AREVA Sachsenwerk GmbH Geschäftsbereich Energieverteilung Fachbereich Mittelspannungsschaltanlagen Königsbrücker Strasse 124 01099 Dresden Tel.:(0351)820-3394 Fax: (0351)820-2602

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

INCOMING FEEDER

CIRCUIT DIAGRAM

A =L12 / A01

D009781.02. 612-3.AHA

50.3023.01.A3.741.223
COVER SHEET

PANEL
12

DATE :	06.06.2005
prep.:	ADAM
Check:	GROHMANN
Norm :	

05.01.2007 HJ0115ND
D0978102 =L12
A01
ADAM

Nr. Alteration	Date	Name
03 AS BUILT	05.12.2006	AD
02 Fact.-Rev.	09.11.2005	AD
01 Approval	20.09.2005	AD

INSTRU. AND CONTROL

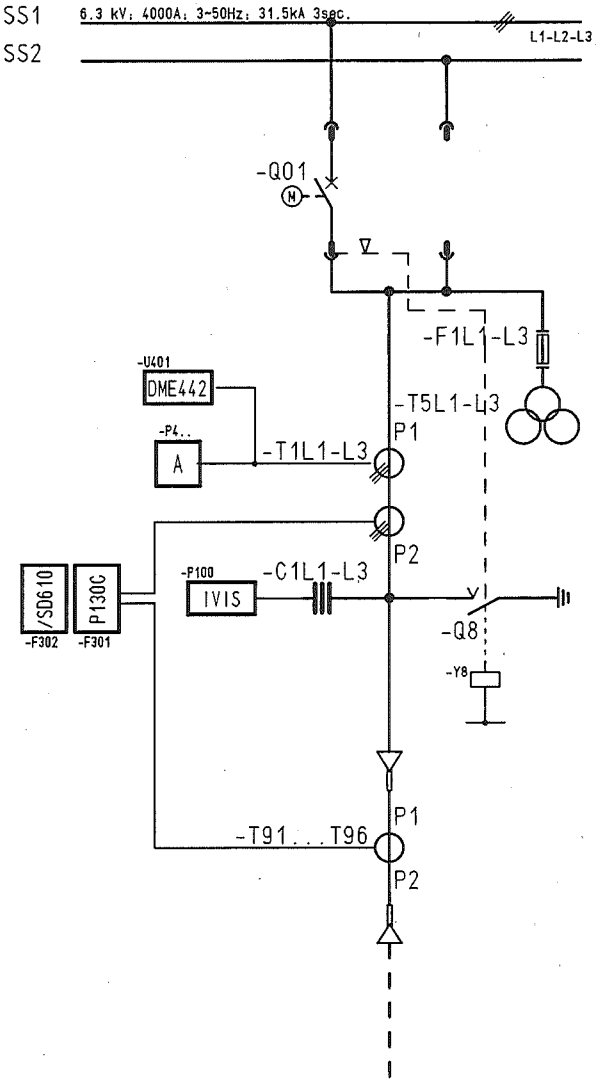
FUNCTION	LOCAL	LOCAL CONTROL	REMOTE CONTROL		REMARKS
CONTROL	-Q8 -Q01,-Q02		-Q01,-Q02		
STATUS SIGNAL	-Q01,-Q02,-Q8		-Q01,-Q02,-Q8		
MEASUREMENT	I (L1-L3)		I (L2), U(L1-L2) P (P2), Q(Q2)		
PROTECTION ANSI	MiCOM P130C 27,32,46,48,49,50P,50N,50BF,51,51N,59,59N,66,67,67N,79,81O 81U,86 SIEMENS 7SD610 + 7XV75 ANSI: 49,50,50N,51,51N,50HS,50BF,79,87				
METERING					

TECHNICAL SWITCH DATA

DESIGN	MANUFACT	TYP	RATED CURRENT	BREAK. CURRENT		REMARKS
-Q01	AREVA	ECA 12-50-31-21	4000A	50kA		
-Q8	AREVA	KGE 80/12-2				

TECHNICAL TRANSFORMER DATA

DESIGN	MANUFACT	TYP	RATIO	VDE	REMARKS
-T1L1 -T1L2 -T1L3	AEG AEG AEG	CT12 CT12 CT12	4000/1/1A 4000/1/1A 4000/1/1A	C1: cl. 0.2FS5 15VA C2: cl. 10P10 20VA	
T91..T96	AEG	RKT 250/160 Gr.3	60/1A	C1: cl. 3FS5 1.2VA	
-T5L1 -T5L2 -T5L3	AEG AEG AEG	EYEb EYEb EYEb	$\frac{6.3}{\sqrt{3}}/\frac{0.1}{\sqrt{3}}/\frac{0.1}{3}$ kV	Cl. 0.2 30VA 3P 100VA	
-F1L1 -F1L2 -F1L3	AEG AEG AEG	2A 2A 2A			HV FUSE
-C1L1 -C1L2 -C1L3	AREVA AREVA AREVA	IVIS IVIS IVIS			CAP. TAPPING



D0978102 Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115ND =L12 A02 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

CIRCUIT DIAGRAM
PANEL 12

50.3023.01.A3.741.223 A =L12 / A02

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 2 135Sh.

	CLIENT DOCUMENT NUMBER	RELEASE BY DOCUMENT NUMBER	VERSION STATUS			DOCUMENT IDENTIFICATION SORT	MATCHING	ITEM NO.	SHEET	DESIGN
–	50.3023.01.A3.741	D009781.02.612-3.AHA	01	02	03	A	=L12	A01	1	COVER SHEET PANEL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	A	=L12	A02	2	CIRCUIT DIAGRAM PANEL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	A	=L12	B01	3	Inhaltsverzeichnis PANEL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	A	=L12	B02	4	Inhaltsverzeichnis PANEL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	A	=L12	B03	5	Inhaltsverzeichnis PANEL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	A	=L12	B04	6	Inhaltsverzeichnis PANEL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	A	=L12	B05	7	Inhaltsverzeichnis PANEL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	D01	8	CIRCUIT DIAGRAM PANEL AC-DISTRIBUTION 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	D02	9	CIRCUIT DIAGRAM PANEL AC-DISTRIBUTION 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	D03	10	CIRCUIT DIAGRAM PANEL FAN A 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	D04	11	CIRCUIT DIAGRAM PANEL FAN B 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	G00	12	CIRCUIT DIAGRAM PANEL CBF 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	G01	13	CIRCUIT DIAGRAM PANEL DC DISTR. 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	G02	14	CIRCUIT DIAGRAM PANEL RING CIRCUIT 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	L01	15	CIRCUIT DIAGRAM PANEL CIRCUIT-BREAKER MOTOR DRIVE 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	M00	16	CIRCUIT DIAGRAM PANEL CONTROL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	M01	17	CIRCUIT DIAGRAM PANEL CONTROL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	M02	18	CIRCUIT DIAGRAM PANEL CONTROL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	M03	19	CIRCUIT DIAGRAM PANEL CONTROL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	M04	20	CIRCUIT DIAGRAM PANEL CONTROL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	M05	21	CIRCUIT DIAGRAM PANEL CONTROL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	M06	22	CIRCUIT DIAGRAM PANEL CONTROL 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	N01	23	CIRCUIT DIAGRAM PANEL ARC DETECTOR 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	N02	24	CIRCUIT DIAGRAM PANEL ARC DETECTOR 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	P01	25	CIRCUIT DIAGRAM PANEL INTERLOCK 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	P02	26	CIRCUIT DIAGRAM PANEL INTERLOCK 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Q01	27	CIRCUIT DIAGRAM PANEL POSITION INDICA. 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Q02	28	CIRCUIT DIAGRAM PANEL INTERFACE 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Q03	29	CIRCUIT DIAGRAM PANEL INTERFACE 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Q04	30	CIRCUIT DIAGRAM PANEL INTERFACE 12
–	50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Q05	31	CIRCUIT DIAGRAM PANEL INTERFACE 12

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	Inhaltsverzeichnis
Drawn	ADAM	50.3023.01	
Check	GROHMANN	SUBSTATION T80	PANEL 12
Std.		Orig.: iss.for	iss.by:

AREVA

50.3023.01.A3.741.223 A =L12 / B01

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 3 135Sh.

CLIENT DOCUMENT NUMBER	RELEASE BY DOCUMENT NUMBER	VERSION STATUS			DOCUMENT IDENTIFICATION			SHEET	DESIGN	
					SORT	MATCHING	ITEM NO.			
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Q06	32	CIRCUIT DIAGRAM PANEL	INTERFACE 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Q07	33	CIRCUIT DIAGRAM PANEL	INTERFACE 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Q08	34	CIRCUIT DIAGRAM PANEL	INTERFACE 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Q09	35	CIRCUIT DIAGRAM PANEL	SPARE CONTACTS 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Q10	36	CIRCUIT DIAGRAM PANEL	SPARE CONTACTS 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	R01	37	CIRCUIT DIAGRAM PANEL	SIGNALLING 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	R02	38	CIRCUIT DIAGRAM PANEL	SIGNALLING 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	R03	39	CIRCUIT DIAGRAM PANEL	SPARE CONTACTS 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	S01	40	CIRCUIT DIAGRAM PANEL	CURR.TRANSF. 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	S02	41	CIRCUIT DIAGRAM PANEL	CURR.TRANSF. 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	S03	42	CIRCUIT DIAGRAM PANEL	CURR.TRANSF. 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	T01	43	CIRCUIT DIAGRAM PANEL	VOLTAGE TRANSF. 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	T02	44	CIRCUIT DIAGRAM PANEL	IVIS 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	V01	45	CIRCUIT DIAGRAM PANEL	SPARE CONTACTS 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	V02	46	CIRCUIT DIAGRAM PANEL	SPARE CONTACTS 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	X01	47	CIRCUIT DIAGRAM PANEL	AX PE-BUS 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1A1	48	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1A10	49	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1A11	50	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1A12	51	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1F1	52	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1F10	53	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1F11	54	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1F13	55	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1F2	56	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1F3	57	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1H1	58	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1K1	59	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1K2	60	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1K3	61	LIST OF EQUIPMENT PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1P1	62	LIST OF EQUIPMENT PANEL	12

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

Inhaltsverzeichnis

PANEL
12

50.3023.01.A3.741.223 A =L12 / B02

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 4 135Sh.

CLIENT DOCUMENT NUMBER	RELEASE BY DOCUMENT NUMBER	VERSION STATUS			DOCUMENT IDENTIFICATION SORT	MATCHING	ITEM NO.	SHEET	DESIGN
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1R1	63	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1S1	64	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1U1	65	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1X1	66	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z1X10	67	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z2B1	68	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z2C1	69	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z2E1	70	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z2P1	71	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z2Q1	72	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z2S1	73	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z2T1	74	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z2Y1	75	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z3Q1	76	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z3Q2	77	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z3S1	78	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	S	=L12	Z3Y1	79	LIST OF EQUIPMENT PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K01	80	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K02	81	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K10	82	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K11	83	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K12	84	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K13	85	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K30	86	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K40	87	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K41	88	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K50	89	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K51	90	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K52	91	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K60	92	TERMINAL DIAGRAM PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K80	93	TERMINAL DIAGRAM PANEL 12

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date 06.06.2005
Drawn ADAM
Check GROHMANN
Orig.: Iss.for

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

AREVA

Iss.by:

Inhaltsverzeichnis
PANEL
12

50.3023.01.A3.741.223 A =L12 / B03

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 5 135Sh.

CLIENT DOCUMENT NUMBER	RELEASE BY DOCUMENT NUMBER	VERSION STATUS			DOCUMENT IDENTIFICATION			SHEET	DESIGN	
					SORT	MATCHING	ITEM NO.			
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K81	94	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K82	95	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	K90	96	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	KPE	97	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	Q10	98	CROSS CONNECT. LIST PANEL	RELAY BOX 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	Q11	99	CROSS CONNECT. LIST PANEL	RELAY BOX 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	Q12	100	CROSS CONNECT. LIST PANEL	RELAY BOX 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	Q13	101	CROSS CONNECT. LIST PANEL	RELAY BOX 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	Q14	102	CROSS CONNECT. LIST PANEL	RELAY BOX 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	S01	103	PLUG DIAGRAM PANEL	CIRCUIT-BREAKER 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	S40	104	PLUG DIAGRAM PANEL	NIEDERSPG.-SCHR.A- NIEDERSPG.-SCHR.B 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	S41	105	PLUG DIAGRAM PANEL	NIEDERSPG.-SCHR.A- NIEDERSPG.-SCHR.B 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.R	S101	106	PLUG DIAGRAM PANEL	FAN 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.T	Q15	107	CROSS CONNECT. LIST PANEL	RELAY BOX 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1A.T	Q16	108	CROSS CONNECT. LIST PANEL	RELAY BOX 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	K01	109	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	K10	110	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	K11	111	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	K30	112	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	K40	113	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	K41	114	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	K42	115	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	K60	116	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	K80	117	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	K90	118	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	KPE	119	TERMINAL DIAGRAM PANEL	12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	Q10	120	CROSS CONNECT. LIST PANEL	RELAY BOX 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	Q11	121	CROSS CONNECT. LIST PANEL	RELAY BOX 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	S01	122	PLUG DIAGRAM PANEL	CIRCUIT-BREAKER 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S1B.R	S101	123	PLUG DIAGRAM PANEL	FAN 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S2A	Q20	124	CROSS CONNECT. LIST PANEL	PANEL 12

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	
Drawn	ADAM	50.3023.01	
Check	GROHMANN	SUBSTATION T80	
Orig.:		Iss.for	Iss.by:

AREVA

Inhaltsverzeichnis

PANEL
12

50.3023.01.A3.741.223 A =L12

/ B04

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 6
135Sh.

CLIENT DOCUMENT NUMBER	RELEASE BY DOCUMENT NUMBER	VERSION STATUS			DOCUMENT IDENTIFICATION SORT	MATCHING	ITEM NO.	SHEET	DESIGN	
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S2A	Q21	125	CROSS CONNECT. LIST PANEL	PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S2A	S101	126	PLUG DIAGRAM PANEL	FAN 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S2B	Q20	127	CROSS CONNECT. LIST PANEL	PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S2B	Q21	128	CROSS CONNECT. LIST PANEL	PANEL 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S2B	S101	129	PLUG DIAGRAM PANEL	FAN 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S3A	Q30	130	CROSS CONNECT. LIST PANEL	SWITCHING TRUCK 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S3A	Q31	131	CROSS CONNECT. LIST PANEL	SWITCHING TRUCK 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S3A	Q32	132	CROSS CONNECT. LIST PANEL	SWITCHING TRUCK 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S3A	Q33	133	CROSS CONNECT. LIST PANEL	SWITCHING TRUCK 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S3A	S01	134	PLUG DIAGRAM PANEL	CIRCUIT-BREAKER 12
50.3023.01.A3.741 .223	D009781.02.612-3.AHA	01	02	03	V	=L12 +S3B	S01	135	PLUG DIAGRAM PANEL	CIRCUIT-BREAKER 12

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

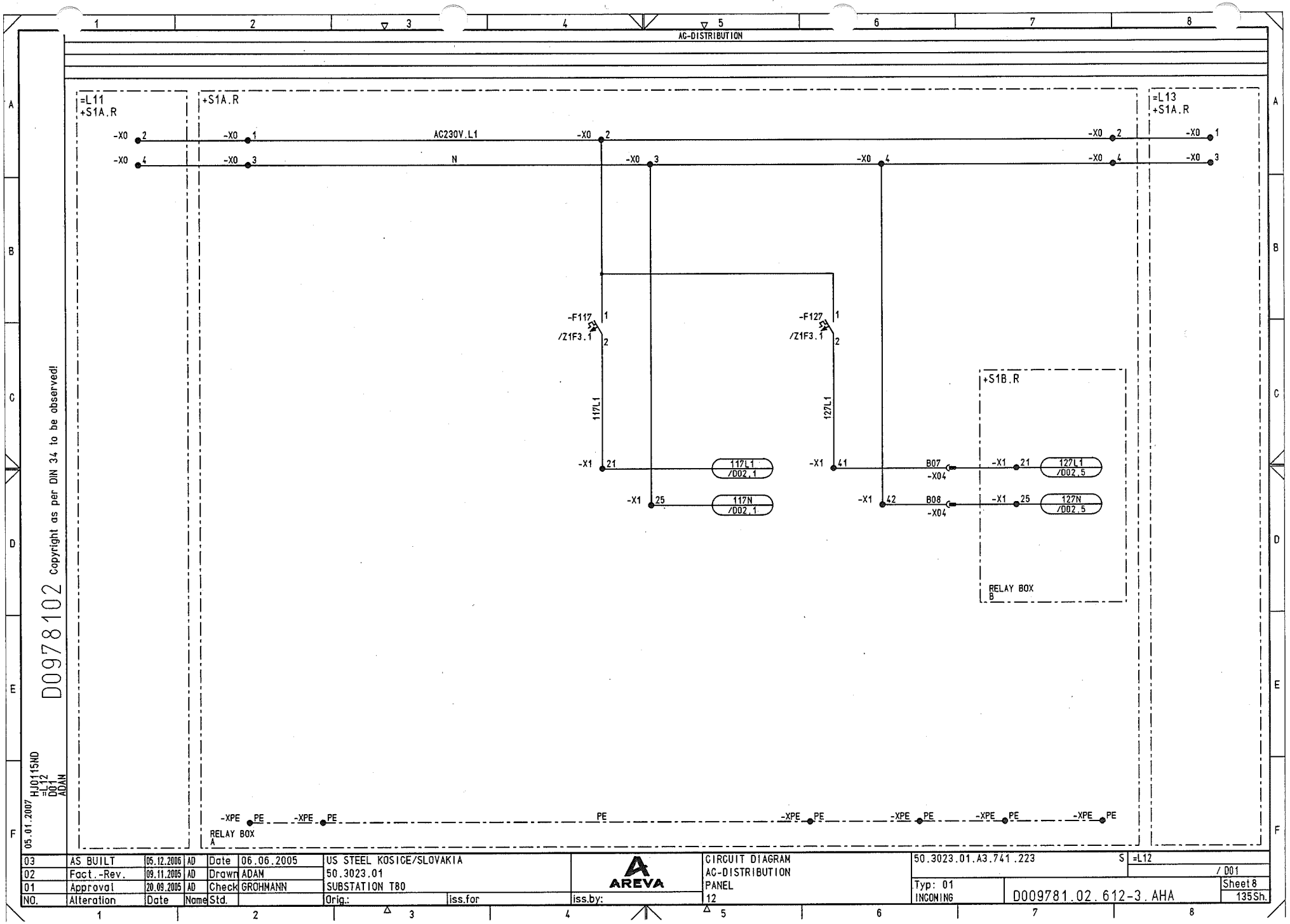
Date 06.06.2005
Drawn ADAM
Check GROHMANN
Orig.: iss.for
iss.by:

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

AREVA

Inhaltsverzeichnis
PANEL
12

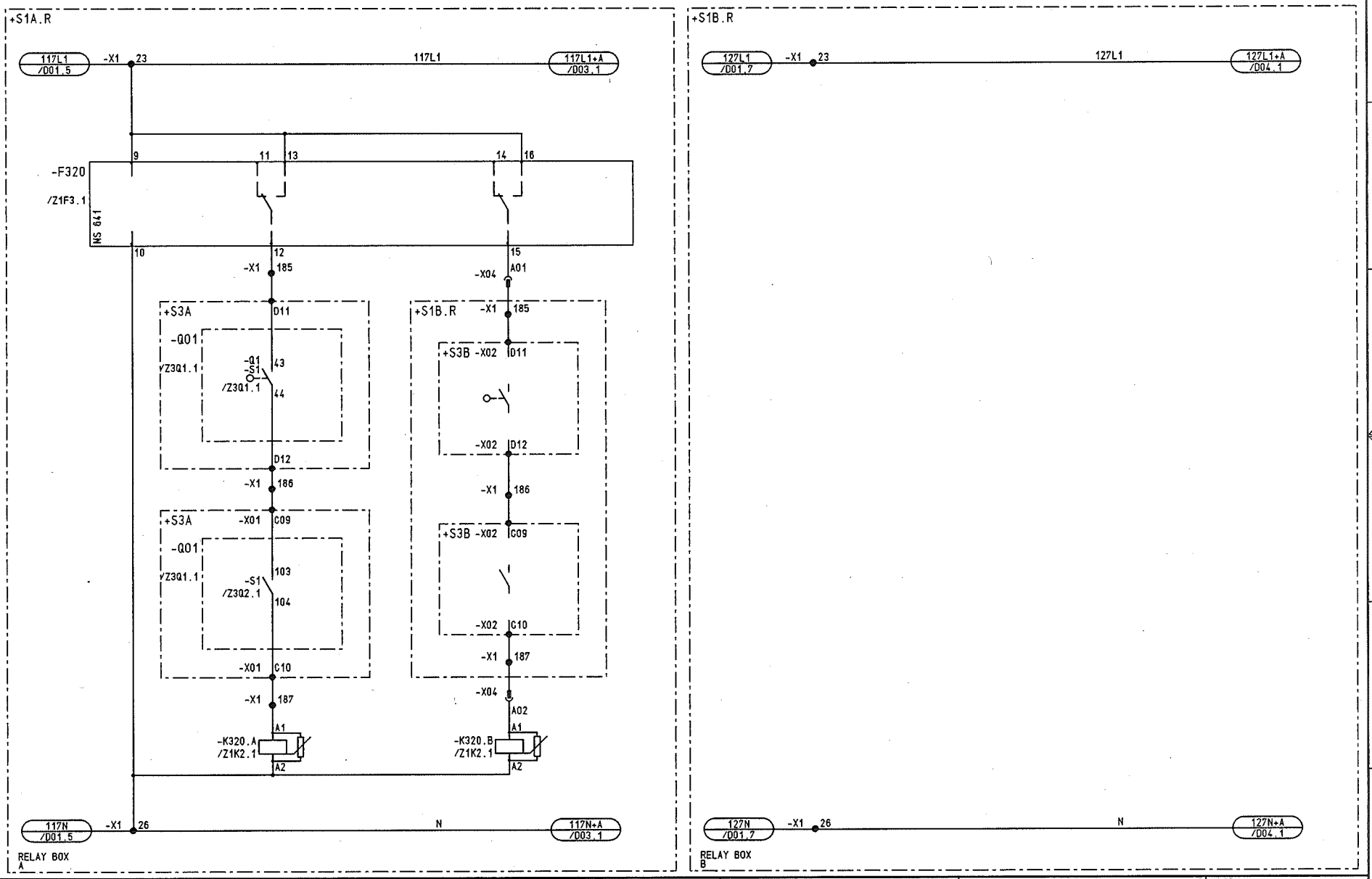
50.3023.01.A3.741.223 A =L12
/ B05
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 7 135Sh.


AC-DISTRIBUTION
=L11
+S1A.R
+S1A.R
=L13
+S1A.R
-X0 2
-X0 4
-X0 1
-X0 3
AC230V.L1
N
-F117
/Z1F3.1
-F127
/Z1F3.1
117L1
127L1
-X1 21
-X1 25
-X1 41
-X1 42
117L1 /D02.1
117N /D02.1
B07
B08
-X04
127L1 /D02.5
127N /D02.5
+S1B.R
RELAY BOX B
-XPE PE
PE
RELAY BOX A
D0097810 2
Copyright as per DIN 34 to be observed!
05.01.2007
HJ0115ND
=L12
D01
ADAM
03 AS BUILT 05.12.2006 AD
02 Fact.-Rev. 09.11.2005 AD
01 Approval 20.09.2005 AD
NO. Alteration Date Name
Date 06.06.2005
Drawn ADAM
Check GROHMANN
Std.
US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:
AREVA
CIRCUIT DIAGRAM
AC-DISTRIBUTION
PANEL
12
50.3023.01.A3.741.223
S
=L12
/ D01
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 8
135 Sh.

FAN CONTROL A

FAN CONTROL B

CURRENT REL



D0097810 2 Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115ND =L12 D02 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

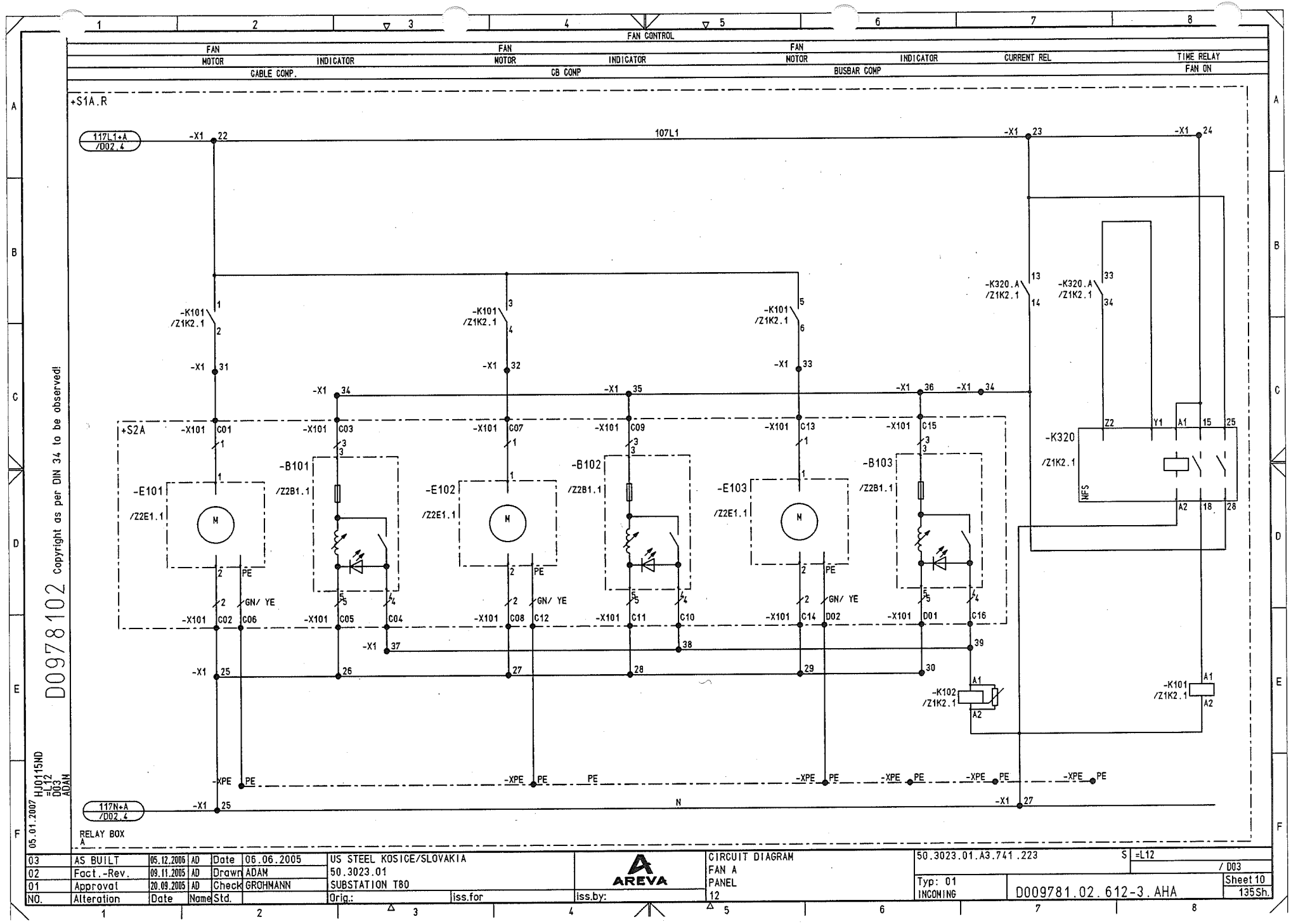
CIRCUIT DIAGRAM
AC-DISTRIBUTION
PANEL
12

50.3023.01.A3.741.223 S =L12 / D02

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 9
135 Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

CIRCUIT DIAGRAM
FAN A
PANEL
12

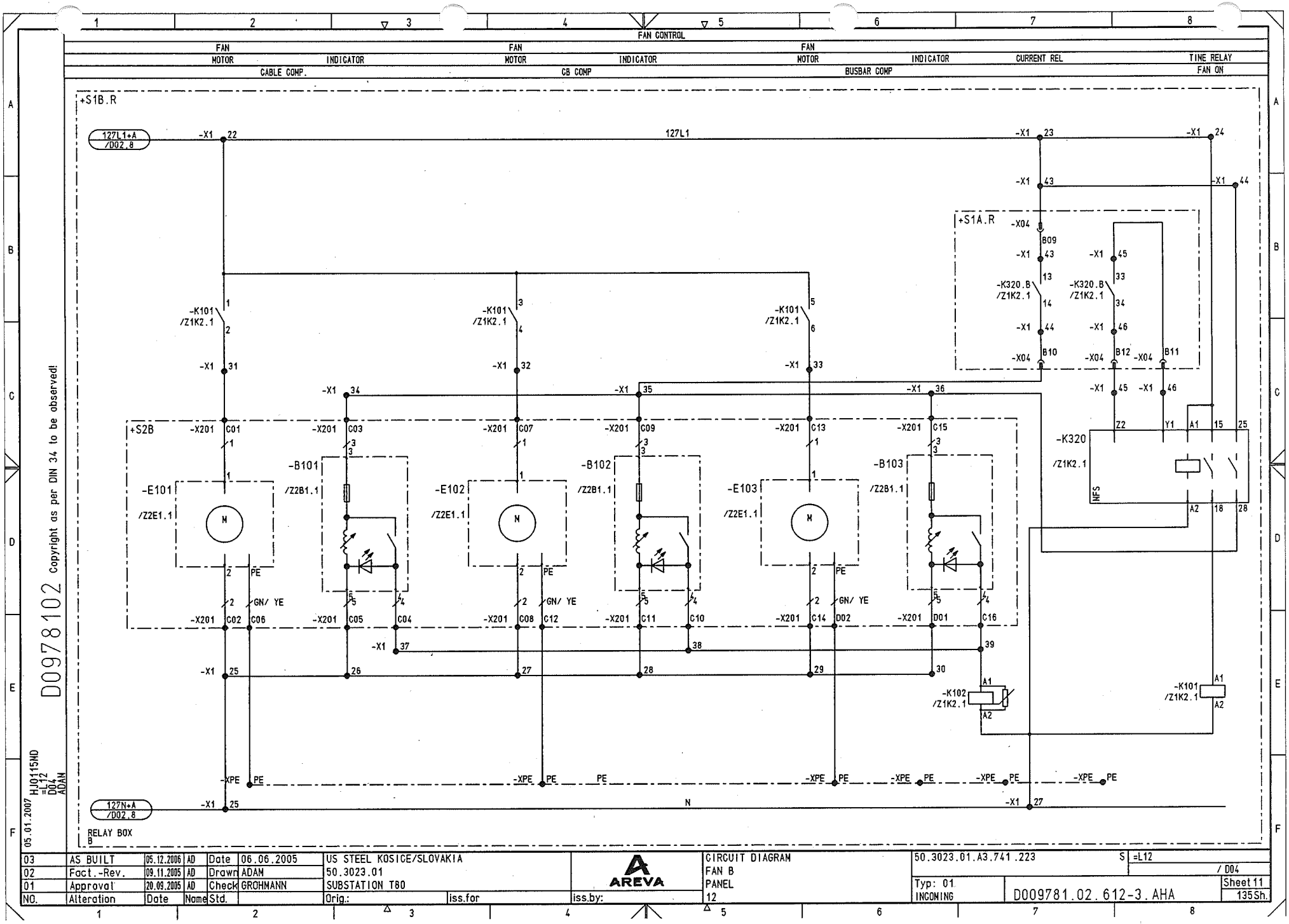
50.3023.01.A3.741.223

S =L12 / D03

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 10 135Sh.



D0097810 2 Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115ND =L12 D04 ADAN

NO.	Alteration	Date	Name	Std.		Orig.:	Iss.for	Iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

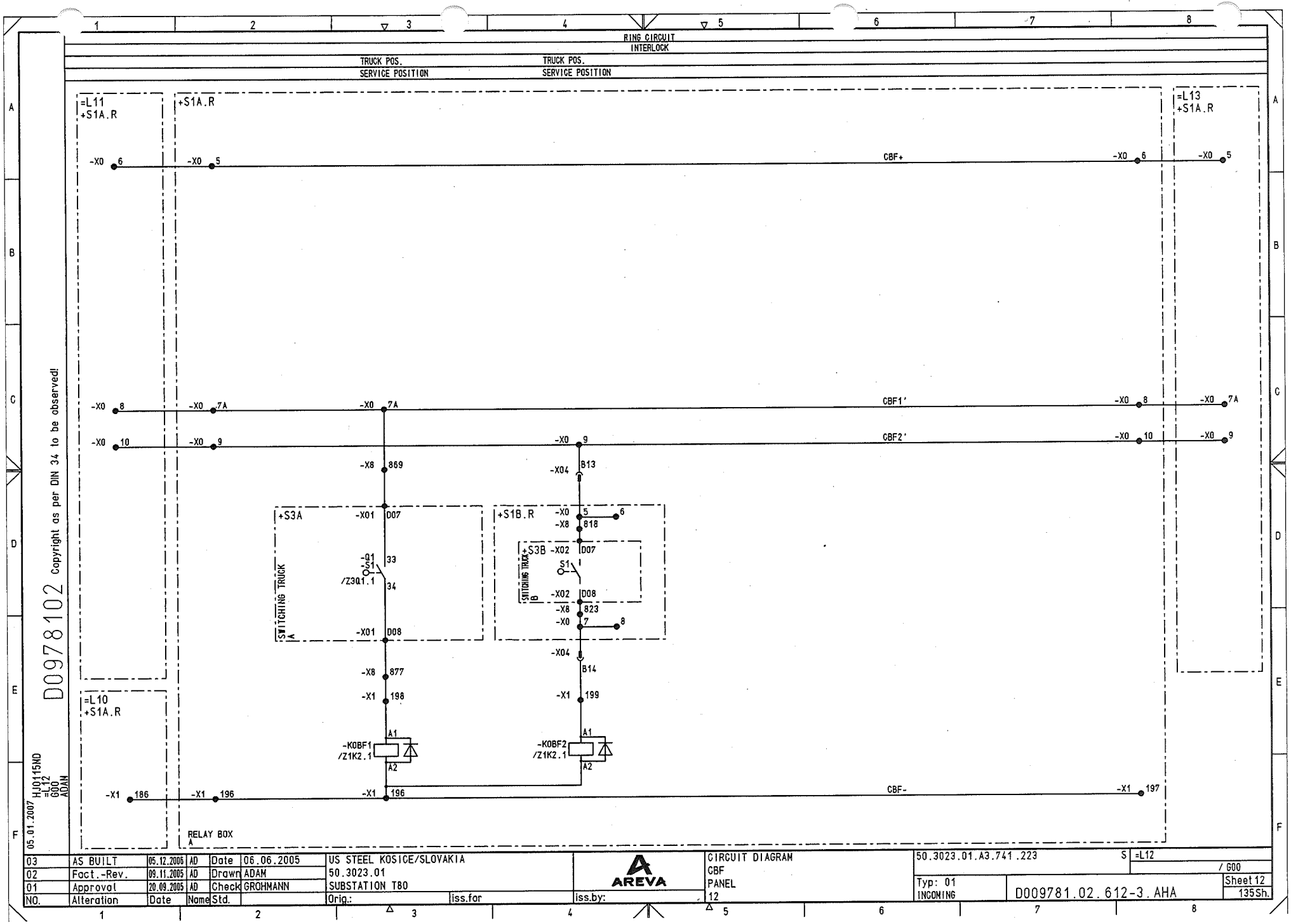
CIRCUIT DIAGRAM
FAN B
PANEL
12

50.3023.01.A3.741.223 S =L12 / D04

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 11 135Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

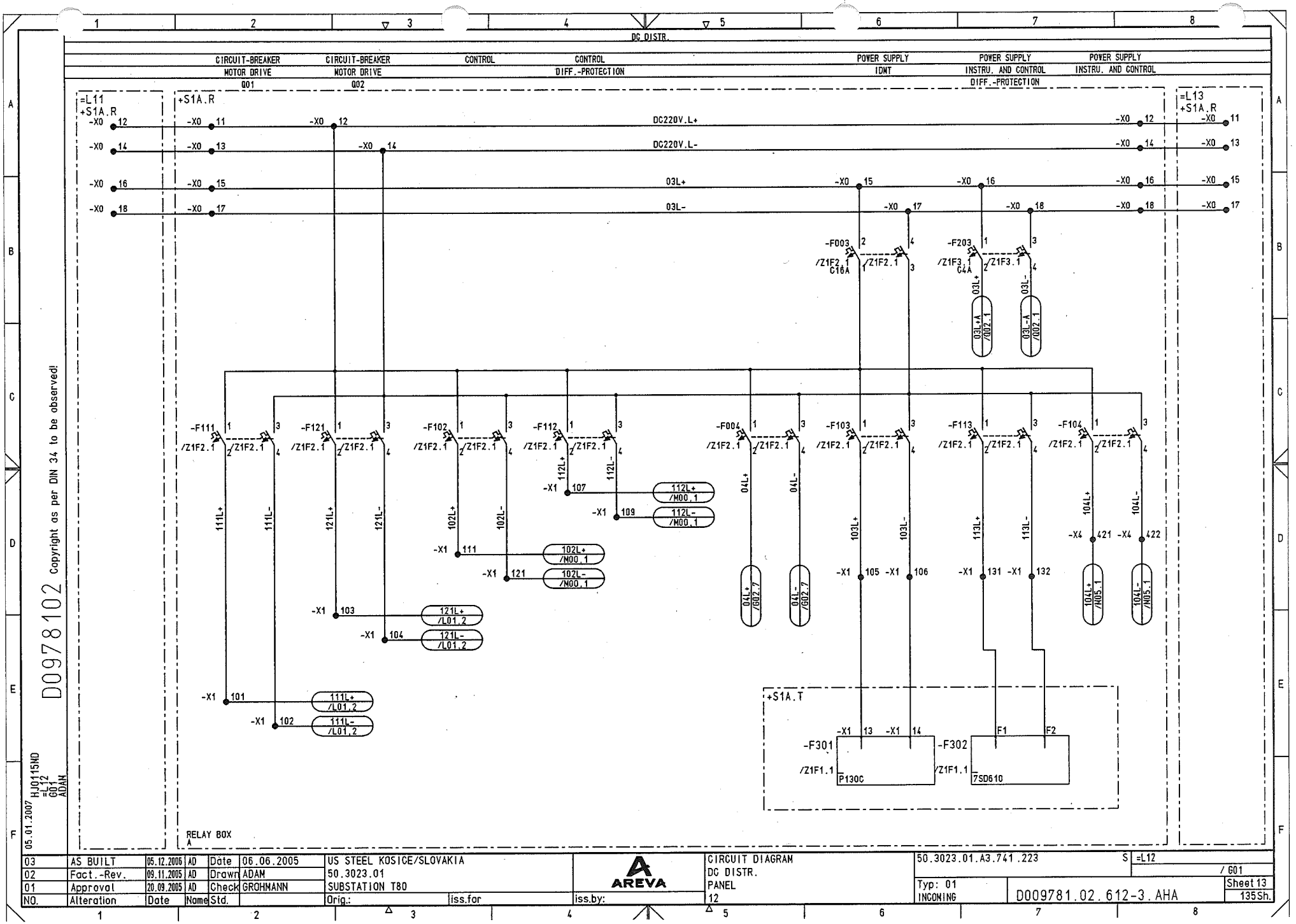
CIRCUIT DIAGRAM
CBF
PANEL
12

50.3023.01.A3.741.223 S =L12 / G00

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 12
135Sh.



Copyright as per DIN 34 to be observed!

