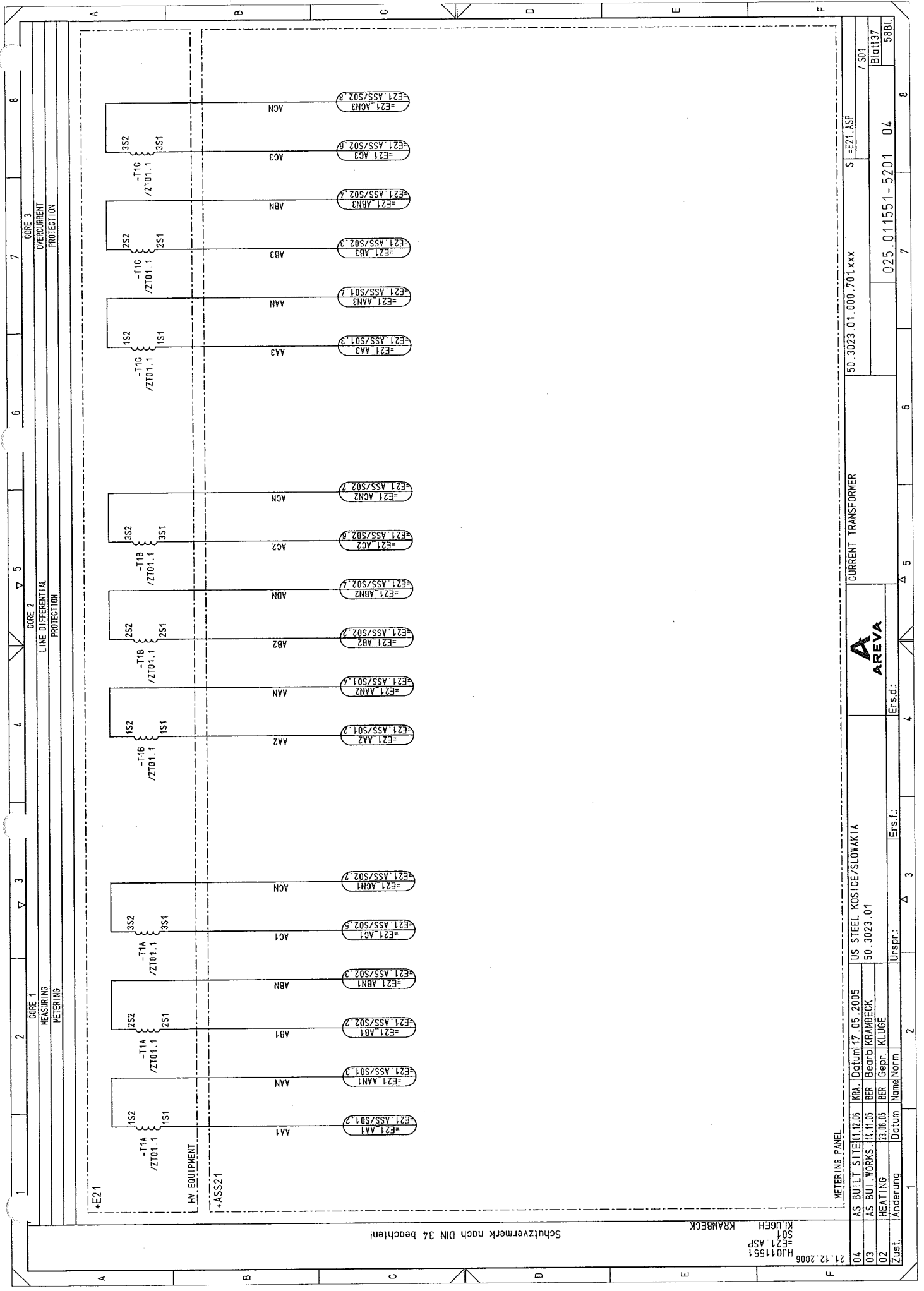
CENTRAL CONTROL DEVICE
SIEMENS 6MB5510

OVERCURRENT-PROTECTION
7SJ61
SYSTEM INTERFACE

DIFF. -PROTECTION
7SD610
SYSTEM INTERFACE

PROTECTION PANEL

CONTROL PANEL



Schutzvermerk nach DIN 34 beachten!

