

AREVA Sachsenwerk GmbH      Geschäftsbereich Energieverteilung      Fachbereich Mittelspannungsschaltanlagen      Königsbrücker Strasse 124      01099 Dresden      Tel.: 03511820-3394      Fax: 03511820-2602

US STEEL KOSICE/SLOVAKIA  
50.3023.01  
SUBSTATION T80

CROSS COUPLING  
CIRCUIT DIAGRAM

A = L09

/ A01

D009781.02. 609-3.AHA

50.3023.01.A3.741.230  
COVER SHEET  
PANEL  
09

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

09.01.2007 HJ0115ND  
L09  
A01  
ADAM

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

## INSTRU. AND CONTROL

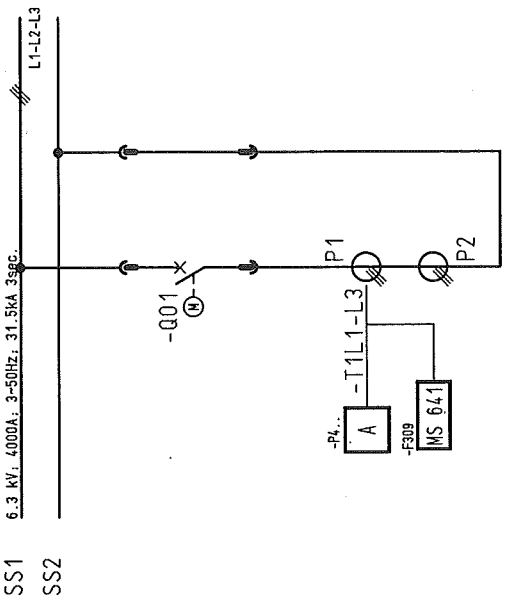
FUNCTION	LOCAL	LOCAL CONTROL	REMOTE CONTROL	REMARKS
CONTROL	-001		-001	
STATUS SIGNAL	-001		-001	
MEASUREMENT	1 (L1-13)			
PROTECTION				
METERING				

## TECHNICAL SWITCH DATA

[illegible]

## TECHNICAL TRANSFORMER DATA

DESIGN	MANUFACT	TYP	RATIO	IDE	REMARKS
-T1L1	AEG	CT12	4000/1/1A	C1: c.l. 0.2FS5 15VA	
-T1L2	AEG	CT12	4000/1/1A	C2: c.l. 10P10 20VA	
-T1L3	AEG	CT12	4000/1/1A		



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05.01.2007

CLIENT DOCUMENT NUMBER		RELEASE BY DOCUMENT NUMBER		VERSION STATUS		DOCUMENT IDENTIFICATION		SHEET		DESIGN	
						SORT MATCHING		ITEM NO.			
A	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	A =L09	A01	1	COVER SHEET	09
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	A =L09	A02	2	CIRCUIT DIAGRAM	09
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	A =L09	B01	3	Inhaltssverzeichnis	09
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	A =L09	B02	4	Inhaltssverzeichnis	09
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	A =L09	B03	5	Inhaltssverzeichnis	09
B	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	D01	6	CIRCUIT DIAGRAM	AC-DISTRIBUTION
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	D02	7	CIRCUIT DIAGRAM	AC-DISTRIBUTION
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	D03	8	CIRCUIT DIAGRAM	FAN A
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	D04	9	CIRCUIT DIAGRAM	FAN B
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	600	10	CIRCUIT DIAGRAM	DC DISTR.
C	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	601	11	CIRCUIT DIAGRAM	DC DISTR.
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	602	12	CIRCUIT DIAGRAM	RING CIRCUIT
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	L01	13	CIRCUIT DIAGRAM	CIRCUIT-BREAKER
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	M01	14	CIRCUIT DIAGRAM	CONTROL
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	M03	15	CIRCUIT DIAGRAM	CONTROL
D	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	M04	16	CIRCUIT DIAGRAM	CONTROL
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	N01	17	CIRCUIT DIAGRAM	ARC DETECTOR
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	N02	18	CIRCUIT DIAGRAM	ARC DETECTOR
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	P01	19	CIRCUIT DIAGRAM	INTERLOCK
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	P02	20	CIRCUIT DIAGRAM	INTERLOCK
E	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	Q01	21	CIRCUIT DIAGRAM	POSITION INDICA.
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	Q02	22	CIRCUIT DIAGRAM	INTERFACE
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	Q03	23	CIRCUIT DIAGRAM	INTERFACE
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	Q04	24	CIRCUIT DIAGRAM	INTERFACE
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	Q05	25	CIRCUIT DIAGRAM	INTERFACE
F	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	Q07	26	CIRCUIT DIAGRAM	SPARE CONTACTS
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	R01	27	CIRCUIT DIAGRAM	SIGNALLING
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	S01	28	CIRCUIT DIAGRAM	CURR. TRANSF.
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	T01	29	CIRCUIT DIAGRAM	VOLTAGE TRANSF.
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	V01	30	CIRCUIT DIAGRAM	SPARE CONTACTS
	50.3023.01.A3.741	D009781.02.609-3.AHA		01	02	03	S =L09	V02	31	CIRCUIT DIAGRAM	SPARE CONTACTS