D009781 02

05.01.2007 HJ0115ND =L12 G01 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

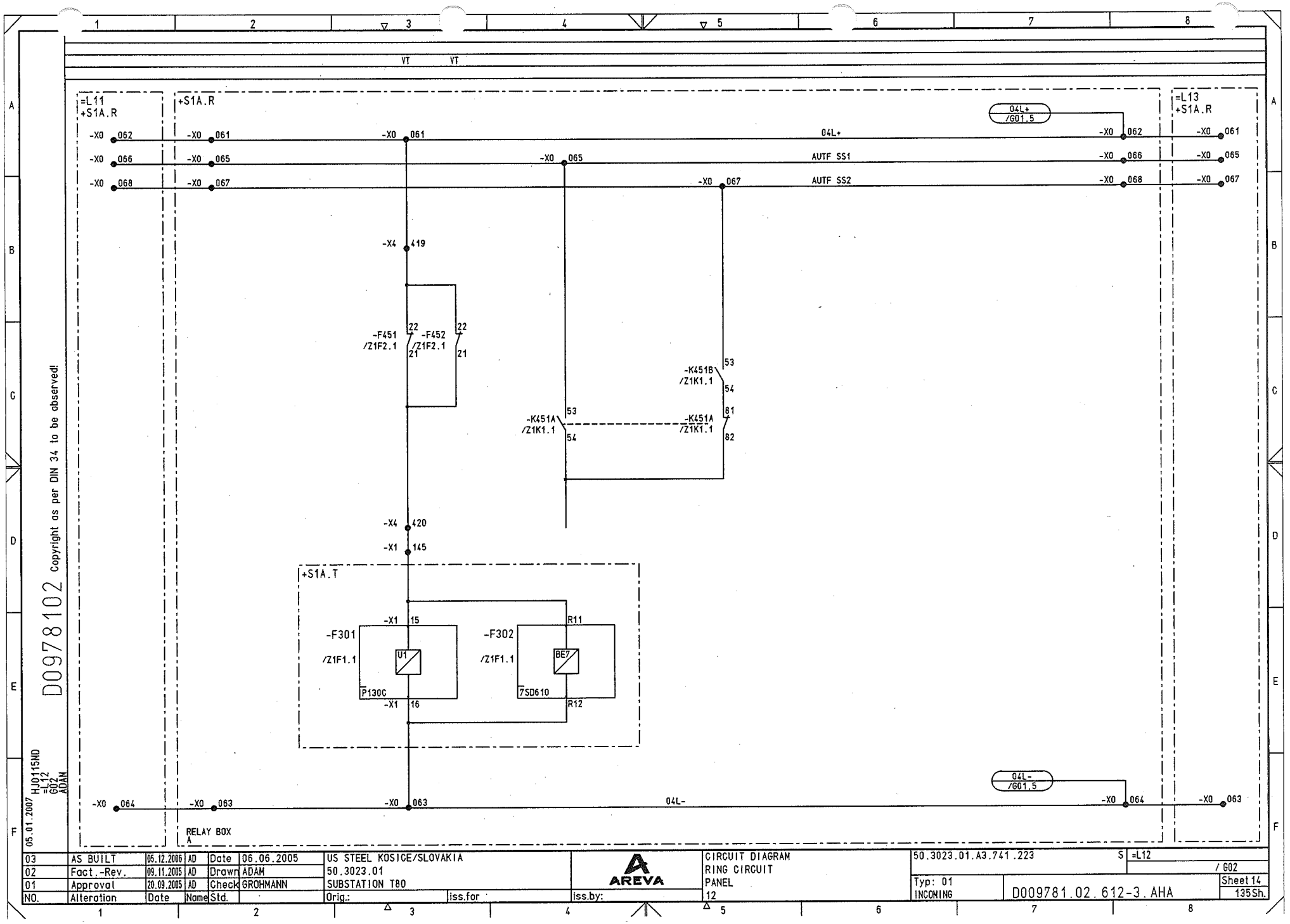
CIRCUIT DIAGRAM
DC DISTR.
PANEL
12

50.3023.01.A3.741.223 S =L12 / G01

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 13 135Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

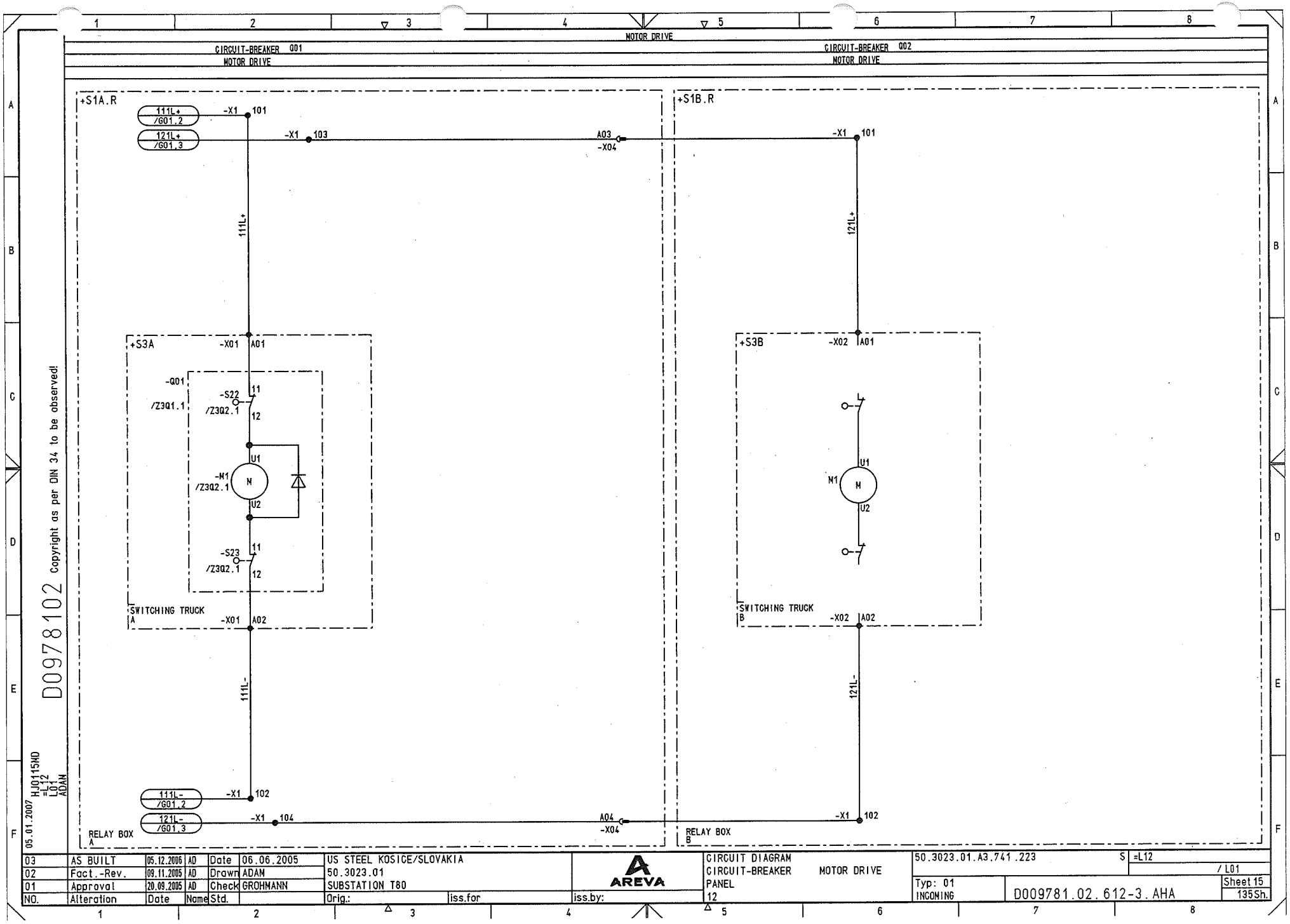
CIRCUIT DIAGRAM
RING CIRCUIT
PANEL
12

50.3023.01.A3.741.223 S =L12 / G02

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 14
135Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

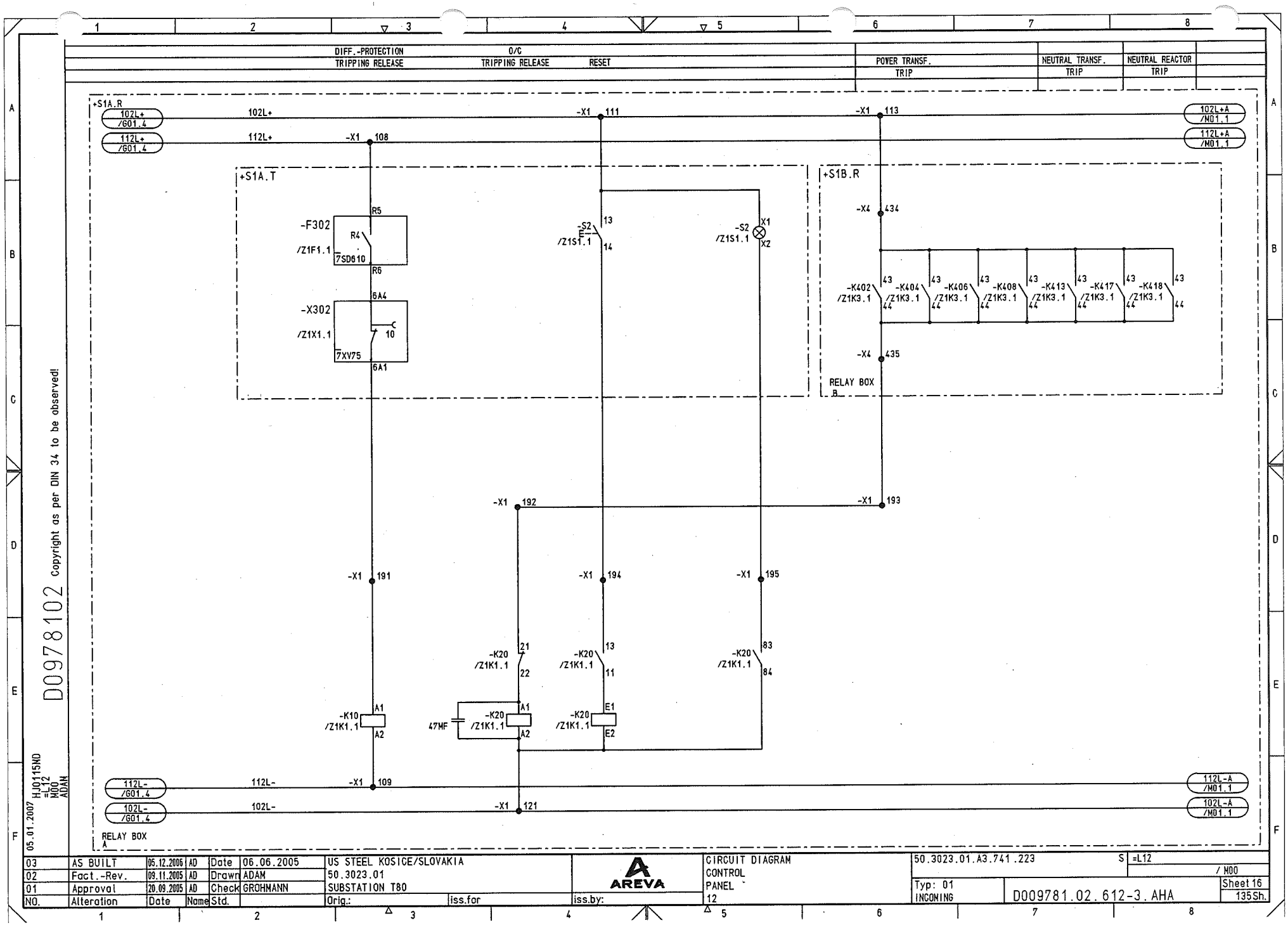
CIRCUIT DIAGRAM
CIRCUIT-BREAKER MOTOR DRIVE
PANEL
12

50.3023.01.A3.741.223 S =L12 / L01

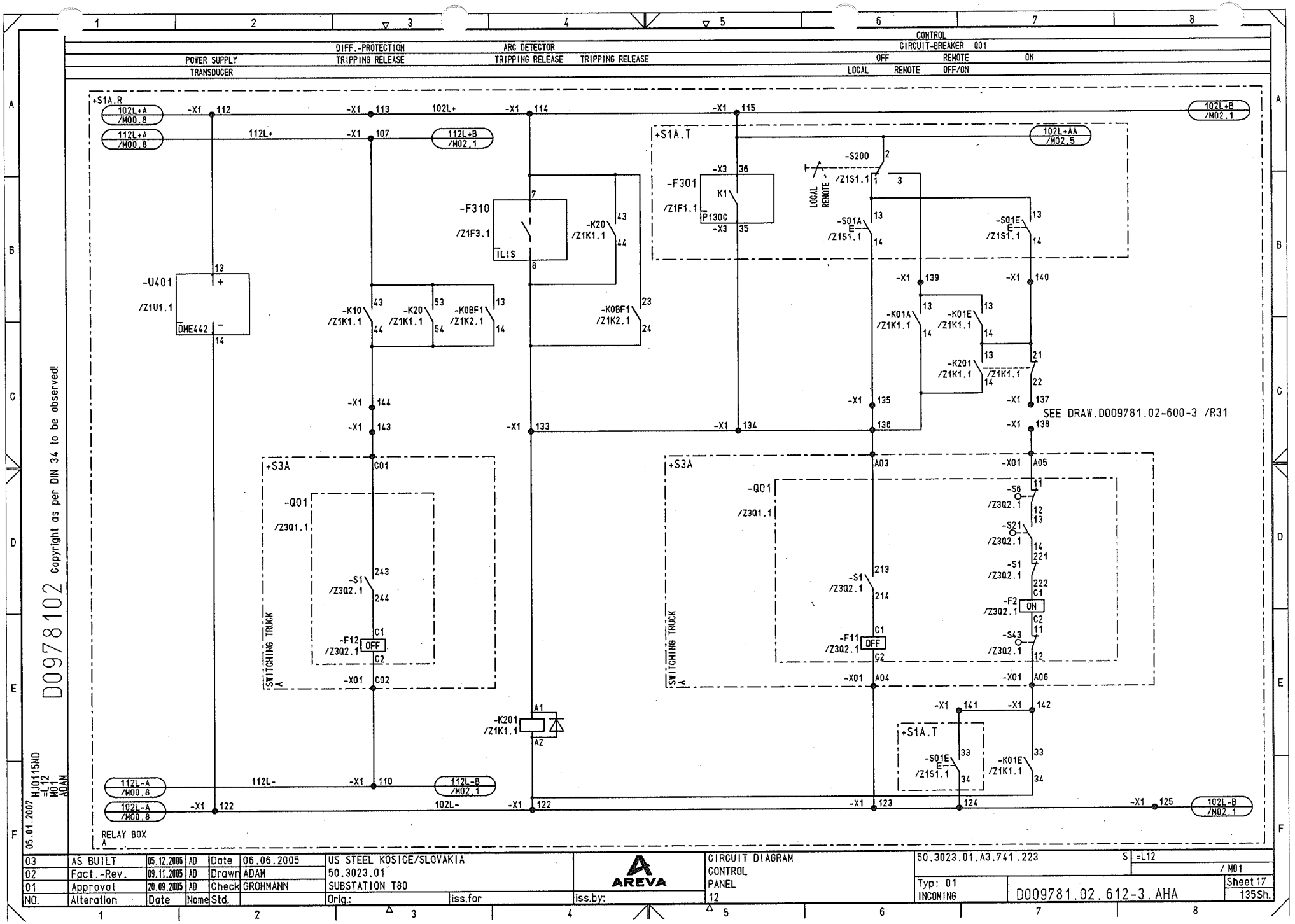
Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 15
135Sh.



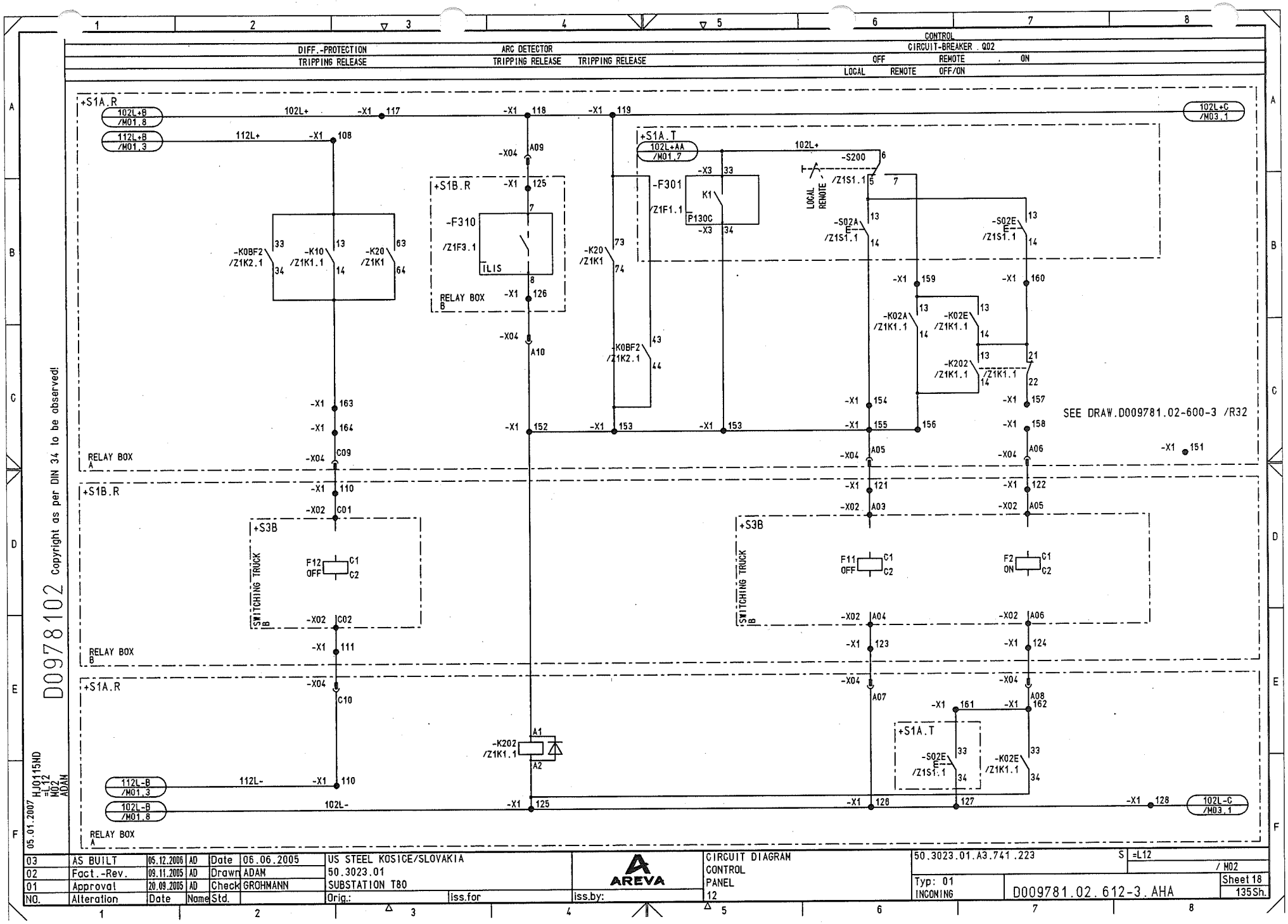
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	CIRCUIT DIAGRAM CONTROL PANEL 12	50.3023.01.A3.741.223 S =L12 / M00
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01			Typ: 01 INCOMING D009781.02.612-3.AHA Sheet 16 135Sh.
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80			
NO.	Alteration	Date	Name	Std.		Orig.: iss.for	iss.by:		



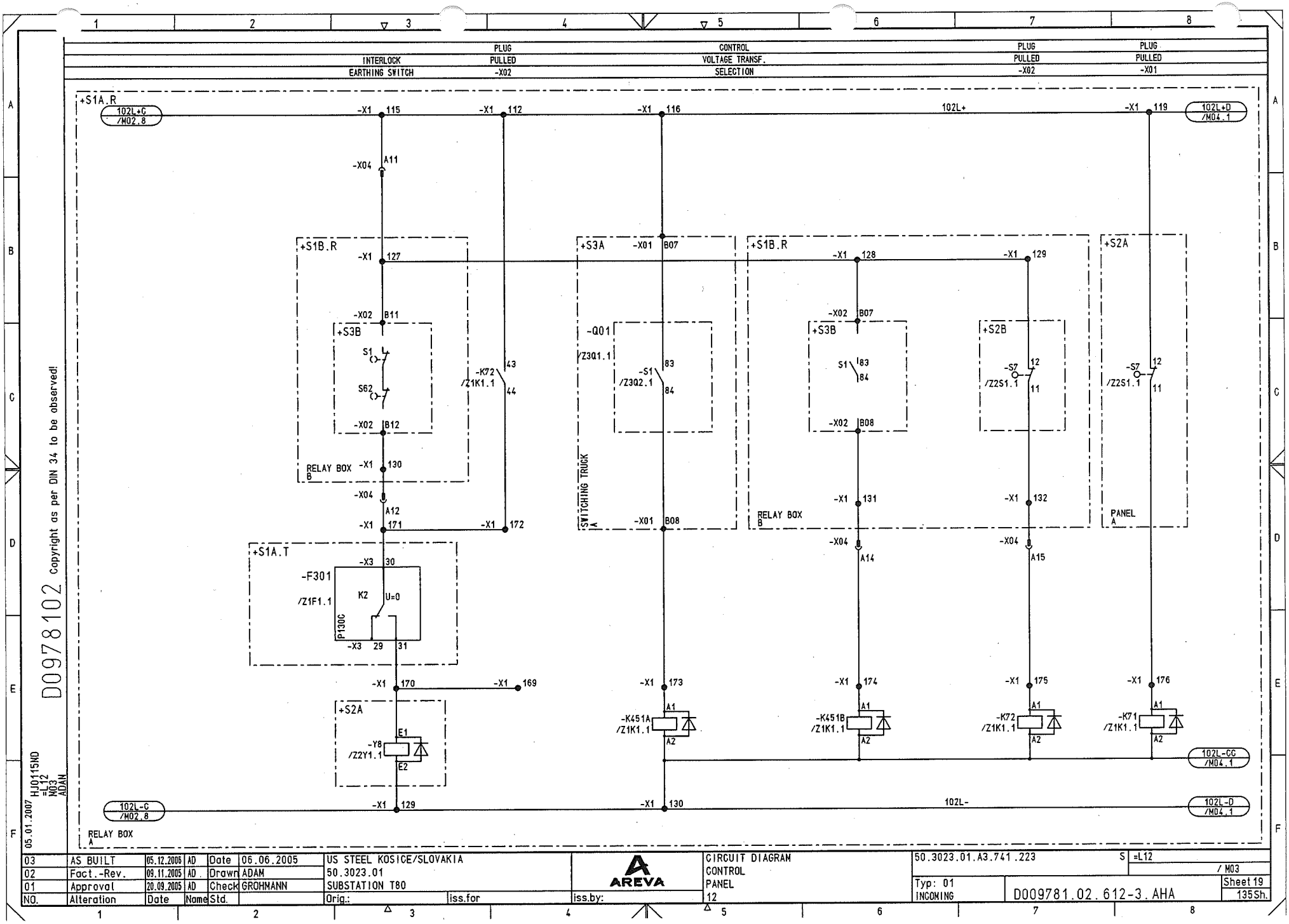
D0097810 2 Copyright as per DIN 34 to be observed!

H:\0115ND
=L12
M01
ADAM
05.01.2007

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	CIRCUIT DIAGRAM	50.3023.01.A3.741.223	S =L12 / M01
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		CONTROL		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL	Typ: 01 INCOMING	Sheet 17
NO.	Alteration	Date	Name	Std.		Orig.: iss.for	iss.by:	12	D009781.02.612-3.AHA	135Sh.



03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	CIRCUIT DIAGRAM CONTROL PANEL 12	50.3023.01.A3.741.223 S =L12 / M02
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01			Typ: 01 INCOMING D009781.02.612-3.AHA Sheet 18 135Sh.
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80			
NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:	



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

CIRCUIT DIAGRAM
CONTROL
PANEL
12

50.3023.01.A3.741.223 S =L12 / M03

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 19
135Sh.

CONTROL CIRCUIT-BREAKER Q01 REMOTE OFF REMOTE ON

CONTROL CIRCUIT-BREAKER Q02 REMOTE OFF REMOTE ON

+S1A.R

102L+D /M03.8

102L+

-X1 120

102L+E /Q01.1

-A100 /Z1A1.1

TN 1703 D0-6212

-X20 11 -X20 13 -X20 15 -X20 17

COM00 COM01 COM02 COM03

-X20 1 -X20 3 -X20 5 -X20 7

-K01A /Z1K1.1 -K01E /Z1K1.1 -K02A /Z1K1.1 -K02E /Z1K1.1

A1 A2

102L-CC /M03.8

102L-

102L-D /M03.8

102L-

102L-E /Q01.1

RELAY BOX A

D0097810 2 Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115ND =L12 M04 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

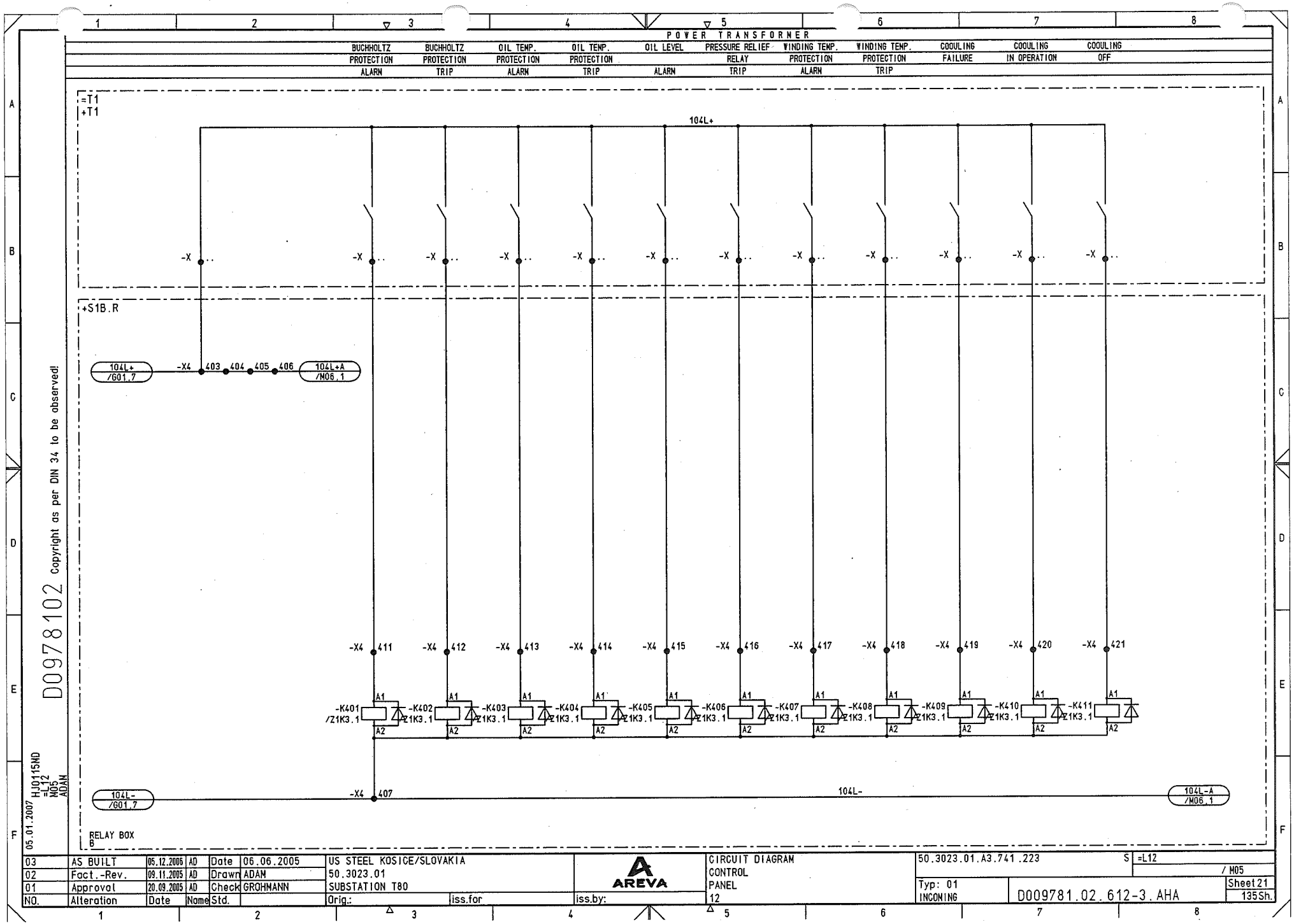
CIRCUIT DIAGRAM
CONTROL
PANEL
12

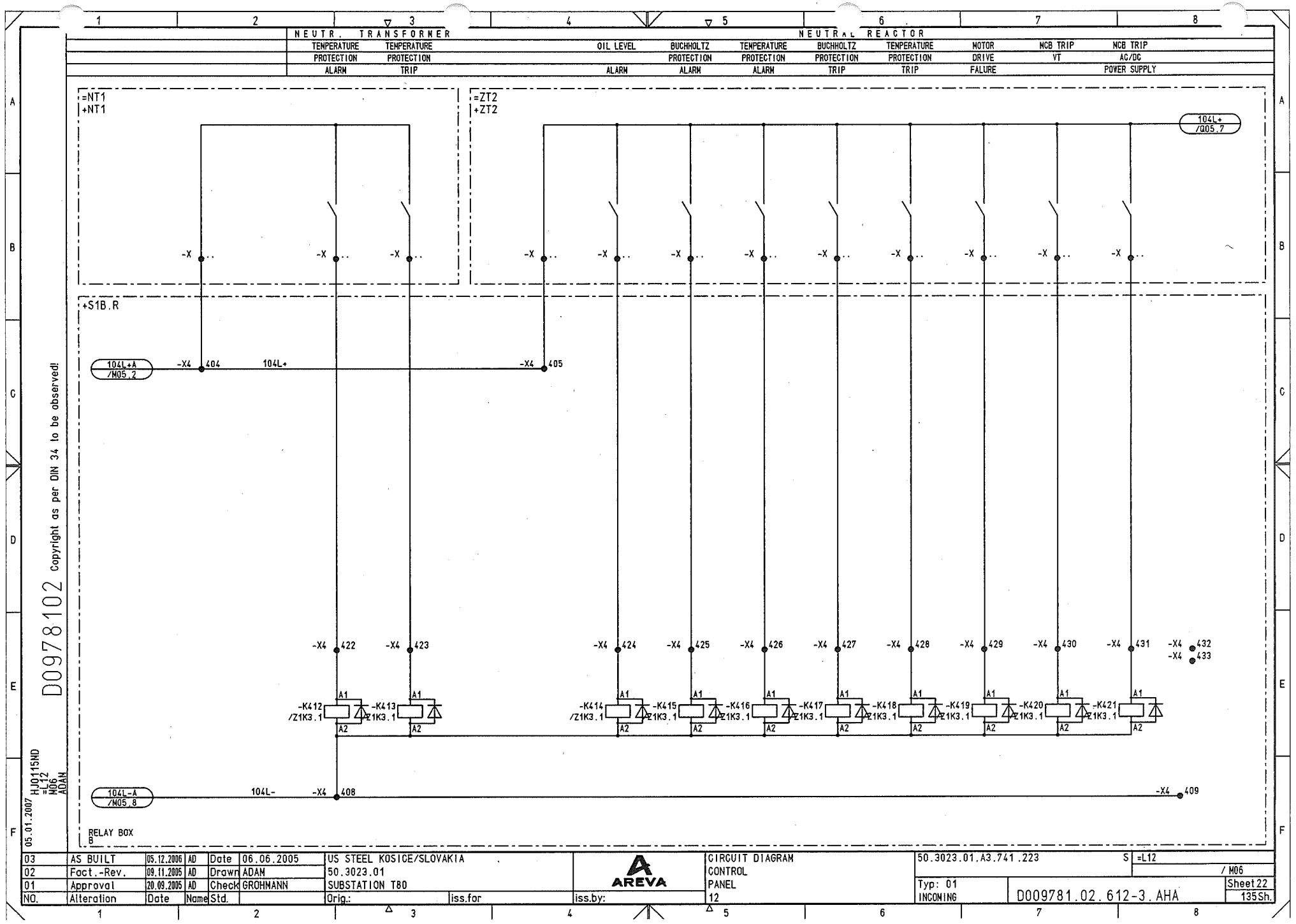
50.3023.01.A3.741.223 S =L12 / M04

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 20 135Sh.


POWER TRANSFORMER
BUCHHOLTZ PROTECTION ALARM
BUCHHOLTZ PROTECTION TRIP
OIL TEMP. PROTECTION ALARM
OIL TEMP. PROTECTION TRIP
OIL LEVEL ALARM
PRESSURE RELIEF RELAY TRIP
WINDING TEMP. PROTECTION ALARM
WINDING TEMP. PROTECTION TRIP
COOLING FAILURE
COOLING IN OPERATION
COOLING OFF
=T1
+T1
104L+
+S1B.R
104L+ /G01.7
-X4 403 404 405 406
104L+A /M06.1
-X4 411 412 413 414 415 416 417 418 419 420 421
-K401 /Z1K3.1
-K402 Z1K3.1
-K403 Z1K3.1
-K404 Z1K3.1
-K405 Z1K3.1
-K406 Z1K3.1
-K407 Z1K3.1
-K408 Z1K3.1
-K409 Z1K3.1
-K410 Z1K3.1
-K411 Z1K3.1
A1
A2
104L- /G01.7
-X4 407
104L-
104L-A /M06.1
RELAY BOX
6
D0097810 2
Copyright as per DIN 34 to be observed!
05.01.2007 H.J0115ND =L12 M05 ADAM
03 AS BUILT 05.12.2006 AD
02 Fact.-Rev. 09.11.2005 AD
01 Approval 20.09.2005 AD
NO. Alteration Date Name
Date 06.06.2005
Drawn ADAM
Check GROHMANN
Std.
US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: Iiss.for
Iiss.by:
AREVA
CIRCUIT DIAGRAM
CONTROL
PANEL
12
50.3023.01.A3.741.223
S =L12
/ M05
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 21
135 Sh.



D0978102 Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115ND =L12 M06 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

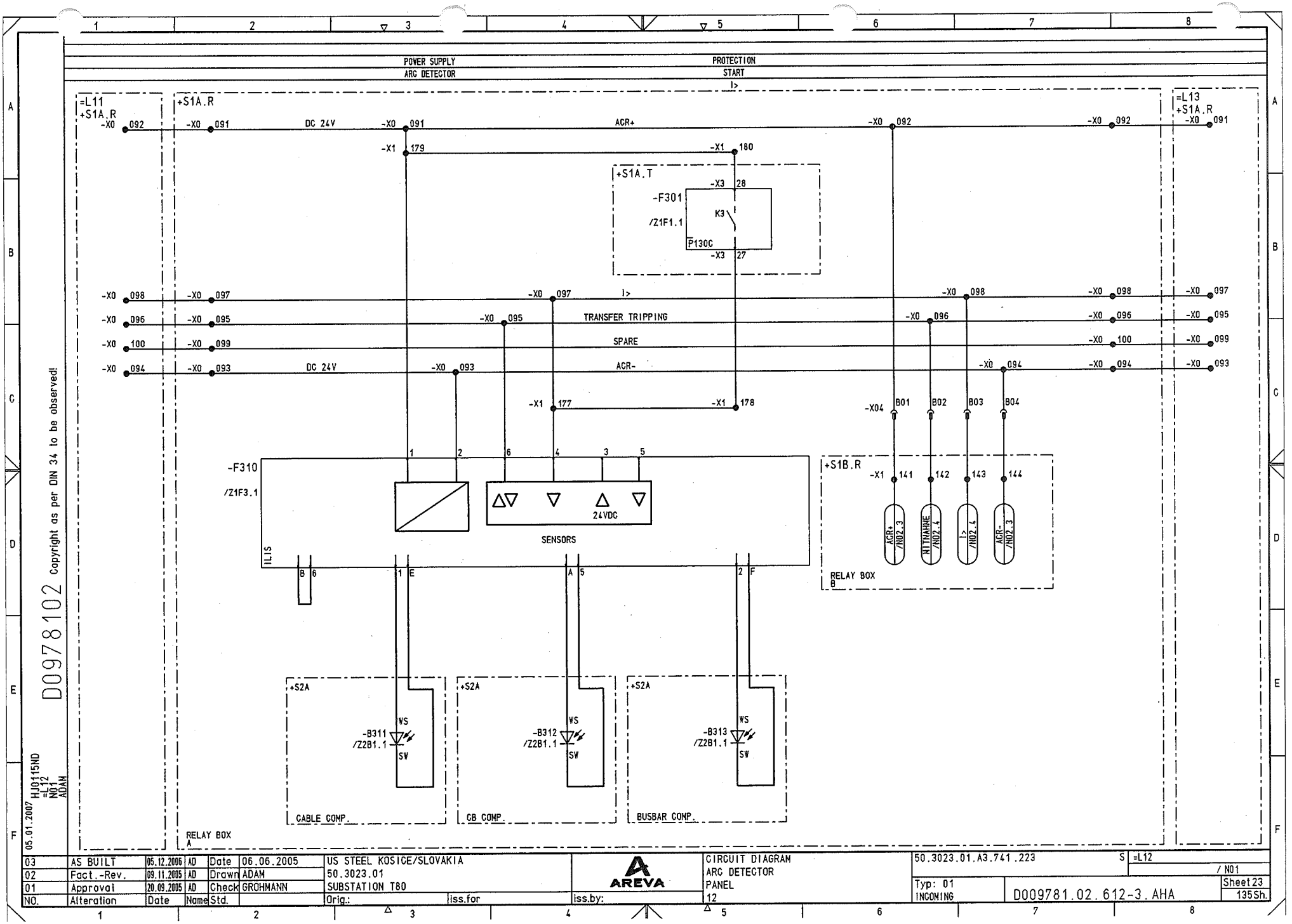
CIRCUIT DIAGRAM
CONTROL
PANEL
12

50.3023.01.A3.741.223 S =L12 / M06

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 22 135Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

CIRCUIT DIAGRAM
ARC DETECTOR
PANEL
12

50.3023.01.A3.741.223 S =L12 / N01

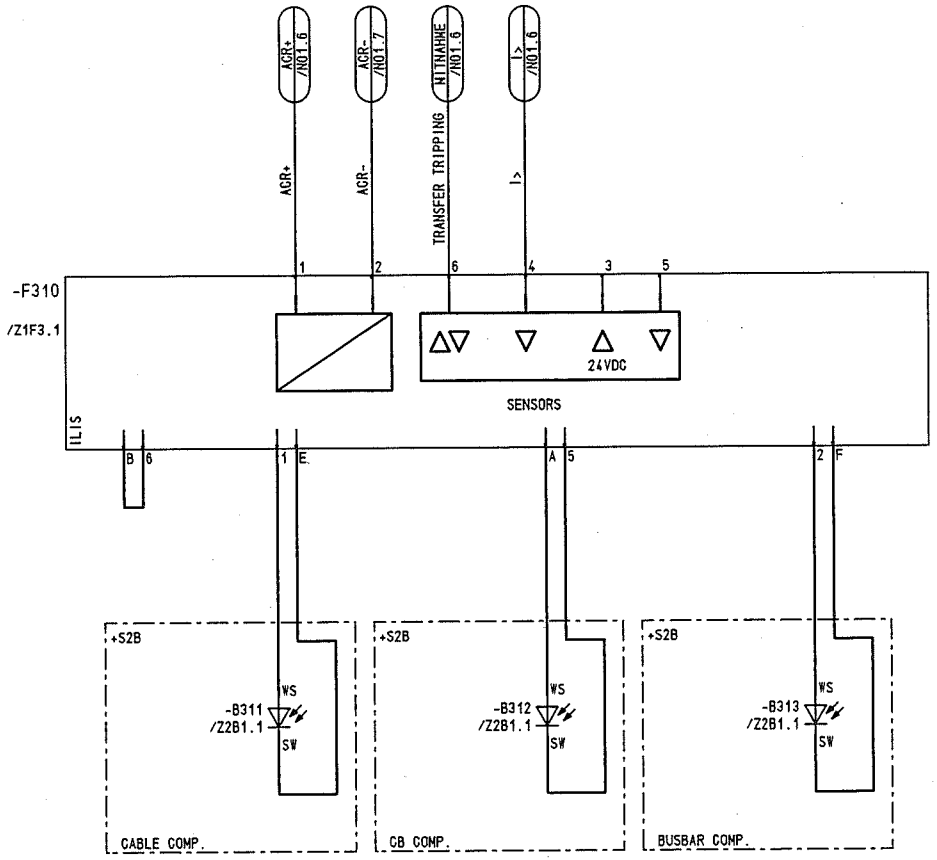
Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 23
135 Sh.

POWER SUPPLY
ARC DETECTOR

+S1B.R

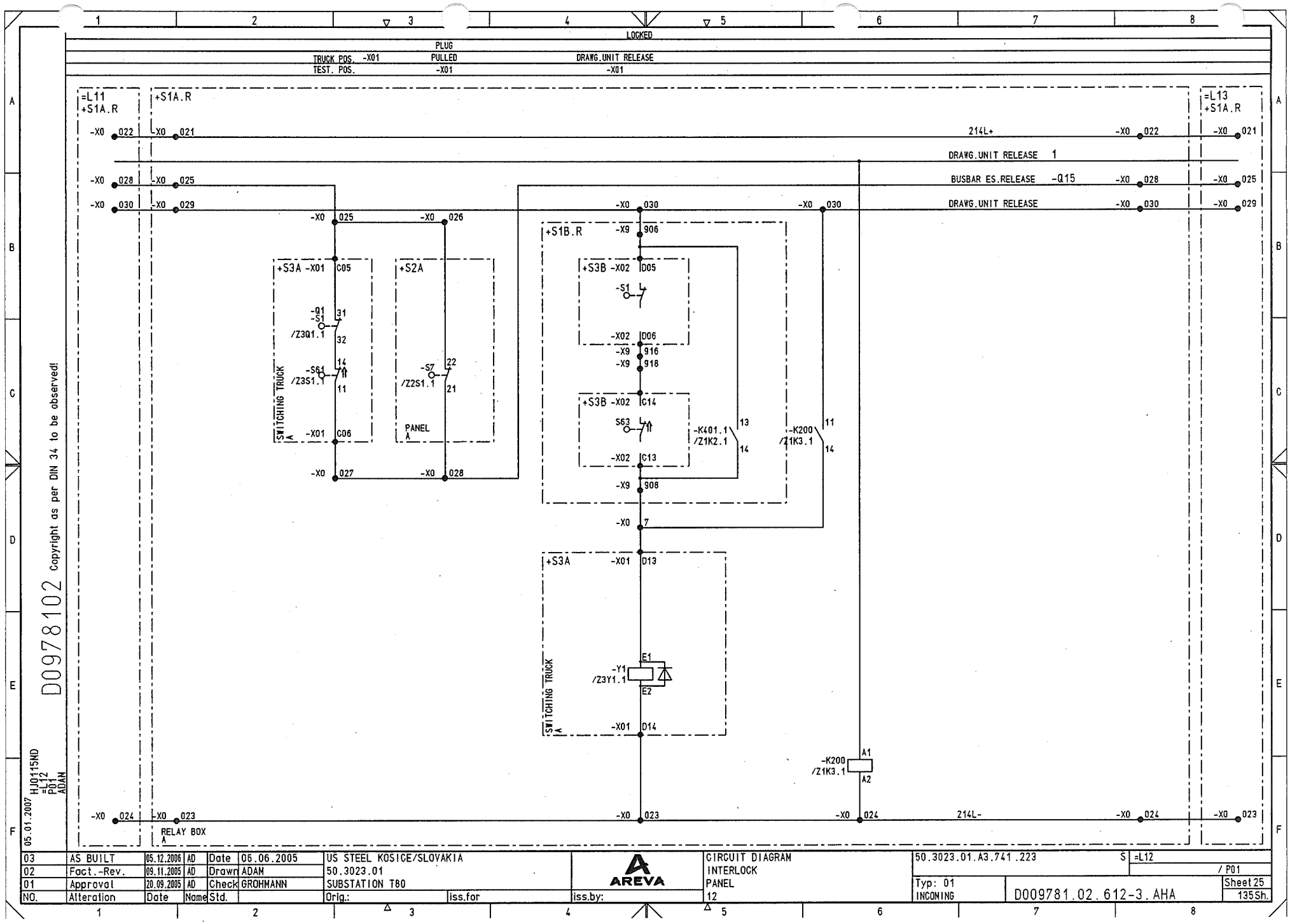


RELAY BOX B

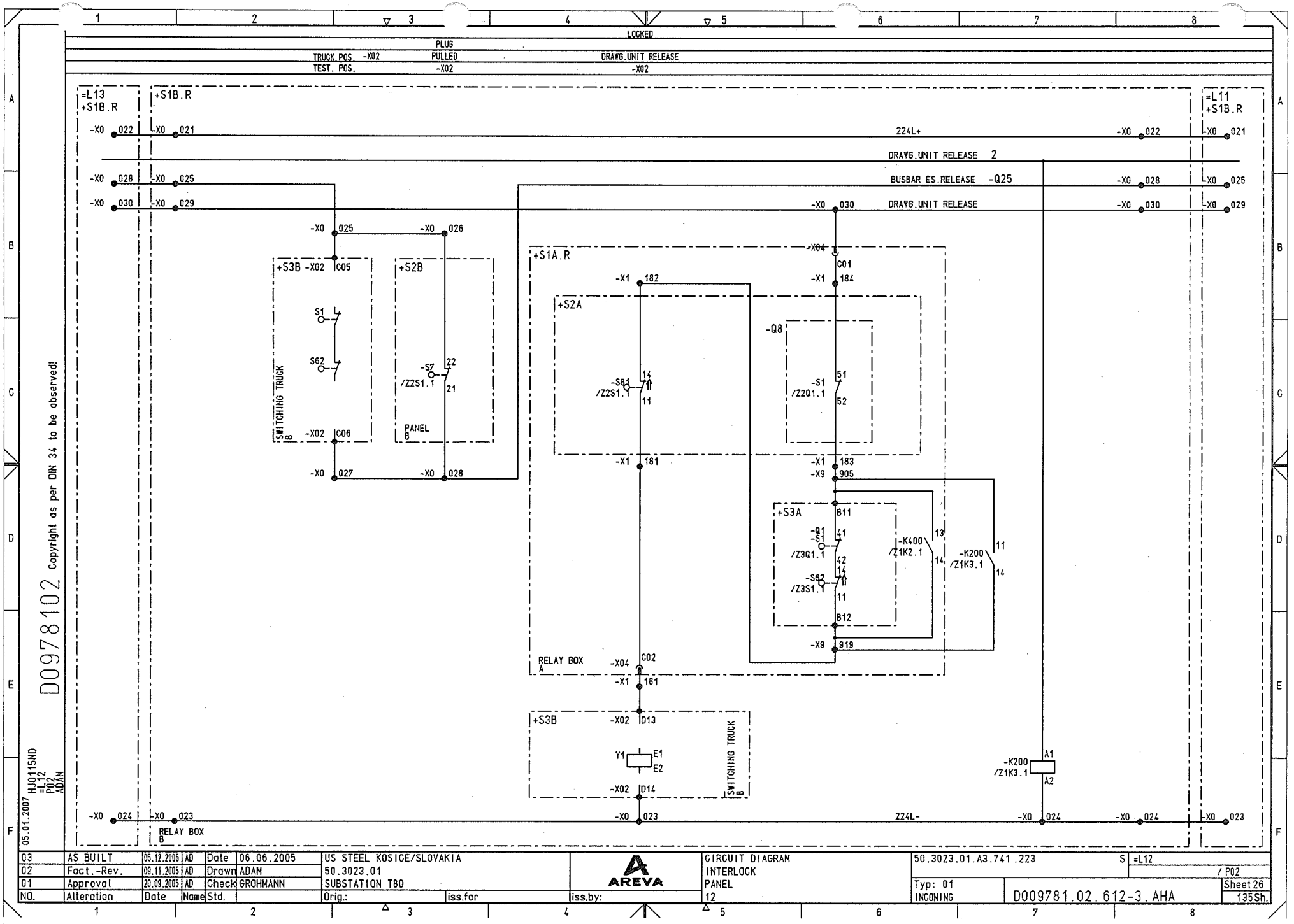
D0097810 2 Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115ND =L12 N02 ADAM

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	CIRCUIT DIAGRAM	50.3023.01.A3.741.223 S =L12
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		ARC DETECTOR	/ N02
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL	Sheet 24
NO.	Alteration	Date	Name	Std.		Orig.: iss.for	iss.by:	12	Typ: 01 INCOMING D009781.02.612-3.AHA 135 Sh.