KRAMBECK

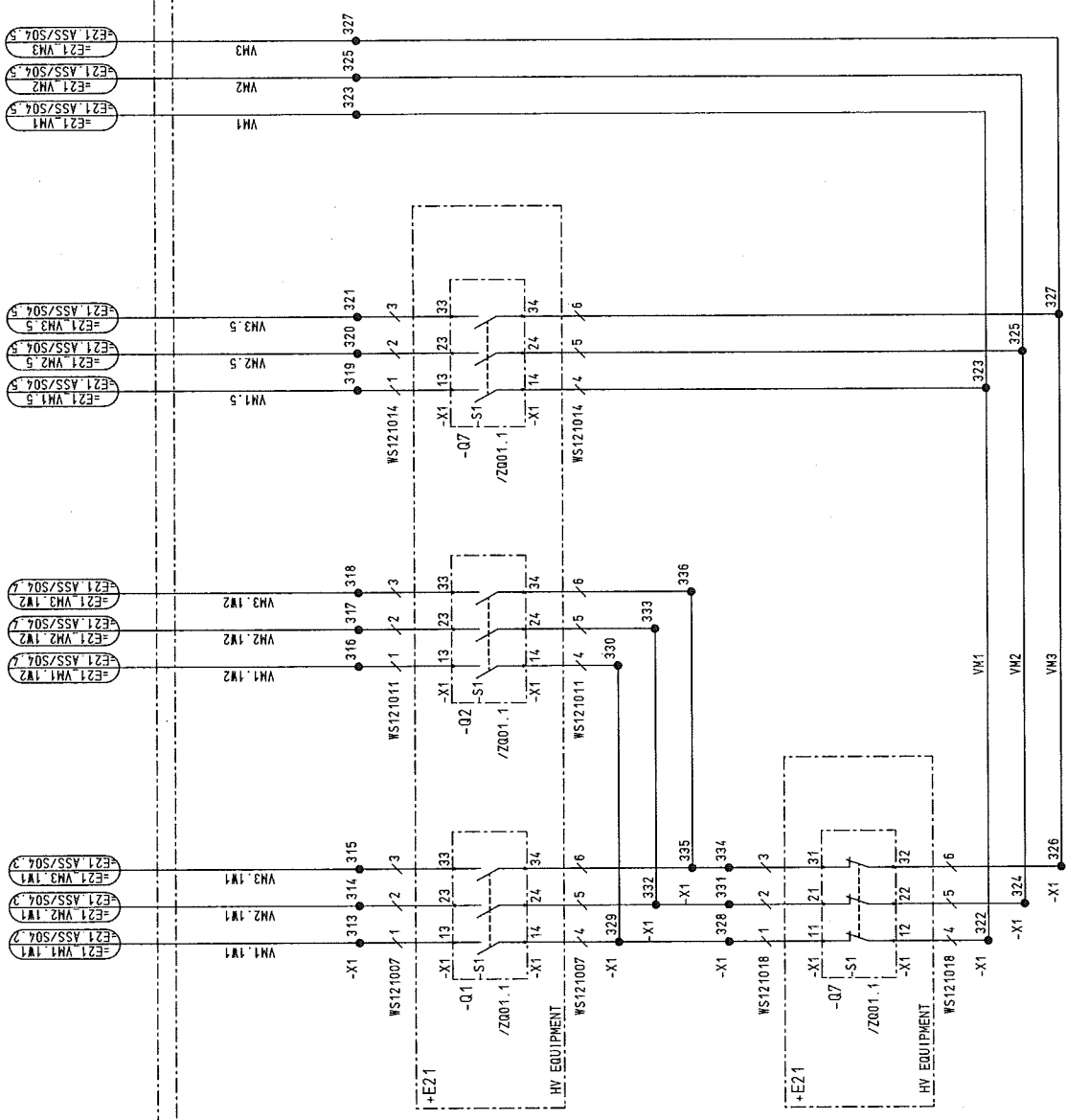
H401551
-E21 ASP
KLUEH
S04

CONTROL PANEL

+ASS21

METERING
PANEL

+ASP21



04	AS BUILT SITE	12.06	KRA	Datum	17.05.2005	US STEEL KOSICE/SLOVAKIA	BUS WIRES BB-VOLTAGE	50.3023.01.000.701.xxx	S	-E21.ASP	/S04
03	AS BUILT WORKS	11.11.05	BER	Beprb	KRAMBECK	50.3023.01					
02	HEATING	23.08.05	BER	Gepr.	KLUGE						
Zust.	Änderung	Datum	Name	Norm	Urspr.:	Ers.f.:	Ers.d.:	CIRCUIT DIAGRAM	025.011551-5201_04	56BL	Bit140

1	2	3	4	5	6	7	8
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Schutzvermerk nach DIN 34 beachten!

KRAMBECK

HJ011551
=E21.ASP
X01
KLÜGEH

ASP21

-X1 7	-X1 94	-X1 196	-X1 249	-X1 286
-X1 14	-X1 103	-X1 197	-X1 250	-X1 287
-X1 29	-X1 112	-X1 198	-X1 254	
-X1 32	-X1 119	-X1 199	-X1 255	
-X1 38	-X1 128	-X1 200	-X1 256	
-X1 41	-X1 137	-X1 201	-X1 257	
	-X1 146	-X1 206	-X1 258	
	-X1 153	-X1 211	-X1 259	
	-X1 154	-X1 216	-X1 260	
-X1 70	-X1 155	-X1 221	-X1 261	
-X1 79		-X1 226	-X1 262	
		-X1 231	-X1 263	
		-X1 232	-X1 264	
		-X1 233	-X1 267	
		-X1 234	-X1 268	
		-X1 235	-X1 269	
		-X1 236	-X1 270	
		-X1 237	-X1 271	
		-X1 238	-X1 272	
		-X1 239	-X1 273	
		-X1 240	-X1 274	
		-X1 241	-X1 275	
		-X1 242	-X1 276	
		-X1 243	-X1 277	
		-X1 244	-X1 278	
		-X1 245	-X1 279	
		-X1 246	-X1 280	
		-X1 247	-X1 281	
		-X1 248		

CONTROL PANEL

04	AS BUILT SITE	12.06	KRA	Datum	17.05.2005	US STEEL KOSICE/SLOVAKIA	SPARE TERMINALS	150.3023.01.000.701.xxx	S =E21.ASP	/ X01
03	AS BUI. WORKS	14.11.05	BER	Bearb	KRAMBECK	50.3023.01				
02	HEATING	23.08.05	BER	Gepr.	KLÜGE					
Zust.	Änderung	Datum	Name	Norm	Urspr.:	Ers.f.:	Ers.d.:	025.011551-5201	04	58BL

AREVA

Ers.d.:

Ers.f.:

Urspr.:

Name

Norm

Gepr.