03	AS BUILT	05.12.2006	AD	Date	05.06.2005	US STEEL KOSICE/SLOVAKIA		50.3023.01.A3.741.230		A =L09	
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		Inhaltssverzeichnis		A =L09	
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL		/ B01	
NO.	Alteration	Date	Name	Sld.	Iss.	for	Iss.	by:	Iss.	Type: D6	
										CROSS COUPLING	
										D009781.02.609-3.AHA	
										93Sh.	
										8	

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05.01.2007

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		Inhaltsverzeichnis		50.3023.01.A3.741.230		A =L09		/ 802	
02	Fact.-Rev.	09.11.2005	AD	Date	09.11.2005	Drawn ADAM		PANEL		Typ: 06		D009781.02.609-3.AHA		Sheet 4	
01	Approval	20.09.2005	AD	Date	20.09.2005	Checked GROHMANN		09		CROSS COUPLING		8		93Sh.	
NO.	Alteration	Date	Name	Std.	Iss.	for	Iss.	by:							

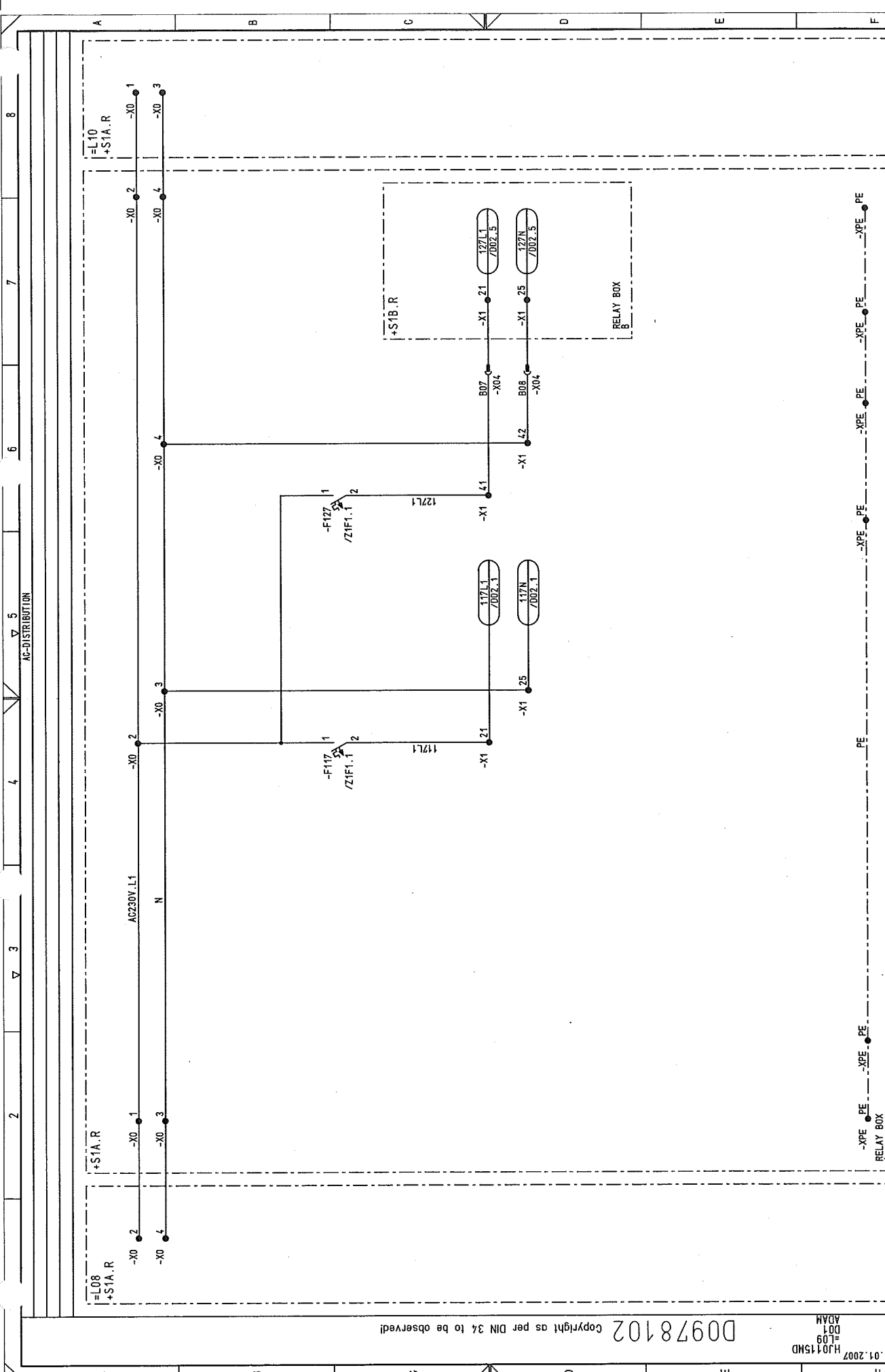
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						SORT MATCHING		ITEM NO.			
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	50.3023.01.A3.741.230		01	02	03	S	=L09	Z1A10	34	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z1A11	35	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z1F1	36	LIST OF EQUIPMENT	09
B	50.3023.01.A3.741.230	D009781.02.609-3.AHA	01	02	03	S	=L09	Z1F2	37	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z1H1	38	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z1K1	39	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z1K2	40	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z1P1	41	LIST OF EQUIPMENT	09
C	50.3023.01.A3.741.230	D009781.02.609-3.AHA	01	02	03	S	=L09	Z1S1	42	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z1U1	43	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z2B1	44	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z2E1	45	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z2S1	46	LIST OF EQUIPMENT	09