03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	CIRCUIT DIAGRAM	50.3023.01.A3.741.223	S	=L12
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		INTERLOCK			/ P01
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL	Typ: 01	D009781.02.612-3.AHA	Sheet 25
NO.	Alteration	Date	Name	Std.		Orig.: iss.for	iss.by:	12	INCOMING		135 Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

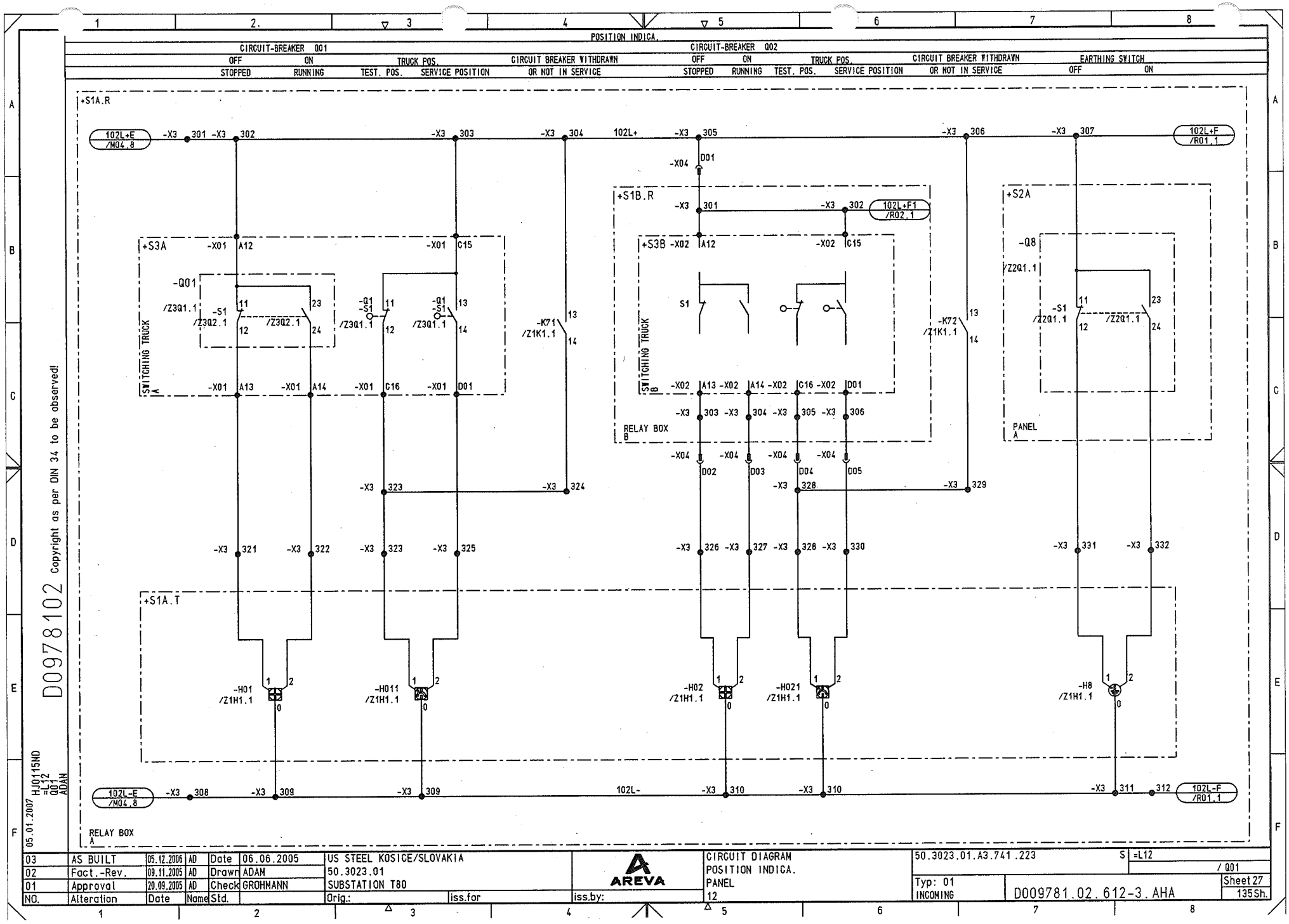
CIRCUIT DIAGRAM
INTERLOCK
PANEL
12

50.3023.01.A3.741.223 S =L12 / P02

Typ: 01
INCOMING

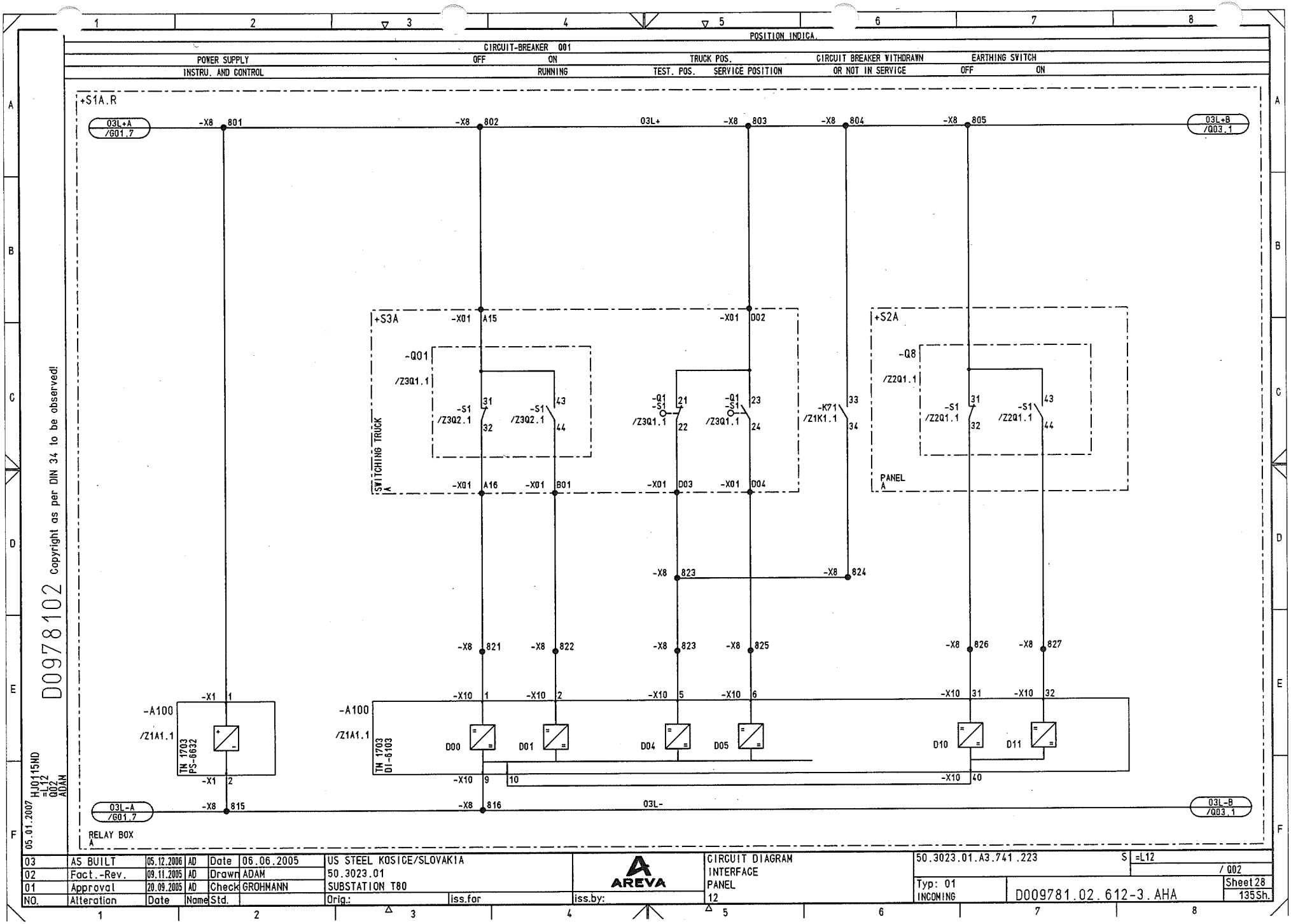
D009781.02.612-3.AHA

Sheet 26
135Sh.



03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	CIRCUIT DIAGRAM POSITION INDICA. PANEL 12	50.3023.01.A3.741.223
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01			S =L12 / Q01
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80			Typ: 01 INCOMING
NO.	Alteration	Date	Name	Std.		Orig.: iss.for	iss.by:		D009781.02.612-3.AHA

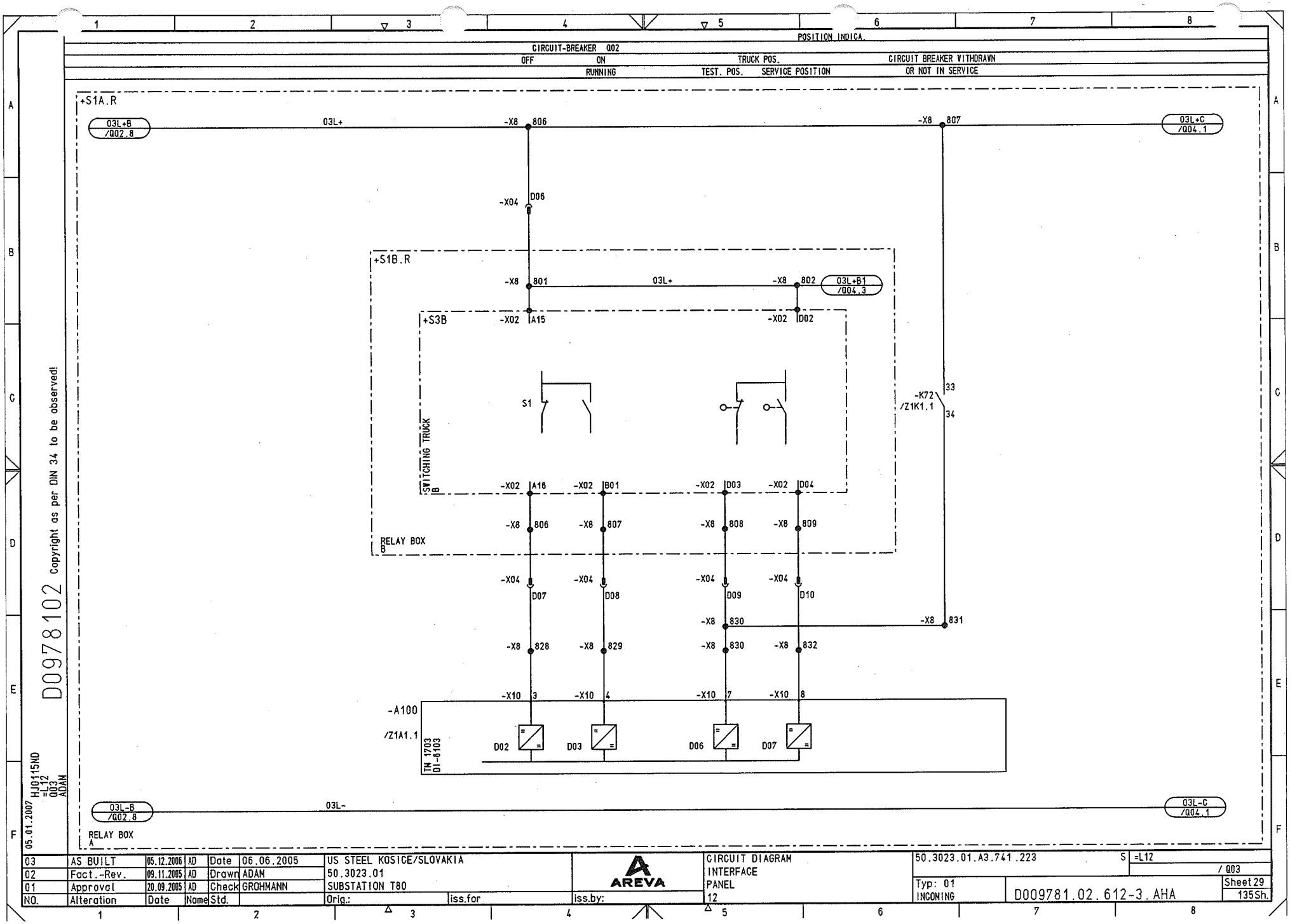
Sheet 27
135 Sh.



D0097810 2 Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115MD =L12 Q02 ADAN

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	CIRCUIT DIAGRAM	50.3023.01.A3.741.223	S	=L12
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		INTERFACE			/ Q02
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL	Typ: 01	D009781.02.612-3.AHA	Sheet 28
NO.	Alteration	Date	Name	Std.		Orig.: iss.for	iss.by:	12	INCOMING		135 Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

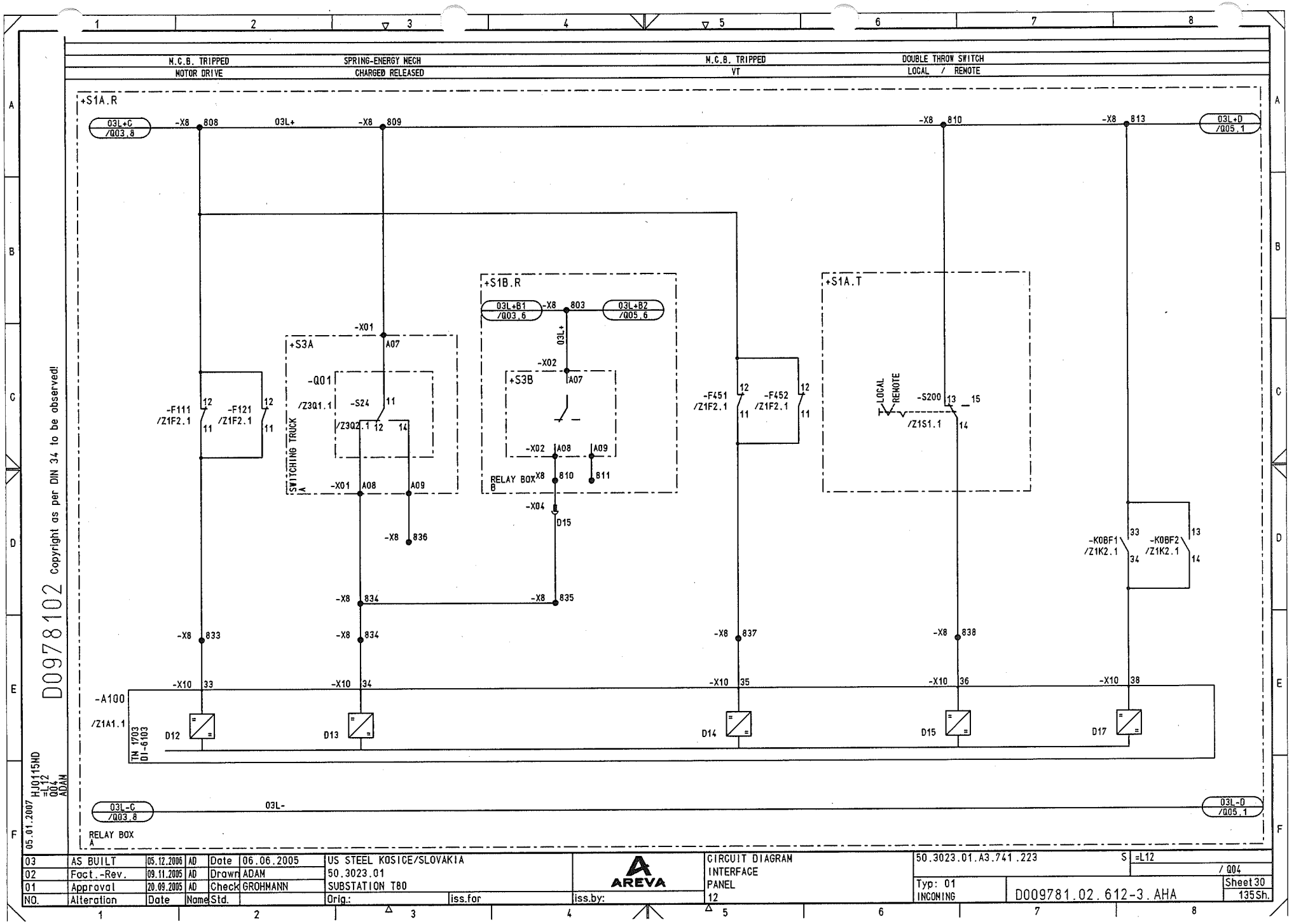
CIRCUIT DIAGRAM
INTERFACE
PANEL
12

50.3023.01.A3.741.223 S =L12 / Q03

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 29
135Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

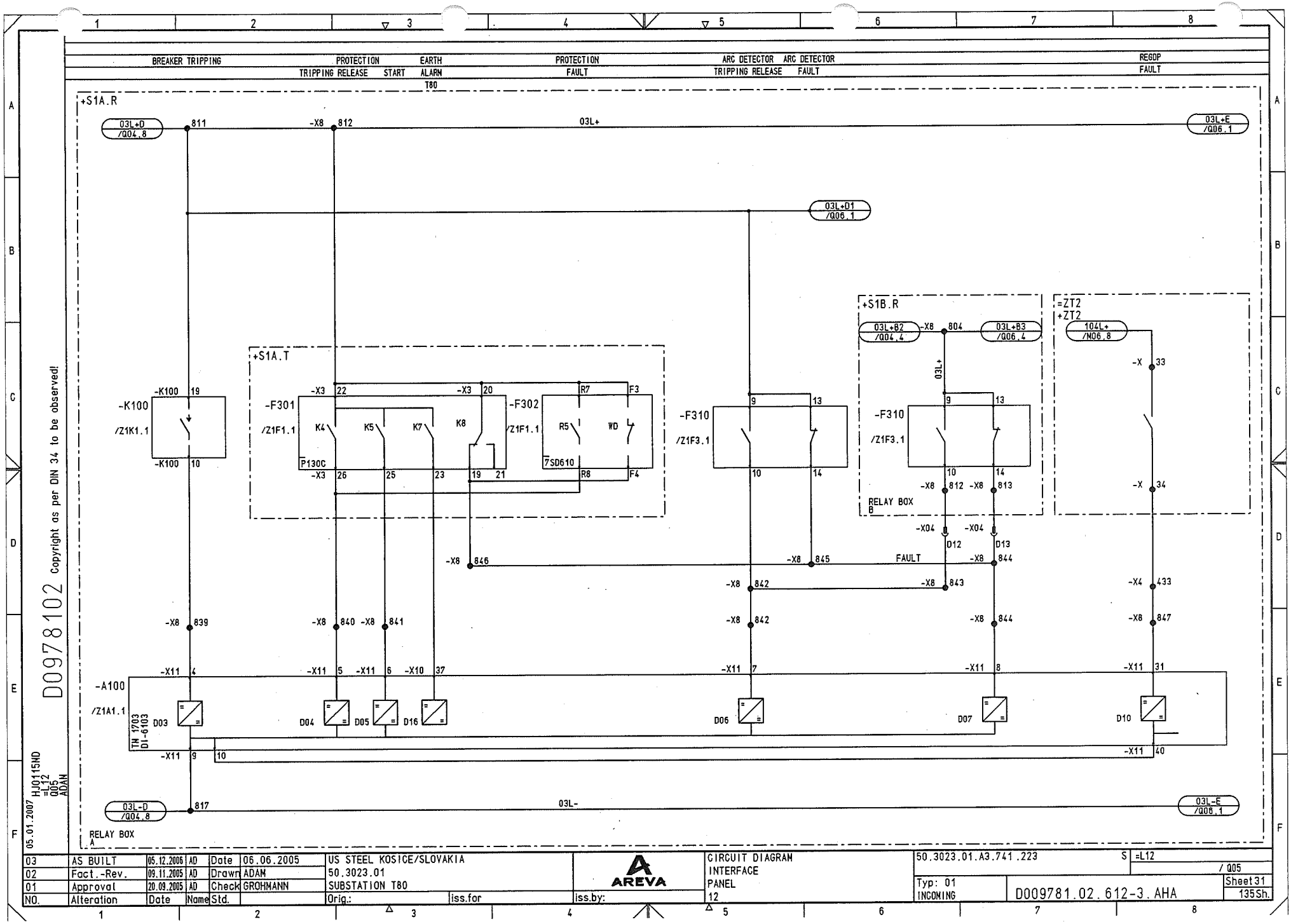
CIRCUIT DIAGRAM
INTERFACE
PANEL
12

50.3023.01.A3.741.223 S =L12 / Q04

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 30
135Sh.



D0097810 2 Copyright as per DIN 34 to be observed!

HJ0115ND
=L12
Q05
ADAM
05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

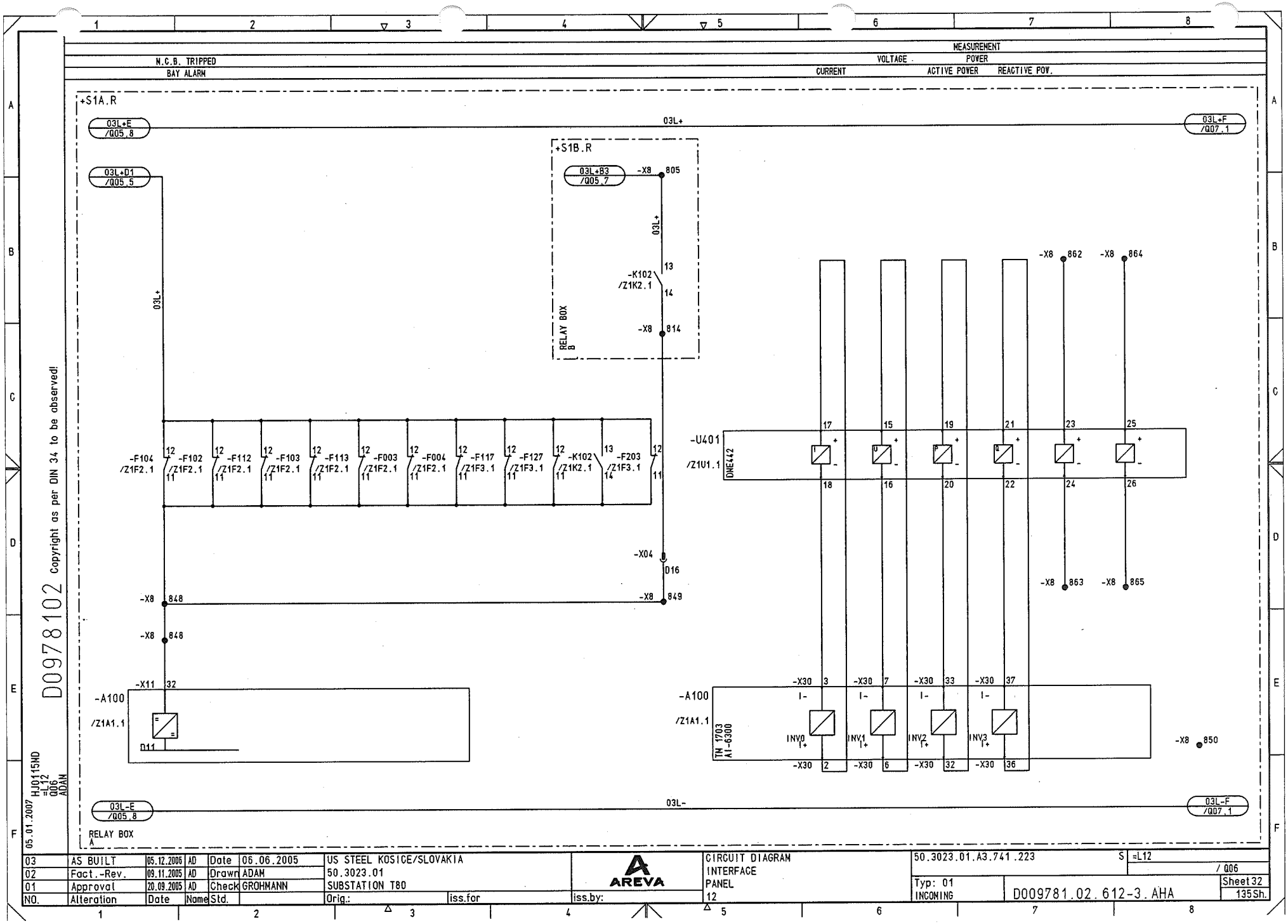
CIRCUIT DIAGRAM
INTERFACE
PANEL
12

50.3023.01.A3.741.223 S =L12 / Q05

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 31
135 Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

CIRCUIT DIAGRAM
INTERFACE
PANEL
12

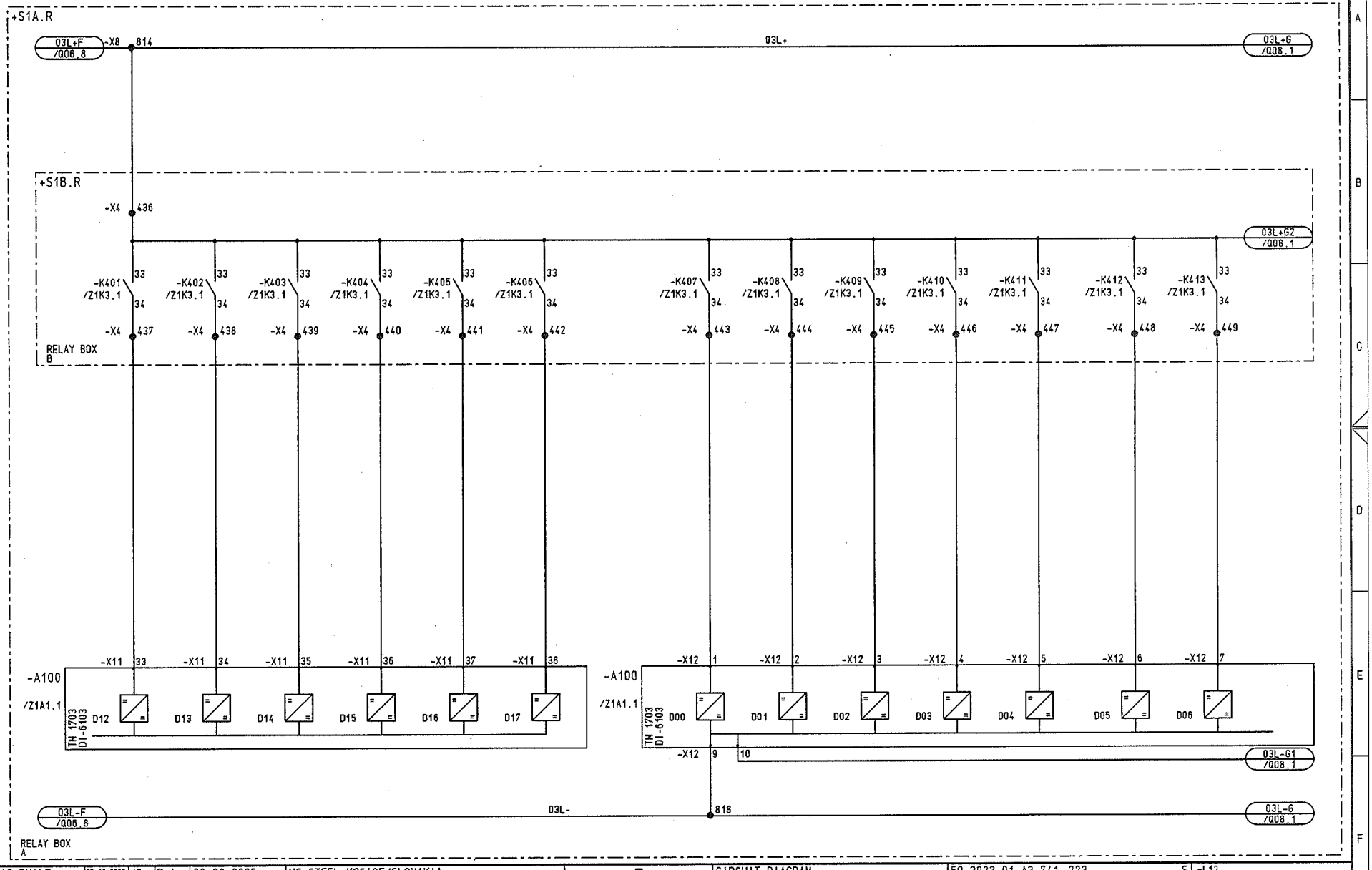
50.3023.01.A3.741.223 S =L12 / Q06

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 32
135 Sh.

POWER TRANSFORMER											NEUTR. TRANSFORMER	
BUCHHOLTZ PROTECTION ALARM	BUCHHOLTZ PROTECTION TRIP	OIL TEMP. PROTECTION ALARM	OIL TEMP. PROTECTION TRIP	OIL LEVEL	PRESSURE RELIEF RELAY TRIP	WINDING TEMP. PROTECTION ALARM	WINDING TEMP. PROTECTION TRIP	COOLING FAILURE	COOLING IN OPERATION	COOLING OFF	TEMPERATURE PROTECTION ALARM	TEMPERATURE PROTECTION TRIP



D0097810 2 Copyright as per DIN 34 to be observed!

HJ0115MD =L12 Q07 ADAM 05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

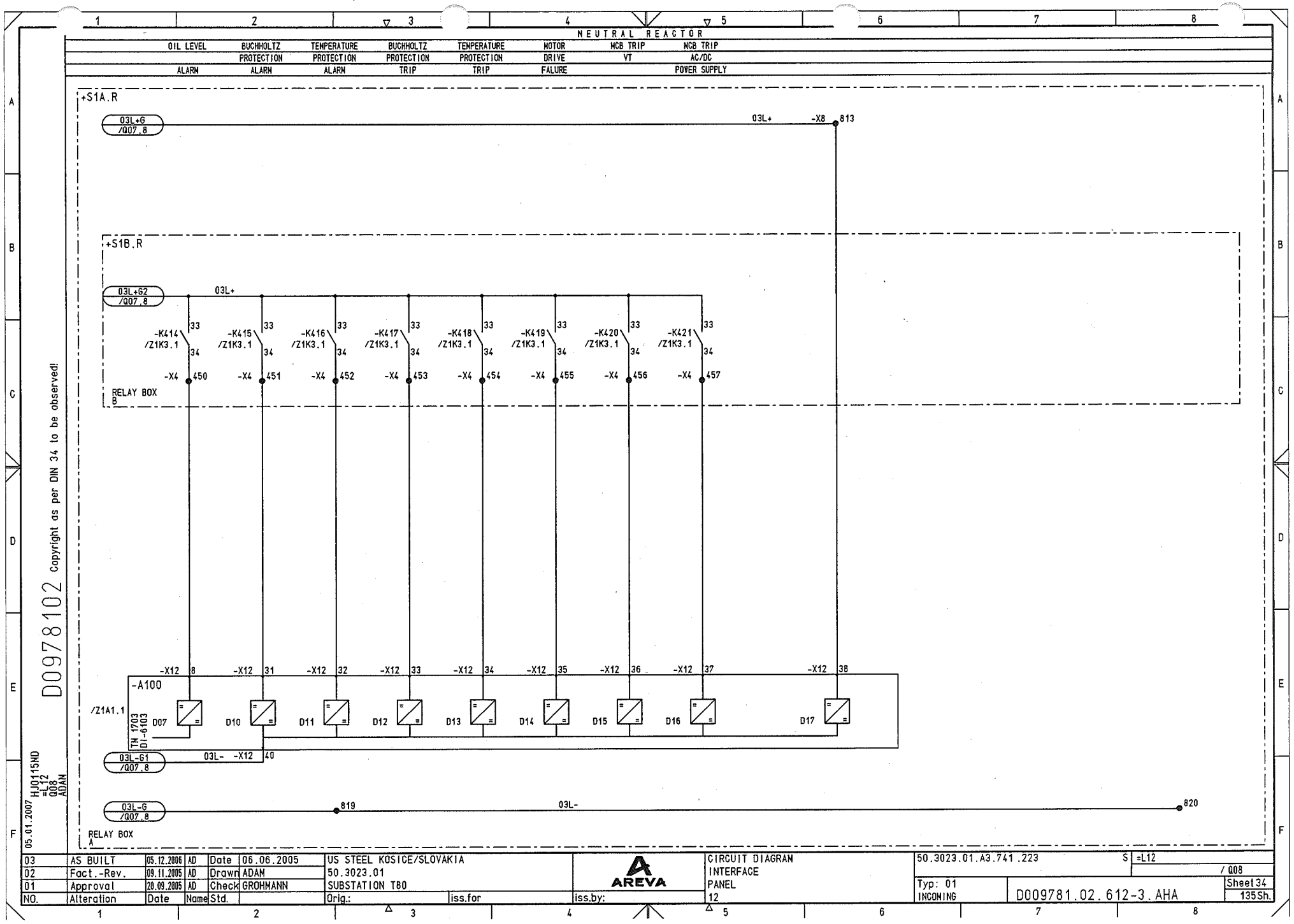
CIRCUIT DIAGRAM
INTERFACE
PANEL
12

50.3023.01.A3.741.223 S =L12 / Q07

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 33
135 Sh.

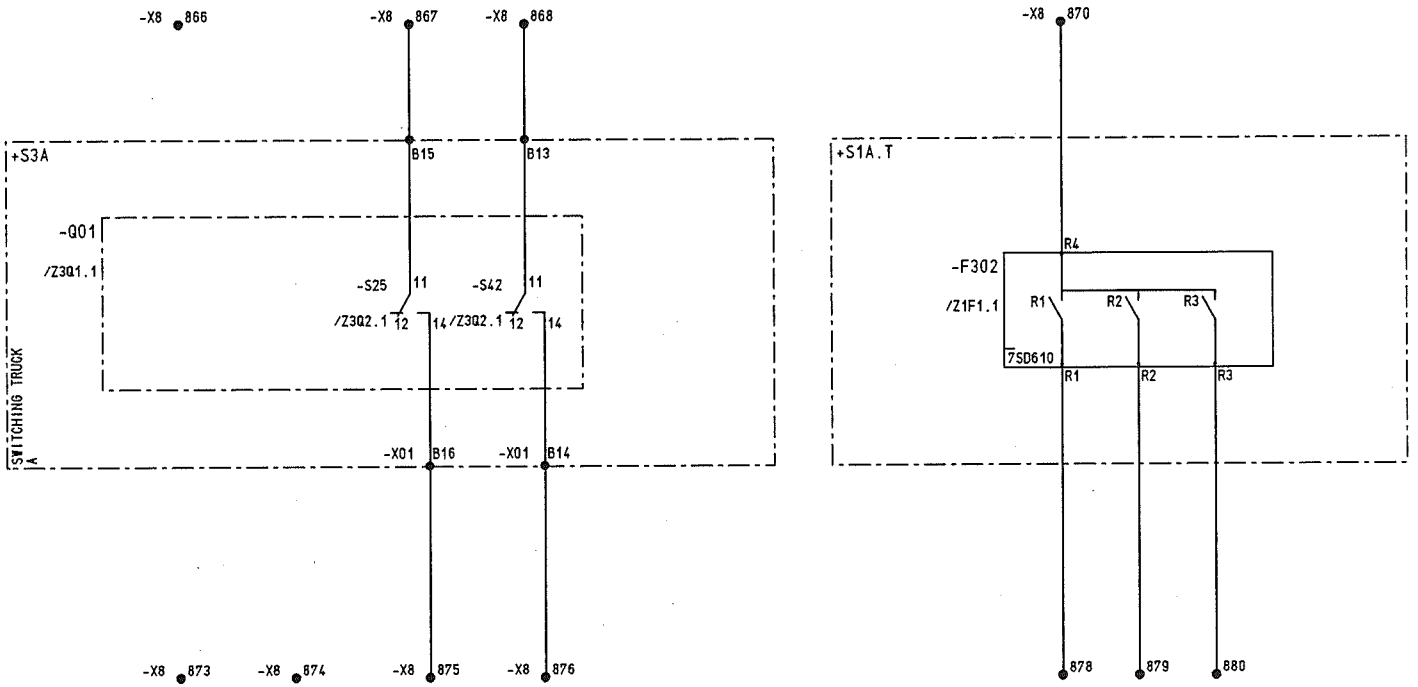

NEUTRAL REACTOR
OIL LEVEL ALARM
BUCHHOLTZ PROTECTION ALARM
TEMPERATURE PROTECTION ALARM
BUCHHOLTZ PROTECTION TRIP
TEMPERATURE PROTECTION TRIP
MOTOR DRIVE FALURE
MCB TRIP VT
MCB TRIP AC/DC POWER SUPPLY
+S1A.R
03L+G /Q07.8
03L+ -X8 813
+S1B.R
03L+G2 /Q07.8
03L+
-K414 /Z1K3.1
-K415 /Z1K3.1
-K416 /Z1K3.1
-K417 /Z1K3.1
-K418 /Z1K3.1
-K419 /Z1K3.1
-K420 /Z1K3.1
-K421 /Z1K3.1
33
34
-X4 450
-X4 451
-X4 452
-X4 453
-X4 454
-X4 455
-X4 456
-X4 457
RELAY BOX B
-X12 8
-X12 31
-X12 32
-X12 33
-X12 34
-X12 35
-X12 36
-X12 37
-X12 38
-A100
/Z1A1.1
TM 1703 DI-6103
D07
D10
D11
D12
D13
D14
D15
D16
D17
03L-G1 /Q07.8
03L- -X12 40
03L-G /Q07.8
819
03L-
820
RELAY BOX A
D0978102
Copyright as per DIN 34 to be observed!
05.01.2007
HJ0115ND
=L12
Q08
ADAN
03 AS BUILT 05.12.2006 AD
02 Fact.-Rev. 09.11.2005 AD
01 Approval 20.09.2005 AD
NO. Alteration Date Name
Date 06.06.2005
Drawn ADAM
Check GROHMANN
Std.
US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for
iss.by:
AREVA
CIRCUIT DIAGRAM
INTERFACE
PANEL
12
50.3023.01.A3.741.223
S =L12
/ Q08
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 34
135 Sh.

POSITION INDICA.

SPRING CHARED ACTUATION ON/OFF

free OUTPUT

+S1A.R



RELAY BOX
A

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ0115ND =L12 Q09 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

CIRCUIT DIAGRAM
SPARE CONTACTS
PANEL
12

50.3023.01.A3.741.223 S =L12 / Q09

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 35 135Sh.

POSITION INDIGA.

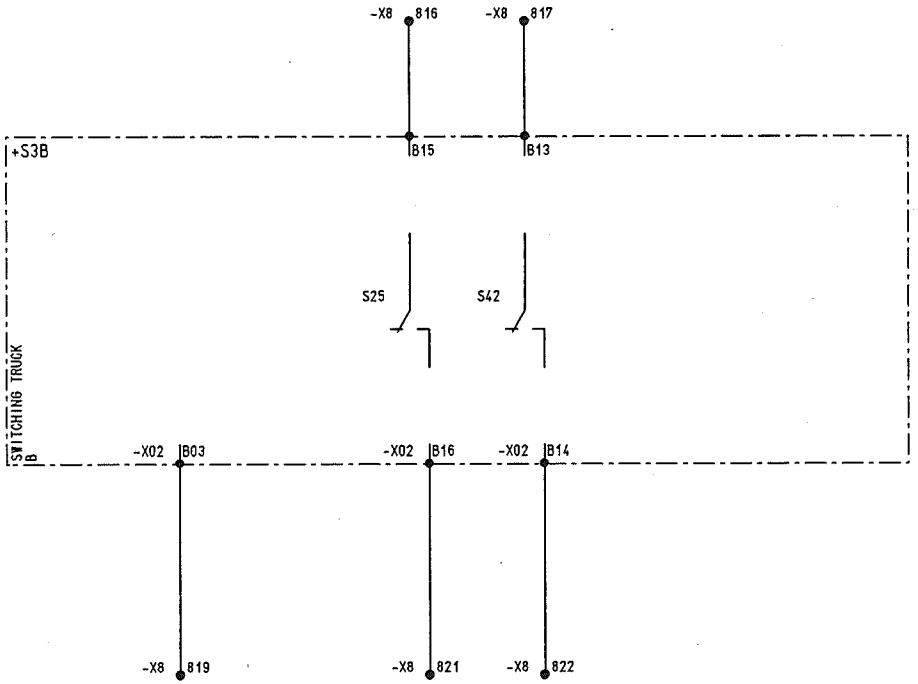
SPARE CONTACTS

Q02

SPRING CHARED ACTUATION

ON/OFF

+S1B.R



RELAY BOX

B

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115MD =L12 Q10 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

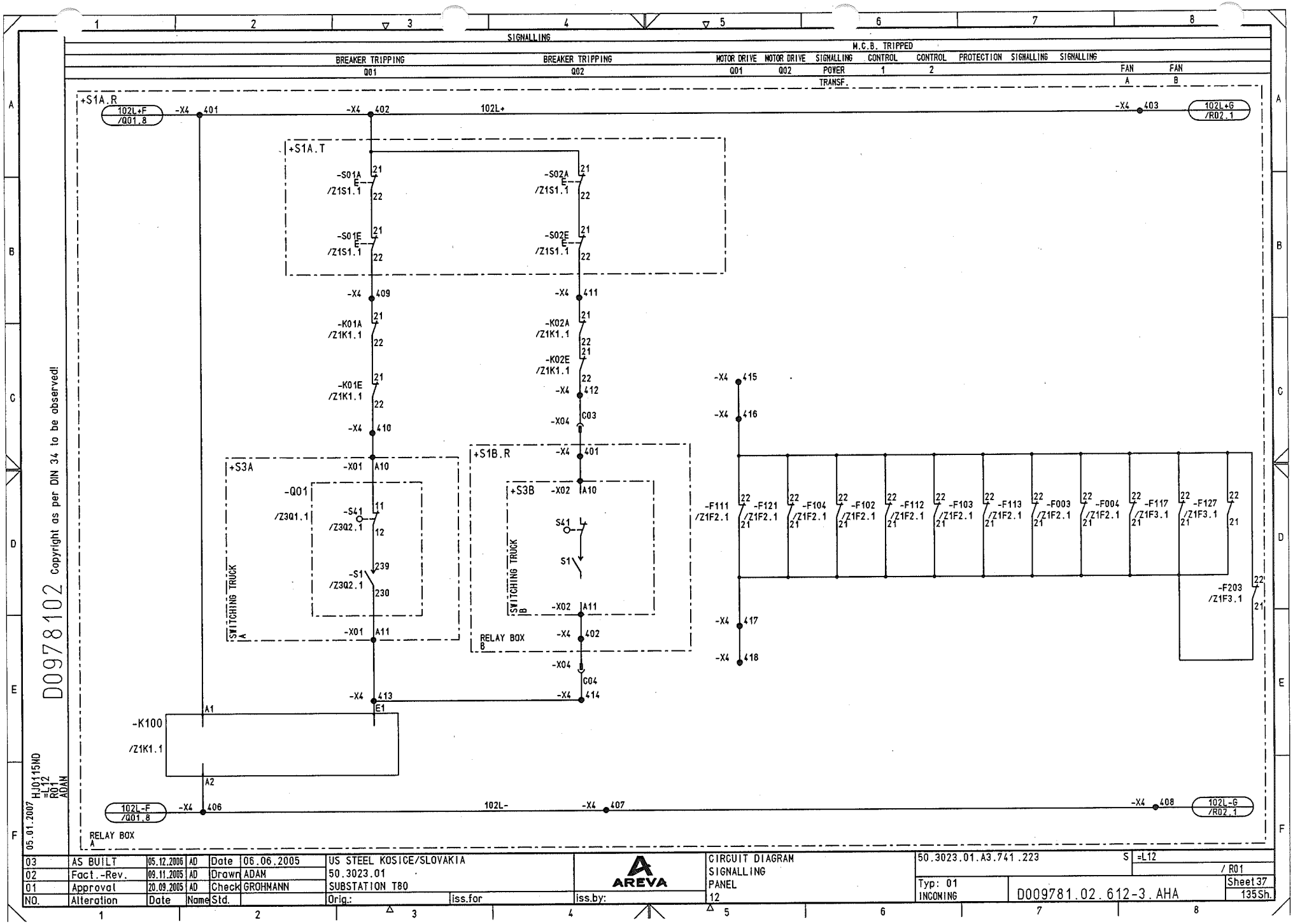
CIRCUIT DIAGRAM
SPARE CONTACTS
PANEL
12

50.3023.01.A3.741.223 S =L12 / Q10

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 36
135 Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

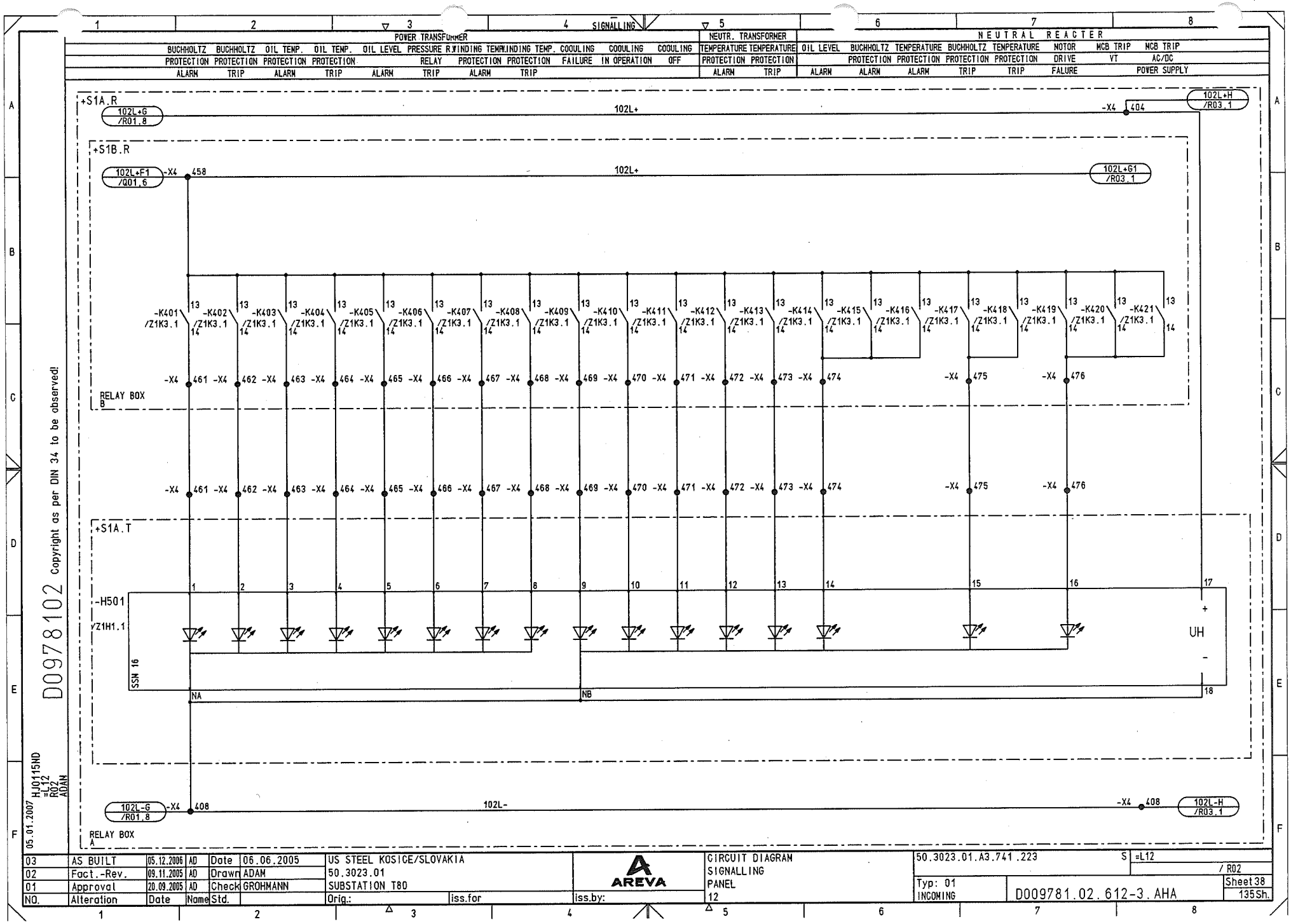
CIRCUIT DIAGRAM
SIGNALLING
PANEL
12

50.3023.01.A3.741.223 S =L12 / R01

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 37 135 Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

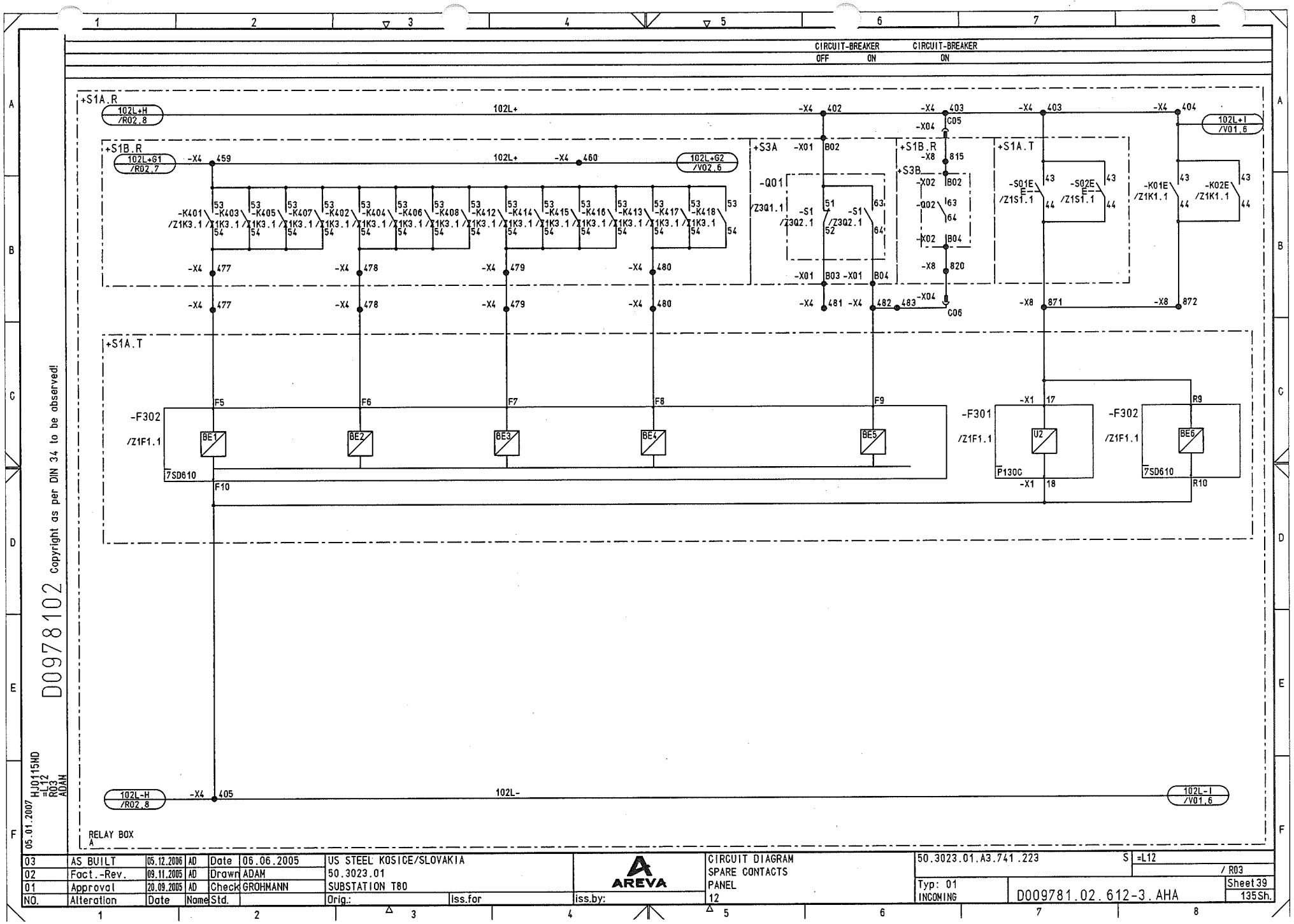
CIRCUIT DIAGRAM
SIGNALLING
PANEL
12

50.3023.01.A3.741.223 S =L12 / R02

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 38 135 Sh.



Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 H_J0115ND =L12 R03 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	Iss.for	Iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

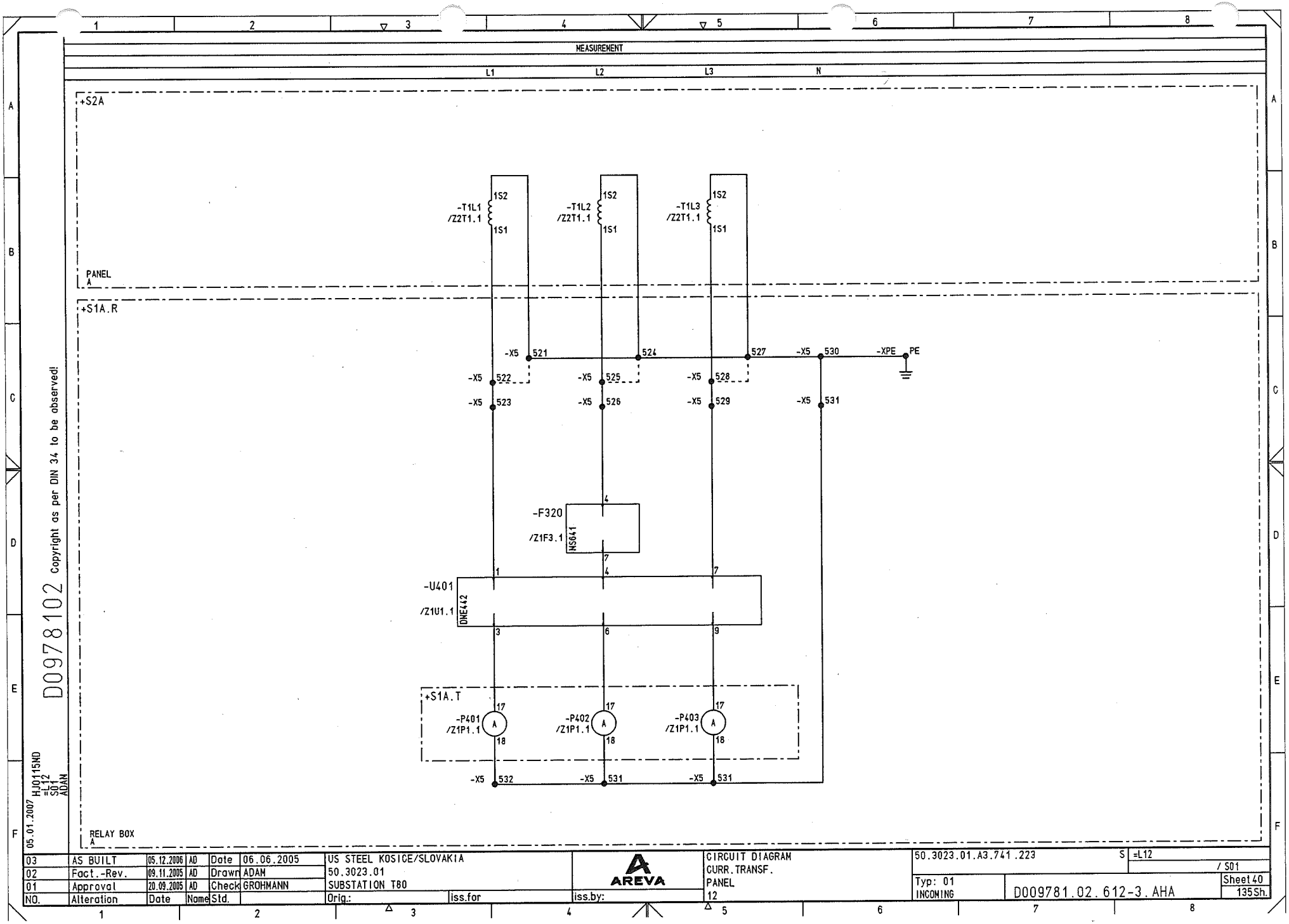
CIRCUIT DIAGRAM
SPARE CONTACTS
PANEL
12

50.3023.01.A3.741.223 S =L12 / R03

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 39 135Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

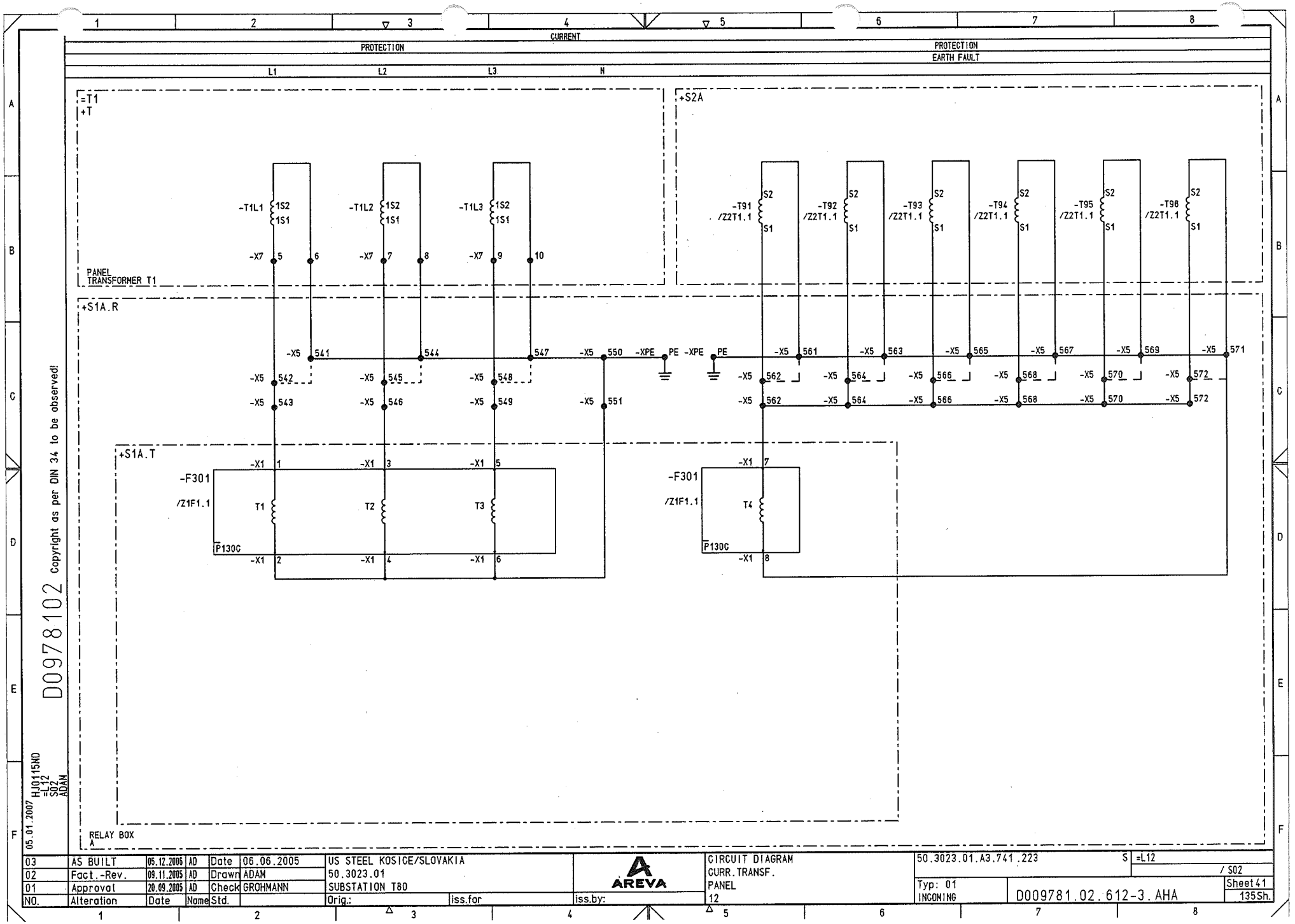
CIRCUIT DIAGRAM
CURR. TRANSF.
PANEL
12

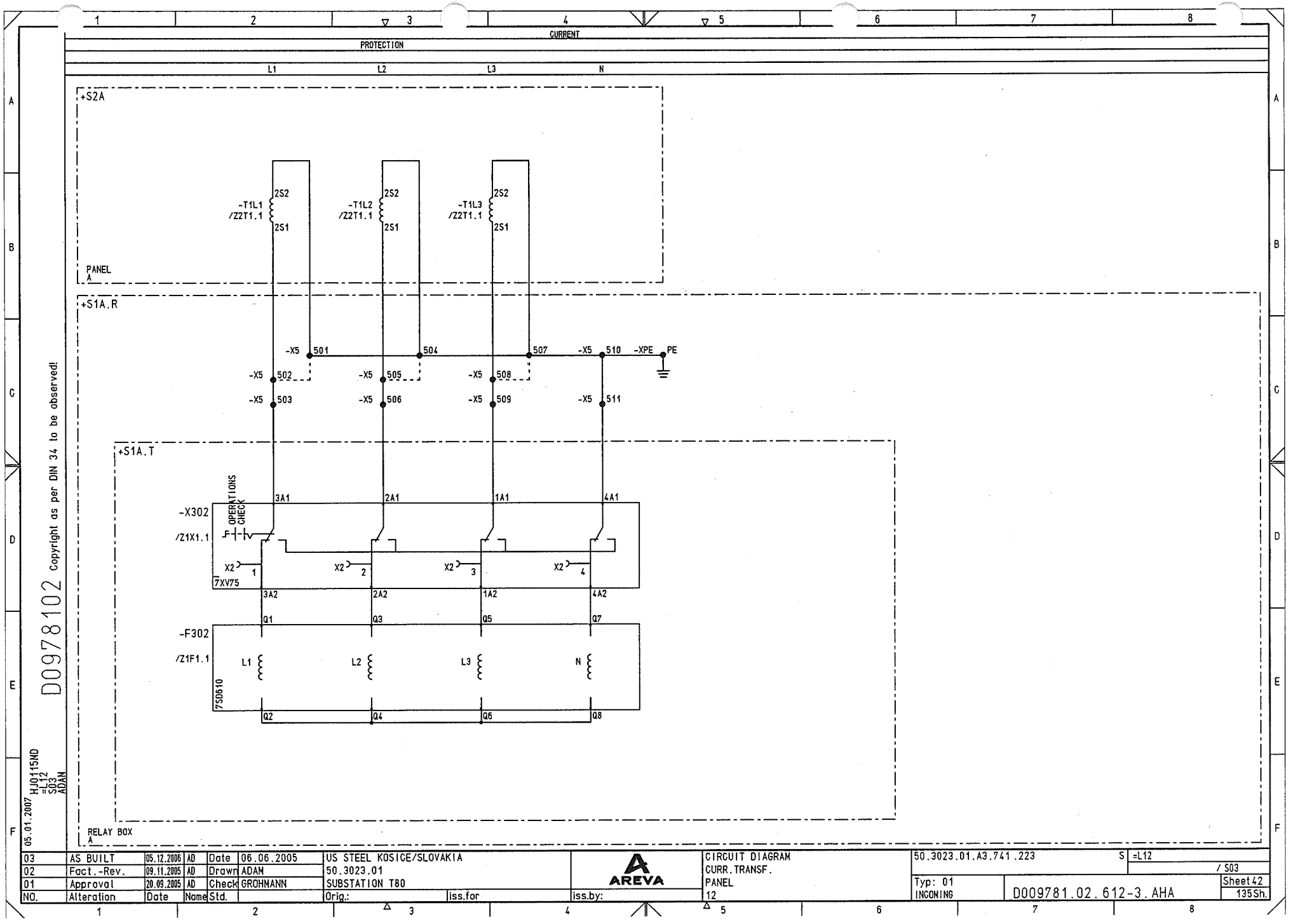
50.3023.01.A3.741.223 S =L12 / S01

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 40
135 Sh.


CURRENT
PROTECTION
PROTECTION
EARTH FAULT
L1
L2
L3
N
=T1
+T
-T1L1
-T1L2
-T1L3
1S2
1S1
-X7
5
6
7
8
9
10
PANEL
TRANSFORMER T1
+S2A
-T91
/Z2T1.1
-T92
/Z2T1.1
-T93
/Z2T1.1
-T94
/Z2T1.1
-T95
/Z2T1.1
-T96
/Z2T1.1
S2
S1
+S1A.R
-X5
541
542
543
544
545
546
547
548
549
550
551
-XPE
PE
561
562
563
564
565
566
567
568
569
570
571
572
+S1A.T
-X1
1
2
3
4
5
6
7
8
-F301
/Z1F1.1
T1
T2
T3
T4
P130C
RELAY BOX
A
D0097810 2
Copyright as per DIN 34 to be observed!
05.01.2007
HJ0115ND
=L12
S02
ADAN
03 AS BUILT 05.12.2006 AD
02 Fact.-Rev. 09.11.2005 AD
01 Approval 20.09.2005 AD
NO. Alteration Date Name
Date 06.06.2005
Drawn ADAM
Check GROHMANN
Std.
US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:
AREVA
CIRCUIT DIAGRAM
CURR.TRANSF.
PANEL
12
50.3023.01.A3.741.223
S
=L12
/ S02
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 41
135Sh.



Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 S03 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

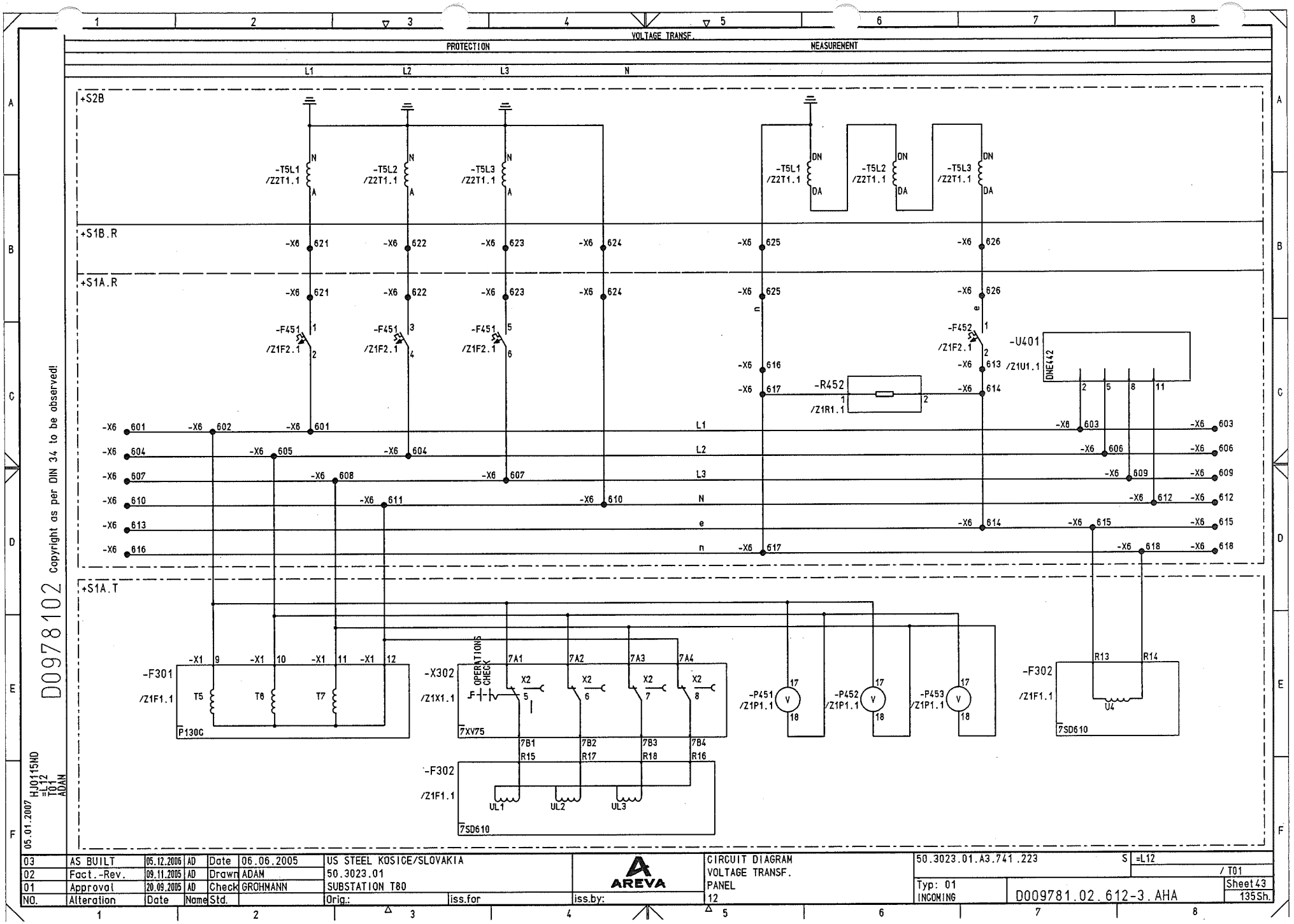
CIRCUIT DIAGRAM
CURR.TRANSF.
PANEL
12

50.3023.01.A3.741.223 S =L12 / S03

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 42
135 Sh.



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

CIRCUIT DIAGRAM
VOLTAGE TRANSF.
PANEL
12

50.3023.01.A3.741.223 S =L12 / T01

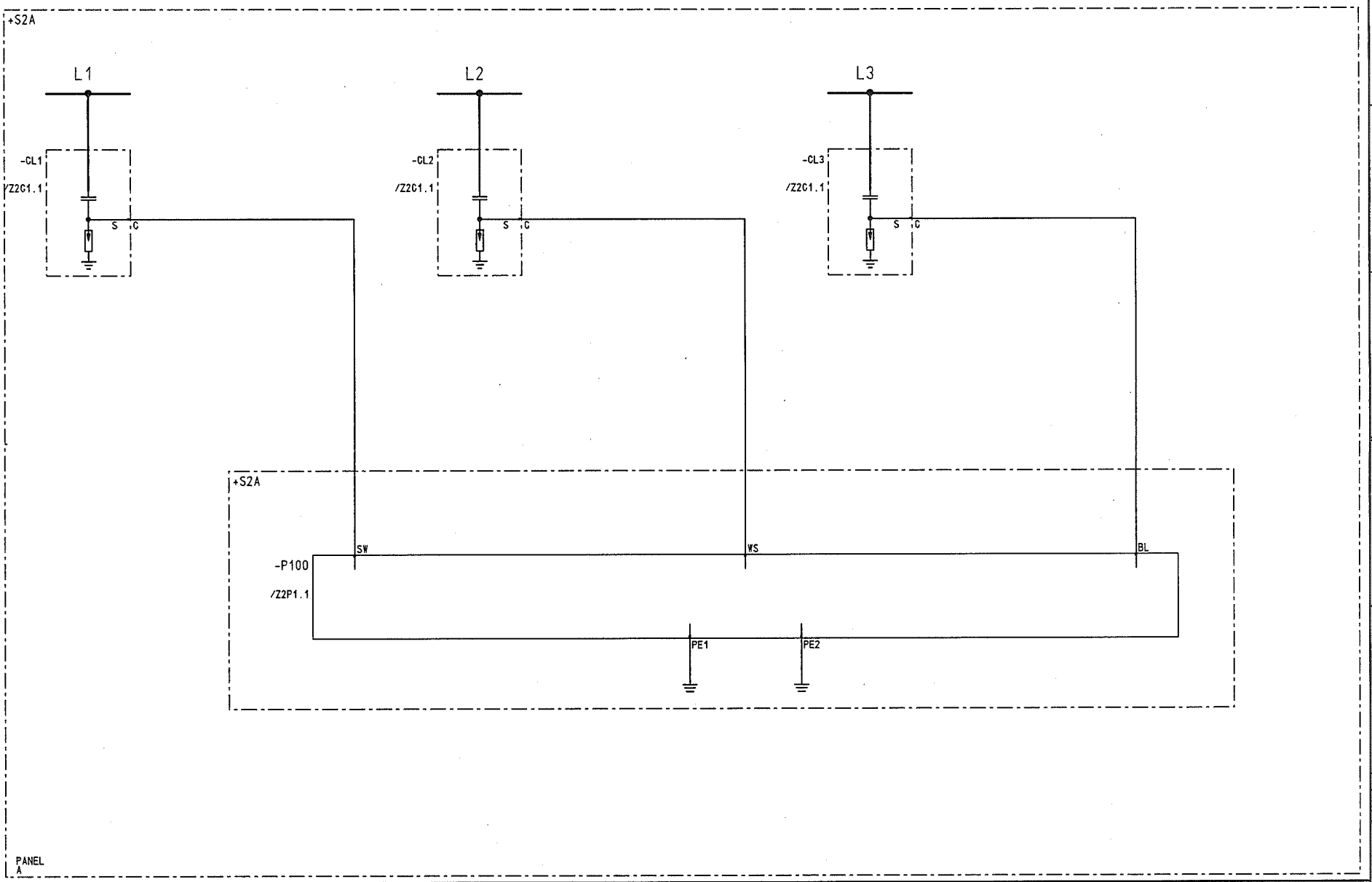
Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 43
135 Sh.

CAPACITIVE VOLTAGE INDICATION (VDS)

CAP. TAP ON IVIS POST INSULATOR	DISPLAY	CAP. TAP ON IVIS POST INSULATOR	DISPLAY	CAP. TAP ON IVIS POST INSULATOR	DISPLAY



Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 T02 ADAN

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

CIRCUIT DIAGRAM
IVIS
PANEL
12

50.3023.01.A3.741.223 S =L12 / T02

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 44
135 Sh.

SPARE CONTACTS

CIRCUIT-BREAKER Q01			EARTHING SWITCH	DOUBLE THROW SWITCH
OFF	OFF	OFF	TEST. POS. TEST. POS.	ON	LOCAL / REMOTE

=L14 +S1A.R -X9 915

=L10 +S1A.R -X8 858

=L10 +S1A.R -X8 860

+S1A.R

-X9 901 -X9 902 -X9 904 -X9 906 -X9 907 -X9 908 -X9 909 -X9 910 -X9 911 -X9 912 -X9 913 -X9 914

102L+ /R03.8

102L+

-K400 /Z1K2.1 23 24

-K400 /Z1K2.1 33 34

-K400 /Z1K2.1 43 44

-X01

+S3A -X01 B05 B09 C11 D05 D09 C13

+S2A

+S1A.T

-Q01 /Z3Q1.1

-S1 /Z3Q2.1 71 72 91 92 111 112

-Q1 -S1 /Z3Q1.1 51 52 -Q1 -S1 /Z3Q1.1 61 62

-S63 /Z3S1.1 14 11

SWITCHING TRUCK A

-X01 B06 B10 C12 D06 D10 C14

-X01

-Q8 /Z2Q1.1

-S1 /Z2Q1.1 63 64

-S7 /Z2S1.1 32 31

PANEL A

LOCAL REMOTE

-S200 9 11

/Z1S1.1 10

-X9 915 -X9 916 -X9 918 -X9 920 -X9 921 -X9 922 -X9 923 -X9 924 -X9 925 -X9 926

-K400 /Z1K2.1 A1 A2

-X9 903 -X9 917 -X9 927

102L-K /V02.5

102L-I /R03.8

-X4 408

RELAY BOX A

=L10 +S1A.R -X1 138

=L14 +S1A.R -X9 914

=L14 +S1A.R -X9 906

D0978102 Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115ND =L12 V01 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	Iss.for	Iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

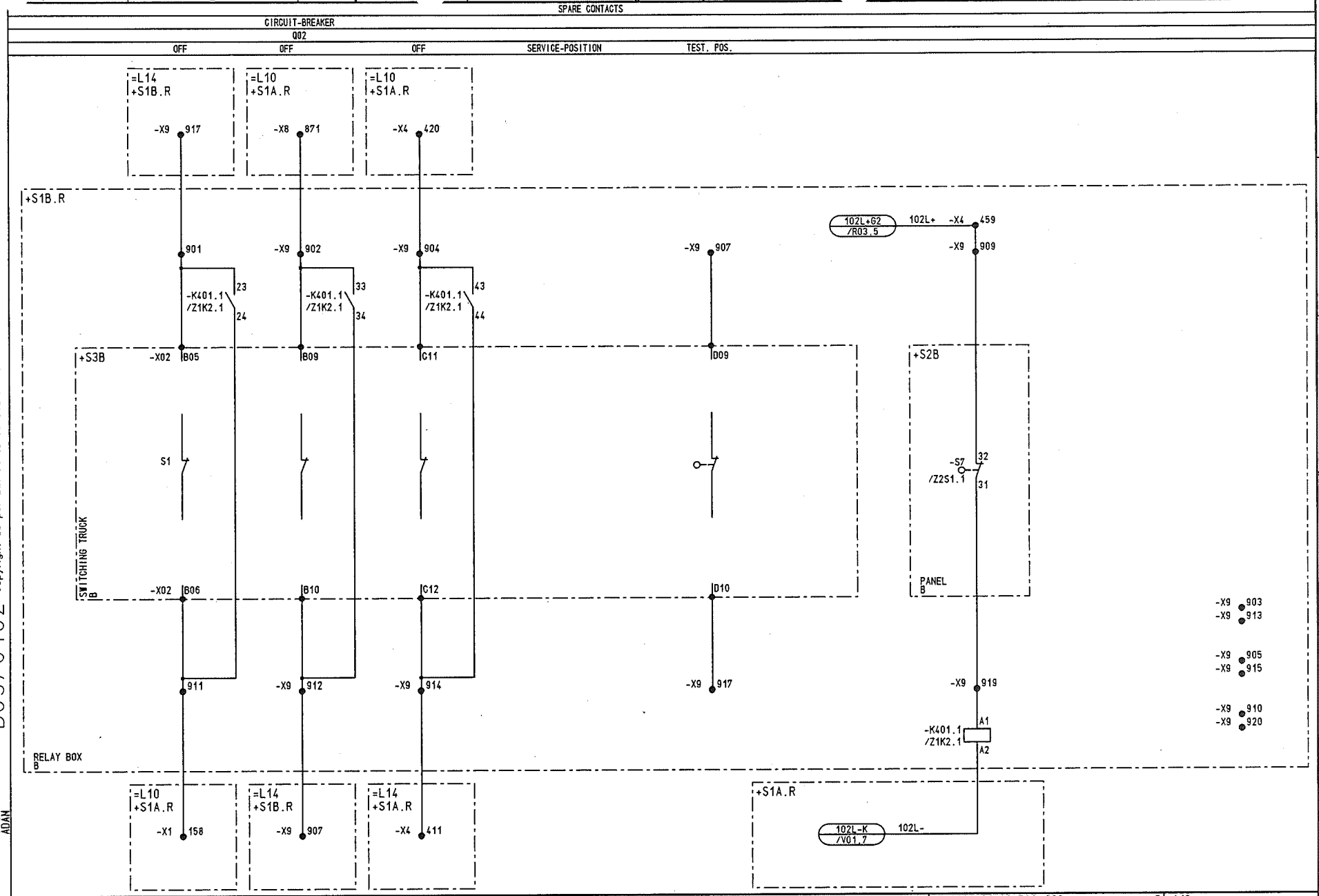
CIRCUIT DIAGRAM
SPARE CONTACTS
PANEL
12

50.3023.01.A3.741.223 S =L12 / V01

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 45 135Sh.



D0978102 Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115ND =L12 V02 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

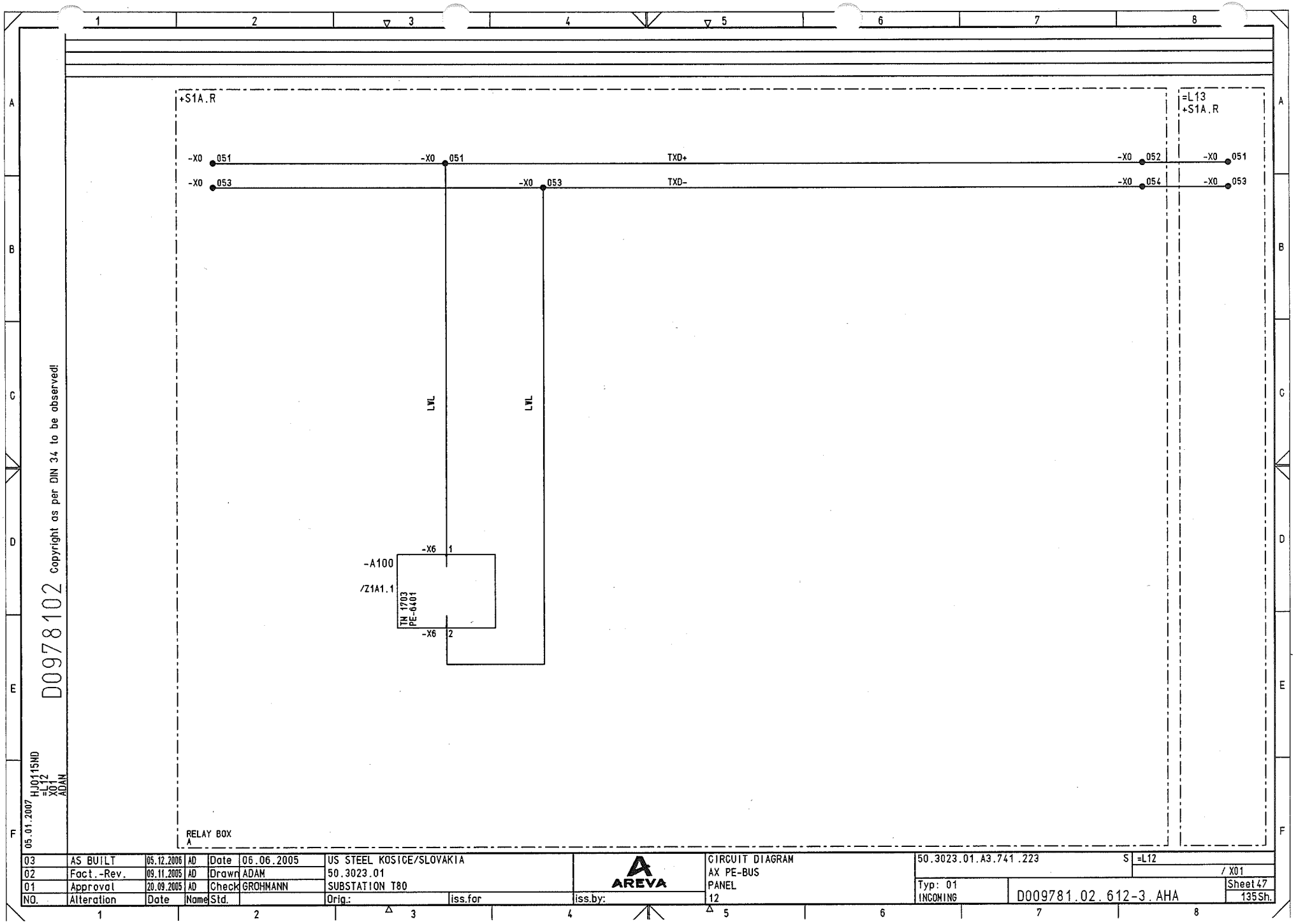
CIRCUIT DIAGRAM
SPARE CONTACTS
PANEL
12

50.3023.01.A3.741.223 S =L12 / V02

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 46
135Sh.


+S1A.R
=L13
+S1A.R
-X0 051
-X0 051
TXD+
-X0 052
-X0 051
-X0 053
-X0 053
TXD-
-X0 054
-X0 053
LWL
LWL
-X6 1
-A100
/Z1A1.1
TN 1703
PE-6401
-X6 2
RELAY BOX
A
D0978102
Copyright as per DIN 34 to be observed!
05.01.2007
H.JO115ND
=L12
X01
ADAN
03 AS BUILT 05.12.2006 AD
02 Fact.-Rev. 09.11.2005 AD
01 Approval 20.09.2005 AD
NO. Alteration Date Name
Date 06.06.2005
Drawn ADAM
Check GROHMANN
Std.
US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.:
iss.for
iss.by:
AREVA
CIRCUIT DIAGRAM
AX PE-BUS
PANEL
12
50.3023.01.A3.741.223
S =L12
/ X01
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 47
135 Sh.

STÜCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	SETTINGS	MANUFACTURER, TYPE, ORDERING DATA MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	INTERFACE MANUF.: VA TECH SAT TYPE TM 1703 PO NO.: SAT 1703 AUTOMATION SYSTEMS : 24-60V DC :				REFERENCES FOR GROUP REPRES. IN CIRCUIT DIAGRAM REFERENCES TO SEP. DOCUMENTS WITH DETAILS OF REPRES. REFERENCES FOR REPRES.OF APPLIANCE CONNECTIONS	

TECHNICAL COMPONENTS	TYP	ORDER NO

APPLICATION	SETTINGS	MOUNTING	BTM IDENTIFIER
		+S1A.R	-A100

/N04.2 /Q02.3 /Q02.1 /Q03.3 /Q04.1 /Q05.1 /Q06.1 /Q06.5 /Q07.1 /Q07.4 /Q08.1 /X01.3

-X1 /Z1A10.1 -X6 /Z1A10.1 -X10 /Z1A11.1 -X11 /Z1A11.3 -X12 /Z1A11.6 -X20 /Z1A12.1 -X30 /Z1A12.4

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z1A1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T8D		

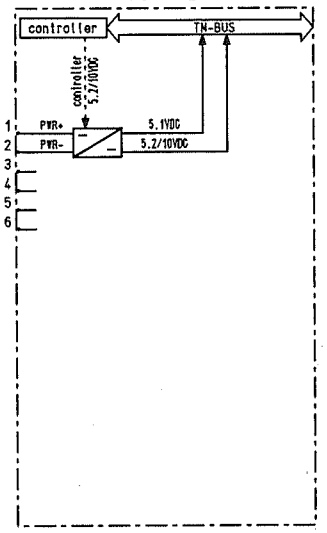
AREVA

LIST OF EQUIPMENT
PANEL
12

50.3023.01.A3.741.223 S =L12
/ Z1A1
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 48
135 Sh.

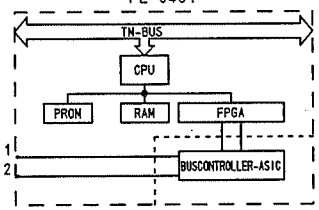
MOUNTING	+S1A.R		APP.
APPA. DESIG	-A100		REF.
PIN	-X1	STATUS	/Z1A1.1
MEANING			REF.
PWR+			/Q02.2
PWR-			/Q02.2
PE			
N/O			
CON			

power supply module
PS-6632



MOUNTING	+S1A.R		APP.
APPA. DESIG	-A100		REF.
PIN	-X6	STATUS	/Z1A1.1
MEANING			REF.
Ax PE-Bus			/X01.3
Ax PE-Bus			/X01.3

peripheral control module
PE-6401



Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115HD =L12 Z1A10 ADAN

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

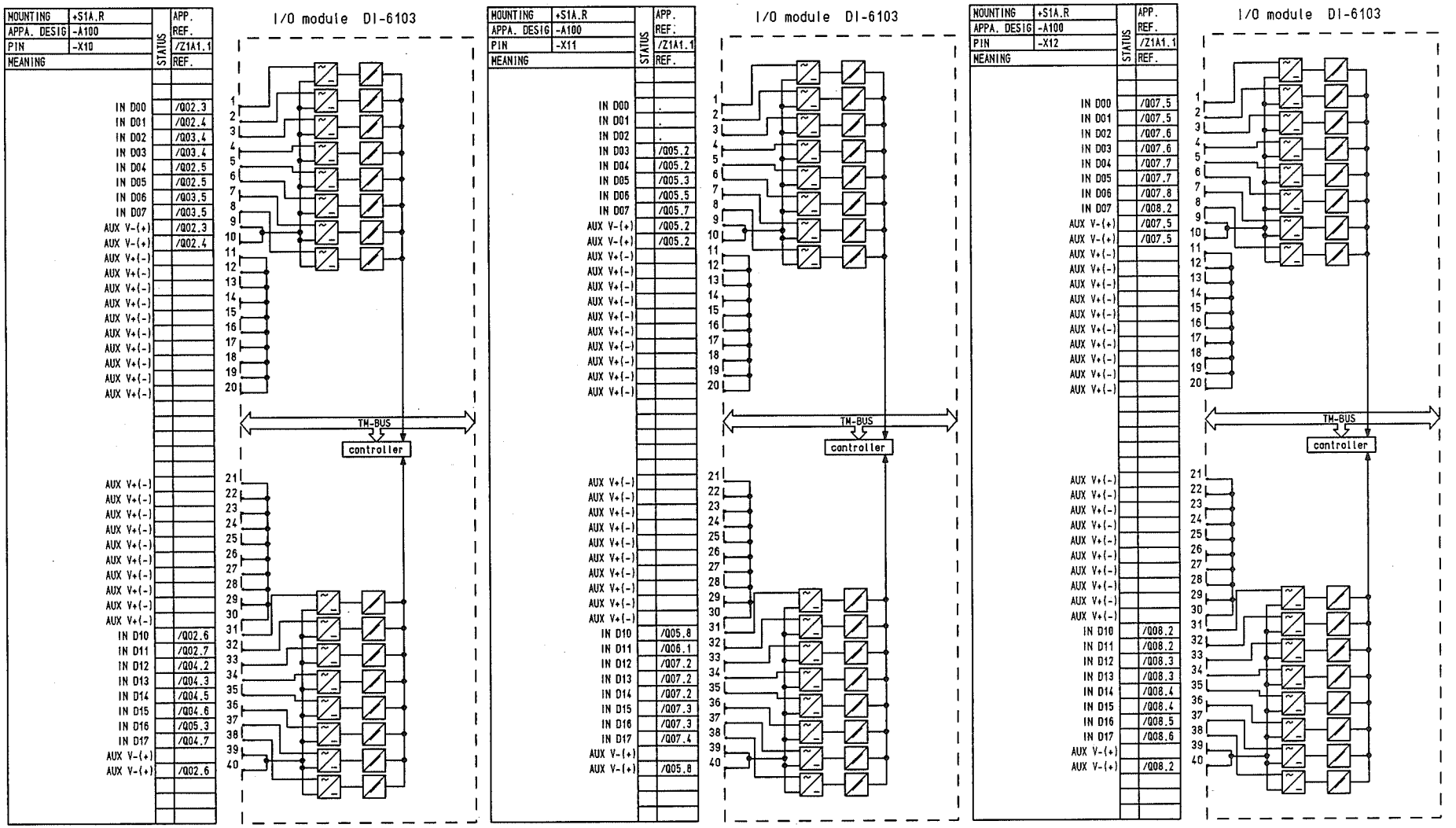
LIST OF EQUIPMENT
PANEL
12

50.3023.01.A3.741.223 S =L12 / Z1A10

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 49 135Sh.



D0097810 2

Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115ND =L12 Z1A11 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT

PANEL 12

50.3023.01.A3.741.223 S =L12 / Z1A11

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 50 135 Sh.

Copyright as per DIN 34 to be observed!

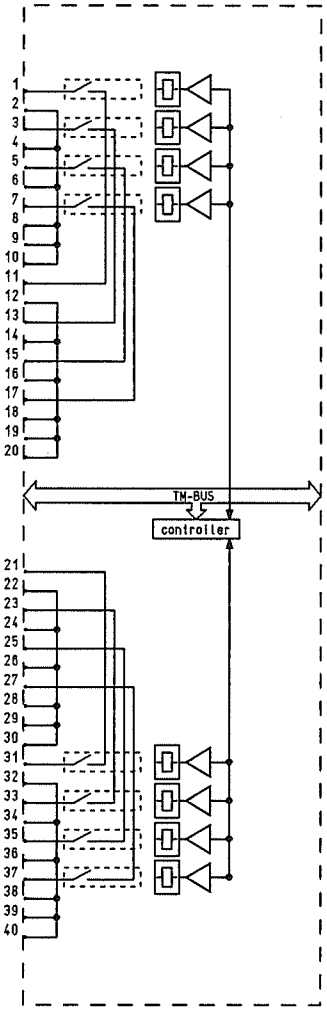
D0978102

HJ0115ND
=L12
Z1A12
ADAM
05.01.2007

MOUNTING	+S1A.R
APPA. DESIG	-A100
PIN	-X20
MEANING	

	STATUS	APP. REF.
		/Z1A1.1
		REF.
COM00		/N04.3
AUX V0-		
COM01		/N04.3
AUX V0-		
COM02		/N04.4
AUX V0-		
COM03		/N04.4
AUX V0-		
AUX V0-		
AUX V0-		
OUT D00		/N04.3
AUX V0+		
OUT D01		/N04.3
AUX V0+		
OUT D02		/N04.4
AUX V0+		
OUT D03		/N04.4
AUX V0+		
AUX V0+		
AUX V0+		
OUT D04		
AUX V1+		
OUT D05		
AUX V1+		
OUT D06		
AUX V1+		
OUT D07		
AUX V1+		
AUX V1+		
AUX V1+		
COM04		
AUX V1-		
COM05		
AUX V1-		
COM06		
AUX V1-		
COM07		
AUX V1-		
AUX V1-		
AUX V1-		

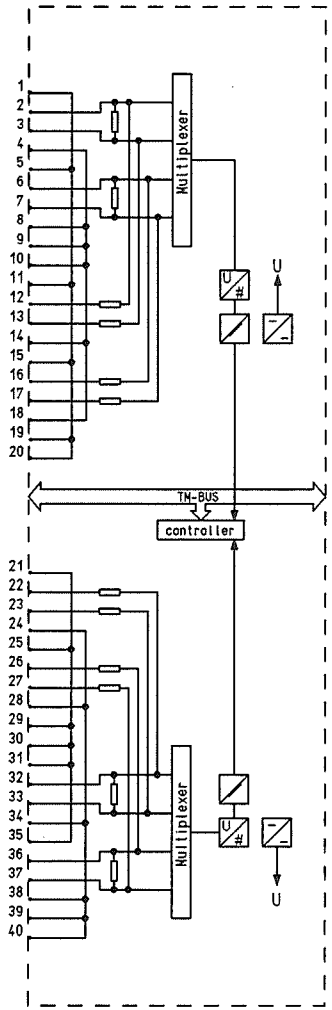
I/O module DO-6212



MOUNTING	+S1A.R
APPA. DESIG	-A100
PIN	-X30
MEANING	

	STATUS	APP. REF.
		/Z1A1.1
		REF.
AUX V0+		
IN V0 I+		/006.6
IN V0 I-		/006.6
AUX V0-		
AUX V0+		
IN V1 I+		/006.6
IN V1 I-		/006.6
AUX V0-		
AUX V0-		
AUX V0-		
AUX V0+		
IN V0 U+		
IN V0 U-		
AUX V0-		
AUX V0+		
IN V1 U+		
IN V1 U-		
AUX V0-		
AUX V0+		
AUX V0+		
AUX V1+		
IN V2 U+		
IN V2 U-		
AUX V1-		
AUX V1+		
IN V3 U+		
IN V3 U-		
AUX V1-		
AUX V1-		
AUX V1-		
AUX V1+		
IN V2 I+		/006.6
IN V2 I-		/006.6
AUX V1-		
AUX V1+		
IN V3 I+		/006.7
IN V3 I-		/006.7
AUX V1-		
AUX V1-		
AUX V1-		

I/O module AI-6300



NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL
12

50.3023.01.A3.741.223 S =L12
/ Z1A12
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet51
135Sh.

STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA / APPLICATION	MANUFACTURER, TYPE, ORDERING DATA / SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM / REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	MONIT.- PROTECTION MOTOR PROTECTION IN=AC 1/5 UN=AC 50-130 fN=50/60Hz AUXILIARY VOLTAGE : DC24-60V/DC110-250V/ : AC100-230V TECHNICAL COMPONENTS TYP ORDER NO	MANUF.: AREVA TYPE P130C PO NO.: MICOM P130-98903020-401-301			REFERENCES FOR GROUP REPRES. IN CIRCUIT DIAGRAM REFERENCES TO SEP. DOCUMENTS WITH DETAILS OF REPRES. REFERENCES FOR REPRES.OF APPLIANCE CONNECTIONS		

APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER
		+S1A.T	-F301

/601.6	/602.3	/N01.5	/N02.5	/N03.2	/N01.5	/005.2	/R03.7	/S02.2	/S02.5	/T01.1

-X1 /Z1F10.1	-X3 /Z1F10.3	-X6 /Z1F10.3	-X7 /Z1F10.5	-X8 /Z1F10.5	-X9 /Z1F10.5	-X10 /Z1F10.5	-X11 /Z1F10.5	-X31 /Z1F10.5	-X32 /Z1F10.5	-X33 /Z1F10.7	LED /Z1F10.7	-XPE /Z1F11.1

1	LINE DIFF UND STEUEREINRICHTUNG IN=AC1A **BEISTELLUNG** TECHNICAL COMPONENTS TYP ORDER NO	MANUF.: SIEMENS TYPE 7SD610 PO NO.: 7SD610 GEH.40T FUER EINBAU			REFERENCES FOR GROUP REPRES. IN CIRCUIT DIAGRAM REFERENCES TO SEP. DOCUMENTS WITH DETAILS OF REPRES. REFERENCES FOR REPRES.OF APPLIANCE CONNECTIONS		

APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER
LINE DIFF PROTECTION		+S1A.T	-F302

/601.6	/602.4	/N00.2	/005.4	/009.5	/R03.1	/R03.7	/S03.2	/T01.3	/T01.7

/Z1F13.1

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z1F1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

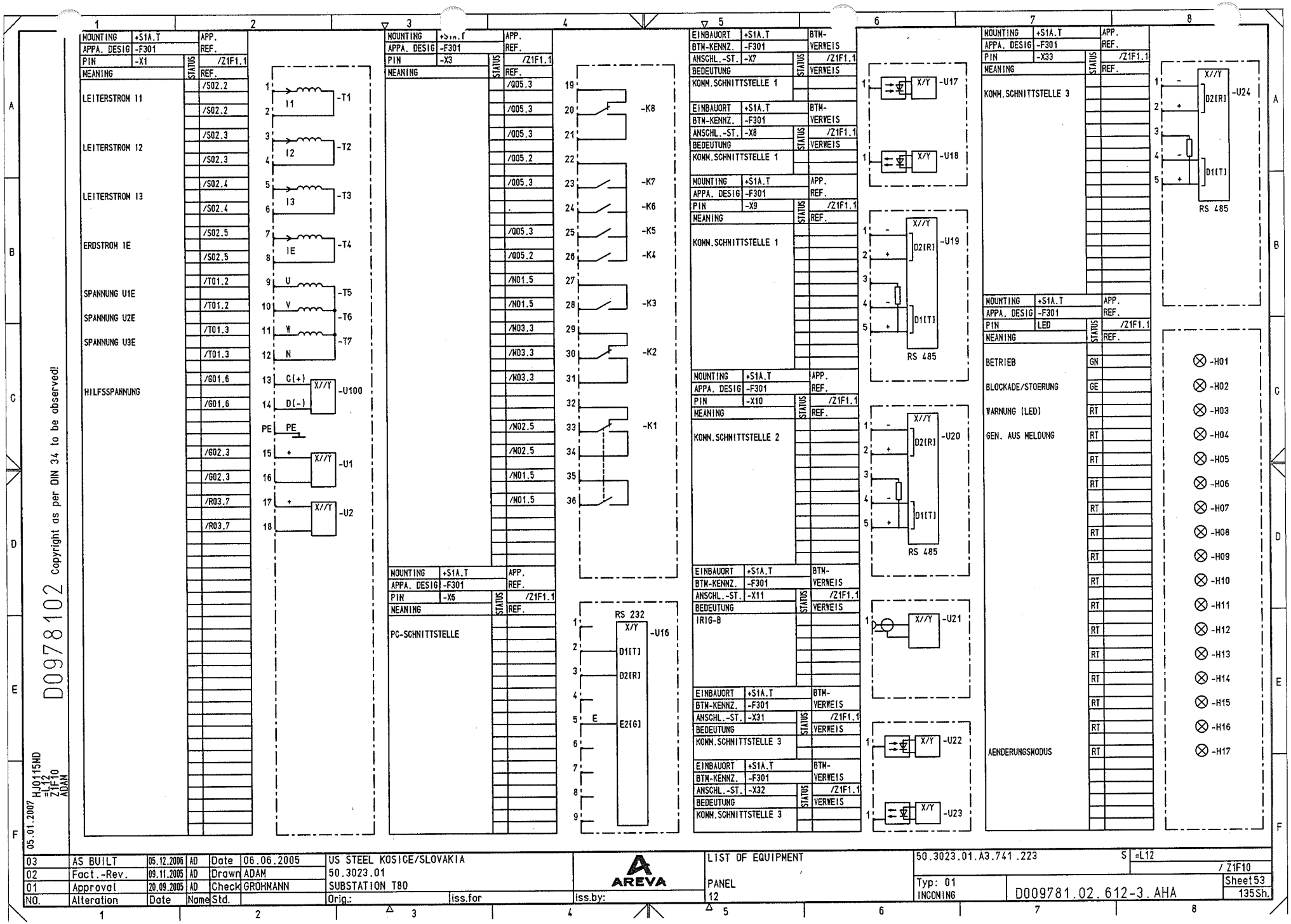
LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z1F1

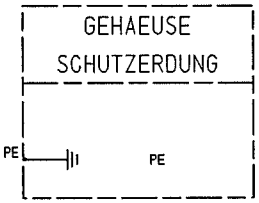
Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 52 135 Sh.


MOUNTING +S1A.T
APPA. DESIG -F301
PIN -X1
MEANING
STATUS
APP. REF. /Z1F1.1 REF.
/S02.2
LEITERSTROM I1
/S02.2
/S02.3
LEITERSTROM I2
/S02.3
/S02.4
LEITERSTROM I3
/S02.4
/S02.5
ERDSTROM IE
/S02.5
/T01.2
SPANNUNG U1E
/T01.2
SPANNUNG U2E
/T01.3
SPANNUNG U3E
/T01.3
/G01.6
HILFSSPANNUNG
/G01.6
/G02.3
/G02.3
/R03.7
/R03.7
I1 -T1
I2 -T2
I3 -T3
IE -T4
U -T5
V -T6
W -T7
N
C(+)
D(-)
X//Y -U100
PE
X//Y -U1
X//Y -U2
MOUNTING +S1A.T
APPA. DESIG -F301
PIN -X3
MEANING
/Q05.3
/Q05.3
/Q05.3
/Q05.2
/Q05.3
/Q05.3
/Q05.2
/N01.5
/N01.5
/N03.3
/N03.3
/N03.3
/N02.5
/N02.5
/N01.5
/N01.5
MOUNTING +S1A.T
APPA. DESIG -F301
PIN -X6
MEANING
PC-SCHNITTSTELLE
-K8
-K7
-K6
-K5
-K4
-K3
-K2
-K1
RS 232
X/Y -U16
D1[T]
D2[R]
E
E2[G]
EINBAUORT +S1A.T
BTM-KENNZ. -F301
ANSCHL.-ST. -X7
BEDEUTUNG
KONN.SCHNITTSTELLE 1
BTM-VERWEIS
/Z1F1.1 VERWEIS
EINBAUORT +S1A.T
BTM-KENNZ. -F301
ANSCHL.-ST. -X8
BEDEUTUNG
KONN.SCHNITTSTELLE 1
MOUNTING +S1A.T
APPA. DESIG -F301
PIN -X9
MEANING
KONN.SCHNITTSTELLE 1
MOUNTING +S1A.T
APPA. DESIG -F301
PIN -X10
MEANING
KONN.SCHNITTSTELLE 2
EINBAUORT +S1A.T
BTM-KENNZ. -F301
ANSCHL.-ST. -X11
BEDEUTUNG
IRIG-B
EINBAUORT +S1A.T
BTM-KENNZ. -F301
ANSCHL.-ST. -X31
BEDEUTUNG
KONN.SCHNITTSTELLE 3
EINBAUORT +S1A.T
BTM-KENNZ. -F301
ANSCHL.-ST. -X32
BEDEUTUNG
KONN.SCHNITTSTELLE 3
X/Y -U17
X/Y -U18
X//Y D2[R] D1[T] -U19
RS 485
X//Y D2[R] D1[T] -U20
RS 485
X//Y -U21
X/Y -U22
X/Y -U23
MOUNTING +S1A.T
APPA. DESIG -F301
PIN -X33
MEANING
KONN.SCHNITTSTELLE 3
X//Y D2[R] D1[T] -U24
RS 485
MOUNTING +S1A.T
APPA. DESIG -F301
PIN LED
MEANING
BETRIEB GN
BLOCKADE/STOERUNG GE
WARNUNG (LED) RT
GEN. AUS MELDUNG RT
RT
RT
RT
RT
RT
RT
RT
RT
RT
RT
RT
RT
RT
AENDERUNGSMODUS RT
-H01
-H02
-H03
-H04
-H05
-H06
-H07
-H08
-H09
-H10
-H11
-H12
-H13
-H14
-H15
-H16
-H17
D0097810 2
Copyright as per DIN 34 to be observed!
05.01.2007 HJ0115ND =L12 Z1F10 ADAM
03 AS BUILT 05.12.2006 AD
02 Fact.-Rev. 09.11.2005 AD
01 Approval 20.09.2005 AD
NO. Alteration Date Name
Date 06.06.2005
Drawn ADAM
Check GROHMANN
Std.
US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:
AREVA
LIST OF EQUIPMENT
PANEL 12
50.3023.01.A3.741.223
S =L12
/ Z1F10
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 53
135 Sh.

MOUNTING	+S1A.T		APP.
APPA. DESIG	-F301	STATUS	REF.
PIN	-XPE		/Z1F1.1
MEANING			REF.
GEHÄUSE ERDUNG			



D0978102 Copyright as per DIN 34 to be observed!

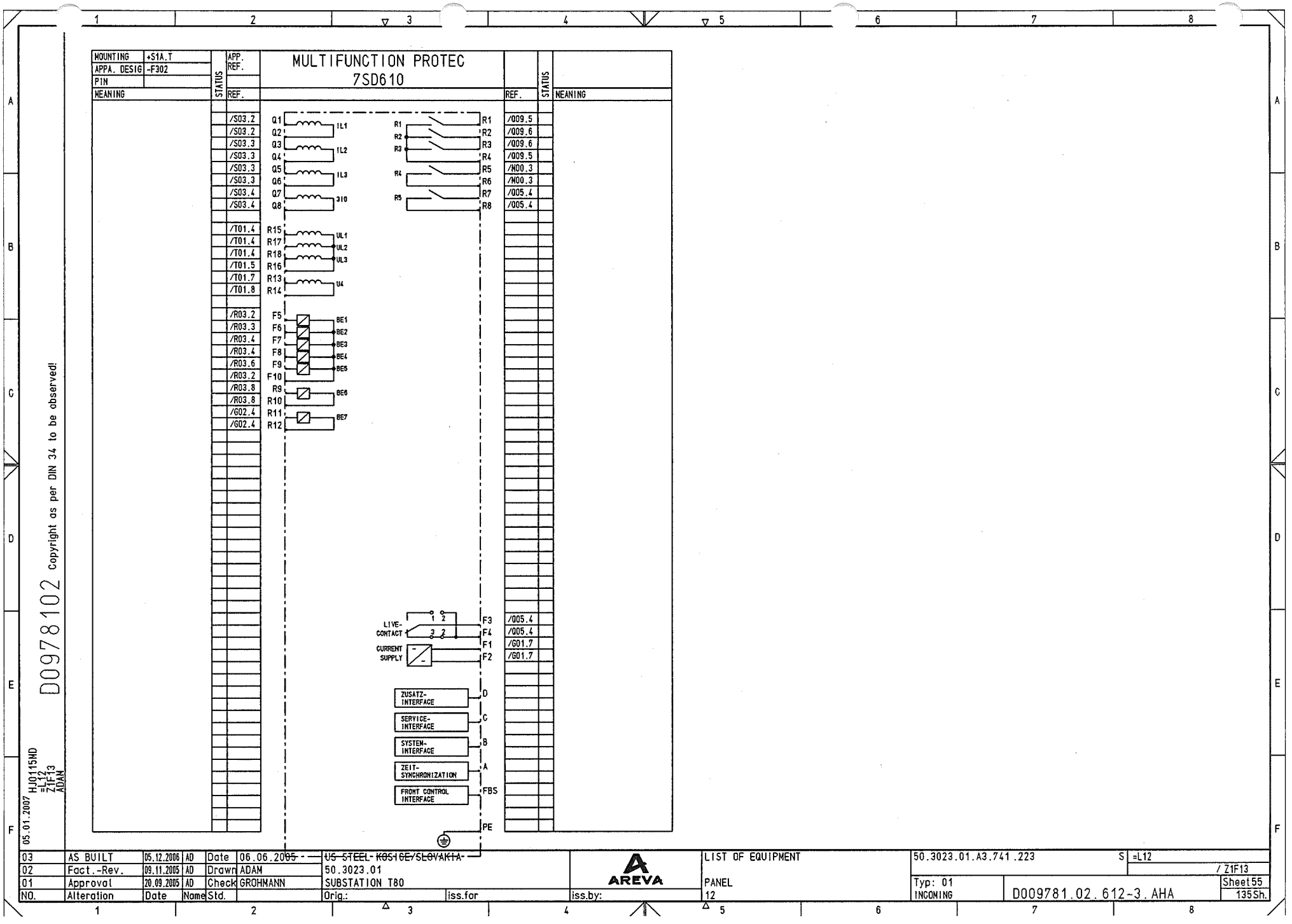
05.01.2007 HJ0115ND =L12 Z1F11 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL
12

50.3023.01.A3.741.223 S =L12
/ Z1F11
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 54
135 Sh.


MOUNTING +S1A.T
APPA. DESIG -F302
PIN
MEANING
STATUS
APP. REF.
REF.
MULTIFUNCTION PROTEC
7SD610
REF.
STATUS
MEANING
/S03.2 Q1 1L1 R1 /009.5
/S03.2 Q2 R2 /009.6
/S03.3 Q3 1L2 R3 /009.6
/S03.3 Q4 R4 /009.5
/S03.3 Q5 1L3 R5 /N00.3
/S03.3 Q6 R6 /N00.3
/S03.4 Q7 310 R7 /005.4
/S03.4 Q8 R8 /005.4
/T01.4 R15 UL1
/T01.4 R17 UL2
/T01.4 R18 UL3
/T01.5 R16
/T01.7 R13 U4
/T01.8 R14
/R03.2 F5 BE1
/R03.3 F6 BE2
/R03.4 F7 BE3
/R03.4 F8 BE4
/R03.6 F9 BE5
/R03.2 F10
/R03.8 R9 BE6
/R03.8 R10
/G02.4 R11 BE7
/G02.4 R12
LIVE-CONTACT
CURRENT SUPPLY
F3 /005.4
F4 /005.4
F1 /G01.7
F2 /G01.7
ZUSATZ-INTERFACE D
SERVICE-INTERFACE C
SYSTEN-INTERFACE B
ZEIT-SYNCHRONIZATION A
FRONT CONTROL INTERFACE FBS
PE
Copyright as per DIN 34 to be observed!
D0978102
05.01.2007 HJ0115ND =L12 Z1F13 ADAM
03 AS BUILT 05.12.2006 AD Date 06.06.2005 US STEEL KOSICE/SLOVAKIA
02 Fact.-Rev. 09.11.2005 AD Drawn ADAM 50.3023.01
01 Approval 20.09.2005 AD Check GROHMANN SUBSTATION T80
NO. Alteration Date Name Std. Orig.: iss.for iss.by:
AREVA
LIST OF EQUIPMENT
PANEL 12
50.3023.01.A3.741.223 S =L12 / Z1F13
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet55 135Sh.

STÜCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	SETTINGS	MANUFACTURER, TYPE, ORDERING DATA MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
7	M.C.B. MANUF.: GE POWER CONTROLS TYPE EP102 UC B6 PO NO.: 566311 AUXILIARY SWITCH HH RATED CURRENT : 6A CHARACTERISTIC : B					
	TECHNICAL COMPONENTS / TYP / ORDER NO					
1	AUXILIARY SWITCH / CB SH/HH-R / 672570					
	APPLICATION	SETTINGS	MOUNTING	BTM IDENTIFIER		
	CONTROL 1		+S1A.R	-F102	/G01.3 /G01.4 /Q06.2 /R01.6	
	CONTROL 2		+S1A.R	-F112	/G01.4 /G01.4 /Q06.2 /R01.6	
	PROTECTION		+S1A.R	-F103	/G01.6 /G01.6 /Q06.2 /R01.7	
	PROTECTION		+S1A.R	-F113	/G01.7 /G01.7 /Q06.3 /R01.7	
	SIGNALLING		+S1A.R	-F104	/G01.7 /G01.7 /Q06.1 /R01.6	
	SIGNALLING	C 16 A	+S1A.R	-F003	/G01.6 /G01.6 /Q06.3 /R01.7	
	SIGNALLING		+S1A.R	-F004	/G01.5 /G01.5 /Q06.3 /R01.7	
2	M.C.B. MANUF.: GE POWER CONTROLS TYPE EP102 UC C0,5 PO NO.: 566336 AUXILIARY SWITCH HH RATED CURRENT : 0,5A CHARACTERISTIC : C					
	TECHNICAL COMPONENTS / TYP / ORDER NO					
1	AUXILIARY SWITCH / CB SH/HH-R / 672570					
	APPLICATION	SETTINGS	MOUNTING	BTM IDENTIFIER		
	MOTOR DRIVE		+S1A.R	-F111	/G01.2 /G01.2 /Q04.2 /R01.5	
	MOTOR DRIVE		+S1A.R	-F121	/G01.2 /G01.3 /Q04.2 /R01.5	
1	M.C.B. HERST. : GE POWER CONTROLS TYP: EP63 C3 BEST.NR.: 566594 AUXILIARY SWITCH HH RATED CURRENT : 3A CHARACTERISTIC : C					
	TECHNISCHE KOMPONENTEN / TYP / BESTELLNUMMER					
1	AUXILIARY SWITCH / CB SH/HH-R / 672570					
	VERWENDUNGSZWECK	EINSTELLDATEN	EINBAUORT	BTM-KENNZEICHEN		
	VOLT.TRANSF MEASUREMENT		+S1A.R	-F451	/T01.2 /T01.3 /T01.4 /Q04.5 /G02.3	
1	M.C.B. MANUF.: GE POWER CONTROLS TYPE EP61 C6 PO NO.: 566516 AUXILIARY SWITCH HH RATED CURRENT : 6A CHARACTERISTIC : C					
	TECHNICAL COMPONENTS / TYP / ORDER NO					
1	AUXILIARY SWITCH / CB SH/HH-R / 672570					
	APPLICATION	SETTINGS	MOUNTING	BTM IDENTIFIER		
	VOLT.TRANSF e-n WINDING		+S1A.R	-F452	/T01.7 /Q04.5 /G02.3	

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115MD =L12 Z1F2 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z1F2
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 56 135Sh.

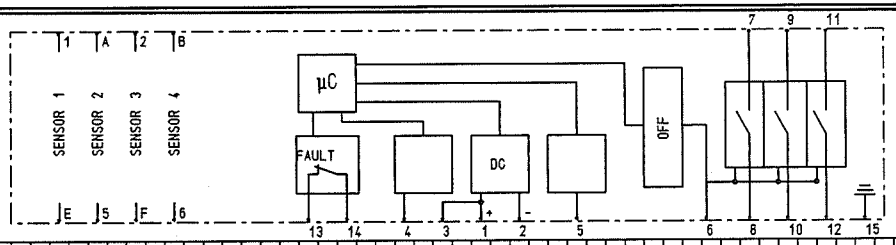
STÜCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK

2 ARC DETECTOR — MANUF.: AREVA — TYPE ILIS — PO NO.: C66622

DC 24V

TECHNICAL COMPONENTS	TYP	ORDER NO

APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER
ARC DETECTOR		+S1A.R	-F310
ARC DETECTOR		+S1B.R	-F310

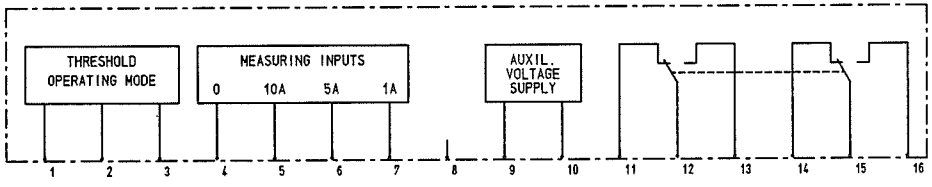


1 CURRENT SENSING RELAY — MANUF.: ALSTOM — TYPE MS 641 — PO NO.:

AUXILIARY VOLTAGE : 230V AC

TECHNICAL COMPONENTS	TYP	ORDER NO
I AH/I N	0,58	
MESSEINGANG	1A (EINSTELLWERT)	
HYSTERESE	10%	
ANSPRECHVERZOEGERUNG	0s	

APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER
CURRENT MONITORING		+S1A.R	-F320



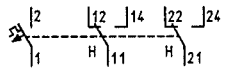
2 SICHERUNGSAUTOMAT — MANUF.: GE POWER CONTROLS — TYPE EP61 B6 — PO NO.:

HILFSSCHALTER HH

NENNSTROM NOMINAL CURRENT : 6A — NENNSPANNUNG NOMINAL VOLTAGE : B

TECHNICAL COMPONENTS	TYP	ORDER NO
1 HILFSSCHALTER	CB SH/HH-R	672570

APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER
FAN		+S1A.R	-F117
FAN		+S1A.R	-F127



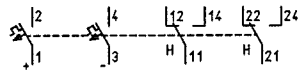
1 M.C.B. — MANUF.: MOELLER — TYPE C 4A — PO NO.:

AUXILIARY SWITCH HH

RATED CURRENT : 4A — CHARACTERISTIC : C

TECHNICAL COMPONENTS	TYP	ORDER NO
1 AUXILIARY SWITCH		

APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER
SIGNALLING		+S1A.R	-F203



Copyright as per DIN 34 to be observed!

D0097810 2

H.J0115ND
=L12
Z1F3
ADAN
05.01.2007

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Date 06.06.2005 — Drawn ADAM — Check GROHMANN — Std.

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: | iss.for | iss.by:

AREVA

LIST OF EQUIPMENT
PANEL
12

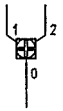
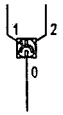
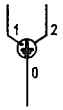
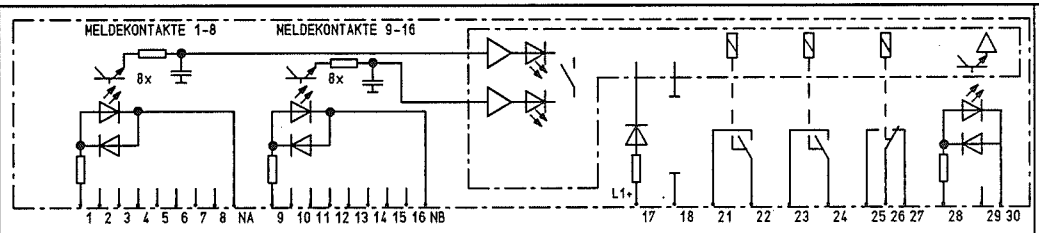
50.3023.01.A3.741.223

S =L12
/ Z1F3

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 57
135 Sh.

STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
2	STELLUNGSMELDER RUECKMELDER TRENNSCHALTER : 220VAC/220VDC : GELB TECHNICAL COMPONENTS TYP ORDER NO	MANUF.: messMa TYPE EST-L PO NO.: EST-L-1746-08-330-21					
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER			
	CIRCUIT-BREAKER ON/OFF		+S1A.T	-H01	/Q01.2		
	CIRCUIT-BREAKER ON/OFF		+S1A.T	-H02	/Q01.5		
2	STELLUNGSMELDER RUECKMELDER SCHALTWAGEN : 220VAC/220VDC : GELB TECHNICAL COMPONENTS TYP ORDER NO	MANUF.: messMa TYPE EST-L PO NO.: EST-L-1746-08-231-21					
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER			
	SWITCHING TRUCK SERVICE POS. TEST POS.		+S1A.T	-H011	/Q01.3		
	SWITCHING TRUCK SERVICE POS. TEST POS.		+S1A.T	-H021	/Q01.5		
1	STELLUNGSMELDER RUECKMELDER ERDER : 220VAC/220VDC : GELB TECHNICAL COMPONENTS TYP ORDER NO	MANUF.: messMa TYPE EST-L PO NO.: EST-L-1746-08-131-21					
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER			
	EARTHING SWITCH OFF/ON		+S1A.T	-H8	/Q01.7		
1	MALFUNCTION ALARM : 220VDC : TECHNICAL COMPONENTS TYP ORDER NO	MANUF.: EES TYPE SSM-16 PO NO.:					
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER			
	MALFUNCTION ALARM		+S1A.T	-H501	/A02.2 /A02.2 /A02.2 /A02.3 /A02.3 /A02.4 /A02.2 /A02.4 /A02.5 /A02.5 /A02.6 /A02.6 /A02.7 /A02.4 /A02.8 /A02.8		

Copyright as per DIN 34 to be observed!

D0097810 2

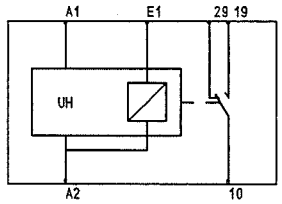
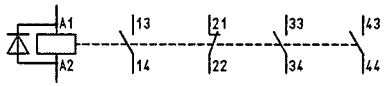
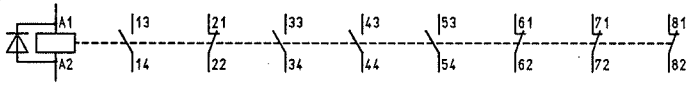
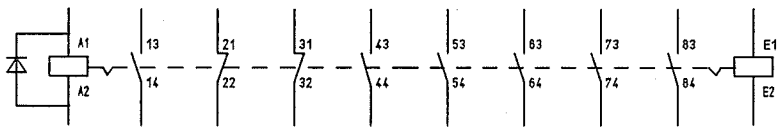
H10115ND
=L12
Z1H1
ADAM
05.01.2007

NO.	Alteration	Date	Name	Std.	Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80	

AREVA

LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z1H1
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 58 135Sh.

STÜCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM / REFERENCE TO INDIVIDUAL TREATMENT (WITH REFERENCES TO DETAILS CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	TIME RELAY OUTPUT PULSE t=50ms FUNCTION : IMPULSDEHNER RATED VOLTAGE : 24-240AC/DC TECHNICAL COMPONENTS TYP ORDER NO	MANUF.: AREVA PO NO.: 701917/1 TYPE C27900				
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER		
	PULSE EXPD.		+S1A.R	-K100	/R01.2 /R01.3 /Q05.2	
8	AUXILIARY CONTACTOR RATED VOLTAGE : 220VDC : TECHNICAL COMPONENTS TYP ORDER NO	MANUF.: Schneider Electric PO NO.: CA3-KN31 MD3 TYPE CA3-KN31 MD3				
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER		
	C.B. OPEN		+S1A.R	-K01A	/M04.3 /N01.6 /R01.3	
	C.B. CLOSED		+S1A.R	-K01E	/M04.3 /N01.7 /R01.3 /N01.7 /R03.8	
	C.B. OPEN		+S1A.R	-K02A	/M04.4 /N02.6 /R01.4	
	C.B. CLOSED		+S1A.R	-K02E	/M04.4 /N02.7 /R01.4 /N02.7 /R03.8	
	ANTI-PUMPING FEATURE		+S1A.R	-K201	/M01.4 /N01.7 /M01.7	
	ANTI-PUMPING FEATURE		+S1A.R	-K202	/M02.4 /N02.7 /M02.7	
			+S1A.R	-K71	/M03.8 /Q01.4 /Q02.6	
			+S1A.R	-K72	/M03.7 /Q01.6 /Q03.6 /M03.4	
3	AUXILIARY CONTACTOR RATED VOLTAGE : 220VDC : TECHNICAL COMPONENTS TYP ORDER NO	MANUF.: Schneider Electric PO NO.: CA3-KN31 MD3+LA1 KN13 TYPE CA3-KN31 MD3				
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER		
	VOLT.TRANSF SELECTION		+S1A.R	-K451A	/M03.5 . . . . /G02.4 . . /G02.5	
	VOLT.TRANSF SELECTION		+S1A.R	-K451B	/M03.6 . . . . /G02.5	
	TRIPPING RELAY		+S1A.R	-K10	/M00.3 /N02.2 . . /M01.3 . . .	
1	TRIPPING RELAY RATED VOLTAGE : 220VDC : TECHNICAL COMPONENTS TYP ORDER NO	MANUF.: Schneider Electric PO NO.: TYPE CA3-DK22 MD3+LA1 DN40				
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER		
	TRIPPING RELAY		+S1A.R	-K20	/M00.4 /N00.4 /M00.4 . /M01.4 /N01.3 . . /M00.5 /N00.4	

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ0115ND =L12 Z1K1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

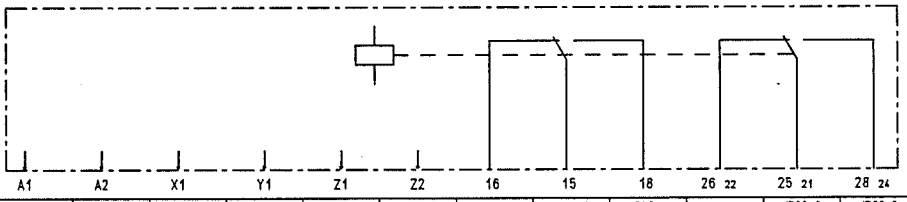
LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z1K1

Typ: 01 INCOMING

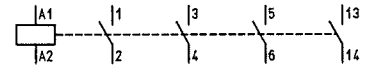
D009781.02.612-3.AHA

Sheet 59 135Sh.

STÜCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
2	TIME RELAY RUECKFALLVERZOEGERT 30MIN VOLTAGE : 230V AC	MANUF.: SCHIELE PO NO.: TYPE MFS				

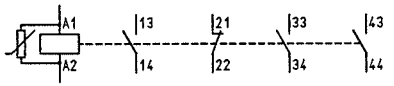
TECHNICAL COMPONENTS	TYP	ORDER NO

APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER										
FAN		+S1A.R	-K320	/D03.8	/D03.8		/D03.8		/D03.7		/D03.8	/D03.8		/D03.8	/D03.8
FAN		+S1B.R	-K320	/D04.8	/D04.8		/D04.8		/D04.7		/D04.8	/D04.8		/D04.8	/D04.8

STÜCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
2	AUXILIARY RELAY Ö/S/W 01/05/00 AUXILIARY VOLTAGE : 230V AC	MANUF.: TELEMECANIQUE PO NO.: TYPE LC1 DT20 20P7				

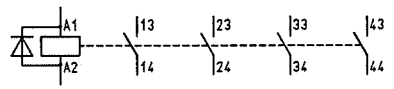
TECHNICAL COMPONENTS	TYP	ORDER NO

APPLICATION		SETTINGS	MOUNTING	BTN IDENTIFIER										
FAN CONTROL	CONTROL		+S1A.R	-K101	/D03.8	/D03.2	/D03.4	/D03.5						
FAN CONTROL	CONTROL		+S1B.R	-K101	/D04.8	/D04.2	/D04.4	/D04.5						

STÜCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
4	AUXILIARY RELAY 3S/10E AUXILIARY VOLTAGE : 230V AC	MANUF.: SCHNEIDER PO NO.: TYPE CA2-KN31 P72				

TECHNICAL COMPONENTS	TYP	ORDER NO

APPLICATION		SETTINGS	MOUNTING	BTN IDENTIFIER										
FAN	CONTROL		+S1A.R	-K102	/D03.6	/Q06.4		.	.	.	.	.	.	.
FAN	CONTROL		+S1B.R	-K102	/D04.7	/Q06.5		.	.	.	.	.	.	.
FAN	CONTROL		+S1A.R	-K320.A	/D02.2	/D03.7		/D03.7	.	.	.	.	.	.
FAN	CONTROL		+S1A.R	-K320.B	/D02.4	/D04.7		/D04.7	.	.	.	.	.	.

STÜCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
4	AUXILIARY RELAY 4S AUXILIARY VOLTAGE : 230V DC	Manuf. SCHNEIDER Ord.No. : Type:CA3-KN40 MD3				

Technical components per device	Typ	Ordering number

Application	Settings	location	item designation										
CBF1		+S1A.R	-K0BF1	/G00.3	/N01.3	/N01.4	/Q04.7						
CBF2		+S1A.R	-K0BF2	/G00.4	/Q04.8		/N02.2	/N02.4					
		+S1A.R	-K400	/V01.7	/P02.6	/V01.2	/V01.3	/V01.3					
		+S1B.R	-K401.1	/V02.6	/P01.5	/V02.2	/V02.3	/V02.3	.				

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z1K2 ADAM

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date 06.06.2005
Drawn ADAM
Check GROHMANN
Orig.:

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
iss.for
iss.by:

AREVA

LIST OF EQUIPMENT
PANEL
12

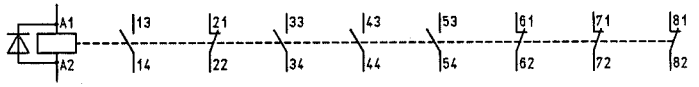
50.3023.01.A3.741.223 S =L12 / Z1K2
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 60 135Sh.

STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK

21 AUXILIARY CONTACTOR MANUF.: Schneider Electric TYPE CA3-KN31 MD3
PO NO.: CA3-KN31 MD3+LA1 KN13

RATED VOLTAGE : 220VDC :

TECHNICAL COMPONENTS	TYP	ORDER NO

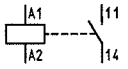


APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER												
		+S1B.R	-K401	/M05.3	/R02.2		/Q07.2		/R03.2						
		+S1B.R	-K402	/M05.3	/R02.2		/Q07.2	/M00.6	/R03.3						
		+S1B.R	-K403	/M05.4	/R02.2		/Q07.2		/R03.2						
		+S1B.R	-K404	/M05.4	/R02.2		/Q07.3	/M00.6	/R03.3						
		+S1B.R	-K405	/M05.5	/R02.3		/Q07.3		/R03.2						
		+S1B.R	-K406	/M05.5	/R02.3		/Q07.4	/M00.7	/R03.3						
		+S1B.R	-K407	/M05.5	/R02.3		/Q07.5		/R03.2						
		+S1B.R	-K408	/M05.6	/R02.4		/Q07.5	/M00.7	/R03.3						
		+S1B.R	-K409	/M05.6	/R02.4		/Q07.6								
		+S1B.R	-K410	/M05.7	/R02.4		/Q07.6								
		+S1B.R	-K411	/M05.7	/R02.5		/Q07.7								
		+S1B.R	-K412	/M06.2	/R02.5		/Q07.7		/R03.4						
		+S1B.R	-K413	/M06.3	/R02.5		/Q07.8	/M00.7	/R03.4						
		+S1B.R	-K414	/M06.4	/R02.6		/Q08.2		/R03.4						
		+S1B.R	-K415	/M06.5	/R02.6		/Q08.2		/R03.4						
		+S1B.R	-K416	/M06.5	/R02.6		/Q08.2		/R03.4						
		+S1B.R	-K417	/M06.6	/R02.6		/Q08.3	/M00.7	/R03.5						
		+S1B.R	-K418	/M06.6	/R02.7		/Q08.3	/M00.8	/R03.5						
		+S1B.R	-K419	/M06.7	/R02.7		/Q08.4								
		+S1B.R	-K420	/M06.7	/R02.7		/Q08.4								
		+S1B.R	-K421	/M06.7	/R02.8		/Q08.5								

2 RELAY MANUF. : TYPE:
ORD.NR. :

RATED VOLTAGE : 220VDC :

TECHNICAL COMPONENTS	TYPE	ORDERING NUMBER



APPLICATION	SETTING VALUES	LOCATION	ITEM DESIGNATION												
		+S1A.R	-K200	/P01.6	/P01.6										
		+S1B.R	-K200	/P02.7	/P02.7										

Copyright as per DIN 34 to be observed!

D0097810 2

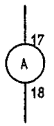
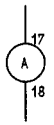
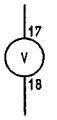
05.01.2007 HJ0115ND =L12 Z1K3 ADAN

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL
12

50.3023.01.A3.741.223 S =L12 / Z1K3
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 61 135Sh.

STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	MEAS. UNIT BIMETALLIC AMMETER SCALE: 20% OVERLOAD MEASUREMENT VARIABLE: 1A : TECHNICAL COMPONENTS / TYP / ORDER NO	MANUF.: WEIGEL PO NO.: TYPE BiQ72K TRANSFORMER CONNECTION ?A/1A					
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER			
	CURRENT MEAS L2		+S1A.T	-P402	/S01.4		
2	MEAS. UNIT MOVING-IRON AMMETER SCALE: 100 % OVERLOAD MEASUREMENT VARIABLE: 1A : TECHNICAL COMPONENTS / TYP / ORDER NO	MANUF.: WEIGEL PO NO.: TYPE EQ72K TRANSFORMER CONNECTION ?A/1A					
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER			
	CURRENT MEAS L1		+S1A.T	-P401	/S01.4		
	CURRENT MEAS L3		+S1A.T	-P403	/S01.5		
3	MEAS. UNIT VOLTMETER MOVING-IRON MEASUREMENT VARIABLE: V : TECHNICAL COMPONENTS / TYP / ORDER NO	MANUF.: WEIGEL PO NO.: TYPE EQ72K					
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER			
	VOLTAGE L1-L2		+S1A.T	-P451	/T01.5		
	VOLTAGE L1-L3		+S1A.T	-P452	/T01.6		
	VOLTAGE L2-L3		+S1A.T	-P453	/T01.6		

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ0115ND =L12 Z1P1 ADAM

NO.	Alteration	Date	Name	Std.	Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date 06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z1P1
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 62 135Sh.

STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA / APPLICATION	MANUFACTURER, TYPE, ORDERING DATA / SETTINGS / MOUNTING / APPA. DESIG.	APPARATUS SYMBOL DIAGRAM / REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	RESISTOR	MANUF.: Heine Resistors GmbH TYPE EFM 60x300 PO NO.: 742011720027			
	RESISTOR DAMPING				
	RESISTANCE : 22 Ohm +/- 10% POWER : 430W				
	TECHNICAL COMPONENTS	TYP	ORDER NO		
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER	
	DAMPING RESISTANCE		+S1A.R	-R452	/T01.6 /T01.6

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z1R1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z1R1
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 63 135Sh.

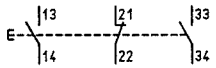
STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA / APPLICATION	MANUFACTURER, TYPE, ORDERING DATA / SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM / REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK

2 PB — MANUF.: Schneider Electric — TYPE HARMONY Style 5 — PO NO.:

PUSH-BUTTON OFF — RED-AND-WHITE CIRCLE

SWITCHING CONTACTS : 2S,1O — CONTACT SEQUENCE :

	TECHNICAL COMPONENTS		TYP	ORDER NO
1	RED-AND-WHITE CIRCLE	S071457	ZB5-AA432	ZB5-AA432
1	FIXING FLANGE	S071460	ZB5-AZ009	ZB5-AZ009
1	AUXIL SWITCH (NO)	S071461	1S (NO)	ZBE-101
1	AUXIL SWITCH (NC)	S071462	1O (NC)	ZBE-102



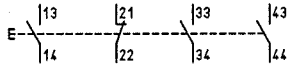
APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER	APPARATUS SYMBOL DIAGRAM / REFERENCE TO INDIVIDUAL TREATMENT											REMARK
CIRCUIT-BREAKER OFF		+S1A.T	-S01A	/M01.6	/R01.3										
CIRCUIT-BREAKER OFF		+S1A.T	-S02A	/M02.6	/R01.4										

2 PB — MANUF.: Schneider Electric — TYPE HARMONY Style 5 — PO NO.:

PUSHBUTTON ON — GREEN-AND-WHITE BAR

SWITCHING CONTACTS : 2S 1O — CONTACT SEQUENCE :

	TECHNICAL COMPONENTS		TYP	ORDER NO
1	GREEN-AND-WHITE BAR	S071458	ZB5-AA431	ZB5-AA431
1	FIXING FLANGE	S071460	ZB5-AZ009	ZB5-AZ009
1	AUXIL SWITCH (NO)	S071461	1S (NO)	ZBE-101
1	AUXIL SWITCH (NC)	S071462	1O (NC)	ZBE-102



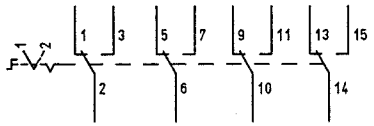
APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER	APPARATUS SYMBOL DIAGRAM / REFERENCE TO INDIVIDUAL TREATMENT											REMARK
CIRCUIT-BREAKER ON		+S1A.T	-S01E	/M01.7	/R01.3	/M01.6	/R03.7								
CIRCUIT-BREAKER ON		+S1A.T	-S02E	/M02.7	/R01.4	/M02.6	/R03.7								

1 SWITCH — MANUF.: SONTHEIMER — TYPE WS4/8ZM/NS-T1.0511+T — PO NO.: WS4/8ZM/NS

INSCRIPTION:
1=LOCAL 2=REMOTE

SWITCHING CONTACTS : 4 — POSITIONS : 2

TECHNICAL COMPONENTS	TYP	ORDER NO

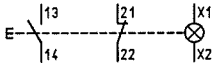


APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER	APPARATUS SYMBOL DIAGRAM / REFERENCE TO INDIVIDUAL TREATMENT											REMARK
DOUBLE THROW SWITCH LOCAL/OFF/REMOTE		+S1A.T	-S200	/M01.6	/N02.6	/V01.7	/004.6								

1 MANUF.: — TYPE — PO NO.:

: :

TECHNICAL COMPONENTS	TYP	ORDER NO



APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER	APPARATUS SYMBOL DIAGRAM / REFERENCE TO INDIVIDUAL TREATMENT											REMARK
RESET		+S1A.T	-S2	/M00.4		/M00.5									

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z1S1 ADAM

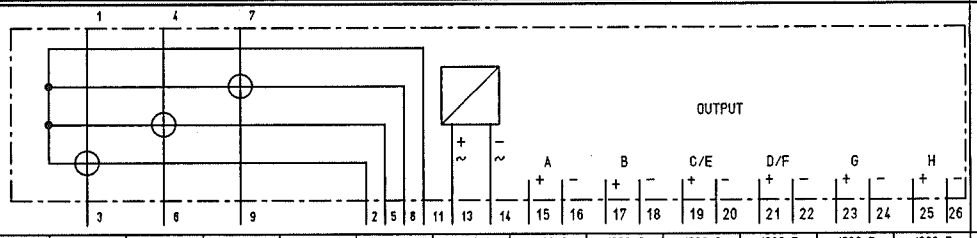
NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 — S =L12 / Z1S1
Typ: 01 INCOMING — D009781.02.612-3.AHA — Sheet 64 135Sh.

STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	TRANSDUCER MANUF.: GOSSEN PO NO.: PROGRAMMIERBARER MULTI-MESSUMFORMER INPUT : OUTPUT : TECHNICAL COMPONENTS TYP ORDER NO					



APPLICATION		SETTINGS	MOUNTING	BTM IDENTIFIER
MULTIFUNCTION	CONVERTER		+S1A.R	-U401

/S01.4	/S01.4	/S01.5		/T01.7	/N01.2	/Q06.6	/Q06.6	/Q06.6	/Q06.7	/Q06.7	/Q06.7

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z1U1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT

PANEL 12

50.3023.01.A3.741.223 S =L12 / Z1U1

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 65 135Sh.

QUANTITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	SETTINGS	MANUFACTURER, TYPE, ORDERING DATA MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	TEST SWITCH		MANUF.: SIEMENS PO NO.: 7XV75	TYPE 7XV75			
	BEISTELLUNG						
	TECHNICAL COMPONENTS		TYP	ORDER NO			
	APPLICATION	SETTINGS	MOUNTING	BTM IDENTIFIER			
			+S1A.T	-X302			

/N00.2
/S03.2
/T01.3

/Z1X10.1

REFERENCES FOR GROUP REPRES. IN CIRCUIT DIAGRAM

REFERENCES TO SEP. DOCUMENTS WITH DETAILS OF REPRES.