Bearb

KRA

Datum

12.06

AS BUILT SITE

12.06

KRA

Datum

17.05.2005

US STEEL KOSICE/SLOVAKIA

SPARE TERMINALS

150.3023.01.000.701.xxx

S =E21.ASP

/ X01

58BL

04

025.011551-5201

Ers.d.:

Ers.f.:

Bearb

KRAMBECK

14.11.05

AS BUI. WORKS

12.06

AS BUILT SITE

12.06

KRA

Datum

17.05.2005

US STEEL KOSICE/SLOVAKIA

SPARE TERMINALS

150.3023.01.000.701.xxx

S =E21.ASP

/ X01

58BL

04

025.011551-5201

Ers.d.:

Ers.f.:

Bearb

KRAMBECK

14.11.05

AS BUI. WORKS

12.06

AS BUILT SITE

12.06

KRA

Datum

17.05.2005

US STEEL KOSICE/SLOVAKIA

SPARE TERMINALS

150.3023.01.000.701.xxx

S =E21.ASP

/ X01

58BL

04

025.011551-5201

Ers.d.:

Ers.f.:

Bearb

KRAMBECK

14.11.05

AS BUI. WORKS

12.06

AS BUILT SITE

12.06

KRA

Datum

17.05.2005

US STEEL KOSICE/SLOVAKIA

SPARE TERMINALS

150.3023.01.000.701.xxx

S =E21.ASP

/ X01

58BL

04

025.011551-5201

Ers.d.:

Ers.f.:

Bearb

KRAMBECK

14.11.05

AS BUI. WORKS

12.06

AS BUILT SITE

12.06

KRA

Datum

17.05.2005

US STEEL KOSICE/SLOVAKIA

SPARE TERMINALS

150.3023.01.000.701.xxx

S =E21.ASP

/ X01

58BL

04

025.011551-5201

Ers.d.:

Ers.f.:

Bearb

KRAMBECK

14.11.05

AS BUI. WORKS

12.06

AS BUILT SITE

12.06

KRA

Datum

17.05.2005

US STEEL KOSICE/SLOVAKIA

SPARE TERMINALS

150.3023.01.000.701.xxx

S =E21.ASP

/ X01

58BL

04

025.011551-5201

Ers.d.:

Ers.f.:

Bearb

KRAMBECK

14.11.05

AS BUI. WORKS

12.06

AS BUILT SITE

12.06

KRA

Datum

17.05.2005

US STEEL KOSICE/SLOVAKIA

SPARE TERMINALS

150.3023.01.000.701.xxx

S =E21.ASP

/ X01

58BL

04

025.011551-5201

Ers.d.:

Ers.f.:

Bearb

KRAMBECK

14.11.05

AS BUI. WORKS

12.06

AS BUILT SITE

12.06

KRA

Datum

17.05.2005

US STEEL KOSICE/SLOVAKIA

SPARE TERMINALS

150.3023.01.000.701.xxx

S =E21.ASP

/ X01

58BL

04

025.011551-5201

Ers.d.:

Ers.f.:

Bearb

KRAMBECK

14.11.05

AS BUI. WORKS

12.06

AS BUILT SITE

12.06

KRA

Datum

17.05.2005

US STEEL KOSICE/SLOVAKIA

SPARE TERMINALS

150.3023.01.000.701.xxx

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/ X01

58BL

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025.011551-5201

Ers.d.:

Ers.f.:

Bearb

KRAMBECK

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Datum

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US STEEL KOSICE/SLOVAKIA

SPARE TERMINALS

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US STEEL KOSICE/SLOVAKIA

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Ers.d.:

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Bearb

KRAMBECK

14.11.05

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Ers.d.:

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14.11.05

AS BUI. WORKS

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AS BUILT SITE

12.06

KRA

Datum

17.05.2005

US STEEL KOSICE/SLOVAKIA

SPARE TERMINALS

150.3023.01.000.701.xxx

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Schutzvermerk nach DIN 34 beachten!

21.12.2006
HJ011551
S-E21.ASP
ZF01
KRAMBECK

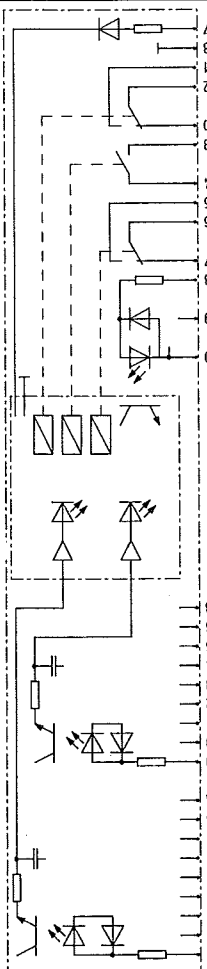
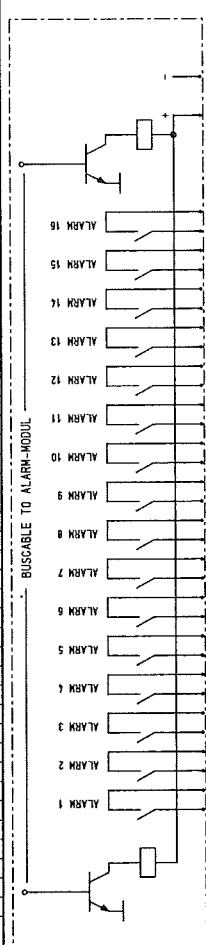
1		2		3		4		5		6		7		8	
4		SICHERUNG FUSE NEOZED NEOZED AUSLÖSESTROM TRIPPING CURRENT : 2A		Manuf. : SIEMENS Ord. No. : 5SE2302 Type: 5SE2 SICHERUNGSSOCKEL 5SE1330 WITH FUSE SOCKET 5SE1330 BAUFORM TYPE OF CONSTRUCTION: 400V, D01		Technical components		Type		Ordering number					
Application		Settings		Location		Item designation									
				+ASP21		-FU1									
				+ASP21		-FU2									
				+ASP21		-FU3									
				+ASP21		-FU4									
1		SICHERUNGSAUTOMAT MINI CIRCUIT-BREAKER 1-POLIG 1-POLE NENNSTROM NOMINAL CURRENT : B 2A		Manuf. : SIEMENS Ord. No. : 5S15102-6 Type: 5S15 MIT HILFSSCHALTER 5S13010 WITH AUX. SWITCH 5S13010 HILFSSCHALTER AUX. CONTACTS : 1S/10E (1ND/1NC)		Technical components		Type		Ordering number					
Application		Settings		Location		Item designation									
				+ASP21		-FA100									
1		SICHERUNGSAUTOMAT MINI CIRCUIT-BREAKER 1-POLIG 1-POLE NENNSTROM NOMINAL CURRENT : B 16A		Manuf. : SIEMENS Ord. No. : 5S15116-6 Type: 5S15 MIT HILFSSCHALTER 5S13010 WITH AUX. SWITCH 5S13010 HILFSSCHALTER AUX. CONTACTS : 1S/10E (1ND/1NC)		Technical components		Type		Ordering number					
Application		Settings		Location		Item designation									
				+ASP21		-FA101									
1		SICHERUNGSAUTOMAT MINI CIRCUIT-BREAKER 2-POLIG 2-POLE NENNSTROM NOMINAL CURRENT : C 4A		Manuf. : SIEMENS Ord. No. : 5S15204-7 Type: 5S15 MIT HILFSSCHALTER 5S13010 WITH AUX. SWITCH 5S13010 HILFSSCHALTER AUX. CONTACTS : 1S/10E (1ND/1NC)		Technical components		Type		Ordering number					
Application		Settings		Location		Item designation									
				+ASP21		-FA142									