D	50.3023.01.A3.741.230	D009781.02.609-3.AHA	01	02	03	S	=L09	Z2T1	47	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z3Q1	48	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z3Q2	49	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z3S1	50	LIST OF EQUIPMENT	09
	50.3023.01.A3.741.230		01	02	03	S	=L09	Z3Y1	51	LIST OF EQUIPMENT	09
E	50.3023.01.A3.741.230	D009781.02.609-3.AHA	01	02	03	V	=L09 +S1A.R	K01	52	TERMINAL DIAGRAM	09
	50.3023.01.A3.741.230		01	02	03	V	=L09 +S1A.R	K02	53	TERMINAL DIAGRAM	09
	50.3023.01.A3.741.230		01	02	03	V	=L09 +S1A.R	K03	54	TERMINAL DIAGRAM	09
	50.3023.01.A3.741.230		01	02	03	V	=L09 +S1A.R	K10	55	TERMINAL DIAGRAM	09
	50.3023.01.A3.741.230		01	02	03	V	=L09 +S1A.R	K11	56	TERMINAL DIAGRAM	09
F	50.3023.01.A3.741.230	D009781.02.609-3.AHA	01	02	03	V	=L09 +S1A.R	K12	57	TERMINAL DIAGRAM	09
	50.3023.01.A3.741.230		01	02	03	V	=L09 +S1A.R	K30	58	TERMINAL DIAGRAM	09
	50.3023.01.A3.741.230		01	02	03	V	=L09 +S1A.R	K40	59	TERMINAL DIAGRAM	09
	50.3023.01.A3.741.230		01	02	03	V	=L09 +S1A.R	K50	60	TERMINAL DIAGRAM	09
	50.3023.01.A3.741.230		01	02	03	V	=L09 +S1A.R	K80	61	TERMINAL DIAGRAM	09
G	50.3023.01.A3.741.230	D009781.02.609-3.AHA	01	02	03	V	=L09 +S1A.R	K81	62	TERMINAL DIAGRAM	09



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05.01.2007

CLIENT DOCUMENT NUMBER		RELEASE BY DOCUMENT NUMBER		VERSION STATUS		DOCUMENT IDENTIFICATION		SHEET		DESIGN	
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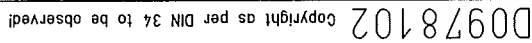


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02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	AC-DISTRIBUTION				Sheet 6
01	Approval	20.08.2005	AD	Check	GROHMANN	SUBSTATION T80	PANEL				93Sh.
NO.	Alteration	Date	Name	Std.	Iss. for	Orig.	Iss. by:	CROSS COUPLING	D009781.02.609-3.AHA		