REFERENCES FOR REPRES.OF APPLIANCE CONNECTIONS

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ0115ND
=L12
Z1X1
ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT

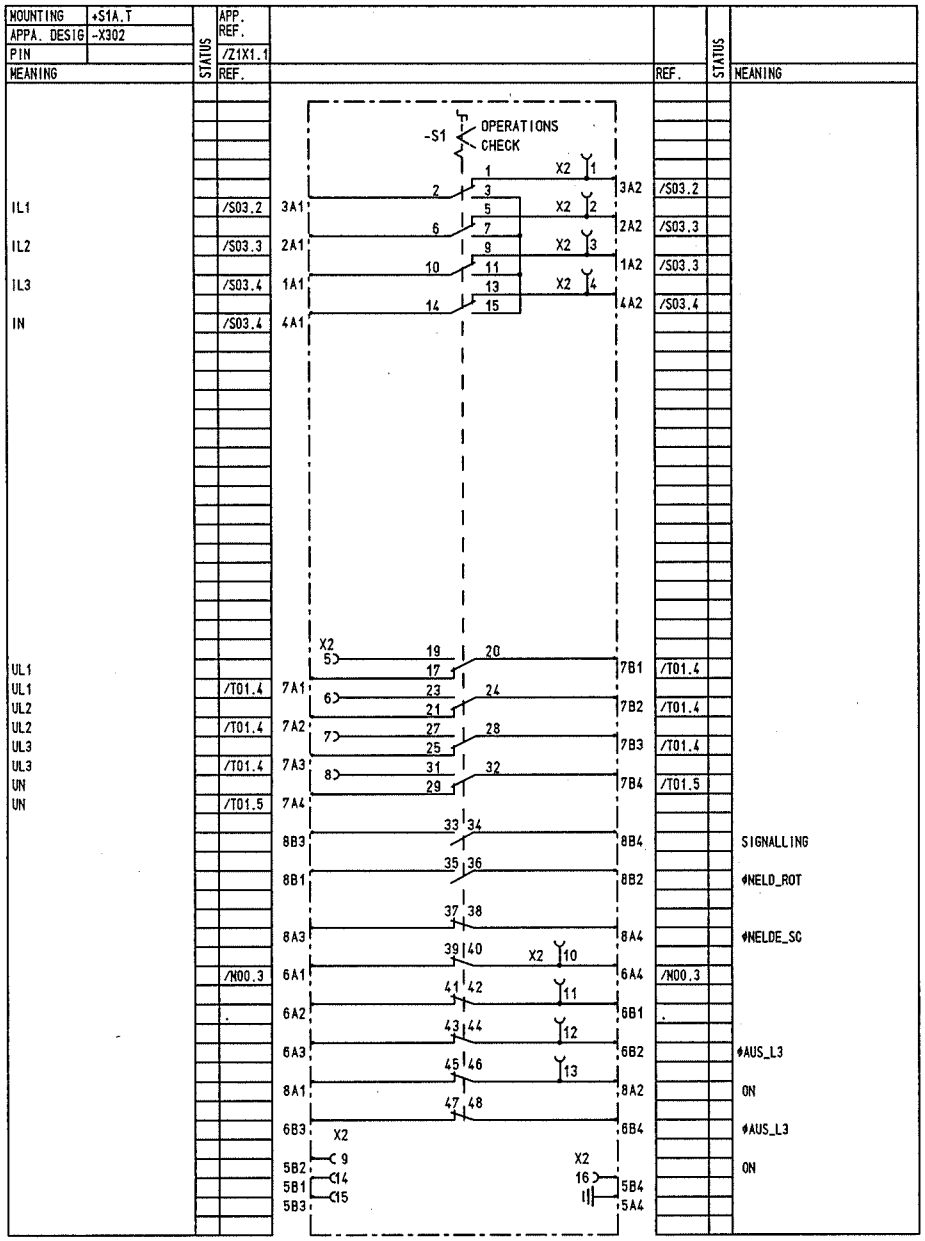
PANEL
12

50.3023.01.A3.741.223 S =L12
/ Z1X1

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 66
135Sh.



Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z1X10 ADAM

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	LIST OF EQUIPMENT	50.3023.01.A3.741.223	S	=L12
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01					/ Z1X10
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL 12	Typ: 01 INCOMING	D009781.02.612-3.AHA	Sheet 67 135Sh.
NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:			

STÜCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK

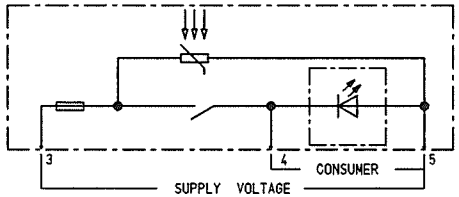
6 DIODE MANUF.: TYPE
PO NO.:
SENSOR-DIODE FÜR ILIS

TECHNICAL COMPONENTS	TYP	ORDER NO

APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER												
		+S2A	-B311	/N01.3											
		+S2A	-B312	/N01.4											
		+S2A	-B313	/N01.5											
		+S2B	-B311	/N02.3											
		+S2B	-B312	/N02.4											
		+S2B	-B313	/N02.5											

6 LUEFTERINDIKATOR MANUF.: KRIWAN TYPE 52N102S21
PO NO.:
SPANNUNG : 230V AC

TECHNICAL COMPONENTS	TYP	ORDER NO



APPLICATION		SETTINGS	MOUNTING	BTN IDENTIFIER												
FAN	INDIKATOR		+S2A	-B101	/D03.2			/D03.3		/D03.2						
FAN	INDIKATOR		+S2A	-B102	/D03.4			/D03.5		/D03.4						
FAN	INDIKATOR		+S2A	-B103	/D03.6			/D03.6		/D03.6						
FAN	INDIKATOR		+S2B	-B101	/D04.3			/D04.3		/D04.3						
FAN	INDIKATOR		+S2B	-B102	/D04.4			/D04.5		/D04.4						
FAN	INDIKATOR		+S2B	-B103	/D04.6			/D04.7		/D04.6						

Copyright as per DIN 34 to be observed!

D0097810 2

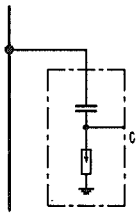
05.01.2007 HJ0115ND =L12 Z2B1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL
12

50.3023.01.A3.741.223 S =L12 / Z2B1
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 68
135 Sh.

STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
3	IVIS POST INSULATOR	MANUF.: AREVA/SW PO NO.:	TYPE IVIS				

TECHNICAL COMPONENTS	TYP	ORDER NO

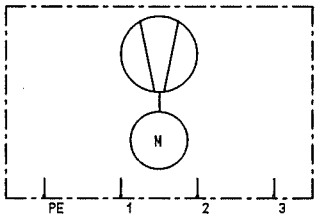
APPLICATION	SETTINGS	MOUNTING	BTM IDENTIFIER															
CAP. TAPPING		+S2A	-GL1			/T02.2												
CAP. TAPPING		+S2A	-GL2			/T02.4												
CAP. TAPPING		+S2A	-GL3			/T02.6												

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z2C1 ADAM

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		LIST OF EQUIPMENT	50.3023.01.A3.741.223	S	=L12		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	AREVA				/ Z2C1		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL 12	Typ: 01 INCOMING	D009781.02.612-3.AHA		Sheet 69	
NO.	Alteration	Date	Name	Std.		Orig.:	Iss.for	Iss.by:					135 Sh.

STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
6	FAN	MANUF.: PO NO.:	TYPE			
	VOLTAGE : 230V AC		:			
	TECHNICAL COMPONENTS	TYP	ORDER NO			

APPLICATION	SETTINGS	MOUNTING	BTM IDENTIFIER														
FAN		+S2A	-E101	/D03.2	/D03.2	/D03.2											
FAN		+S2A	-E102	/D03.4	/D03.4	/D03.4											
FAN		+S2A	-E103	/D03.6	/D03.5	/D03.5											
FAN		+S2B	-E101	/D04.2	/D04.2	/D04.2											
FAN		+S2B	-E102	/D04.4	/D04.4	/D04.4											
FAN		+S2B	-E103	/D04.6	/D04.5	/D04.5											

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z2E1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

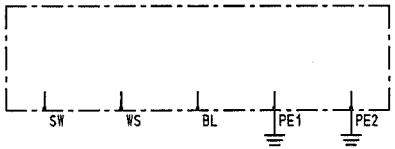
LIST OF EQUIPMENT
PANEL
12

50.3023.01.A3.741.223 S =L12 / Z2E1

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 70 135 Sh.

STOCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	INDICATOR INTELLIGENT	MANUF.: AREVA Sachsenwerk TYPE IVIS PO NO.: VOLT INFORMATION SYSTEM				
	TECHNICAL COMPONENTS	TYP	ORDER NO			
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER		
	IVIS		+S2A	-P100	/T02.3 /T02.5 /T02.7 /T02.5 /T02.5	

Copyright as per DIN 34 to be observed!

D0097810 2

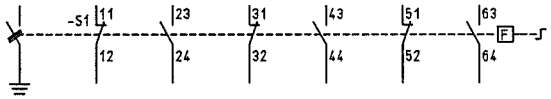
05.01.2007 HJ0115ND =L12 Z2P1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	Iss.for	Iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z2P1
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 71 135 Sh.

STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	SETTINGS	MANUFACTURER, TYPE, ORDERING DATA MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	EARTHING SWITCH	MANUF.: AREVA PO NO.:	TYPE KGE 80/24-2				

TECHNICAL COMPONENTS	TYP	ORDER NO

APPLICATION	SETTINGS	MOUNTING	BTK IDENTIFIER
EARTHING SWITCH		+S2A	-Q8

/Q01.7 /Q01.8 /Q02.6 /Q02.7 /P02.6 /V01.6

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z2Q1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT

PANEL 12

50.3023.01.A3.741.223 S =L12 / Z2Q1

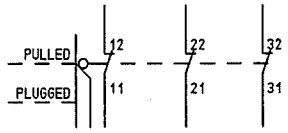
Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 72 135Sh.

QUANTITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	 MOUNTING	 APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
2	AUXILIARY SWITCH PLUG PULLED	MANUF.: PO NO.:	AREVA	TYPE			

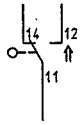
TECHNICAL COMPONENTS	TYP	ORDER NO



APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER													
PLUG PULLED		+S2A	-S7	/M03.8	/P01.3	/V01.7										
PLUG PULLED		+S2B	-S7	/M03.7	/P02.3	/V02.6										

QUANTITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	 MOUNTING	 APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	ANSTOSSSCHALTER KURBEL GESTECKT KABELERDER	MANUF.: PO NO.:	ALSTOM	TYPE			

TECHNICAL COMPONENTS	TYP	ORDER NO



APPLICATION		SETTINGS	MOUNTING	BTN IDENTIFIER												
CRANK INSERTED	EARTHING SWITCH		+S2A	-S81	/P02.4											

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z2S1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT

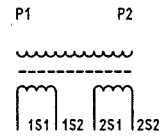
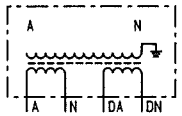
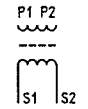
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z2S1

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 73 135 Sh.

STOCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA / APPLICATION	MANUFACTURER, TYPE, ORDERING DATA / SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM / REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
3	CURR.TRANSF. 4000/1/1A	MANUF.: AEG PO NO.:		TYPE CT12			
	TECHNICAL COMPONENTS	TYP	ORDER NO				
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER			
	CURR.TRANSF. L1		+S2A	-T1L1	/S01.4 /S03.2		
	CURR.TRANSF. L2		+S2A	-T1L2	/S01.4 /S03.3		
	CURR.TRANSF. L3		+S2A	-T1L3	/S01.5 /S03.4		
3	VOLTAGE TRANSF. WITH DA/DN WINDING	MANUF.: SEE COVER SHEET PO NO.:		TYPE SEE COVER SHEET			
	: IEC			: SINGLE PHASE			
	TECHNICAL COMPONENTS	TYP	ORDER NO				
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER			
	VOLT.TRANSF L1		+S2B	-T5L1	/T01.2 /T01.6		
	VOLT.TRANSF L2		+S2B	-T5L2	/T01.3 /T01.6		
	VOLT.TRANSF L3		+S2B	-T5L3	/T01.4 /T01.7		
6	CABLE-TYPE CT 60/1A	MANUF.: AEG PO NO.:		TYPE RKT 250/160			
	TECHNICAL COMPONENTS	TYP	ORDER NO				
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER			
	CABLE-TYPE CT		+S2A	-T91	/S02.5		
	CABLE-TYPE CT		+S2A	-T92	/S02.6		
	CABLE-TYPE CT		+S2A	-T93	/S02.6		
	CABLE-TYPE CT		+S2A	-T94	/S02.7		
	CABLE-TYPE CT		+S2A	-T95	/S02.7		
	CABLE-TYPE CT		+S2A	-T96	/S02.8		

Copyright as per DIN 34 to be observed!

D0978102

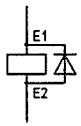
05.01.2007 HJ0115ND =L12 Z2T1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z2T1
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 74 135Sh.

STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	SETTINGS	MANUFACTURER, TYPE, ORDERING DATA MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	SPERRMAGNET MANUF.: ALSTOM PO NO.: TYPE 220VDC SPERRMAGNET AM ERDER					
	TECHNICAL COMPONENTS TYP ORDER NO					
	APPLICATION	SETTINGS	MOUNTING	BTM IDENTIFIER		
	RELEASE EARTHING SWITCH		+S2A	-Y8	/M03.3	

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ0115ND =L12 Z2Y1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	Iss.for	Iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z2Y1

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 75 135Sh.

STÜCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK

1 CIRCUIT-BREAKER MANUF.: AREVA TYPE ECA 12-50-31-21
PO NO.:

TECHNICAL COMPONENTS	TYP	ORDER NO

APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER
CIRCUIT-BREAKER		+S3A	-Q01

/002.2 /002.2 /L01.2 /N01.5 /N01.2 /N03.4 /001.2 /Q02.3 /004.2 /009.1 /R01.2 /R03.5 /V01.1

REFERENCES FOR GROUP REPRES. IN CIRCUIT DIAGRAM

REFERENCES TO SEP. DOCUMENTS WITH DETAILS OF REPRES.

REFERENCES FOR REPRES.OF APPLIANCE CONNECTIONS

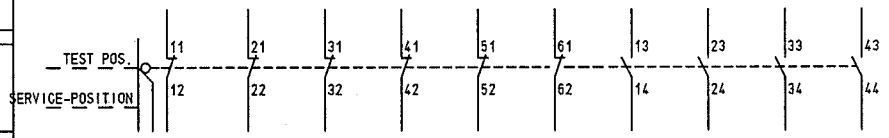
/Z302.1 /Z302.1

1 MANUF.: AREVA TYPE
PO NO.:

AUXILIARY SWITCH
10_POL

TECHNICAL COMPONENTS	TYP	ORDER NO

APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER
AUXILIARY SWITCH		+S3A	-Q1



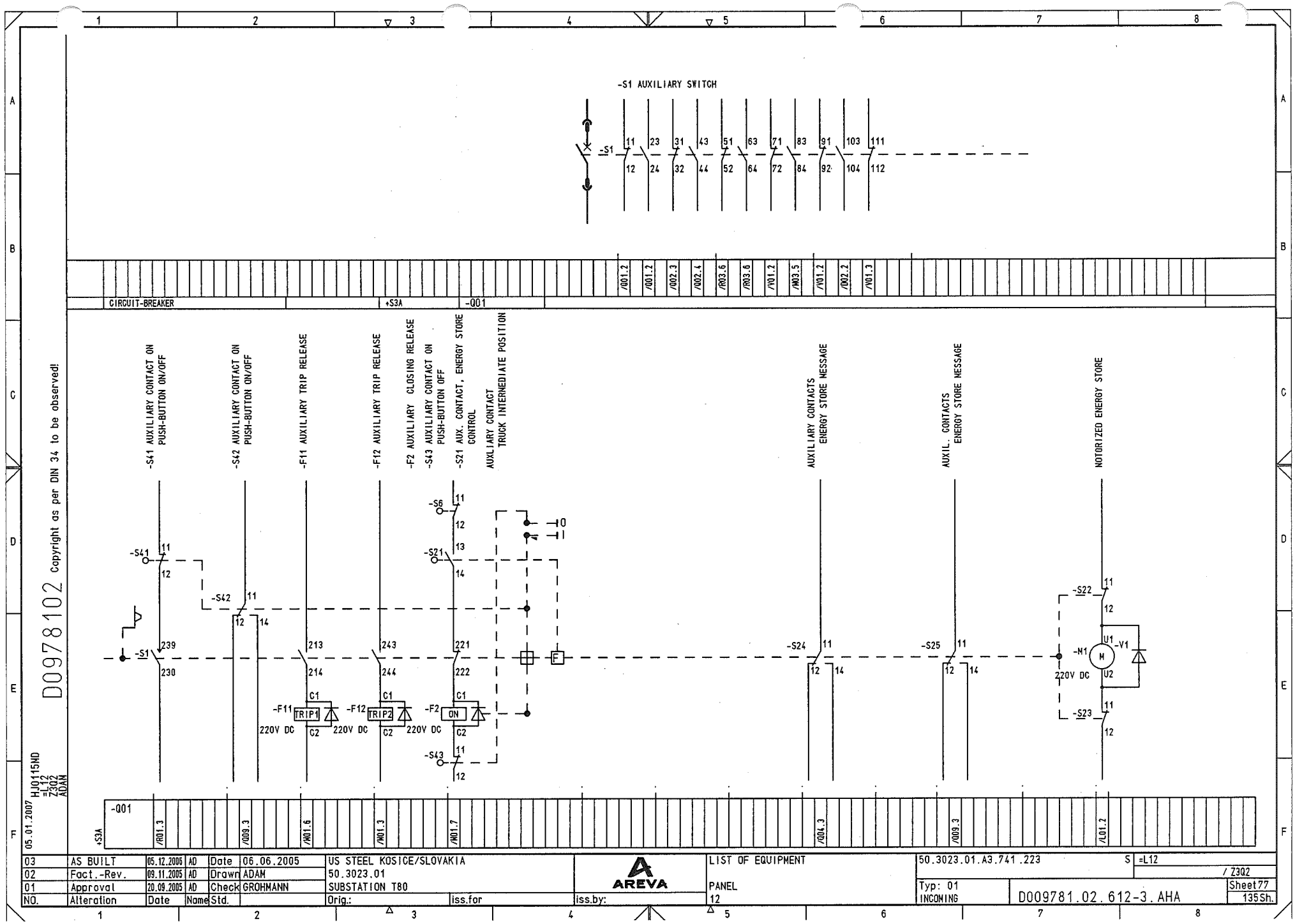
/Q01.3 /Q02.5 /P01.2 /P02.6 /V01.4 /V01.4 /Q01.3 /Q02.5 /G00.3 /D02.2

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND L12 Z3Q1 ADAM

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	LIST OF EQUIPMENT	50.3023.01.A3.741.223	S	=L12
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01					/ Z3Q1
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL	Typ: 01		Sheet 76
NO.	Alteration	Date	Name	Std.		Orig.:	Iss.for	Iss.by:	12	INCOMING	D009781.02.612-3.AHA	135 Sh.



Copyright as per DIN 34 to be observed!

D0978102

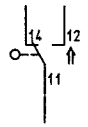
05.01.2007 HJ0115ND =L12 Z302 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223
S =L12
/ Z302
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 77
135 Sh.

STÜCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM WITH REFERENCES TO DETAILS REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
3	ANSTOßSCHALTER	MANUF.: ALSTOM PO NO.:	TYPE			

TECHNICAL COMPONENTS	TYP	ORDER NO

APPLICATION		SETTINGS	MOUNTING	BTN IDENTIFIER		
CRANK INSERTED	SLIDE-IN MODULE		+S3A	-S61	/P01.2	
CRANK INSERTED	SLIDE-IN MODULE		+S3A	-S62	/P02.6	
CRANK INSERTED	SLIDE-IN MODULE		+S3A	-S63	/V01.5	

D0097810 2 Copyright as per DIN 34 to be observed!

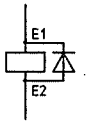
05.01.2007 HJ0115ND =L12 Z3S1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z3S1
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 78 135Sh.

STUCK-TITY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
1	SPERRMAGNET SPERRMAGNET AN SCHALTWAGEN : 220VDC	MANUF.: ALSTOM PO NO.:	TYPE				
	TECHNICAL COMPONENTS	TYP	ORDER NO				
	APPLICATION	SETTINGS	MOUNTING	BTN IDENTIFIER			
	RELEASE SLIDE-IN MODULE		+S3A	-Y1	/P01.4		

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12 Z3Y1 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

LIST OF EQUIPMENT
PANEL 12

50.3023.01.A3.741.223 S =L12 / Z3Y1
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 79 135 Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X0

CABLE MATERIAL				⌀	COLOR
STANDARD:		H07V-K	1.5MM2		SW
POS.:	0	H05V-K	1.0MM2		SW
	2	H07V-K	2.5MM2		SW

TERM.TYPE

STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL		POT	NO	DESTINAT. DESIG. INTERN			CORES/LINE	REMARK
/D01.2													2	=L11 +S1A.R -X0	2	AC230V.L1	1					
/D01.7													2	=L13 +S1A.R -X0	1	AC230V.L1	2	-F117	1	Q		
/D01.2													2	=L11 +S1A.R -X0	4	N	3	-X1	25			
/D01.7													2	=L13 +S1A.R -X0	3	N	4	-X1	42			
/G00.2													2	=L11 +S1A.R -X0	6	CBF+	5					
/G00.7													2	=L13 +S1A.R -X0	5	CBF+	6					
/P01.4													0	+S1B.R -X9	908		7	-X01	D13		0	
/G00.2													2	=L11 +S1A.R -X0	8	CBF1'	7A	-X8	869			
/G00.7													2	=L13 +S1A.R -X0	7A	CBF1'	8					
/G00.2													2	=L11 +S1A.R -X0	10		9	-X04	B13			
/G00.7													2	=L13 +S1A.R -X0	9		10					
/G01.2													2	=L11 +S1A.R -X0	12	DC220V.L+	11					
/G01.7													2	=L13 +S1A.R -X0	11	DC220V.L+	12	-F003	1	Q	2	
/G01.2													2	=L11 +S1A.R -X0	14	DC220V.L-	13					
/G01.7													2	=L13 +S1A.R -X0	13	DC220V.L-	14	-F003	3	Q	2	
/G01.2													2	=L11 +S1A.R -X0	16	03L+	15	-F003	2			
/G01.7													2	=L13 +S1A.R -X0	15	03L+	16	-F203	1			
/G01.2													2	=L11 +S1A.R -X0	18	03L-	17	-F003	4			
/G01.7													2	=L13 +S1A.R -X0	17	03L-	18	-F203	3			
/P01.1													2	=L11 +S1A.R -X0	022	214L+	021					
/P01.7													2	=L13 +S1A.R -X0	021	214L+	022					
/P01.1													2	=L11 +S1A.R -X0	024	214L-	023	-X01	D14		0	
/P01.7													2	=L13 +S1A.R -X0	023	214L-	024	-K200	A2		0	
/P01.1													2	=L11 +S1A.R -X0	028		025	-X01	C05		0	
/P01.3																	026	+S2A -S7	22			
/P01.2																BUSBAR ES.RELEASE	027	-X01	C06		0	
/P01.7													2	=L13 +S1A.R -X0	025	BUSBAR ES.RELEASE	028	+S2A -S7	21			
/P01.1													2	=L11 +S1A.R -X0	030	DRAWG.UNIT RELEASE	029					
/P01.7													2	=L13 +S1A.R -X0	029	DRAWG.UNIT RELEASE	030	+S1B.R -X9	906		0	

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	Iss.for	Iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1A.R / K01

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 80 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X0

CABLE MATERIAL			Ø	COLOR
STANDARD:		H07V-K 1.5MM2		SW
POS.:	2	H07V-K 2.5MM2		SW

TERM.TYPE

STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL		POT	NO	DESTINAT. DESIG. INTERN				CORES/LINE	REMARK
/X01.3																TXD+	051		-A100	-X6	1			
/X01.7													2	=L13 +S1A.R -X0	051	TXD+	052						
/X01.4																TXD-	053		-A100	-X6	2			
/X01.7													2	=L13 +S1A.R -X0	053	TXD-	054						
/G02.2													2	=L11 +S1A.R -X0	062	04L+	061		-X4		419		
/G02.7													2	=L13 +S1A.R -X0	061	04L+	062		-F004		2		
/G02.2													2	=L11 +S1A.R -X0	064	04L-	063	+S1A.T -F301	-X1		16	Q	
/G02.7													2	=L13 +S1A.R -X0	063	04L-	064		-F004		4		
/G02.2													2	=L11 +S1A.R -X0	066	AUTF SS1	065		-K451A		53		
/G02.7													2	=L13 +S1A.R -X0	065	AUTF SS1	066						
/G02.2													2	=L11 +S1A.R -X0	068	AUTF SS2	067		-K451B		53		2
/G02.7													2	=L13 +S1A.R -X0	067	AUTF SS2	068						
/N01.2													2	=L11 +S1A.R -X0	092	ACR+	091		-X1		179		
/N01.7													2	=L13 +S1A.R -X0	091	ACR+	092		-X04		B01		
/N01.2													2	=L11 +S1A.R -X0	094	ACR-	093		-F310		2		
/N01.7													2	=L13 +S1A.R -X0	093	ACR-	094		-X04		B04		
/N01.2													2	=L11 +S1A.R -X0	096	TRANSFER TRIPPING	095		-F310		6		
/N01.7													2	=L13 +S1A.R -X0	095	TRANSFER TRIPPING	096		-X04		B02		
/N01.2													2	=L11 +S1A.R -X0	098	I>	097		-X1		177		
/N01.7													2	=L13 +S1A.R -X0	097	I>	098		-X04		B03		
/N01.2													2	=L11 +S1A.R -X0	100	SPARE	099						
/N01.7													2	=L13 +S1A.R -X0	099	SPARE	100						

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	
Date		06.06.2005		
Drawn		ADAM		
Check		GROHMANN		

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:

AREVA

TERMINAL DIAGRAM
PANEL 12

50.3023.01.A3.741.223 V =L12 +S1A.R / K02
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 81 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X1

CABLE MATERIAL	⌀	COLOR	TERM.TYPE
STANDARD: H07V-K 1.5MM2		SW	STANDARD: UKKB3

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE		DESTINAT. DESIG. EXTERNAL	
/D01.4																
/D03.2																
/D02.2														Q	-F320	9
/D03.8																
/D01.4															-X0	3
/D02.2														Q	-F320	10
/D03.7														Q	-K101	A2
/D03.4																
/D03.5																
/D03.6																
/D03.2															-K101	2
/D03.4															-K101	4
/D03.5															-K101	6
/D03.7														Q	-K320	28
/D03.4																
/D03.6																
/D03.3																
/D03.5																
/D03.6															-K102	A1
/D01.6															-F127	2
/D01.6															-X0	4
/D04.7															-X04	B09
/D04.7															-X04	B10
/D04.7															-X04	B11
/D04.7															-X04	B12

POT	NO
117L1	21
107L1	22
107L1	23
107L1	24
N	25
N	26
N	27
N	28
N	29
N	30
	31
	32
	33
	34
	35
	36
	37
	38
	39
127L1	41
N	42
127L1	43
	44
	45
	46

DESTINAT. DESIG. INTERN			CORES/LINE	REMARK
-F117	2			
-K101	1	Q		
-K320	25	Q		
-K320	15	Q		
-X101	C02			
-X101	C05			
-X101	C08			
-X101	C11			
-X101	C14			
-X101	D01			
-X101	C01			
-X101	C07			
-X101	C13			
-X101	C03			
-X101	C09			
-X101	C15			
-X101	C04			
-X101	C10			
-X101	C16			
-X04	B07			
-X04	B08			
-K320.B	13			
-K320.B	14			
-K320.B	33			
-K320.B	34			

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:		iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	iss.for	
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1A.R / K10

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 82 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X1

CABLE MATERIAL	⌀	COLOR
STANDARD: H07V-K	1.5MM2	SW
POS.: 0 H05V-K	1.0MM2	SW

TERM.TYPE

STANDARD: UKKB3

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE		DESTINAT. DESIG. EXTERNAL		
/G01.2															-F111		2
/G01.2															-F111		4
/G01.2															-F121		2
/G01.3															-F121		4
/G01.6															+S1A.T -F301	-X1	13
/G01.6															+S1A.T -F301	-X1	14
/G01.4															-F112		2
/M00.3															+S1A.T -F302		R5
/M00.3															-K10		A2
/M02.2															-X04		C10
/M00.4													0	Q	+S1A.T -S2		13
/M01.2															-U401		13
/M00.6															+S1B.R -X4		434
/M01.4																	
/M01.5														Q	+S1A.T -F301	-X3	33
/M03.5																	
/M02.3																	
/M02.4																	
/M03.8															+S2A -S7		12
/M04.3														Q	-A100	-X20	11
/G01.4															-F102		4
/M01.4														Q	-K01E		34
/M01.6																	
/M01.6															+S1A.T -S01E		34
/M02.4																	
/M02.6																	
/M02.6															+S1A.T -S02E		34
/M02.8																	
/M03.3																	
/M03.5														Q	-K01A		A2
/G01.7															+S1A.T -F302		F1
/G01.7															+S1A.T -F302		F2
/M01.4													0	Q	-F310		8
/M01.5															+S1A.T -F301	-X3	35

POT	NO
111L+	101
111L-	102
121L+	103
121L-	104
103L+	105
103L-	106
112L+	107
112L+	108
112L-	109
112L-	110
102L+	111
102L+	112
102L+	113
102L+	114
102L+	115
102L+	116
102L+	117
102L+	118
102L+	119
102L+	120
102L-	121
102L-	122
102L-	123
102L-	124
102L-	125
102L-	126
102L-	127
102L-	128
102L-	129
102L-	130
113L+	131
113L-	132
	133
	134

DESTINAT. DESIG. INTERN				CORES/ LINE	REMARK
-X01		A01		0	
-X01		A02		0	
-X04		A03			
-X04		A04			
-F103		2			
-F103		4			
-K0BF1		13	Q		
-K0BF2		33	Q		
-F112		4			
-X01		C02			
-F102		2			
-K72		43			
-F310		7	Q		
-X04		A11			
-X01		B07		0	
-X04		A09			
-K0BF2		43	Q		
-X3		301			
-K20		84	Q		
-U401		14			
-X01		A04		0	
-K02E		34	Q		
-X04		A07			
+S2A -Y8		E2			
-X3		308			
-F113		2			
-F113		4			
-K201		A1		0	

D0097810 2 Copyright as per DIN 34 to be observed!

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date	06.06.2005	Orig.:	Iss.for
Drawn	ADAM		
Check	GROHMANN		Iss.by:

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

AREVA

TERMINAL DIAGRAM
PANEL
12

50.3023.01.A3.741.223 V
=L12
+S1A.R / K11
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 83
135 Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X1

CABLE MATERIAL	⌀	COLOR
STANDARD:	H07V-K 1.5MM2	SW
POS.: 0	H05V-K 1.0MM2	SW

TERM.TYPE

STANDARD: UKKB3

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE		DESTINAT. DESIG. EXTERNAL		
/M01.6													0		+S1A.T -S01A		14
/M01.6														Q	-K01A		14
/M01.7																	
/M01.7																	
/M01.6															+S1A.T -S200		3
/M01.7															+S1A.T -S01E		14
/M01.6															+S1A.T -S01E		33
/M01.7															-K01E		33
/M01.3															-X01		C01
/M01.3														Q	-K0BF1		14
/G02.3															-X4		420
/M02.8																	
/M02.4															-K202		A1
/M02.4														Q	-K0BF2		44
/M02.6															+S1A.T -S02A		14
/M02.6																	
/M02.6																	
/M02.7																	
/M02.7																	
/M02.6															+S1A.T -S200		7
/M02.7															+S1A.T -S02E		14
/M02.6															+S1A.T -S02E		33
/M02.7															-K02E		33
/M02.2																	
/M02.2															-X04		C09
/M03.4																	
/M03.3															+S1A.T -F301	-X3	31
/M03.3															+S1A.T -F301	-X3	30
/M03.4																	
/M03.5															-K451A		A1
/M03.6															-K451B		A1
/M03.7															-K72		A1
/M03.8															+S2A -S7		11
/N01.4															-X0		097

POT	NO
	135
	136
	137
	138
	139
	140
	141
	142
	143
	144
	145
	151
	152
	153
	154
	155
	156
	157
	158
	159
	160
	161
	162
	163
	164
	169
	170
	171
	172
	173
	174
	175
	176
I>	177

DESTINAT. DESIG. INTERN				CORES/ LINE	REMARK
-X01		A03		0	
-K201		22			
-X01		A05		0	
-K01A		13	Q		
-K01E		14	Q		
-X01		A06		0	
+S1A.T -F301	-X1	15	Q		
-X04		A10			
+S1A.T -F301	-X3	34			
-X04		A05			
-K02A		14	Q		
-K202		22			
-X04		A06			
-K02A		13	Q		
-K02E		14	Q		
-X04		A08			
-K0BF2		34	Q		
+S2A -Y8		E1			
-X04		A12			
-K72		44			
-X01		B08		0	
-X04		A14			
-X04		A15			
-K71		A1			
-F310		4			

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date	06.06.2005	Orig.:	iss.for
Drawn	ADAM		
Check	GROHMANN		

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

AREVA

iss.by:

TERMINAL DIAGRAM

PANEL
12

50.3023.01.A3.741.223 V

=L12
+S1A.R / K12

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 84
135 Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X1

CABLE MATERIAL			Ø	COLOR
STANDARD:		H07V-K	1.5MM2	SW
POS.:	0	H05V-K	1.0MM2	SW
	2	H07V-K	2.5MM2	SW

TERM.TYPE

STANDARD: UKKB3

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL			POT	NO	DESTINAT. DESIG. INTERN			CORES/LINE	REMARK
/N01.5														+S1A.T	-F301	-X3 27	I>	178					
/N01.3															-X0	091	ACR+	179	-F310		1		
/N01.5																	ACR+	180	+S1A.T	-F301 -X3	28		
/P02.4														+S2A	-S81	11		181	-X04		C02		
/P02.4														+S2A	-S81	14		182	-X9		919		
/P02.6													0	+S2A	-Q8 -S1	52		183	-X9		905		
/P02.6														+S2A	-Q8 -S1	51	DRAWG.UNIT RELEASE	184	-X04		C01		
/D02.2															-F320	12		185	-X01		D11	0	
/D02.2													0		-X01	D12		186	-X01		C09	0	
/D02.2													0		-X01	C10		187	-K320.A		A1		
/M00.3														+S1A.T	-X302	6A1		191	-K10		A1		
/M00.4																		192	-K20		21		
/M00.6														+S1B.R	-X4	435		193					
/M00.4														+S1A.T	-S2	14		194	-K20		13		
/M00.5														+S1A.T	-S2	X2		195	-K20		83		
/G00.2													2	=L10 +S1A.R	-X1	186	CBF-	196	-K0BF1		A2	Q	
/G00.7																	CBF-	197					
/G00.3															-X8	877		198	-K0BF1		A1		
/G00.4															-K0BF2	A1		199	-X04		B14		

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Std.		Date	06.06.2005
Drawn	ADAM		
Check	GROHMANN		

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: Iss.for Iss.by:

AREVA

TERMINAL DIAGRAM
PANEL 12

50.3023.01.A3.741.223 V =L12 +S1A.R / K13

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 85 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X3

CABLE MATERIAL			Ø	COLOR
STANDARD:		H07V-K 1.5MM2		SW
POS.:	0	H05V-K 1.0MM2		SW

TERM.TYPE

STANDARD: UKKB3

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL	
/Q01.2															
/Q01.2															
/Q01.3															
/Q01.4															
/Q01.5															
/Q01.6															
/Q01.7														-X4	401
/Q01.2														-X1	130
/Q01.3														+S1A.T -H011	0
/Q01.5														+S1A.T -H02	0
/Q01.7														+S1A.T -H8	0
/Q01.8															
/Q01.2														+S1A.T -H01	1
/Q01.2														+S1A.T -H01	2
/Q01.3														+S1A.T -H011	1
/Q01.4															
/Q01.3														+S1A.T -H011	2
/Q01.5														+S1A.T -H02	1
/Q01.5														+S1A.T -H02	2
/Q01.5														+S1A.T -H021	1
/Q01.6															
/Q01.6														+S1A.T -H021	2
/Q01.7														+S1A.T -H8	1
/Q01.8														+S1A.T -H8	2

POT	NO
102L+	301
102L+	302
102L+	303
102L+	304
102L+	305
102L+	306
102L+	307
102L-	308
102L-	309
102L-	310
102L-	311
102L-	312
	321
	322
	323
	324
	325
	326
	327
	328
	329
	330
	331
	332

DESTINAT. DESIG. INTERN					CORES/LINE	REMARK
-X1			120			
-X01			A12		0	
-X01			C15		0	
-K71			13			
-X04			D01			
-K72			13			
+S2A	-Q8	-S1	11	Q		
+S1A.T -H01			0			
+S1A.T -H021			0			
-X4			406			
-X01			A13		0	
-X01			A14		0	
-X01			C16		0	
-K71			14			
-X01			D01		0	
-X04			D02			
-X04			D03			
-X04			D04			
-K72			14			
-X04			D05			
+S2A	-Q8	-S1	12			
+S2A	-Q8	-S1	24			

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Std.		Date	06.06.2005
Drawn	ADAM		
Check	GROHMANN		

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:

AREVA

TERMINAL DIAGRAM
PANEL 12

50.3023.01.A3.741.223 V
=L12
+S1A.R / K30
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 86
135 Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X4

CABLE MATERIAL			⌀	COLOR
STANDARD:	H07V-K	1.5MM2		SW
POS.: 0	H05V-K	1.0MM2		SW

TERM.TYPE

STANDARD: UKKB3

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE		DESTINAT. DESIG.	EXTERNAL	
/R01.2															-K100		A1
/R01.3														Q	+S1A.T -S01A		21
/R03.7														Q	+S1A.T -S01E		43
/R02.7															+S1A.T -H501		17
/R03.2														Q	+S1A.T -F301	-X1	18
/R01.2															-K100		A2
/R01.4																	
/R02.2														Q	+S1A.T -H501		18
/R01.3															+S1A.T -S01E		22
/R01.3															-K01E		22
/R01.4															+S1A.T -S02E		22
/R01.4															-K02E		22
/R01.3															-K100		E1
/R01.4																	
/R01.5																	
/R01.5																	
/R01.5																	
/R01.5																	
/G02.3															-X0		061
/G02.3															-X1		145
/G01.7															+S1B.R -X4		403
/G01.7															+S1B.R -X4		407

POT	NO
102L+	401
102L+	402
102L+	403
102L+	404
102L-	405
102L-	406
102L-	407
102L-	408
	409
	410
	411
	412
	413
	414
	415
	416
	417
	418
04L+	419
	420
104L+	421
104L-	422

DESTINAT. DESIG.	INTERN		CORES/ LINE	REMARK
-X3	307			
-X01	B02			
-X04	C05			
-K01E	43	Q		
-X3	312			
-K400	A2			
-K01A	21			
-X01	A10		0	
-K02A	21			
-X04	C03			
-X01	A11		0	
-X04	C04			
-F003	22	Q		
-F003	21	Q		
-F451	22	Q		
-F451	21	Q		
-F104	2			
-F104	4			

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date 06.06.2005
Drawn ADAM
Check GROHMANN
Orig.: Iss.for Iss.by:

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

AREVA

TERMINAL DIAGRAM
PANEL 12

50.3023.01.A3.741.223 V
=L12
+S1A.R / K40
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 87
135 Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X4

CABLE MATERIAL	⌀	COLOR	TERM.TYPE
STANDARD: H07V-K	1.5MM2	SW	STANDARD: UKKB3

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL		POT NO	DESTINAT. DESIG. INTERN		CORES/LINE	REMARK
/Q05.8														=ZT2 +ZT2 -X	34	433	-X8	847		
/R02.2														+S1A.T -H501	1	461	+S1B.R -X4	461		
/R02.2														+S1A.T -H501	2	462	+S1B.R -X4	462		
/R02.2														+S1A.T -H501	3	463	+S1B.R -X4	463		
/R02.2														+S1A.T -H501	4	464	+S1B.R -X4	464		
/R02.3														+S1A.T -H501	5	465	+S1B.R -X4	465		
/R02.3														+S1A.T -H501	6	466	+S1B.R -X4	466		
/R02.3														+S1A.T -H501	7	467	+S1B.R -X4	467		
/R02.4														+S1A.T -H501	8	468	+S1B.R -X4	468		
/R02.4														+S1A.T -H501	9	469	+S1B.R -X4	469		
/R02.4														+S1A.T -H501	10	470	+S1B.R -X4	470		
/R02.5														+S1A.T -H501	11	471	+S1B.R -X4	471		
/R02.5														+S1A.T -H501	12	472	+S1B.R -X4	472		
/R02.5														+S1A.T -H501	13	473	+S1B.R -X4	473		
/R02.6														+S1A.T -H501	14	474	+S1B.R -X4	474		
/R02.6														+S1A.T -H501	15	475	+S1B.R -X4	475		
/R02.7														+S1A.T -H501	16	476	+S1B.R -X4	476		
/R03.2														+S1A.T -F302	F5	477	+S1B.R -X4	477		
/R03.3														+S1A.T -F302	F6	478	+S1B.R -X4	478		
/R03.4														+S1A.T -F302	F7	479	+S1B.R -X4	479		
/R03.4														+S1A.T -F302	F8	480	+S1B.R -X4	480		
/R03.6																481	-X01	B03		
/R03.6														+S1A.T -F302	F9	482	-X01	B04		
/R03.6																483	-X04	C06		

Copyright as per DIN 34 to be observed!

D009781 02

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1A.R / K41

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 88 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X5

CABLE MATERIAL	⌀	COLOR
STANDARD: H07V-K	2.5MM2	SW

TERM.TYPE

STANDARD: URTK/S

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL	
/S03.2															
/S03.2															
/S03.2															
/S03.3															
/S03.3															
/S03.3															
/S03.4														-X5	510
/S03.4															
/S03.4															
/S03.4														-X5	507
/S03.4															

POT	NO
	501
	502
	503
	504
	505
	506
	507
	508
	509
	510
	511

DESTINAT. DESIG. INTERN		CORES/LINE	REMARK
+S2A -T1L1	2S2		
+S2A -T1L1	2S1		
+S1A.T -X302	3A1		
+S2A -T1L2	2S2		
+S2A -T1L2	2S1		
+S1A.T -X302	2A1		
+S2A -T1L3	2S2		
+S2A -T1L3	2S1		
+S1A.T -X302	1A1		
-XPE	PE		
+S1A.T -X302	4A1		

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1A.R / K50

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 89 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X5

CABLE MATERIAL	⌀	COLOR	TERM.TYPE
STANDARD: H07V-K	2.5MM2	SW	STANDARD: URTK/S

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL		POT NO	DESTINAT. DESIG. INTERN			CORES/LINE	REMARK
/S01.4																521	+S2A	-T1L1	1S2		
/S01.4																522	+S2A	-T1L1	1S1		
/S01.4																523		-U401	1		
/S01.4																524	+S2A	-T1L2	1S2		
/S01.4																525	+S2A	-T1L2	1S1		
/S01.4																526		-F320	4		
/S01.5														-X5	530	527	+S2A	-T1L3	1S2		
/S01.5																528	+S2A	-T1L3	1S1		
/S01.5																529		-U401	7		
/S01.6														-X5	527	530		-XPE	PE		
/S01.5														+S1A.T -P403	18	531	+S1A.T	-P402	18		
/S01.4														+S1A.T -P401	18	532					
/S02.2																541	=T1 +T	-X7	6		
/S02.2																542	=T1 +T	-X7	5		
/S02.2																543		+S1A.T -F301 -X1	1		
/S02.3																544	=T1 +T	-X7	8		
/S02.3																545	=T1 +T	-X7	7		
/S02.3																546		+S1A.T -F301 -X1	3		
/S02.4														-X5	550	547	=T1 +T	-X7	10		
/S02.4																548	=T1 +T	-X7	9		
/S02.4																549		+S1A.T -F301 -X1	5		
/S02.4														-X5	547	550		-XPE	PE		
/S02.4																551		+S1A.T -F301 -X1	2	Q	

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:		iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA			
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01			
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80			

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V | =L12 | +S1A.R | / K51

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 90 | 135 Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X5

CABLE MATERIAL	⌀	COLOR	TERM.TYPE
STANDARD: H07V-K 2.5MM2		SW	STANDARD: URTK/S

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL		
/S02.5														-XPE		PE
/S02.5														+S1A.T -F301	-X1	7
/S02.6																
/S02.6																
/S02.7																
/S02.6																
/S02.7																
/S02.7																
/S02.8																
/S02.7																
/S02.8														+S1A.T -F301	-X1	8
/S02.8																

POT	NO
	561
	562
	563
	564
	565
	566
	567
	568
	569
	570
	571
	572

DESTINAT. DESIG. INTERN			CORES/LINE	REMARK
+S2A	-T91	S2		
+S2A	-T91	S1		
+S2A	-T92	S2		
+S2A	-T92	S1		
+S2A	-T93	S2		
+S2A	-T93	S1		
+S2A	-T94	S2		
+S2A	-T94	S1		
+S2A	-T95	S2		
+S2A	-T95	S1		
+S2A	-T96	S2		
+S2A	-T96	S1		

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1A.R / K52

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 91 135 Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X6

CABLE MATERIAL			⌀	COLOR
STANDARD:		H07V-K 1.5MM2		SW
POS.:	2	H07V-K 2.5MM2		SW

TERM.TYPE

STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE	DESTINAT. DESIG. EXTERNAL	
/T01.2															
/T01.2															
/T01.7															
/T01.3															
/T01.2															
/T01.7															
/T01.4															
/T01.3															
/T01.8															
/T01.4															
/T01.3															
/T01.8															
/T01.7															
/T01.7															
/T01.7															
/T01.5															
/T01.5															
/T01.8															
/T01.2													2	+S1B.R -X6	621
/T01.3													2	+S1B.R -X6	622
/T01.4													2	+S1B.R -X6	623
/T01.4													2	+S1B.R -X6	624
/T01.5													2	+S1B.R -X6	625
/T01.7													2	+S1B.R -X6	626

POT	NO
L1	601
L1	602
L1	603
L2	604
L2	605
L2	606
L3	607
L3	608
L3	609
N	610
N	611
N	612
e	613
e	614
e	615
n	616
n	617
n	618
L1	621
L2	622
L3	623
N	624
n	625
e	626

DESTINAT. DESIG. INTERN				CORES/ LINE	REMARK
-F451		2			
+S1A.T -F301	-X1	9	Q		
-U401		2			
-F451		4			
+S1A.T -F301	-X1	10	Q		
-U401		5			
-F451		6			
+S1A.T -F301	-X1	11	Q		
-U401		8			
-X6		624		2	
+S1A.T -F301	-X1	12	Q		
-U401		11			
-F452		2			
-R452		2		2	
+S1A.T -F302		R13			
-X6		625		2	
-R452		1		2	
+S1A.T -F302		R14			
-F451		1		2	
-F451		3		2	
-F451		5		2	
-X6		610		2	
-X6		616		2	
-F452		1		2	

Copyright as per DIN 34 to be observed!