1		2		3		4		5		6		7		8	
04		AS BUILT SITE		12.06		KRA.		Datum		17.05.2005		US STEEL KOSICE/SLOVAKIA		LIST OF ITEMS	
03		AS BUI. WORKS		11.11.05		BER		Datum		11.11.05		50.3023.01		50.3023.01.000.701.xxx	
02		HEATING		23.08.05		BER		Datum		23.08.05		Gepr. KLUGE		Ersd.: 025.011551-5201 04	
Zust.		Änderung		Datum		Name/Norm		Ersd.:		Urspr.:		Ersd.:		Ersd.:	

Schutzvermerk nach DIN 34 beachten!

24.12.2008
H011551
E21 ASP
KLUGEH
ZHO1

KRAMBECK

2		WARWELDER ALARM DEVICE ALARM-MODUL ALARM-MODULE HILFSSPANNUNG AUXILIARY VOLTAGE : 220V DC EINGANGSSPANNUNG INPUT VOLTAGE : 125-220V DC Type Ordering number		Manuf. : EES ELEKTRA Ord. No. : PROGRAMMIERBAR PROGRAMMEABLE		Type: SSM 16-R		1		2		3		4		5		6		7		8			
Application		Settings		Location		Item designation				1		2		3		4		5		6		7		8	
				+ASP21		-H01A																			
				+ASP21		-H02A																			
2		WARWELDER ALARM DEVICE RELAYS-MODUL RM16 ZUM ALARM-MODUL RELAY-MODULE RM16 HILFSSPANNUNG AUXILIARY VOLTAGE : 220V DC EINGANGSSPANNUNG INPUT VOLTAGE : 24-250V AC/220V DC Type Ordering number		Manuf. : EES ELEKTRA Ord. No. : ZUM ALARM-MODUL FOR ALARM-MODULE		Type: SSM 16-R				1		2		3		4		5		6		7		8	
Application		Settings		Location		Item designation																			
				+ASP21		-H01R																			
				+ASP21		-H02R																			
																						</			

Schutzvermerk nach DIN 34 beachten!

KRAMBECK

H4011551
E21 ASP
ZK01
KLUEH

21.12.2006

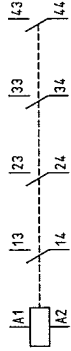
10 HILFSSCHUTZ
AUXILIARY CONTACTOR

Manuf. : SIEMENS
Type: 3RH1140-1BN40

Spannung
VOLTAGE : 220V DC

KONTAKTE
CONTACTS : 4S (4NO)

Technical components
Type
Ordering number



Application	Settings	Location	Item designation
MOTOR OVERLOAD	Q1	+ASP21	-K111
LOCAL OPERATION	Q1	+ASP21	-K113
MOTOR OVERLOAD	Q2	+ASP21	-K121
LOCAL OPERATION	Q2	+ASP21	-K123
MOTOR OVERLOAD	Q7	+ASP21	-K171
LOCAL OPERATION	Q7	+ASP21	-K173
MOTOR OVERLOAD	Q8	+ASP21	-K181
LOCAL OPERATION	Q8	+ASP21	-K183
MOTOR OVERLOAD	Q9	+ASP21	-K191
LOCAL OPERATION	Q9	+ASP21	-K193

04	AS BUILT SITE	12.05	KRA	Datum	17.05.2005	US STEEL KOSTICE/SLOWAKIA	50.3023.01	LIST OF ITEMS	50.3023.01.000.701.xxx	S-E21.ASP	/ ZK01
03	AS BUILT WORKS	14.11.05	BER	Bearb	KRAMBECK	50.3023.01					
02	HEATING	23.06.05	BER	Bepr.	KLUEH						
Zust.	Anderung	Datum	Name	Norm	Urspr.	Ersd.			025.011551-5201	04	588L

025.011551-5201 04 588L

[illegible]

3

STROMWANDLER
CURRENT TRANSFORMER

Manuf. : -
Ord. No. : -

TECHNICAL SPECIFICATIONS SHEET/801

Uebersetzung
TRANSFORMATION RATIO: 200/1/1/1A

LEISTUNG
POWER : 3 TAPS / 30VA

Technical components

Ordering number

Application

Settings

Location

Item designation

CURRENT TRANSFORMER

-T1A

-E21

/S01.1 /S01.2 /S01.3

CURRENT TRANSFORMER

-T1B

-E21

/S01.4 /S01.5 /S01.5

CURRENT TRANSFORMER

-T1C

-E21

/S01.6 /S01.7 /S01.8

P1

P2

TS1

TS2

TS3

TS4

TS5

TS6

TS7

TS8

TS1

TS2

TS3

TS4

TS5

TS6

TS7

TS8

1

2

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5

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7

8

21.12.2006

HJ011551

E21.ASP

KLUEH

ZT01

KRAMBECK

Schutzvermerk nach DIN 34 beachten!

104

AS BUILT SITE

17.05.2005

KRA.

Datum

17.05.2005

US STEEL KOSICE/SLOVAKIA

103

AS BUILT WORKS

14.11.05

BER

Bearb

KRAMBECK

50.3023.01

102

HEATING

23.08.05

BER

Gepr.

KLUEH

Zust.

Anderung

Datum

Norm

Urspr.

Ers.f.

Ers.d.

AREVA

LIST OF ITEMS

50.3023.01.000.701.xxx

S -E21.ASP

/ ZT01

Blatt 48

5881

1

2

3

4

5

6

7

8

1	2	3	4	5	6	7	8
STECKDOOSE SOCKET AUFBAU MOUNTING ANZAHL ANSCHLUESSE NUMBER OF PINS Technische Komponenten pro Gerät		Herst. : GE POWER CONTROLS Best.Nr. : 666499 Typ: MSOSE NENNSTROM NOMINAL CURRENT Typ : 16A 250VAC Bestellnummer	<div> <div>Y^L</div> <div>Y^N</div> <div>Y^{PE}</div> </div>				
Verwendungszweck SOCKET		Einstallations +ASP21	EInbauart -X101	BTM-Kennzeichen -X101			

21.12.2006

H2011551

E21.ASP

ZX01

KLUGE

Schulzvermerk nach DIN 34 beachten!

KRAMBECK

104	AS BUILT SITE	01.12.06	KRA	Datum	17.05.2005	US STEEL KOSTICE/SLOWAKIA	A AREVA	LIST OF ITEMS	50.3023.01.000.701.xxx	S	E21.ASP	
03	AS BUI WORKS	14.11.05	BER	Bearb	KRAMBECK	50.3023.01						
02	HEATING	23.09.05	BER	Gepr.	KLUGE							
Zust.	Änderung	Datum	Name	Norm		Urspr.:	Ers.f.:	Ers.d.:	025.011551-5201	04	58 Bl.	



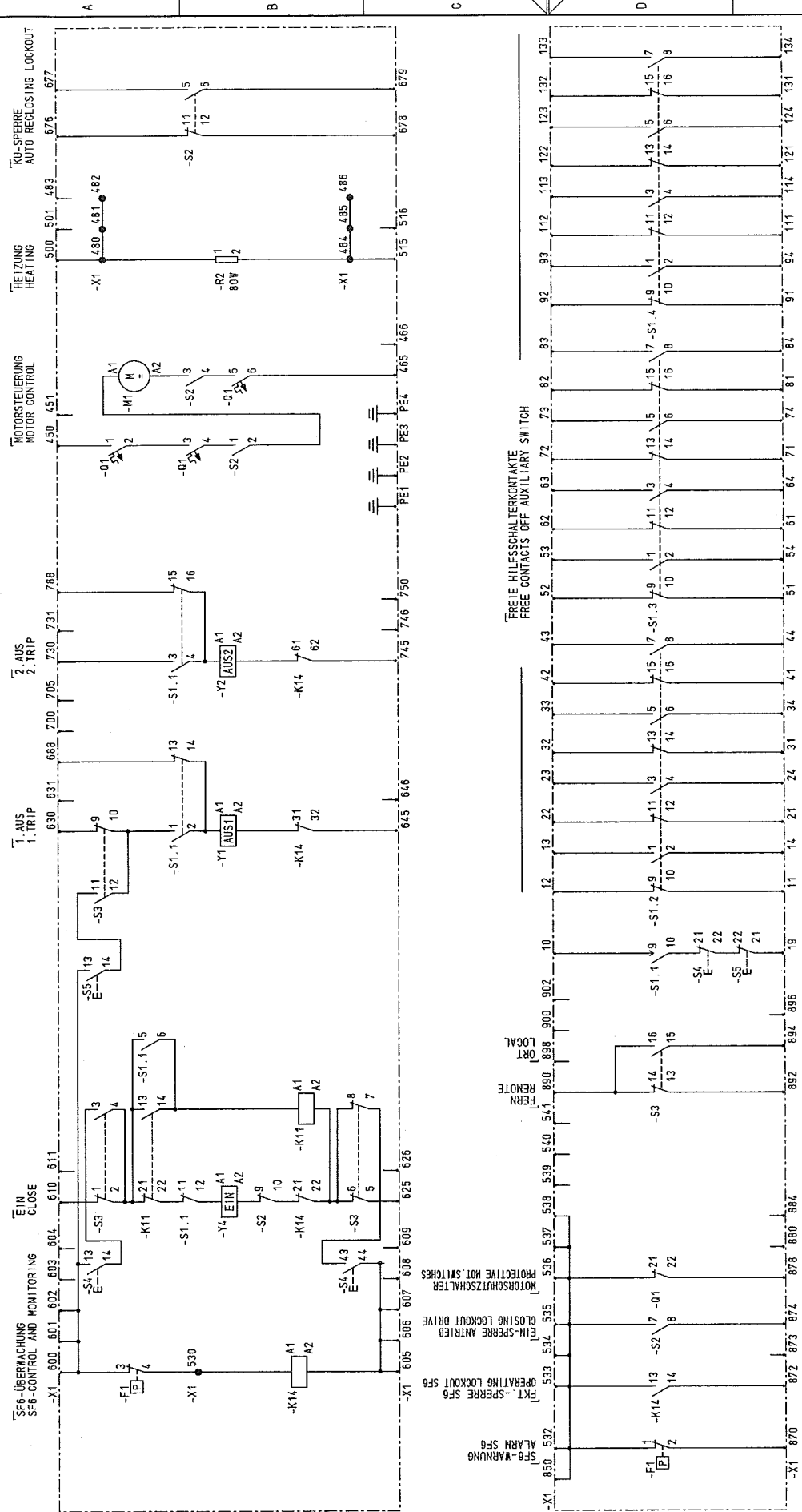
+ASP21	-A210	/Q01.7	/Q01.8	/Q01.8	/Q03.6	/Q03.6
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	-A210
	+ .AC051
	-X803
	ZZ001.1
/M06.5	
/M06.5	
/M03.2	
/M03.2	
/M03.3	
/M03.3	
/Q11.2	
/Q11.2	
/Q11.2	
/M06.2	
/M06.2	
/M06.3	
/M06.3	
/Q11.4	
/Q11.4	
/Q03.4	
/Q03.4	
/Q03.4	