D009781 02

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1A.R / K60

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 92 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X8

CABLE MATERIAL			Ø	COLOR
STANDARD:	H07V-K	1.5MM2		SW
POS.: 0	H05V-K	1.0MM2		SW

TERM.TYPE

STANDARD: UDMTK5-P/P

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE	DESTINAT. DESIG. EXTERNAL			POT	NO	DESTINAT. DESIG. INTERN				CORES/ LINE	REMARK
/Q02.2														-F203		2	03L+	801	-A100	-X1	1			
/Q02.3																	03L+	802	-X01		A15		0	
/Q02.5																	03L+	803	-X01		D02		0	
/Q02.6																	03L+	804	-K71		33			
/Q02.6																	03L+	805	+S2A -Q8	-S1	31	Q		
/Q03.4																	03L+	806	-X04		D06			
/Q03.6																	03L+	807	-K72		33			
/Q04.2																	03L+	808	-F111		12	Q		
/Q04.3																	03L+	809	-X01		A07		0	
/Q04.6																	03L+	810	+S1A.T -S200		13			
/Q05.2																	03L+	811	-F003		12	Q		
/Q05.2																	03L+	812	+S1A.T -F301	-X3	20	Q		
/Q08.6														-A100	-X12	38	03L+	813	-K0BF1		33	Q		
/Q07.2																	03L+	814	+S1B.R -X4		436			
/Q02.2														-F203		4	03L-	815	-A100	-X1	2			
/Q02.3																	03L-	816	-A100	-X10	9			
/Q05.2																	03L-	817	-A100	-X11	9			
/Q07.5																	03L-	818	-A100	-X12	9			
/Q08.2																	03L-	819						
/Q08.8																	03L-	820						
/Q02.3														-A100	-X10	1		821	-X01		A16		0	
/Q02.4														-A100	-X10	2		822	-X01		B01		0	
/Q02.5														-A100	-X10	5		823	-X01		D03		0	
/Q02.6																		824	-K71		34			
/Q02.5														-A100	-X10	6		825	-X01		D04		0	
/Q02.6														-A100	-X10	31		826	+S2A -Q8	-S1	32			
/Q02.7														-A100	-X10	32		827	+S2A -Q8	-S1	44			
/Q03.4														-A100	-X10	3		828	-X04		D07			
/Q03.4														-A100	-X10	4		829	-X04		D08			
/Q03.5														-A100	-X10	7		830	-X04		D09			
/Q03.6																		831	-K72		34			
/Q03.5														-A100	-X10	8		832	-X04		D10			
/Q04.2														-A100	-X10	33		833	-F111		11	Q		
/Q04.3														-A100	-X10	34		834	-X01		A08		0	

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:		iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA			
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01			
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80			

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V | =L12 | +S1A.R | / K80

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 93 | 135 Sh.

NO	CABLE	WIRES USED SHEET\STATE	CABLE-TYPE SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X8

CABLE MATERIAL				⌀	COLOR
STANDARD:		H07V-K	1.5MM2		SW
POS.:	0	H05V-K	1.0MM2		SW

TERM.TYPE

STANDARD: UDMTK5-P/P

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE		DESTINAT. DESIG. EXTERNAL			POT	NO	DESTINAT. DESIG. INTERN				CORES/ LINE	REMARK
/Q04.4																			835	-X04		D15			
/Q04.3																			836	-X01		A09		0	
/Q04.5															-A100	-X10	35		837	-F451		11	Q		
/Q04.6															-A100	-X10	36		838	+S1A.T -S200		14			
/Q05.2															-A100	-X11	4		839	-K100		10			
/Q05.2															-A100	-X11	5		840	+S1A.T -F301	-X3	26	Q		
/Q05.3															-A100	-X11	6		841	+S1A.T -F301	-X3	25			
/Q05.5															-A100	-X11	7		842	-F310		10			
/Q05.6																			843	-X04		D12			
/Q05.7															-A100	-X11	8	FAULT	844	-X04		D13			
/Q05.5																		FAULT	845	-F310		14			
/Q05.3																		FAULT	846	+S1A.T -F301	-X3	19	Q		
/Q05.8															-A100	-X11	31		847	-X4		433			
/Q06.1															-A100	-X11	32		848	-F003		11	Q		
/Q06.5																			849	-X04		D16			
/Q06.8																			850						
/Q06.7																			862	-U401		23			
/Q06.7																			863	-U401		24			
/Q06.7																			864	-U401		25			
/Q06.7																			865	-U401		26			
/Q09.2																			866						
/Q09.3																			867	-X01		B15		0	
/Q09.3																			868	-X01		B13		0	
/G00.3															-X0		7A	CBF1'	869	-X01		D07			
/Q09.5																			870	+S1A.T -F302		R4			
/R03.7														Q	+S1A.T -F301	-X1	17		871	+S1A.T -S01E		44	Q		
/R03.8																			872	-K01E		44	Q		
/Q09.2																			873						
/Q09.2																			874						
/Q09.3																			875	-X01		B16		0	
/Q09.3																			876	-X01		B14		0	
/G00.3															-X1		198		877	-X01		D08			
/Q09.5																			878	+S1A.T -F302		R1			
/Q09.6																			879	+S1A.T -F302		R2			

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	TERMINAL DIAGRAM
Drawn	ADAM	50.3023.01	
Check	GROHMANN	SUBSTATION T80	PANEL 12
Orig.:	iss.for	iss.by:	

AREVA

50.3023.01.A3.741.223 V =L12 +S1A.R / K81

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 94 135 Sh.

NO	CABLE	WIRES USED SHEET\STATE	CABLE-TYPE SECTION	CORES	-Route	CIRCUIT DIAGRAM		CABLE MATERIAL	⌀	COLOR	TERM.TYPE
								STANDARD:	H07V-K	1.5MM2 SW	STANDARD: UDMTK5-P/P
						INSTALLATION	-X8				

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE	DESTINAT. DESIG. EXTERNAL	POT NO	DESTINAT. DESIG. INTERN	CORES/ LINE	REMARK
/Q09.6														+S1A.T -F302 R3	880			

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1A.R / K82

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 95 135 Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X9

CABLE MATERIAL			⌀	COLOR
STANDARD:		H07V-K 1.5MM2		SW
POS.:	0	H05V-K 1.0MM2		SW

TERM.TYPE

STANDARD: UKKB3

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE		DESTINAT. DESIG. EXTERNAL	
/V01.2															=L14 +S1A.R -X9	915
/V01.2															=L10 +S1A.R -X8	858
/V01.8																
/V01.3															=L10 +S1A.R -X8	860
/P02.6															-X1	183
/V01.4																
/V01.4																
/V01.5																
/V01.5																
/V01.6																
/V01.7														Q	-K01E	43
/V01.7																
/V01.8																
/V01.8																
/V01.2															=L10 +S1A.R -X1	138
/V01.2															=L14 +S1A.R -X9	914
/V01.8																
/V01.3															=L14 +S1A.R -X9	906
/P02.6															-X1	182
/V01.4																
/V01.4																
/V01.5																
/V01.5																
/V01.6																
/V01.7															-K400	A1
/V01.7																
/V01.8																

POT	NO
	901
	902
	903
	904
	905
	906
	907
	908
	909
	910
102L+	911
	912
	913
	914
	915
	916
	917
	918
	919
	920
	921
	922
	923
	924
	925
	926
	927

DESTINAT. DESIG. INTERN			CORES/ LINE	REMARK
-X01	B05	Q	0	
-X01	B09	Q	0	
-X01	C11	Q	0	
-X01	B11	Q		
-X01	D05		0	
-X01	D09		0	
-X01	C13		0	
+S2A -Q8 -S1	63			
+S2A -S7	32			
+S1A.T -S200	9			
+S1A.T -S200	11			
-X01	B06	Q	0	
-X01	B10	Q	0	
-X01	C12	Q	0	
-X01	B12	Q		
-X01	D06		0	
-X01	D10		0	
-X01	C14		0	
+S2A -Q8 -S1	64			
+S2A -S7	31			
+S1A.T -S200	10			

Copyright as per DIN 34 to be observed!

D009781 02

05.01.2007

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Date	06.06.2005	Std.	
Drawn	ADAM	Orig.:	
Check	GROHMANN		

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

iss.for | iss.by:

AREVA

TERMINAL DIAGRAM
PANEL
12

50.3023.01.A3.741.223 V

=L12
+S1A.R / K90

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 96
135 Sh.

NO	CABLE	WIRES USED SHEET\STATE	CABLE-TYPE SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-XPE

CABLE MATERIAL			Ø COLOR
STANDARD:	H05V-K	1.0MM2	GN/ YE
POS.: 2	H07V-K	2.5MM2	SW

TERM.TYPE

STANDARD: USLKG5

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE	DESTINAT. DESIG. EXTERNAL		POT NO	DESTINAT. DESIG. INTERN		CORES/ LINE	REMARK
/D03.2																PE	-X101	C06		
/S01.6													2	-X5	530	PE	-X101	C12		
/S02.5													2	-X5	550	PE	-X101	D02		
/S02.5													2	-X5	561	PE				
/S03.5													2	-X5	510	PE				
/D03.7																PE				

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Std.		Date	06.06.2005
Drawn	ADAM		
Check	GROHMANN		

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:

AREVA

TERMINAL DIAGRAM
PANEL 12

50.3023.01.A3.741.223 V
=L12
+S1A.R / KPE
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 97
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
D01	AC230V.L1 1 1.5MM2	H07V-K SW	-X0 2	-F117 1	-F127 1				
D02	117L1 1 1.5MM2	H07V-K SW	-X1 23	-F320 9	-F320 13	-F320 16			
D02	N	BL	-X1 26	-F320 10	-K320.A A2	-K320.B A2			
D03	1 1.5MM2	H07V-K SW		-K101 A1	-K320 18				
D03	1 1.5MM2	H07V-K SW		-K320 Y1	-K320.A 33				
D03	1 1.5MM2	H07V-K SW		-K320 Z2	-K320.A 34				
D03	107L1 1 1.5MM2	H07V-K SW	-X1 22	-K101 1	-K101 3	-K101 5			
D03	107L1 1 1.5MM2	H07V-K SW	-X1 23	-K320 25	-K320.A 13				
D03	107L1 1 1.5MM2	H07V-K SW	-X1 24	-K320 15	-K320 A1				
D03	N	BL	-X1 27	-K101 A2	-K102 A2	-K320 A2			
D03	1 1.5MM2	H07V-K SW	-X1 34	-K320 28	-K320.A 14				
G00	CBF- 1 1.5MM2	H07V-K SW	-X1 196	-K0BF1 A2	-K0BF2 A2				
G01	DC220V.L+ 2 2.5MM2	H07V-K SW	-X0 12	-F003 1	-F004 1	-F102 1	-F103 1	-F104 1	-F111 1
	---->			-F112 1	-F113 1	-F121 1			
G01	DC220V.L- 2 2.5MM2	H07V-K SW	-X0 14	-F003 3	-F004 3	-F102 3	-F103 3	-F104 3	-F111 3
	---->			-F112 3	-F113 3	-F121 3			
G02	1 1.5MM2	H07V-K SW		-K451A 54	-K451A 82				
G02	1 1.5MM2	H07V-K SW		-K451A 81	-K451B 54				
G02	04L+ 1 1.5MM2	H07V-K SW	-X4 419	-F451 22	-F452 22				
G02	1 1.5MM2	H07V-K SW	-X4 420	-F451 21	-F452 21				

Copyright as per DIN 34 to be observed!

D0097810 2 05.01.2007

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Std.

Date 06.06.2005
Drawn ADAM
Check GROHMANN

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: | iss.for | iss.by:

AREVA

CROSS CONNECT. LIST
RELAY BOX
PANEL
12

50.3023.01.A3.741.223 V =L12
+S1A.R / Q10
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 98
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL / ITEM / CR. SECTION	CABLE MATERIAL / COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
M00	1 1.5MM2	H07V-K SW		-K20 11	-K20 E1				
M00	1 1.5MM2	H07V-K SW		-K20 22	-K20 A1				
M00	102L- 1 1.5MM2	H07V-K SW	-X1 121	-K20 84	-K20 A2	-K20 E2			
M01	112L+ 1 1.5MM2	H07V-K SW	-X1 107	-K0BF1 13	-K10 43	-K20 53			
M01	102L+ 1 1.5MM2	H07V-K SW	-X1 114	-F310 7	-K0BF1 23	-K20 43			
M01	102L- 1 1.5MM2	H07V-K SW	-X1 122	-K01E 34	-K201 A2				
M01	0 1.0MM2	H05V-K SW	-X1 133	-F310 8	-K0BF1 24	-K20 44			
M01	1 1.5MM2	H07V-K SW	-X1 136	-K01A 14	-K201 14				
M01	1 1.5MM2	H07V-K SW	-X1 139	-K01A 13	-K01E 13				
M01	1 1.5MM2	H07V-K SW	-X1 140	-K01E 14	-K201 13	-K201 21			
M01	1 1.5MM2	H07V-K SW	-X1 144	-K0BF1 14	-K10 44	-K20 54			
M02	112L+ 1 1.5MM2	H07V-K SW	-X1 108	-K0BF2 33	-K10 13	-K20 63			
M02	102L+ 1 1.5MM2	H07V-K SW	-X1 119	-K0BF2 43	-K20 73				
M02	102L- 1 1.5MM2	H07V-K SW	-X1 125	-K02E 34	-K202 A2				
M02	1 1.5MM2	H07V-K SW	-X1 153	-K0BF2 44	-K20 74				
M02	1 1.5MM2	H07V-K SW	-X1 156	-K02A 14	-K202 14				
M02	1 1.5MM2	H07V-K SW	-X1 159	-K02A 13	-K02E 13				
M02	1 1.5MM2	H07V-K SW	-X1 160	-K02E 14	-K202 13	-K202 21			
M02	1 1.5MM2	H07V-K SW	-X1 163	-K0BF2 34	-K10 14	-K20 64			
M03	102L- 1 1.5MM2	H07V-K SW	-X1 130	-K01A A2	-K01E A2	-K02A A2	-K02E A2	-K71 A2	-K72 A2

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name	Std.	Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date 06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check GROHMANN	SUBSTATION T80		

AREVA

CROSS CONNECT. LIST
RELAY BOX
PANEL
12

50.3023.01.A3.741.223 V =L12
+S1A.R / Q11
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 99
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
	---->			-K451A A2	-K451B A2				
M04	1 1.5MM2	H07V-K SW		-A100 -X20 1	-K01A A1				
M04	1 1.5MM2	H07V-K SW		-A100 -X20 3	-K01E A1				
M04	1 1.5MM2	H07V-K SW		-A100 -X20 5	-K02A A1				
M04	1 1.5MM2	H07V-K SW		-A100 -X20 7	-K02E A1				
M04	102L+ 1 1.5MM2	H07V-K SW	-X1 120	-A100 -X20 11	-A100 -X20 13	-A100 -X20 15	-A100 -X20 17		
P02	1 1.5MM2	H07V-K SW	-X9 905	-X01 B11	-K400 13				
P02	1 1.5MM2	H07V-K SW	-X9 919	-X01 B12	-K400 14				
Q02	1 1.5MM2	H07V-K SW		-A100 -X10 10	-A100 -X10 40				
Q04	1 1.5MM2	H07V-K SW		-A100 -X10 38	-K0BF1 34	-K0BF2 14			
Q04	03L+ 1 1.5MM2	H07V-K SW	-X8 808	-F111 12	-F121 12	-F451 12	-F452 12		
Q04	03L+ 1 1.5MM2	H07V-K SW	-X8 813	-K0BF1 33	-K0BF2 13				
Q04	1 1.5MM2	H07V-K SW	-X8 833	-F111 11	-F121 11				
Q04	1 1.5MM2	H07V-K SW	-X8 837	-F451 11	-F452 11				
Q05	1 1.5MM2	H07V-K SW		-A100 -X11 10	-A100 -X11 40				
Q05	03L+ 1 1.5MM2	H07V-K SW	-X8 811	-F003 12	-F004 12	-F102 12	-F103 12	-F104 12	-F112 12
	---->			-F113 12	-F117 12	-F127 12	-F203 12	-F310 9	-F310 13
	---->			-K100 19	-K102 13				
Q06	1 1.5MM2	H07V-K SW		-A100 -X30 2	-U401 17				
Q06	1 1.5MM2	H07V-K SW		-A100 -X30 3	-U401 18				

Copyright as per DIN 34 to be observed!

D0097810 2 05.01.2007

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD
	Std.		

Date 06.06.2005
Drawn ADAM
Check GROHMANN

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: | iss.for | iss.by:

AREVA

CROSS CONNECT. LIST
RELAY BOX
PANEL
12

50.3023.01.A3.741.223 V
=L12
+S1A.R / Q12
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 100
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
Q06	1 1.5MM2	H07V-K SW		-A100 -X30 6	-U401 15				
Q06	1 1.5MM2	H07V-K SW		-A100 -X30 7	-U401 16				
Q06	1 1.5MM2	H07V-K SW		-A100 -X30 32	-U401 19				
Q06	1 1.5MM2	H07V-K SW		-A100 -X30 33	-U401 20				
Q06	1 1.5MM2	H07V-K SW		-A100 -X30 36	-U401 21				
Q06	1 1.5MM2	H07V-K SW		-A100 -X30 37	-U401 22				
Q06	1 1.5MM2	H07V-K SW	-X8 848	-F003 11	-F004 11	-F102 11	-F103 11	-F104 11	-F112 11
	---->			-F113 11	-F117 11	-F127 11	-F203 11	-K102 14	
R01	1 1.5MM2	H07V-K SW		-K01A 22	-K01E 21				
R01	1 1.5MM2	H07V-K SW		-K02A 22	-K02E 21				
R01	1 1.5MM2	H07V-K SW	-X4 416	-F003 22	-F004 22	-F102 22	-F103 22	-F104 22	-F111 22
	---->			-F112 22	-F113 22	-F117 22	-F121 22	-F127 22	-F203 22
R01	1 1.5MM2	H07V-K SW	-X4 417	-F003 21	-F004 21	-F102 21	-F103 21	-F104 21	-F111 21
	---->			-F112 21	-F113 21	-F117 21	-F121 21	-F127 21	-F203 21
R03	102L+ 1 1.5MM2	H07V-K SW	-X4 404	-X9 911	-K01E 43	-K02E 43			
R03	1 1.5MM2	H07V-K SW	-X8 872	-K01E 44	-K02E 44				
S01	2 2.5MM2	H07V-K SW		-F320 7	-U401 4				
S01	2 2.5MM2	H07V-K SW		-U401 3	P401 17				
S01	2 2.5MM2	H07V-K SW		-U401 6	P402 17				
S01	2 2.5MM2	H07V-K SW		-U401 9	P403 17				

Copyright as per DIN 34 to be observed!

D0097810 2 05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date 06.06.2005
Drawn ADAM
Check GROHMANN

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: | Iss.for | Iss.by:

AREVA

CROSS CONNECT. LIST
RELAY BOX
PANEL
12

50.3023.01.A3.741.223

Typ: 01
INCOMING

D009781.02.612-3.AHA

V =L12
+S1A.R / Q13
Sheet 101
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
V01	0 1.0MM2	H05V-K SW	-X9 901	-X01 B05	-K400 23				
V01	0 1.0MM2	H05V-K SW	-X9 902	-X01 B09	-K400 33				
V01	0 1.0MM2	H05V-K SW	-X9 904	-X01 C11	-K400 43				
V01	0 1.0MM2	H05V-K SW	-X9 915	-X01 B06	-K400 24				
V01	0 1.0MM2	H05V-K SW	-X9 916	-X01 B10	-K400 34				
V01	0 1.0MM2	H05V-K SW	-X9 918	-X01 C12	-K400 44				

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Date 06.06.2005
Drawn ADAM
Check GROHMANN
Std.

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:

AREVA

CROSS CONNECT. LIST
RELAY BOX
PANEL
12

50.3023.01.A3.741.223 V =L12
+S1A.R / Q14
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 102
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
G02	1 1.5MM2	H07V-K SW		-F301 -X1 15	-F302 R11				
G02	04L- 1 1.5MM2	H07V-K SW		-F301 -X1 16	-F302 R12				
M00	1 1.5MM2	H07V-K SW		-F302 R6	-X302 6A4				
M00	102L+ 0 1.0MM2	H05V-K SW		-S2 13	-S2 X1				
M01	1 1.5MM2	H07V-K SW		-S01A 13	-S01E 13	-S200 1			
M02	102L+ 1 1.5MM2	H07V-K SW		-F301 -X3 33	-F301 -X3 36	-S200 2	-S200 6		
M02	1 1.5MM2	H07V-K SW		-S02A 13	-S02E 13	-S200 5			
Q05	FAULT 1 1.5MM2	H07V-K SW		-F301 -X3 19	-F302 F4				
Q05	03L+ 1 1.5MM2	H07V-K SW		-F301 -X3 20	-F301 -X3 22	-F302 F3	-F302 R7		
Q05	1 1.5MM2	H07V-K SW		-F301 -X3 26	-F302 R8				
R01	102L+ 1 1.5MM2	H07V-K SW		-S01A 21	-S02A 21				
R01	1 1.5MM2	H07V-K SW		-S01A 22	-S01E 21				
R01	1 1.5MM2	H07V-K SW		-S02A 22	-S02E 21				
R02	102L- 1 1.5MM2	H07V-K SW		-H501 18	-H501 NA	-H501 NB			
R03	1 1.5MM2	H07V-K SW		-F301 -X1 17	-F302 R9				
R03	102L- 1 1.5MM2	H07V-K SW		-F301 -X1 18	-F302 F10	-F302 R10			
R03	102L+ 1 1.5MM2	H07V-K SW		-S01E 43	-S02E 43				
R03	1 1.5MM2	H07V-K SW		-S01E 44	-S02E 44				
S02	2 2.5MM2	H07V-K SW		-F301 -X1 2	-F301 -X1 4	-F301 -X1 6			
S03	2 2.5MM2	H07V-K SW		-F302 Q1	-X302 3A2				

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12+S1A Q15 ADAN

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	CROSS CONNECT. LIST	50.3023.01.A3.741.223	V	=L12
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		RELAY BOX			+S1A.T / Q15
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL	Typ: 01	D009781.02.612-3.AHA	Sheet 107
NO.	Alteration	Date	Name	Std.		Orig.:	Iss.for	Iss.by:	12	INCOMING	135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
S03	2 2.5MM2	H07V-K SW		-F302 Q2	-F302 Q4	-F302 Q6	-F302 Q8		
S03	2 2.5MM2	H07V-K SW		-F302 Q3	-X302 2A2				
S03	2 2.5MM2	H07V-K SW		-F302 Q5	-X302 1A2				
S03	2 2.5MM2	H07V-K SW		-F302 Q7	-X302 4A2				
T01	L1 1 1.5MM2	H07V-K SW		-F301 -X1 9	-P451 17	-P452 17	-X302 7A1		
T01	L2 1 1.5MM2	H07V-K SW		-F301 -X1 10	-P451 18	-P453 17	-X302 7A2		
T01	L3 1 1.5MM2	H07V-K SW		-F301 -X1 11	-P452 18	-P453 18	-X302 7A3		
T01	N 1 1.5MM2	H07V-K SW		-F301 -X1 12	-X302 7A4				
T01	1 1.5MM2	H07V-K SW		-F302 R15	-X302 7B1				
T01	1 1.5MM2	H07V-K SW		-F302 R16	-X302 7B4				
T01	1 1.5MM2	H07V-K SW		-F302 R17	-X302 7B2				
T01	1 1.5MM2	H07V-K SW		-F302 R18	-X302 7B3				

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115MD =L12+S1A Q16 ADAM

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	CROSS CONNECT. LIST	50.3023.01.A3.741.223	V	=L12
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		RELAY BOX			+S1A.T / Q16
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL	Typ: 01 INCOMING	D009781.02.612-3.AHA	Sheet 108
NO.	Alteration	Date	Name	Std.		Orig.: Iss.for	Iss.by:	12			135Sh.

TERMINAL DIA. , 64-POLE , CIRCUIT-BREAKER

SOCKET

+S1A.R -X01

CABLE MATERIAL H05V-K 1.0mm2 SW

	A	B	C	D
1	A01 -X1 101 /L01.2 H05V-K 1.0MM2 SW	B01 -X8 822 /Q02.4 H05V-K 1.0MM2 SW	C01 -X1 143 /M01.3	D01 -X3 325 /Q01.3 H05V-K 1.0MM2 SW
2	A02 -X1 102 /L01.2 H05V-K 1.0MM2 SW	B02 -X4 402 /R03.6	C02 -X1 110 /M01.3	D02 -X8 803 /Q02.5 H05V-K 1.0MM2 SW
3	A03 -X1 136 /M01.6 H05V-K 1.0MM2 SW	B03 -X4 481 /R03.6	C03	D03 -X8 823 /Q02.5 H05V-K 1.0MM2 SW
4	A04 -X1 123 /M01.6 H05V-K 1.0MM2 SW	B04 -X4 482 /R03.6	C04	D04 -X8 825 /Q02.5 H05V-K 1.0MM2 SW
5	A05 -X1 138 /M01.7 H05V-K 1.0MM2 SW	B05 -X9 901 /V01.2 H05V-K 1.0MM2 SW	C05 -X0 025 /P01.2 H05V-K 1.0MM2 SW	D05 -X9 906 /V01.4 H05V-K 1.0MM2 SW
6	A06 -X1 142 /M01.7 H05V-K 1.0MM2 SW	B06 -X9 915 /V01.2 H05V-K 1.0MM2 SW	C06 -X0 027 /P01.2 H05V-K 1.0MM2 SW	D06 -X9 920 /V01.4 H05V-K 1.0MM2 SW
7	A07 -X8 809 /Q04.3 H05V-K 1.0MM2 SW	B07 -X1 116 /M03.5 H05V-K 1.0MM2 SW	C07	D07 -X8 869 /Q09.4 H05V-K 1.0MM2 SW
8	A08 -X8 834 /Q04.3 H05V-K 1.0MM2 SW	B08 -X1 173 /M03.5 H05V-K 1.0MM2 SW	C08	D08 -X8 877 /Q09.4 H05V-K 1.0MM2 SW
9	A09 -X8 836 /Q04.3 H05V-K 1.0MM2 SW	B09 -X9 902 /V01.2 H05V-K 1.0MM2 SW	C09 -X1 186 /D02.2 H05V-K 1.0MM2 SW	D09 -X9 907 /V01.4 H05V-K 1.0MM2 SW
10	A10 -X4 410 /R01.3 H05V-K 1.0MM2 SW	B10 -X9 916 /V01.2 H05V-K 1.0MM2 SW	C10 -X1 187 /D02.2 H05V-K 1.0MM2 SW	D10 -X9 921 /V01.4 H05V-K 1.0MM2 SW
11	A11 -X4 413 /R01.3 H05V-K 1.0MM2 SW	B11 -X9 905 /V01.4 H05V-K 1.0MM2 SW	C11 -X9 904 /V01.3 H05V-K 1.0MM2 SW	D11 -X1 185 /D02.2 H05V-K 1.0MM2 SW
12	A12 -X3 302 /Q01.2 H05V-K 1.0MM2 SW	B12 -X9 919 /V01.4 H05V-K 1.0MM2 SW	C12 -X9 918 /V01.3 H05V-K 1.0MM2 SW	D12 -X1 186 /D02.2 H05V-K 1.0MM2 SW
13	A13 -X3 321 /Q01.2 H05V-K 1.0MM2 SW	B13 -X8 868 /Q09.3 H05V-K 1.0MM2 SW	C13 -X9 908 /V01.5 H05V-K 1.0MM2 SW	D13 -X0 030 /P01.4 H05V-K 1.0MM2 SW
14	A14 -X3 322 /Q01.2 H05V-K 1.0MM2 SW	B14 -X8 876 /Q09.3 H05V-K 1.0MM2 SW	C14 -X9 922 /V01.5 H05V-K 1.0MM2 SW	D14 -X0 023 /P01.4 H05V-K 1.0MM2 SW
15	A15 -X8 802 /Q02.3 H05V-K 1.0MM2 SW	B15 -X8 867 /Q09.3 H05V-K 1.0MM2 SW	C15 -X3 303 /Q01.3 H05V-K 1.0MM2 SW	D15
16	A16 -X8 821 /Q02.3 H05V-K 1.0MM2 SW	B16 -X8 875 /Q09.3 H05V-K 1.0MM2 SW	C16 -X3 323 /Q01.3 H05V-K 1.0MM2 SW	D16

Subject to technical modifications!
Copyright as per DIN 34 to be observed!

D009781 02

05.01.2007 HJ0115ND =L12+S1A S01 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

PLUG DIAGRAM
CIRCUIT-BREAKER
PANEL
12

50.3023.01.A3.741.223 V

=L12
+S1A.R / S01

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 103
135Sh.

TERMINAL DIA. , 64-POLE , FAN

SOCKET

+S1A.R -X101

CABLE MATERIAL H05V-K 1.0mm2 SW

	A	B	C	D
1	A01	B01	C01 -X1 31 /D03.2	D01 -X1 30 /D03.6
2	A02	B02	C02 -X1 25 /D03.2	D02 -XPE PE /D03.6 H05V-K 1.0MM2 GN/ YE
3	A03	B03	C03 -X1 34 /D03.2	D03
4	A04	B04	C04 -X1 37 /D03.3	D04
5	A05	B05	C05 -X1 26 /D03.2	D05
6	A06	B06	C06 -XPE PE /D03.2 H05V-K 1.0MM2 GN/ YE	D06
7	A07	B07	C07 -X1 32 /D03.4	D07
8	A08	B08	C08 -X1 27 /D03.4	D08
9	A09	B09	C09 -X1 35 /D03.4	D09
10	A10	B10	C10 -X1 38 /D03.5	D10
11	A11	B11	C11 -X1 28 /D03.4	D11
12	A12	B12	C12 -XPE PE /D03.4 H05V-K 1.0MM2 GN/ YE	D12
13	A13	B13	C13 -X1 33 /D03.5	D13
14	A14	B14	C14 -X1 29 /D03.5	D14
15	A15	B15	C15 -X1 36 /D03.6	D15
16	A16	B16	C16 -X1 39 /D03.6	D16

Subject to technical modifications!
Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ015ND =L12+S1A S101 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

PLUG DIAGRAM
FAN
PANEL
12

50.3023.01.A3.741.223 V

=L12
+S1A.R / S101

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 106
135Sh.

ASSEMBLY/INSTRUCT.	CABLE MATERIAL	-X04	TERM.TYPE
	STANDARD: H07V-K 1.5MM2 BK		STANDARD:

RÜCK-REF.	LTG (⌀ IN MM2) CABLE	CORE	DESTINAT. DESIG.	SOCKET	POT	NO	DESTINAT. DESIG.	PIN	LTG (⌀ IN MM2) CABLE	CORE	REMARK
/D02.4			-F320	15		A01	+S1B.R -X1	185			
/D02.4			-K320.B	A1		A02	+S1B.R -X1	187			
/L01.4			-X1	103	121L+	A03	+S1B.R -X1	101			
/L01.4			-X1	104	121L-	A04	+S1B.R -X1	102			
/M02.6			-X1	155		A05	+S1B.R -X1	121			
/M02.7			-X1	158		A06	+S1B.R -X1	122			
/M02.6			-X1	126	102L-	A07	+S1B.R -X1	123			
/M02.7			-X1	162		A08	+S1B.R -X1	124			
/M02.4			-X1	118	102L+	A09	+S1B.R -X1	125			
/M02.4			-X1	152		A10	+S1B.R -X1	126			
/M03.3			-X1	115	102L+	A11	+S1B.R -X1	127	H05V-K	1.0MM2 SW	
/M03.3			-X1	171		A12	+S1B.R -X1	130			
/COST.1						A13					
/M03.6			-X1	174		A14	+S1B.R -X1	131			
/M03.7			-X1	175		A15	+S1B.R -X1	132			
/COST.1						A16					
/N01.6			-X0	092	ACR+	B01	+S1B.R -X1	141			
/N01.6			-X0	096	TRANSFER TRIPPING	B02	+S1B.R -X1	142			
/N01.6			-X0	098	I>	B03	+S1B.R -X1	143			
/N01.7			-X0	094	ACR-	B04	+S1B.R -X1	144			
/COST.2						B05					
/COST.2						B06					
/D01.6			-X1	41	127L1	B07	+S1B.R -X1	21			
/D01.6			-X1	42	N	B08	+S1B.R -X1	25			
/D04.7			-X1	43	127L1	B09	+S1B.R -X1	43			
/D04.7			-X1	44		B10	+S1B.R -X1	35			
/D04.8			-X1	45		B11	+S1B.R -X1	46			
/D04.7			-X1	46		B12	+S1B.R -X1	45			
/G00.4			-X0	9		B13	+S1B.R -X0	5			
/G00.4			-X1	199		B14	+S1B.R -X0	7			
/COST.2						B15					
/COST.2						B16					
/P02.6			-X1	184	DRAWG.UNIT RELEASE	C01	+S1B.R -X0	030			
/P02.4			-X1	181		C02	+S1B.R -X1	181			
/R01.4			-X4	412		C03	+S1B.R -X4	401			
/R01.4			-X4	414		C04	+S1B.R -X4	402			
/R03.6			-X4	403	102L+	C05	+S1B.R -X8	815			
/R03.6			-X4	483		C06	+S1B.R -X8	820			
/COST.2						C07					
/COST.2						C08					

D0097810 2 Copyright as per DIN 34 to be observed!

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

PLUG DIAGRAM	50.3023.01.A3.741.223	V	=L12	
NIEDERSPG.-SCHR.A- NIEDERSPG.-SCHR.B			+S1A.R	/ S40
PANEL 12	Typ: 01 INCOMING	D009781.02.612-3.AHA		Sheet 104 135Sh.

ASSEMBLY/INSTRUCT.	CABLE MATERIAL	-X04	TERM.TYPE
	STANDARD: H07V-K 1.5MM2 BK		STANDARD:

RÜCK-REF.	LTG (ø IN MM2) CABLE	CORE	DESTINAT. DESIG.	SOCKET	POT	NO	DESTINAT. DESIG.	PIN	LTG (ø IN MM2) CABLE	CORE	REMARK
/M02.2			-X1	164		C09	+S1B.R -X1	110			
/M02.2			-X1	110	112L-	C10	+S1B.R -X1	111			
/COST.2						C11					
/COST.2						C12					
/COST.2						C13					
/COST.2						C14					
/COST.2						C15					
/COST.2						C16					
/Q01.5			-X3	305	102L+	D01	+S1B.R -X3	301			
/Q01.5			-X3	326		D02	+S1B.R -X3	303			
/Q01.5			-X3	327		D03	+S1B.R -X3	304			
/Q01.5			-X3	328		D04	+S1B.R -X3	305			
/Q01.6			-X3	330		D05	+S1B.R -X3	306			
/Q03.4			-X8	806	03L+	D06	+S1B.R -X8	801			
/Q03.4			-X8	828		D07	+S1B.R -X8	806			
/Q03.4			-X8	829		D08	+S1B.R -X8	807			
/Q03.5			-X8	830		D09	+S1B.R -X8	808			
/Q03.5			-X8	832		D10	+S1B.R -X8	809			
/COST.3						D11					
/Q05.6			-X8	843		D12	+S1B.R -X8	812			
/Q05.7			-X8	844	FAULT	D13	+S1B.R -X8	813			
/COST.3						D14					
/Q04.4			-X8	835		D15	+S1B.R -X8	810			
/Q06.5			-X8	849		D16	+S1B.R -X8	814			

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.	Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date 06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check GROHMANN	SUBSTATION T80		

AREVA

PLUG DIAGRAM	50.3023.01.A3.741.223	V	=L12
NIEDERSPG.-SCHR.A- NIEDERSPG.-SCHR.B			+S1A.R / S41
PANEL 12	Typ: 01 INCOMING	D009781.02.612-3.AHA	Sheet 105 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X0

CABLE MATERIAL			⌀	COLOR
STANDARD:		H07V-K 1.5MM2		SW
POS.:	0	H05V-K 1.0MM2		SW
	2	H07V-K 2.5MM2		SW

TERM.TYPE

STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE	DESTINAT. DESIG. EXTERNAL		POT	NO	DESTINAT. DESIG. INTERN		CORES/ LINE	REMARK
/G00.4														+S1A.R -X04	B13		5	-X8	818		
/G00.4																	6				
/G00.4														+S1A.R -X04	B14		7	-X8	823		
/G00.4																	8				
/P02.1														=L13 +S1B.R -X0	022	224L+	021				
/P02.7													2	=L11 +S1B.R -X0	021	224L+	022				
/P02.1														=L13 +S1B.R -X0	024	224L-	023	-X02	D14		
/P02.7													2	=L11 +S1B.R -X0	023	224L-	024	-K200	A2		
/P02.1														=L13 +S1B.R -X0	028		025	-X02	C05	0	
/P02.3																	026	+S2B -S7	22	0	
/P02.2																BUSBAR ES.RELEASE	027	-X02	C06	0	
/P02.7													2	=L11 +S1B.R -X0	025	BUSBAR ES.RELEASE	028	+S2B -S7	21		
/P02.1														=L13 +S1B.R -X0	030	DRAWG.UNIT RELEASE	029				
/P02.7													2	=L11 +S1B.R -X0	029	DRAWG.UNIT RELEASE	030	+S1A.R -X04	C01		

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:		iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA			
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01			
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80			

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1B.R / K01

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 109 135Sh.

NO	CABLE	WIRES USED SHEET\STATE	CABLE-TYPE SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X1

CABLE MATERIAL	⌀	COLOR
STANDARD: H07V-K 1.5MM2		SW

TERM.TYPE

STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE		DESTINAT. DESIG. EXTERNAL	
/D01.7															+S1A.R -X04	B07
/D04.2																
/D04.7																
/D04.8																
/D01.7															+S1A.R -X04	B08
/D04.3																
/D04.7														Q	-K101	A2
/D04.4																
/D04.5																
/D04.6																
/D04.2															-K101	2
/D04.4															-K101	4
/D04.5															-K101	6
/D04.3																
/D04.4															+S1A.R -X04	B10
/D04.6															-K320	28
/D04.3																
/D04.5																
/D04.7															-K102	A1
/D04.7															+S1A.R -X04	B09
/D04.8																
/D04.7															+S1A.R -X04	B12
/D04.8															+S1A.R -X04	B11

POT	NO
127L1	21
127L1	22
127L1	23
127L1	24
N	25
N	26
N	27
N	28
N	29
N	30
	31
	32
	33
	34
	35
	36
	37
	38
	39
127L1	43
127L1	44
	45
	46

DESTINAT. DESIG. INTERN			CORES/LINE	REMARK
-K101	1	Q		
-X1	43			
-K320	15	Q		
-X201	C02			
-X201	C05			
-X201	C08			
-X201	C11			
-X201	C14			
-X201	D01			
-X201	C01			
-X201	C07			
-X201	C13			
-X201	C03			
-X201	C09			
-X201	C15			
-X201	C04			
-X201	C10			
-X201	C16			
-X1	23			
-K320	25			
-K320	Z2			
-K320	Y1			

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	TERMINAL DIAGRAM
Drawn	ADAM	50.3023.01	
Check	GROHMANN	SUBSTATION T80	PANEL 12
Orig.:	iss.for	iss.by:	

AREVA

50.3023.01.A3.741.223	V	=L12 +S1B.R / K10
Typ: 01 INCOMING	D009781.02.612-3.AHA	Sheet 110 135Sh.

NO	CABLE	WIRES USED SHEET\STATE	CABLE-TYPE SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X1

CABLE MATERIAL	⌀	COLOR
STANDARD: H07V-K	1.5MM2	SW
POS.: 0 H05V-K	1.0MM2	SW

TERM.TYPE

STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL	
/L01.6														+S1A.R -X04	A03
/L01.6														+S1A.R -X04	A04
/M02.2														+S1A.R -X04	C09
/M02.2														+S1A.R -X04	C10
/M02.6														+S1A.R -X04	A05
/M02.7														+S1A.R -X04	A06
/M02.6														+S1A.R -X04	A07
/M02.7														+S1A.R -X04	A08
/M02.4														+S1A.R -X04	A09
/M02.4														+S1A.R -X04	A10
/M03.3													0	+S1A.R -X04	A11
/M03.6															
/M03.7															
/M03.3														+S1A.R -X04	A12
/M03.6														+S1A.R -X04	A14
/M03.7														+S1A.R -X04	A15
/N01.6														+S1A.R -X04	B01
/N01.6														+S1A.R -X04	B02
/N01.6														+S1A.R -X04	B03
/N01.7														+S1A.R -X04	B04
/P02.4														+S1A.R -X04	C02
/D02.4														+S1A.R -X04	A01
/D02.4													0	-X02	D12
/D02.4														+S1A.R -X04	A02

POT	NO
121L+	101
121L-	102
	110
112L-	111
	121
	122
102L-	123
	124
102L+	125
	126
102L+	127
102L+	128
102L+	129
	130
	131
	132
ACR+	141
TRANSFER TRIPPING	142
I>	143
ACR-	144
	181
	185
	186
	187

DESTINAT. DESIG. INTERN			CORES/LINE	REMARK
	-X02	A01	0	
	-X02	A02	0	
	-X02	C01	0	
	-X02	C02	0	
	-X02	A03	0	
	-X02	A05	0	
	-X02	A04	0	
	-X02	A06	0	
	-F310	7		
	-F310	8		
	-X02	B11	0	
	-X02	B07	0	
+S2B	-S7	12		
	-X02	B12	0	
	-X02	B08	0	
+S2B	-S7	11		
	-F310	1		
	-F310	6		
	-F310	4		
	-F310	2		
	-X02	D13		
	-X02	D11	0	
	-X02	C09	0	
	-X02	C10	0	

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date	06.06.2005	Orig.:	iss.for
Drawn	ADAM		
Check	GROHMANN		iss.by:

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

AREVA

TERMINAL DIAGRAM
PANEL
12

50.3023.01.A3.741.223 V

=L12
+S1B.R / K11

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 111
135Sh.

NO	CABLE	WIRES USED SHEET\STATE	CABLE-TYPE SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X3

CABLE MATERIAL				Ø COLOR
STANDARD:		H07V-K	1.5MM2	SW
POS.:	0	H05V-K	1.0MM2	SW

TERM.TYPE

STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL	
/Q01.5														+S1A.R -X04	D01
/Q01.6														-X4	458
/Q01.5														+S1A.R -X04	D02
/Q01.5														+S1A.R -X04	D03
/Q01.5														+S1A.R -X04	D04
/Q01.6														+S1A.R -X04	D05

POT	NO
102L+	301
102L+	302
	303
	304
	305
	306

DESTINAT. DESIG. INTERN		CORES/LINE	REMARK
-X02	A12	0	
-X02	C15	0	
-X02	A13	0	
-X02	A14	0	
-X02	C16	0	
-X02	D01	0	

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1B.R / K30

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 112 135Sh.

NO	CABLE	WIRES USED SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X4

CABLE MATERIAL	⌀	COLOR
STANDARD: H07V-K	1.5MM2	SW
POS.: 0 H05V-K	1.0MM2	SW

TERM.TYPE

STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL		POT	NO
/R01.4														+S1A.R -X04	C03		401
/R01.4														+S1A.R -X04	C04		402
/M05.2														=T1 +T1 -X	..	104L+	403
/M06.2														=NT1 +NT1 -X	..	104L+	404
/M06.4														=ZT2 +ZT2 -X	..	104L+	405
/M05.2																104L+	406
/M05.3														+S1A.R -X4	422	104L-	407
/M06.2																104L-	408
/M06.8																104L-	409
/M05.3														=T1 +T1 -X	..		411
/M05.3														=T1 +T1 -X	..		412
/M05.4														=T1 +T1 -X	..		413
/M05.4														=T1 +T1 -X	..		414
/M05.5														=T1 +T1 -X	..		415
/M05.5														=T1 +T1 -X	..		416
/M05.5														=T1 +T1 -X	..		417
/M05.6														=T1 +T1 -X	..		418
/M05.6														=T1 +T1 -X	..		419
/M05.7														=T1 +T1 -X	..		420
/M05.7														=T1 +T1 -X	..		421
/M06.2														=NT1 +NT1 -X	..		422
/M06.3														=NT1 +NT1 -X	..		423
/M06.4														=ZT2 +ZT2 -X	..		424
/M06.5														=ZT2 +ZT2 -X	..		425
/M06.5														=ZT2 +ZT2 -X	..		426
/M06.6														=ZT2 +ZT2 -X	..		427
/M06.6														=ZT2 +ZT2 -X	..		428
/M06.7														=ZT2 +ZT2 -X	..		429
/M06.7														=ZT2 +ZT2 -X	..		430
/M06.7														=ZT2 +ZT2 -X	..		431
/M06.8																	432
/M06.8																	433
/M00.6														+S1A.R -X1	113	102L+	434
/M00.6														+S1A.R -X1	193		435

DESTINAT. DESIG. INTERN			CORES/LINE	REMARK
-X02	A10		0	
-X02	A11		0	
+S1A.R -X4	421			
-K401	A2	Q		
-K412	A2	Q		
-K401	A1			
-K402	A1			
-K403	A1			
-K404	A1			
-K405	A1			
-K406	A1			
-K407	A1			
-K408	A1			
-K409	A1			
-K410	A1			
-K411	A1			
-K412	A1			
-K413	A1			
-K414	A1			
-K415	A1			
-K416	A1			
-K417	A1			
-K418	A1			
-K419	A1			
-K420	A1			
-K421	A1			
-K402	43	Q		
-K402	44	Q		

D0097810 2 Copyright as per DIN 34 to be observed!