Schaltvermerk nach DIN 34 beachten!

21.12.2006
HJ011551
=E21 ASP
ZZ001
KLUEH
KRAMBECK



1	000	10	/R010.6	11	/R010.6	12	/R010.6	13	/R010.5	14	/R010.5	15	21	22	/R002.4	23	/R002.4	24	/R012.4	25	/R012.4	26	/R012.3	27	/R012.5	28	/R012.5	29	/R012.5	30	44	31	52	32	53	33	54	34	62	35	63	36	64	37	71	38	72	39	73	40	74	41	81	42	82	43	83	44	84	45	91	46	92	47	93	48	94	49	111	50	112	51	113	52	114	53	121	54	122	55	123	56	124	57	125	58	131	59	132	60	133	61	134	62	141	63	142	64	143	65	144	66	145	67	146	68	147	69	148	70	149	71	150	72	151	73	152	74	153	75	154	76	155	77	156	78	157	79	158	80	159	81	160	82	161	83	162	84	163	85	164	86	165	87	166	88	167	89	168	90	169	91	170	92	171	93	172	94	173	95	174	96	175	97	176	98	177	99	178	100	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1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Schaltzeichen nach DIN 34 beachten!

KRAMBECK

H2011551
E21 ASP
KLUEH
Z2011

21.12.2006

AS BUILT SITE

AS BUILT WORKS

HEATING

Änderung

Datum

Name

Norm

Urspr.

Ers.f.

Urspr.

Ers.f.

Urspr.

Ers.f.

US STEEL KOSICE/SLOVAKIA

50.3023.01

KRA. Datum 17.05.2005

BER Bearb. KRAMBECK

BER Gepr. KLUEH



LIST OF ITEMS
MOTOR DRIVE
ISOLATOR

CM001

50.3023.01.000.701.xxx

S=E21.ASP

/Z2011

Blat 154

025.011551-5201 04

568L

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Z2001.1

-X1

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/S04.3

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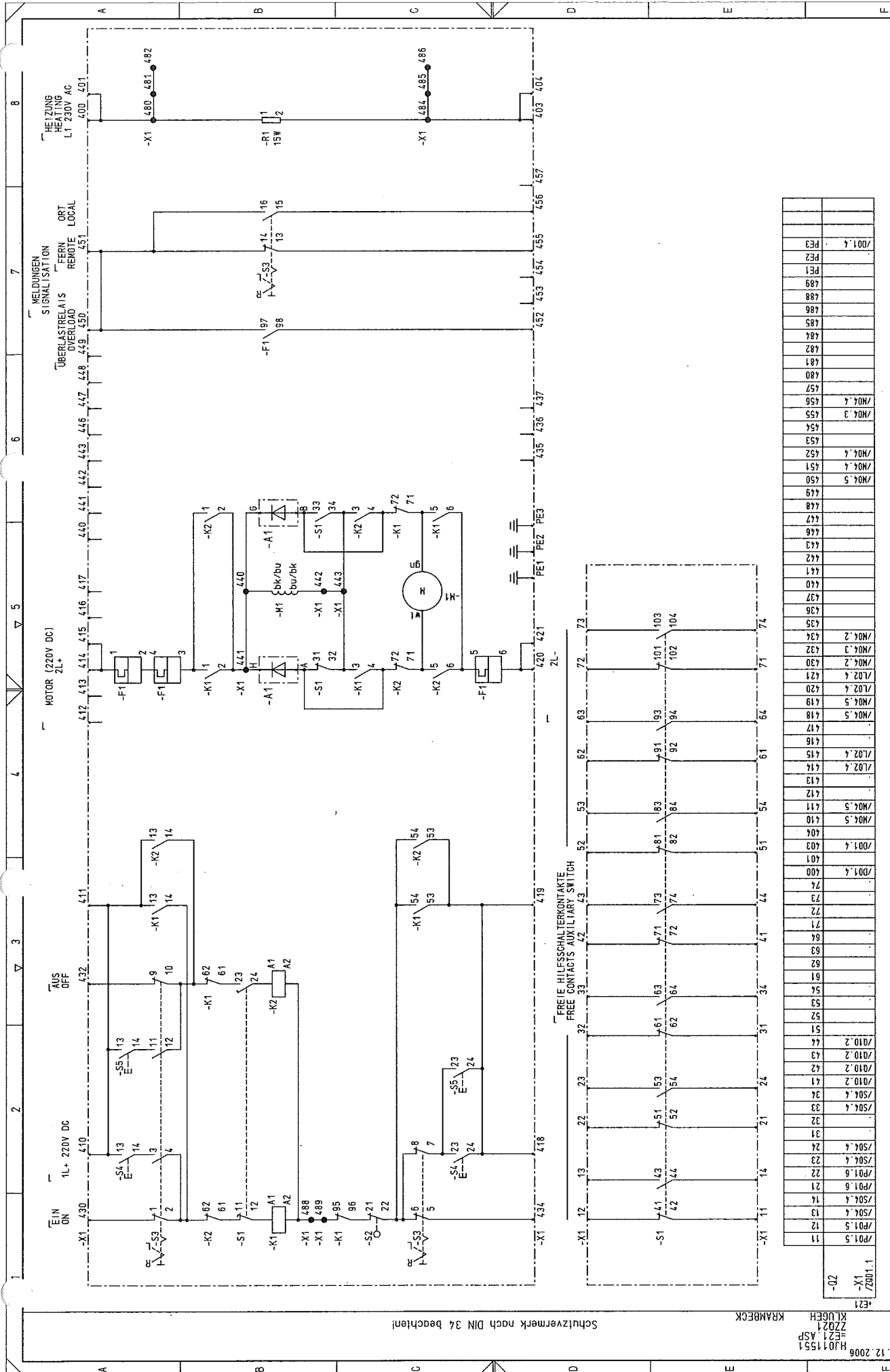
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Schützvermerk nach DIN 34 beachten!

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=E21 ASP
ZZ021
KRAEMER

KRAEMER

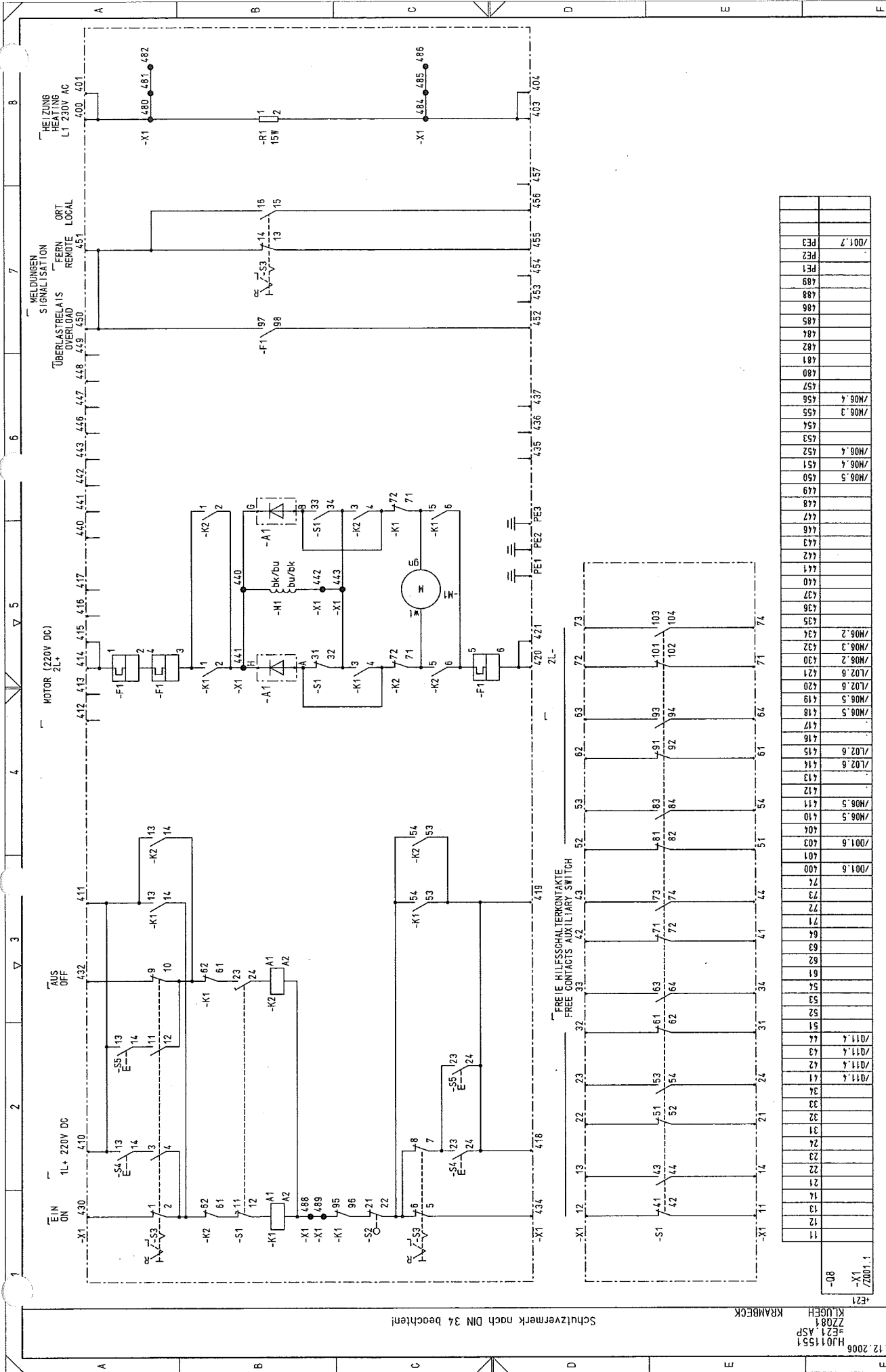


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03	AS BUI. WORKS	14.11.05	BER	Bearb	KRAEMER	50.3023.01						04
02	HEATING	23.08.05	BER	Gepr.	KLUGE							04
Zust.	Änderung	Datum	Name	Norm	Urspr.	Ers.f.	Ers.d.					04
1		2	3	4	5	6	7	8				8

Schaltzvermerk nach DIN 34 beachten!