05.01.2007

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Std.		Date	06.06.2005
		Drawn	ADAM
		Check	GROHMANN

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:

AREVA

TERMINAL DIAGRAM
PANEL
12

50.3023.01.A3.741.223 V =L12 +S1B.R / K40

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 113 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X4

CABLE MATERIAL	⌀	COLOR	TERM.TYPE
STANDARD: H07V-K 1.5MM2		SW	STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL			POT	NO
/Q07.2														+S1A.R	-X8	814	03L+	436
/Q07.2														+S1A.R	-A100 -X11	33		437
/Q07.2														+S1A.R	-A100 -X11	34		438
/Q07.2														+S1A.R	-A100 -X11	35		439
/Q07.3														+S1A.R	-A100 -X11	36		440
/Q07.3														+S1A.R	-A100 -X11	37		441
/Q07.4														+S1A.R	-A100 -X11	38		442
/Q07.5														+S1A.R	-A100 -X12	1		443
/Q07.5														+S1A.R	-A100 -X12	2		444
/Q07.6														+S1A.R	-A100 -X12	3		445
/Q07.6														+S1A.R	-A100 -X12	4		446
/Q07.7														+S1A.R	-A100 -X12	5		447
/Q07.7														+S1A.R	-A100 -X12	6		448
/Q07.8														+S1A.R	-A100 -X12	7		449
/Q08.2														+S1A.R	-A100 -X12	8		450
/Q08.2														+S1A.R	-A100 -X12	31		451
/Q08.2														+S1A.R	-A100 -X12	32		452
/Q08.3														+S1A.R	-A100 -X12	33		453
/Q08.3														+S1A.R	-A100 -X12	34		454
/Q08.4														+S1A.R	-A100 -X12	35		455
/Q08.4														+S1A.R	-A100 -X12	36		456
/Q08.5														+S1A.R	-A100 -X12	37		457
/R02.2													Q		-K401	13	102L+	458
/V02.6															-X9	909	102L+	459
/R03.4																	102L+	460
/R02.2														+S1A.R	-X4	461		461
/R02.2														+S1A.R	-X4	462		462
/R02.2														+S1A.R	-X4	463		463
/R02.2														+S1A.R	-X4	464		464
/R02.3														+S1A.R	-X4	465		465
/R02.3														+S1A.R	-X4	466		466
/R02.3														+S1A.R	-X4	467		467
/R02.4														+S1A.R	-X4	468		468
/R02.4														+S1A.R	-X4	469		469

DESTINAT. DESIG. INTERN			CORES/LINE	REMARK
-K401	33	Q		
-K401	34			
-K402	34			
-K403	34			
-K404	34			
-K405	34			
-K406	34			
-K407	34			
-K408	34			
-K409	34			
-K410	34			
-K411	34			
-K412	34			
-K413	34			
-K414	34			
-K415	34			
-K416	34			
-K417	34			
-K418	34			
-K419	34			
-K420	34			
-K421	34			
-X3	302			
-K401	53	Q		
-K401	14			
-K402	14			
-K403	14			
-K404	14			
-K405	14			
-K406	14			
-K407	14			
-K408	14			
-K409	14			

D0097810 2 Copyright as per DIN 34 to be observed!

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	
Drawn	ADAM	50.3023.01	AREVA
Check	GROHMANN	SUBSTATION T80	
Orig.:	iss.for		iss.by:

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1B.R / K41

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 114 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X4

CABLE MATERIAL	⌀	COLOR	TERM.TYPE
STANDARD: H07V-K 1.5MM2		SW	STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL	
/R02.4														+S1A.R -X4	470
/R02.5														+S1A.R -X4	471
/R02.5														+S1A.R -X4	472
/R02.5														+S1A.R -X4	473
/R02.6														+S1A.R -X4	474
/R02.6														+S1A.R -X4	475
/R02.7														+S1A.R -X4	476
/R03.2														+S1A.R -X4	477
/R03.3														+S1A.R -X4	478
/R03.4														+S1A.R -X4	479
/R03.4														+S1A.R -X4	480

POT NO
470
471
472
473
474
475
476
477
478
479
480

DESTINAT. DESIG. INTERN			CORES/LINE	REMARK
-K410	14			
-K411	14			
-K412	14			
-K413	14			
-K414	14	Q		
-K417	14	Q		
-K419	14	Q		
-K401	54	Q		
-K402	54	Q		
-K412	54	Q		
-K413	54	Q		

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date 06.06.2005
Drawn ADAM
Check GROHMANN

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:

AREVA

TERMINAL DIAGRAM
PANEL
12

50.3023.01.A3.741.223 V
=L12
+S1B.R / K42
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 115
135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X6

CABLE MATERIAL			⌀	COLOR
STANDARD:		H07V-K 1.5MM2		SW
POS.:	2	H07V-K 2.5MM2		SW

TERM.TYPE

STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE	DESTINAT. DESIG. EXTERNAL	
/T01.2													2	+S1A.R -X6	621
/T01.3													2	+S1A.R -X6	622
/T01.4													2	+S1A.R -X6	623
/T01.4													2	+S1A.R -X6	624
/T01.5													2	+S1A.R -X6	625
/T01.7													2	+S1A.R -X6	626

POT	NO
L1	621
L2	622
L3	623
N	624
n	625
e	626

DESTINAT. DESIG. INTERN			CORES/ LINE	REMARK
+S2B -T5L1	A		2	
+S2B -T5L2	A		2	
+S2B -T5L3	A		2	
+S2B -T5L1	N	Q	2	
+S2B -T5L1	DN	Q	2	
+S2B -T5L3	DA		2	

D0978102 Copyright as per DIN 34 to be observed!

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005			
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM			
01	Approval	20.09.2005	AD	Check	GROHMANN			

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

AREVA

TERMINAL DIAGRAM
PANEL
12

50.3023.01.A3.741.223 V
=L12
+S1B.R / K60
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 116
135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X8

CABLE MATERIAL			⌀	COLOR
STANDARD:	H07V-K	1.5MM2		SW
POS.: 0	H05V-K	1.0MM2		SW

TERM.TYPE

STANDARD: MTK-P/P

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/LINE	DESTINAT. DESIG. EXTERNAL	
/Q03.4														+S1A.R -X04	D06
/Q03.5															
/Q04.4															
/Q05.6															
/Q06.5															
/Q03.4														+S1A.R -X04	D07
/Q03.4														+S1A.R -X04	D08
/Q03.5														+S1A.R -X04	D09
/Q03.5														+S1A.R -X04	D10
/Q04.4														+S1A.R -X04	D15
/Q04.4															
/Q05.6														+S1A.R -X04	D12
/Q05.7														+S1A.R -X04	D13
/Q06.5														+S1A.R -X04	D16
/R03.6														+S1A.R -X04	C05
/Q10.3															
/Q10.3															
/G00.4														-X0	5
/Q10.2															
/R03.6														+S1A.R -X04	C06
/Q10.3															
/Q10.3															
/G00.4														-X0	7

POT		NO
03L+		801
03L+		802
03L+		803
03L+		804
03L+		805
		806
		807
		808
		809
		810
		811
		812
FAULT		813
		814
102L+		815
		816
		817
		818
		819
		820
		821
		822
		823

DESTINAT. DESIG. INTERN			CORES/LINE	REMARK
-X02	A15		0	
-X02	D02		0	
-X02	A07		0	
-F310	9	Q		
-K102	13			
-X02	A16		0	
-X02	B01		0	
-X02	D03		0	
-X02	D04		0	
-X02	A08		0	
-X02	A09		0	
-F310	10			
-F310	14			
-K102	14			
-X02	B02			
-X02	B15		0	
-X02	B13		0	
-X02	D07			
-X02	B03		0	
-X02	B04		0	
-X02	B16		0	
-X02	B14		0	
-X02	D08			

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1B.R / K80

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 117 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-X9

CABLE MATERIAL			⌀	COLOR
STANDARD:		H07V-K	1.5MM2	SW
POS.:	0	H05V-K	1.0MM2	SW

TERM.TYPE

STANDARD: UK5N

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE	DESTINAT. DESIG. EXTERNAL			POT	NO	DESTINAT. DESIG. INTERN			CORES/ LINE	REMARK
/V02.2														=L14	+S1B.R	-X9		901		-X02	B05	Q	0	
/V02.2														=L10	+S1A.R	-X8		902		-X02	B09	Q	0	
/V02.8																		903						
/V02.3														=L10	+S1A.R	-X4	420	904		-X02	C11	Q	0	
/V02.8																		905						
/P01.4													0		+S1A.R	-X0	030	906	DRAWG.UNIT RELEASE	-X02	D05	Q		
/V02.5																		907		-X02	D09		0	
/P01.4													0		+S1A.R	-X0	7	908		-X02	C13	Q	0	
/V02.6																-X4	459	909	102L+	+S2B -S7	32			
/V02.8																		910						
/V02.2														=L10	+S1A.R	-X1	158	911		-X02	B06	Q	0	
/V02.2														=L14	+S1B.R	-X9	907	912		-X02	B10	Q	0	
/V02.8																		913						
/V02.3														=L14	+S1A.R	-X4	411	914		-X02	C12	Q	0	
/V02.8																		915						
/P01.4																-X9	918	916		-X02	D06			
/V02.5																		917		-X02	D10		0	
/P01.4																-X9	916	918		-X02	C14			
/V02.6																-K401.1	A1	919		+S2B -S7	31			
/V02.8																		920						

D0978102 Copyright as per DIN 34 to be observed!

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

TERMINAL DIAGRAM

PANEL 12

50.3023.01.A3.741.223 V

=L12 +S1B.R / K90

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 118 135Sh.

NO	CABLE	WIRES USED	SHEET\STATE	CABLE-TYPE	SECTION	CORES	-ROUTE

CIRCUIT DIAGRAM

INSTALLATION

-XPE

CABLE MATERIAL	⌀	COLOR	TERM.TYPE
STANDARD: H05V-K	1.0MM2	GN/ YE	STANDARD: USLKG5

RÜCK-REF.	NO 1	2	3	4	5	6	7	8	9	10	11	12	CORES/ LINE	DESTINAT. DESIG. EXTERNAL
/D04.2														
/D04.4														
/D04.6														
/D04.6														
/D04.7														
/D04.7														

POT	NO
	PE
	PE
	PE
	PE
	PE
	PE

DESTINAT. DESIG. INTERN		CORES/ LINE	REMARK
-X201	C06		
-X201	C12		
-X201	D02		

D0978102 Copyright as per DIN 34 to be observed!

05.01.2007

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date	06.06.2005
Drawn	ADAM
Check	GROHMANN
Orig.:	iss.for

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

iss.by:

AREVA

TERMINAL DIAGRAM

PANEL
12

50.3023.01.A3.741.223 V

=L12
+S1B.R / KPE

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 119
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL / ITEM / CR. SECTION	CABLE MATERIAL / COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
D04	1 1.5MM2	H07V-K SW		-K101 A1	-K320 18				
D04	127L1 1 1.5MM2	H07V-K SW	-X1 22	-K101 1	-K101 3	-K101 5			
D04	127L1 1 1.5MM2	H07V-K SW	-X1 24	-K320 15	-K320 A1				
D04	N	BL	-X1 27	-K101 A2	-K102 A2	-K320 A2			
M00	102L+ 1 1.5MM2	H07V-K SW	-X4 434	-K402 43	-K404 43	-K406 43	-K408 43	-K413 43	-K417 43
	---->			-K418 43					
M00	1 1.5MM2	H07V-K SW	-X4 435	-K402 44	-K404 44	-K406 44	-K408 44	-K413 44	-K417 44
	---->			-K418 44					
M05	104L- 1 1.5MM2	H07V-K SW	-X4 407	-K401 A2	-K402 A2	-K403 A2	-K404 A2	-K405 A2	-K406 A2
	---->			-K407 A2	-K408 A2	-K409 A2	-K410 A2	-K411 A2	
M06	104L- 1 1.5MM2	H07V-K SW	-X4 408	-K412 A2	-K413 A2	-K414 A2	-K415 A2	-K416 A2	-K417 A2
	---->			-K418 A2	-K419 A2	-K420 A2	-K421 A2		
P01	DRAWG.UNIT RELEASE 1 1.5MM2	H07V-K SW	-X9 906	-X02 D05	-K401.1 13				
P01	0 1.0MM2	H05V-K SW	-X9 908	-X02 C13	-K401.1 14				
Q05	03L+ 1 1.5MM2	H07V-K SW	-X8 804	-F310 9	-F310 13				
Q07	03L+ 1 1.5MM2	H07V-K SW	-X4 436	-K401 33	-K402 33	-K403 33	-K404 33	-K405 33	-K406 33
	---->			-K407 33	-K408 33	-K409 33	-K410 33	-K411 33	-K412 33
	---->			-K413 33	-K414 33	-K415 33	-K416 33	-K417 33	-K418 33
	---->			-K419 33	-K420 33	-K421 33			
R02	102L+ 1 1.5MM2	H07V-K SW	-X4 458	-K401 13	-K402 13	-K403 13	-K404 13	-K405 13	-K406 13

Copyright as per DIN 34 to be observed!

D0978102 05.01.2007

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Std.

Date 06.06.2005
Drawn ADAM
Check GROHMANN
Orig.: iss.for

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

AREVA
iss.by:

CROSS CONNECT. LIST
RELAY BOX
PANEL
12

50.3023.01.A3.741.223
V =L12
+S1B.R / Q10
Typ: 01
INCOMING
D009781.02.612-3.AHA
Sheet 120
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
	---->			-K407 13	-K408 13	-K409 13	-K410 13	-K411 13	-K412 13
	---->			-K413 13	-K414 13	-K415 13	-K416 13	-K417 13	-K418 13
	---->			-K419 13	-K420 13	-K421 13			
R02	1 1.5MM2	H07V-K SW	-X4 474	-K414 14	-K415 14	-K416 14			
R02	1 1.5MM2	H07V-K SW	-X4 475	-K417 14	-K418 14				
R02	1 1.5MM2	H07V-K SW	-X4 476	-K419 14	-K420 14	-K421 14			
R03	102L+ 1 1.5MM2	H07V-K SW	-X4 459	-K401 53	-K402 53	-K403 53	-K404 53	-K405 53	-K406 53
	---->			-K407 53	-K408 53	-K412 53	-K413 53	-K414 53	-K415 53
	---->			-K416 53	-K417 53	-K418 53			
R03	1 1.5MM2	H07V-K SW	-X4 477	-K401 54	-K403 54	-K405 54	-K407 54		
R03	1 1.5MM2	H07V-K SW	-X4 478	-K402 54	-K404 54	-K406 54	-K408 54		
R03	1 1.5MM2	H07V-K SW	-X4 479	-K412 54	-K414 54	-K415 54	-K416 54		
R03	1 1.5MM2	H07V-K SW	-X4 480	-K413 54	-K417 54	-K418 54			
V02	0 1.0MM2	H05V-K SW	-X9 901	-X02 B05	-K401.1 23				
V02	0 1.0MM2	H05V-K SW	-X9 902	-X02 B09	-K401.1 33				
V02	0 1.0MM2	H05V-K SW	-X9 904	-X02 C11	-K401.1 43				
V02	0 1.0MM2	H05V-K SW	-X9 911	-X02 B06	-K401.1 24				
V02	0 1.0MM2	H05V-K SW	-X9 912	-X02 B10	-K401.1 34				
V02	0 1.0MM2	H05V-K SW	-X9 914	-X02 C12	-K401.1 44				

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

CROSS CONNECT. LIST
RELAY BOX
PANEL
12

50.3023.01.A3.741.223 V =L12 +S1B.R / Q11

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 121
135Sh.

TERMINAL DIA. , 64-POLE , CIRCUIT-BREAKER

SOCKET

+S1B.R -X02

CABLE MATERIAL H05V-K 1.0mm2 SW

	A		B		C		D	
1	A01	-X1 101 /L01.6 H05V-K 1.0MM2 SW	B01	-X8 807 /Q03.4 H05V-K 1.0MM2 SW	C01	-X1 110 /M02.2 H05V-K 1.0MM2 SW	D01	-X3 306 /Q01.6 H05V-K 1.0MM2 SW
2	A02	-X1 102 /L01.6 H05V-K 1.0MM2 SW	B02	-X8 815 /R03.6	C02	-X1 111 /M02.2 H05V-K 1.0MM2 SW	D02	-X8 802 /Q03.5 H05V-K 1.0MM2 SW
3	A03	-X1 121 /M02.6 H05V-K 1.0MM2 SW	B03	-X8 819 /Q10.2 H05V-K 1.0MM2 SW	C03		D03	-X8 808 /Q03.5 H05V-K 1.0MM2 SW
4	A04	-X1 123 /M02.6 H05V-K 1.0MM2 SW	B04	-X8 820 /R03.6 H05V-K 1.0MM2 SW	C04		D04	-X8 809 /Q03.5 H05V-K 1.0MM2 SW
5	A05	-X1 122 /M02.7 H05V-K 1.0MM2 SW	B05	-X9 901 /V02.2 H05V-K 1.0MM2 SW	C05	-X0 025 /P02.2 H05V-K 1.0MM2 SW	D05	-X9 906 /V02.4 H05V-K 1.0MM2 SW
6	A06	-X1 124 /M02.7 H05V-K 1.0MM2 SW	B06	-X9 911 /V02.2 H05V-K 1.0MM2 SW	C06	-X0 027 /P02.2 H05V-K 1.0MM2 SW	D06	-X9 916 /V02.4 H05V-K 1.0MM2 SW
7	A07	-X8 803 /Q04.4 H05V-K 1.0MM2 SW	B07	-X1 128 /M03.6 H05V-K 1.0MM2 SW	C07		D07	-X8 818 /Q10.4 H05V-K 1.0MM2 SW
8	A08	-X8 810 /Q04.4 H05V-K 1.0MM2 SW	B08	-X1 131 /M03.6 H05V-K 1.0MM2 SW	C08		D08	-X8 823 /Q10.4 H05V-K 1.0MM2 SW
9	A09	-X8 811 /Q04.4 H05V-K 1.0MM2 SW	B09	-X9 902 /V02.2 H05V-K 1.0MM2 SW	C09	-X1 186 /D02.4 H05V-K 1.0MM2 SW	D09	-X9 907 /V02.5 H05V-K 1.0MM2 SW
10	A10	-X4 401 /R01.4 H05V-K 1.0MM2 SW	B10	-X9 912 /V02.2 H05V-K 1.0MM2 SW	C10	-X1 187 /D02.4 H05V-K 1.0MM2 SW	D10	-X9 917 /V02.5 H05V-K 1.0MM2 SW
11	A11	-X4 402 /R01.4 H05V-K 1.0MM2 SW	B11	-X1 127 /M03.3 H05V-K 1.0MM2 SW	C11	-X9 904 /V02.3 H05V-K 1.0MM2 SW	D11	-X1 185 /D02.4 H05V-K 1.0MM2 SW
12	A12	-X3 301 /Q01.5 H05V-K 1.0MM2 SW	B12	-X1 130 /M03.3 H05V-K 1.0MM2 SW	C12	-X9 914 /V02.3 H05V-K 1.0MM2 SW	D12	-X1 186 /D02.4 H05V-K 1.0MM2 SW
13	A13	-X3 303 /Q01.5 H05V-K 1.0MM2 SW	B13	-X8 817 /Q10.3 H05V-K 1.0MM2 SW	C13	-X9 908 /V02.5 H05V-K 1.0MM2 SW	D13	-X1 181 /P02.4 H05V-K 1.0MM2 SW
14	A14	-X3 304 /Q01.5 H05V-K 1.0MM2 SW	B14	-X8 822 /Q10.3 H05V-K 1.0MM2 SW	C14	-X9 918 /V02.5 H05V-K 1.0MM2 SW	D14	-X0 023 /P02.4 H05V-K 1.0MM2 SW
15	A15	-X8 801 /Q03.4 H05V-K 1.0MM2 SW	B15	-X8 816 /Q10.3 H05V-K 1.0MM2 SW	C15	-X3 302 /Q01.6 H05V-K 1.0MM2 SW	D15	
16	A16	-X8 806 /Q03.4 H05V-K 1.0MM2 SW	B16	-X8 821 /Q10.3 H05V-K 1.0MM2 SW	C16	-X3 305 /Q01.5 H05V-K 1.0MM2 SW	D16	

Subject to technical modifications!
Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ0115MD =L12+S1B S01 ADAM

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	Date 06.06.2005
02	Fact.-Rev.	09.11.2005	AD	Drawn ADAM
01	Approval	20.09.2005	AD	Check GROHMANN

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:

AREVA

PLUG DIAGRAM
CIRCUIT-BREAKER
PANEL
12

50.3023.01.A3.741.223 V =L12 +S1B.R / S01
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 122 135Sh.

TERMINAL DIA. , 64-POLE , FAN

SOCKET

+S1B.R -X201

CABLE MATERIAL H05V-K 1.0mm2 SW

	A	B	C			
1	A01	B01	C01	-X1 31 /D04.2	D01	-X1 30 /D04.6
2	A02	B02	C02	-X1 25 /D04.2	D02	-XPE PE /D04.6 H05V-K 1.0MM2 GN/ YE
3	A03	B03	C03	-X1 34 /D04.3	D03	
4	A04	B04	C04	-X1 37 /D04.3	D04	
5	A05	B05	C05	-X1 26 /D04.3	D05	
6	A06	B06	C06	-XPE PE /D04.2 H05V-K 1.0MM2 GN/ YE	D06	
7	A07	B07	C07	-X1 32 /D04.4	D07	
8	A08	B08	C08	-X1 27 /D04.4	D08	
9	A09	B09	C09	-X1 35 /D04.4	D09	
10	A10	B10	C10	-X1 38 /D04.5	D10	
11	A11	B11	C11	-X1 28 /D04.4	D11	
12	A12	B12	C12	-XPE PE /D04.4 H05V-K 1.0MM2 GN/ YE	D12	
13	A13	B13	C13	-X1 33 /D04.5	D13	
14	A14	B14	C14	-X1 29 /D04.5	D14	
15	A15	B15	C15	-X1 36 /D04.6	D15	
16	A16	B16	C16	-X1 39 /D04.7	D16	

Subject to technical modifications!
Copyright as per DIN 34 to be observed!

D0978102

HJ0115MD
=L12+S1B
S101
ADAM

05.01.2007

NO.	Alteration	Date	Name	Std.					
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	PLUG DIAGRAM	50.3023.01.A3.741.223 V =L12
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		FAN	+S1B.R / S101
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL	Typ: 01 INCOMING
						Orig.: iss.for	iss.by:	12	D009781.02.612-3.AHA Sheet 123 135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL / ITEM / CR. SECTION / CABLE MATERIAL / COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
D03	(Aderverbindung)		-X101 C01	-E101 1				
D03	N (Aderverbindung)		-X101 C02	-E101 2				
D03	(Aderverbindung)		-X101 C03	-B101 3				
D03	(Aderverbindung)		-X101 C04	-B101 4				
D03	N (Aderverbindung)		-X101 C05	-B101 5				
D03	(Aderverbindung)		-X101 C06	-E101 PE				
D03	(Aderverbindung)		-X101 C07	-E102 1				
D03	N (Aderverbindung)		-X101 C08	-E102 2				
D03	(Aderverbindung)		-X101 C09	-B102 3				
D03	(Aderverbindung)		-X101 C10	-B102 4				
D03	N (Aderverbindung)		-X101 C11	-B102 5				
D03	(Aderverbindung)		-X101 C12	-E102 PE				
D03	(Aderverbindung)		-X101 C13	-E103 1				
D03	N (Aderverbindung)		-X101 C14	-E103 2				
D03	(Aderverbindung)		-X101 C15	-B103 3				
D03	(Aderverbindung)		-X101 C16	-B103 4				
D03	N (Aderverbindung)		-X101 D01	-B103 5				
D03	(Aderverbindung)		-X101 D02	-E103 PE				
Q01	102L+ 1 1.5MM2 H07V-K SW		-S1 -Q8 11	-S1 -Q8 23				
Q02	03L+ 1 1.5MM2 H07V-K SW		-S1 -Q8 31	-S1 -Q8 43				

Copyright as per DIN 34 to be observed!

D009781 02

05.01.2007 HJ0115ND =L12+S2A Q20 ADAM

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Std.

Date 06.06.2005
Drawn ADAM
Check GROHMANN
Orig.: iss.for

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80

AREVA

iss.by:

CROSS CONNECT. LIST
PANEL
PANEL
12

50.3023.01.A3.741.223 V
=L12
+S2A / Q20

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 124
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
T01	L1 2 2.5MM2	H07V-K SW		-F451 1	-T5L1 A				
T01	L2 1 1.5MM2	H07V-K SW		-F451 3	-T5L2 A				
T01	L3 2 2.5MM2	H07V-K SW		-F451 5	-T5L3 A				
T01	e 2 2.5MM2	H07V-K SW		-F452 1	-T5L3 DA				
T01	N 2 2.5MM2	H07V-K SW		-T5L1 N	-T5L2 N	-T5L3 N	PE SCHRAUBE		
T01	n 2 2.5MM2	H07V-K SW		-T5L1 DN	PE SCHRAUBE				
T01	2 2.5MM2	H07V-K SW		-T5L2 DN	-T5L1 DA				
T01	2 2.5MM2	H07V-K SW		-T5L3 DN	-T5L2 DA				

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ0115ND =L12+S2A Q21 ADAM

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Std.

Date 06.06.2005
Drawn ADAM
Check GROHMANN

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for

AREVA
iss.by:

CROSS CONNECT. LIST
PANEL
PANEL
12

50.3023.01.A3.741.223 V =L12 +S2A / Q21

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 125
135Sh.

TERMINAL DIA., 64 POLIG, FAN

PIN

+S2A -X101

CABLE MATERIAL H05V-K 1.0mm2 SW

	A	B	C	D	
1	A01	B01	C01 -E101 1 /D03.2 1	D01 -B103 5 /D03.6 5	1
2	A02	B02	C02 -E101 2 /D03.2 2	D02 -E103 PE /D03.6 GN/ YE	2
3	A03	B03	C03 -B101 3 /D03.2 3	D03	3
4	A04	B04	C04 -B101 4 /D03.3 4	D04	4
5	A05	B05	C05 -B101 5 /D03.2 5	D05	5
6	A06	B06	C06 -E101 PE /D03.2 GN/ YE	D06	6
7	A07	B07	C07 -E102 1 /D03.4 1	D07	7
8	A08	B08	C08 -E102 2 /D03.4 2	D08	8
9	A09	B09	C09 -B102 3 /D03.4 3	D09	9
10	A10	B10	C10 -B102 4 /D03.5 4	D10	10
11	A11	B11	C11 -B102 5 /D03.4 5	D11	11
12	A12	B12	C12 -E102 PE /D03.4 GN/ YE	D12	12
13	A13	B13	C13 -E103 1 /D03.5 1	D13	13
14	A14	B14	C14 -E103 2 /D03.5 2	D14	14
15	A15	B15	C15 -B103 3 /D03.6 3	D15	15
16	A16	B16	C16 -B103 4 /D03.6 4	D16	16

Subject to technical modifications!
Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12+S2A -S101 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

PLUG DIAGRAM
FAN
PANEL
12

50.3023.01.A3.741.223 V

=L12
+S2A / S101

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 126
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL / ITEM / CR. SECTION	CABLE MATERIAL / COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
D04	(Aderverbindung)			-X201 C01	-E101 1				
D04	N (Aderverbindung)			-X201 C02	-E101 2				
D04	(Aderverbindung)			-X201 C03	-B101 3				
D04	(Aderverbindung)			-X201 C04	-B101 4				
D04	N (Aderverbindung)			-X201 C05	-B101 5				
D04	(Aderverbindung)			-X201 C06	-E101 PE				
D04	(Aderverbindung)			-X201 C07	-E102 1				
D04	N (Aderverbindung)			-X201 C08	-E102 2				
D04	(Aderverbindung)			-X201 C09	-B102 3				
D04	(Aderverbindung)			-X201 C10	-B102 4				
D04	N (Aderverbindung)			-X201 C11	-B102 5				
D04	(Aderverbindung)			-X201 C12	-E102 PE				
D04	(Aderverbindung)			-X201 C13	-E103 1				
D04	N (Aderverbindung)			-X201 C14	-E103 2				
D04	(Aderverbindung)			-X201 C15	-B103 3				
D04	(Aderverbindung)			-X201 C16	-B103 4				
D04	N (Aderverbindung)			-X201 D01	-B103 5				
D04	(Aderverbindung)			-X201 D02	-E103 PE				
T01	N 2 2.5MM2	H07V-K SW		-T5L1 N	-T5L2 N	-T5L3 N	PE SCHRAUBE		
T01	n 2 2.5MM2	H07V-K SW		-T5L1 DN	PE SCHRAUBE				

D0097810 2 Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115MD =L12+S2B Q20 ADAM

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Std.		Date	06.06.2005
		Drawn	ADAM
		Check	GROHMANN

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:

AREVA

CROSS CONNECT. LIST
PANEL
PANEL
12

50.3023.01.A3.741.223 V =L12 +S2B / Q20
Typ: 01 INCOMING
D009781.02.612-3.AHA
Sheet 127 135 Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
T01	2 2.5MM2	H07V-K SW		-T5L2 DN	-T5L1 DA				
T01	2 2.5MM2	H07V-K SW		-T5L3 DN	-T5L2 DA				

D0978102 Copyright as per DIN 34 to be observed!

05.01.2007 HJ0115MD =L12+S2B Q21 ADAM

NO.	Alteration	Date	Name	Std.					
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	AREVA	CROSS CONNECT. LIST	50.3023.01.A3.741.223 V
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		PANEL	=L12
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL	+S2B / Q21
						Orig.: iss.for	iss.by:	12	Typ: 01 INCOMING D009781.02.612-3.AHA Sheet 128 135Sh.

TERMINAL DIA., 64 POLIG, FAN

PIN

+S2B -X201

CABLE MATERIAL H05V-K 1.0mm2 SW

	A	B	C	D
1	A01	B01	C01: -E101 1 / /D04.2 1	D01: -B103 5 / /D04.6 5
2	A02	B02	C02: -E101 2 / /D04.2 2	D02: -E103 PE / /D04.6 GN/ YE
3	A03	B03	C03: -B101 3 / /D04.3 3	D03
4	A04	B04	C04: -B101 4 / /D04.3 4	D04
5	A05	B05	C05: -B101 5 / /D04.3 5	D05
6	A06	B06	C06: -E101 PE / /D04.2 GN/ YE	D06
7	A07	B07	C07: -E102 1 / /D04.4 1	D07
8	A08	B08	C08: -E102 2 / /D04.4 2	D08
9	A09	B09	C09: -B102 3 / /D04.4 3	D09
10	A10	B10	C10: -B102 4 / /D04.5 4	D10
11	A11	B11	C11: -B102 5 / /D04.4 5	D11
12	A12	B12	C12: -E102 PE / /D04.4 GN/ YE	D12
13	A13	B13	C13: -E103 1 / /D04.5 1	D13
14	A14	B14	C14: -E103 2 / /D04.5 2	D14
15	A15	B15	C15: -B103 3 / /D04.6 3	D15
16	A16	B16	C16: -B103 4 / /D04.7 4	D16

Subject to technical modifications!
Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ0115ND =L12+S2B S101 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

PLUG DIAGRAM
FAN
PANEL
12

50.3023.01.A3.741.223 V

=L12
+S2B / S101

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 129
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
D02	0 1.0MM2	H05V-K SW		-X01 C09	-S1 -Q01 103				
D02	0 1.0MM2	H05V-K SW		-X01 C10	-S1 -Q01 104				
D02	0 1.0MM2	H05V-K SW		-X01 D11	-S1 -Q1 43				
D02	0 1.0MM2	H05V-K SW		-X01 D12	-S1 -Q1 44				
L01	111L+ 0 1.0MM2	H05V-K SW		-X01 A01	-S22 -Q01 11				
L01	111L- 0 1.0MM2	H05V-K SW		-X01 A02	-S23 -Q01 12				
M01	0 1.0MM2	H05V-K SW		-F2 -Q01 C1	-S1 -Q01 222				
M01	0 1.0MM2	H05V-K SW		-F2 -Q01 C2	-S43 -Q01 11				
M01	0 1.0MM2	H05V-K SW		-S1 -Q01 221	-S21 -Q01 14				
M01	0 1.0MM2	H05V-K SW		-S21 -Q01 13	-S6 -Q01 12				
M01	0 1.0MM2	H05V-K SW		-X01 A03	-S1 -Q01 213				
M01	102L- 0 1.0MM2	H05V-K SW		-X01 A04	-F11 -Q01 C2				
M01	0 1.0MM2	H05V-K SW		-X01 A05	-S6 -Q01 11				
M01	0 1.0MM2	H05V-K SW		-X01 A06	-S43 -Q01 12				
M01	0 1.0MM2	H05V-K SW		-X01 C01	-S1 -Q01 243				
M01	112L- 0 1.0MM2	H05V-K SW		-X01 C02	-F12 -Q01 C2				
M03	102L+ 0 1.0MM2	H05V-K SW		-X01 B07	-S1 -Q01 83				
M03	0 1.0MM2	H05V-K SW		-X01 B08	-S1 -Q01 84				
P01	0 1.0MM2	H05V-K SW		-S1 -Q1 32	-S61 14				
P01	214L+ 0 1.0MM2	H05V-K SW		-X01 C05	-S1 -Q1 31				

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ0115ND =L12+S3A Q30 ADAM

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Std.

Date 06.06.2005
Drawn ADAM
Check GROHMANN

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: iss.for iss.by:

AREVA

CROSS CONNECT. LIST
SWITCHING TRUCK
PANEL
12

50.3023.01.A3.741.223 V =L12 +S3A / Q30

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 130
135 Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
P01	BUSBAR ES.RELEASE 0 1.0MM2	H05V-K SW		-X01 C06	-S61 11				
P01	DRAWG.UNIT RELEASE 0 1.0MM2	H05V-K SW		-X01 D13	-Y1 E1				
P01	214L- 0 1.0MM2	H05V-K SW		-X01 D14	-Y1 E2				
Q01	102L+ 0 1.0MM2	H05V-K SW		-X01 A12	-S1 -Q01 11	-S1 -Q01 23			
Q01	0 1.0MM2	H05V-K SW		-X01 A13	-S1 -Q01 12				
Q01	0 1.0MM2	H05V-K SW		-X01 A14	-S1 -Q01 24				
Q01	102L+ 0 1.0MM2	H05V-K SW		-X01 C15	-S1 -Q1 11	-S1 -Q1 13			
Q01	0 1.0MM2	H05V-K SW		-X01 C16	-S1 -Q1 12				
Q01	0 1.0MM2	H05V-K SW		-X01 D01	-S1 -Q1 14				
Q02	03L+ 0 1.0MM2	H05V-K SW		-X01 A15	-S1 -Q01 31	-S1 -Q01 43			
Q02	0 1.0MM2	H05V-K SW		-X01 A16	-S1 -Q01 32				
Q02	0 1.0MM2	H05V-K SW		-X01 B01	-S1 -Q01 44				
Q02	03L+ 0 1.0MM2	H05V-K SW		-X01 D02	-S1 -Q1 21	-S1 -Q1 23			
Q02	0 1.0MM2	H05V-K SW		-X01 D03	-S1 -Q1 22				
Q02	0 1.0MM2	H05V-K SW		-X01 D04	-S1 -Q1 24				
Q04	03L+ 0 1.0MM2	H05V-K SW		-X01 A07	-S24 -Q01 11				
Q04	0 1.0MM2	H05V-K SW		-X01 A08	-S24 -Q01 12				
Q04	0 1.0MM2	H05V-K SW		-X01 A09	-S24 -Q01 14				
Q09	0 1.0MM2	H05V-K SW		-X01 B13	-S42 -Q01 11				
Q09	0 1.0MM2	H05V-K SW		-X01 B14	-S42 -Q01 14				

Copyright as per DIN 34 to be observed!

D0097810 2

05.01.2007 HJ0115ND =L12+S3A Q31 ADAM

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Std.

Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	
Drawn	ADAM	50.3023.01	
Check	GROHMANN	SUBSTATION T80	
Orig.:		iss.for	iss.by:

AREVA

CROSS CONNECT. LIST
SWITCHING TRUCK
PANEL
12

50.3023.01.A3.741.223

V =L12
+S3A / Q31

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 131
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
Q09	0 1.0MM2	H05V-K SW		-X01 B15	-S25 -Q01 11				
Q09	0 1.0MM2	H05V-K SW		-X01 B16	-S25 -Q01 14				
Q09	0 1.0MM2	H05V-K SW		-X01 D07	-S1 -Q1 33				
Q09	0 1.0MM2	H05V-K SW		-X01 D08	-S1 -Q1 34				
R01	0 1.0MM2	H05V-K SW		-X01 A10	-S41 -Q01 11				
R01	0 1.0MM2	H05V-K SW		-X01 A11	-S1 -Q01 230				
R03	102L+ 0 1.0MM2	H05V-K SW		-X01 B02	-S1 -Q01 51	-S1 -Q01 63			
R03	0 1.0MM2	H05V-K SW		-X01 B03	-S1 -Q01 52				
R03	0 1.0MM2	H05V-K SW		-X01 B04	-S1 -Q01 64				
V01	0 1.0MM2	H05V-K SW		-S1 -Q1 42	-S62 14				
V01	0 1.0MM2	H05V-K SW		-X01 B05	-S1 -Q01 71				
V01	0 1.0MM2	H05V-K SW		-X01 B06	-S1 -Q01 72				
V01	0 1.0MM2	H05V-K SW		-X01 B09	-S1 -Q01 91				
V01	0 1.0MM2	H05V-K SW		-X01 B10	-S1 -Q01 92				
V01	0 1.0MM2	H05V-K SW		-X01 B11	-S1 -Q1 41				
V01	0 1.0MM2	H05V-K SW		-X01 B12	-S62 11				
V01	0 1.0MM2	H05V-K SW		-X01 C11	-S1 -Q01 111				
V01	0 1.0MM2	H05V-K SW		-X01 C12	-S1 -Q01 112				
V01	0 1.0MM2	H05V-K SW		-X01 C13	-S63 14				
V01	0 1.0MM2	H05V-K SW		-X01 C14	-S63 11				

Copyright as per DIN 34 to be observed!

D009781 02

05.01.2007 HJ0115ND -L12+S3A -Q32 ADAM

NO.	Alteration	Date	Name
03	AS BUILT	05.12.2006	AD
02	Fact.-Rev.	09.11.2005	AD
01	Approval	20.09.2005	AD

Date 06.06.2005
Drawn ADAM
Check GROHMANN
Std.

US STEEL KOSICE/SLOVAKIA
50.3023.01
SUBSTATION T80
Orig.: | Iss.for | Iss.by:

AREVA

CROSS CONNECT. LIST
SWITCHING TRUCK
PANEL
12

50.3023.01.A3.741.223 V =L12 +S3A / Q32

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 132
135Sh.

CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
V01	0 1.0MM2	H05V-K SW		-X01 D05	-S1 -Q1 51				
V01	0 1.0MM2	H05V-K SW		-X01 D06	-S1 -Q1 52				
V01	0 1.0MM2	H05V-K SW		-X01 D09	-S1 -Q1 61				
V01	0 1.0MM2	H05V-K SW		-X01 D10	-S1 -Q1 62				

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ0115ND =L12+S3A Q33 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	iss.for	iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

CROSS CONNECT. LIST
SWITCHING TRUCK
PANEL
12

50.3023.01.A3.741.223 V =L12 +S3A / Q33

Typ: 01
INCOMING

D009781.02.612-3.AHA

Sheet 133
135Sh.

TERMINAL DIA., 64 POLIG, CIRCUIT-BREAKER

PIN

+S3A -X01

CABLE MATERIAL H05V-K 1.0mm2 SW

	A	B	C	D	
1	A01 -Q01 -S22 11 /L01.2	B01 -Q01 -S1 44 /Q02.4	C01 -Q01 -S1 243 /M01.3	D01 -Q1 -S1 14 /Q01.3	1
2	A02 -Q01 -S23 12 /L01.2	B02 -Q01 -S1 51 Q /R03.6	C02 -Q01 -F12 C2 /M01.3	D02 -Q1 -S1 21 Q /Q02.5	2
3	A03 -Q01 -S1 213 /M01.6	B03 -Q01 -S1 52 /R03.6	C03	D03 -Q1 -S1 22 /Q02.5	3
4	A04 -Q01 -F11 C2 /M01.6	B04 -Q01 -S1 64 /R03.6	C04	D04 -Q1 -S1 24 /Q02.5	4
5	A05 -Q01 -S6 11 /M01.7	B05 -Q01 -S1 71 /V01.2	C05 -Q1 -S1 31 /P01.2	D05 -Q1 -S1 51 /V01.4	5
6	A06 -Q01 -S43 12 /M01.7	B06 -Q01 -S1 72 /V01.2	C06 -S61 11 /P01.2	D06 -Q1 -S1 52 /V01.4	6
7	A07 -Q01 -S24 11 /Q04.3	B07 -Q01 -S1 83 /M03.5 H05V-K 1.0MM2 SW	C07	D07 -Q1 -S1 33 /Q09.4	7
8	A08 -Q01 -S24 12 /Q04.3	B08 -Q01 -S1 84 /M03.5	C08	D08 -Q1 -S1 34 /Q09.4	8
9	A09 -Q01 -S24 14 /Q04.3	B09 -Q01 -S1 91 /V01.2	C09 -Q01 -S1 103 /D02.2	D09 -Q1 -S1 61 /V01.4	9
10	A10 -Q01 -S41 11 /R01.3	B10 -Q01 -S1 92 /V01.2	C10 -Q01 -S1 104 /D02.2	D10 -Q1 -S1 62 /V01.4	10
11	A11 -Q01 -S1 230 /R01.3	B11 -Q1 -S1 41 /V01.4	C11 -Q01 -S1 111 /V01.3	D11 -Q1 -S1 43 /D02.2	11
12	A12 -Q01 -S1 11 Q /Q01.2	B12 -S62 11 /V01.4	C12 -Q01 -S1 112 /V01.3	D12 -Q1 -S1 44 /D02.2	12
13	A13 -Q01 -S1 12 /Q01.2	B13 -Q01 -S42 11 /Q09.3	C13 -S63 14 /V01.5	D13 -Y1 E1 /P01.4	13
14	A14 -Q01 -S1 24 /Q01.2	B14 -Q01 -S42 14 /Q09.3	C14 -S63 11 /V01.5	D14 -Y1 E2 /P01.4	14
15	A15 -Q01 -S1 31 Q /Q02.3	B15 -Q01 -S25 11 /Q09.3	C15 -Q1 -S1 11 Q /Q01.3	D15	15
16	A16 -Q01 -S1 32 /Q02.3	B16 -Q01 -S25 14 /Q09.3	C16 -Q1 -S1 12 /Q01.3	D16	16

Subject to technical modifications!
Copyright as per DIN 34 to be observed!

D09781102

05.01.2007 HJ0115ND =L12+S3A -S01 ADAM

NO.	Alteration	Date	Name	Std.
03	AS BUILT	05.12.2006	AD	
02	Fact.-Rev.	09.11.2005	AD	
01	Approval	20.09.2005	AD	

Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	PLUG DIAGRAM
Drawn	ADAM	50.3023.01	CIRCUIT-BREAKER
Check	GROHMANN	SUBSTATION T80	PANEL
Orig.:	iss.for	iss.by:	12

AREVA

50.3023.01.A3.741.223 V =L12 +S3A / S01

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 134 135Sh.

TERMINAL DIA., 64 POLIG, CIRCUIT-BREAKER

PIN

+S3B -X02

CABLE MATERIAL H05V-K 1.0mm2 SW

+	A	B	C	D	+
1	A01	B01	C01	D01	1
2	A02	B02	C02	D02	2
3	A03	B03	C03	D03	3
4	A04	B04	C04	D04	4
5	A05	B05	C05	D05	5
6	A06	B06	C06	D06	6
7	A07	B07	C07	D07	7
8	A08	B08	C08	D08	8
9	A09	B09	C09	D09	9
10	A10	B10	C10	D10	10
11	A11	B11	C11	D11	11
12	A12	B12	C12	D12	12
13	A13	B13	C13	D13	13
14	A14	B14	C14	D14	14
15	A15	B15	C15	D15	15
16	A16	B16	C16	D16	16
+					+

Subject to technical modifications!
Copyright as per DIN 34 to be observed!

D0978102

05.01.2007 HJ0115ND =L12+S3B S01 ADAM

NO.	Alteration	Date	Name	Std.		Orig.:	Iss.for	Iss.by:
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		

AREVA

PLUG DIAGRAM
CIRCUIT-BREAKER
PANEL
12

50.3023.01.A3.741.223 V =L12 +S3B / S01

Typ: 01 INCOMING

D009781.02.612-3.AHA

Sheet 135 135Sh.