21.12.2006
H1011551
=E21 ASP
ZZ081
KRAMBECK
KIUEH

KRAMBECK



04 AS BUILT ITEM: 12.06 KRA. Datum: 17.05.2005
03 AS BUI. WORKS 14.11.05 BER. Bearb: KRAMBECK
02 HEATING 23.08.05 BER. Gepr.: KLUGE

Zust. Änderung Datum Name Norm Urspr.: Ers.f.:
1 2 3 4 5 6 7 8

LIST OF ITEMS
MOTOR DRIVE
ISOLATOR

CM001

50.3023.01.000.701.xxx
025.011551-5201 04
58BL

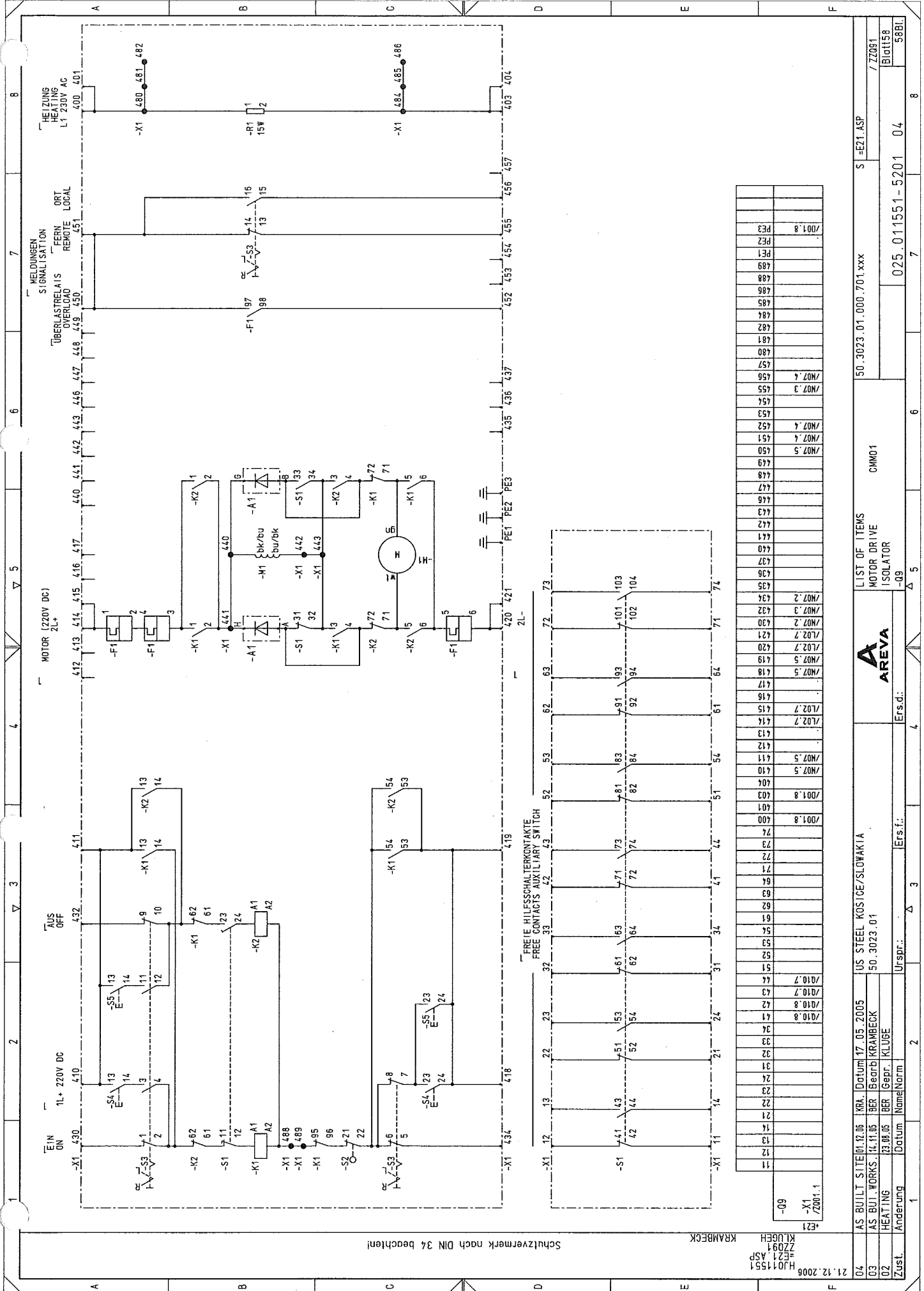
S=E21.ASP
/ZZ081

Blatt 157
58BL

Schutzvermerk nach DIN 34 beachten!

HJ011551
E21 ASP
KLUEGE
ZZ091

KRAMBECK



04	AS BUILT SITE(12.05.2005)	KRA. Datum	17.05.2005	US STEEL KOSICE/SLOVAKIA	LIST OF ITEMS	CM001	50.3023.01.000.701.xxx	S=E21.ASP	ZZ091 / ZZ091
03	AS BUT. WORKS (14.11.05)	BER. Bearb	KRAMBECK	50.3023.01	MOTOR DRIVE				
02	HEATING (23.08.05)	BER. Gepr.	KLUEGE		ISOLATOR				
Zust.	Änderung	Datum	Name/Norm	Urspr.: E21.f.	Ers.d.: -09		025.011551-5201	04	588L

11	12	13	14	21	22	23	24	31	32	33	34	41	42	43	44	51	52	53	54	55	56	57	58	59	60	61	62	63	64	71	72	73	74	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
11	12	13	14	21	22	23	24	31	32	33	34	41	42	43	44	51	52	53	54	55	56	57	58	59	60	61	62	63	64	71	72	73	74	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100