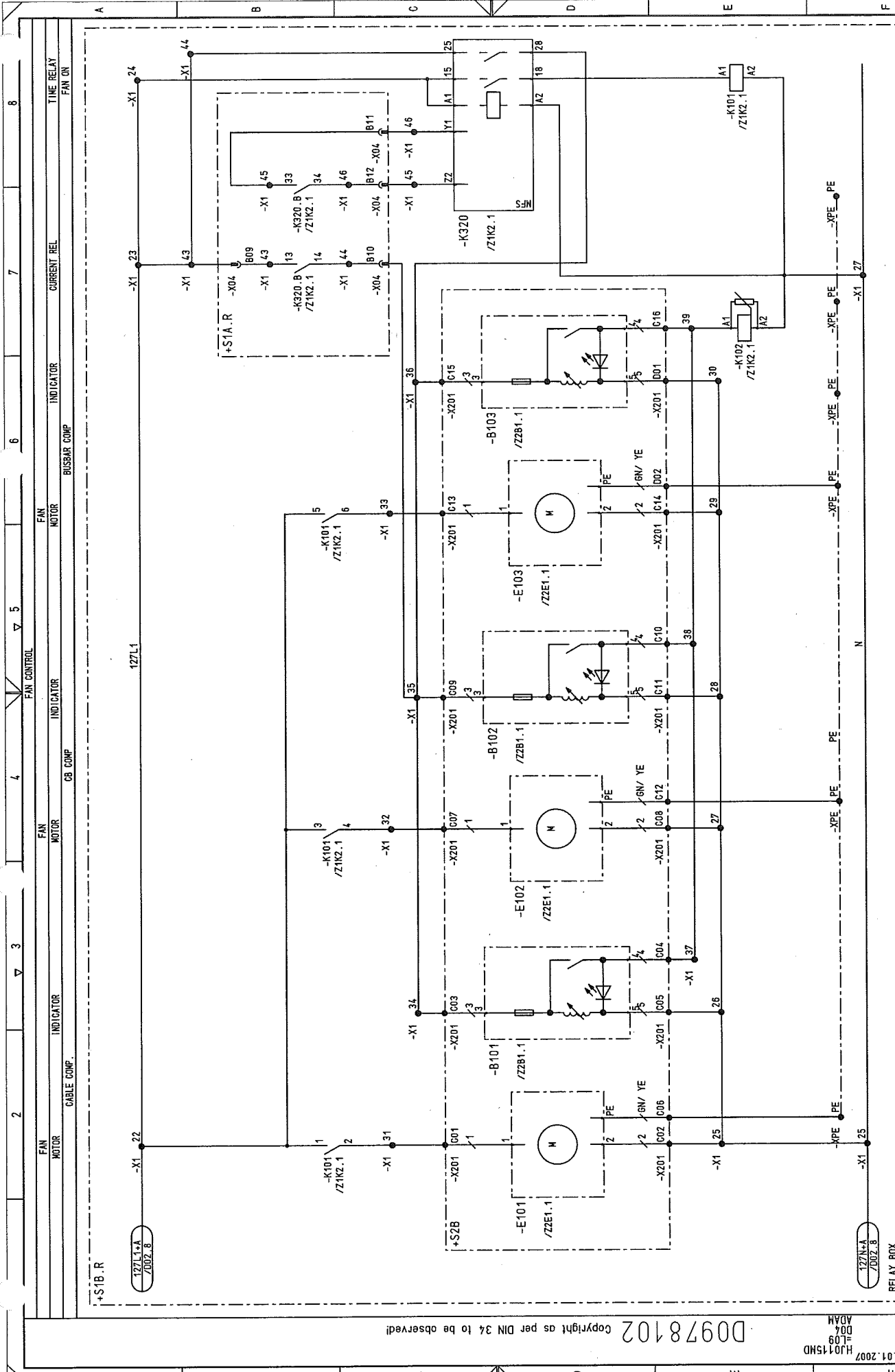
D0978102 Copyright as per DIN 34 to be observed!

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HJ0115MD  
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ADAM



03		AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	CIRCUIT DIAGRAM		50.3023.01.A3.7/1.230	S-L09	/ D04
02	Fact - Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		FAN B				
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL				
NO.	Alteration	Date	Name	Std.	Iss. for	Iss. by:		CROSS COUPLING		D009781.02.609-3.AHA	93Sh	8

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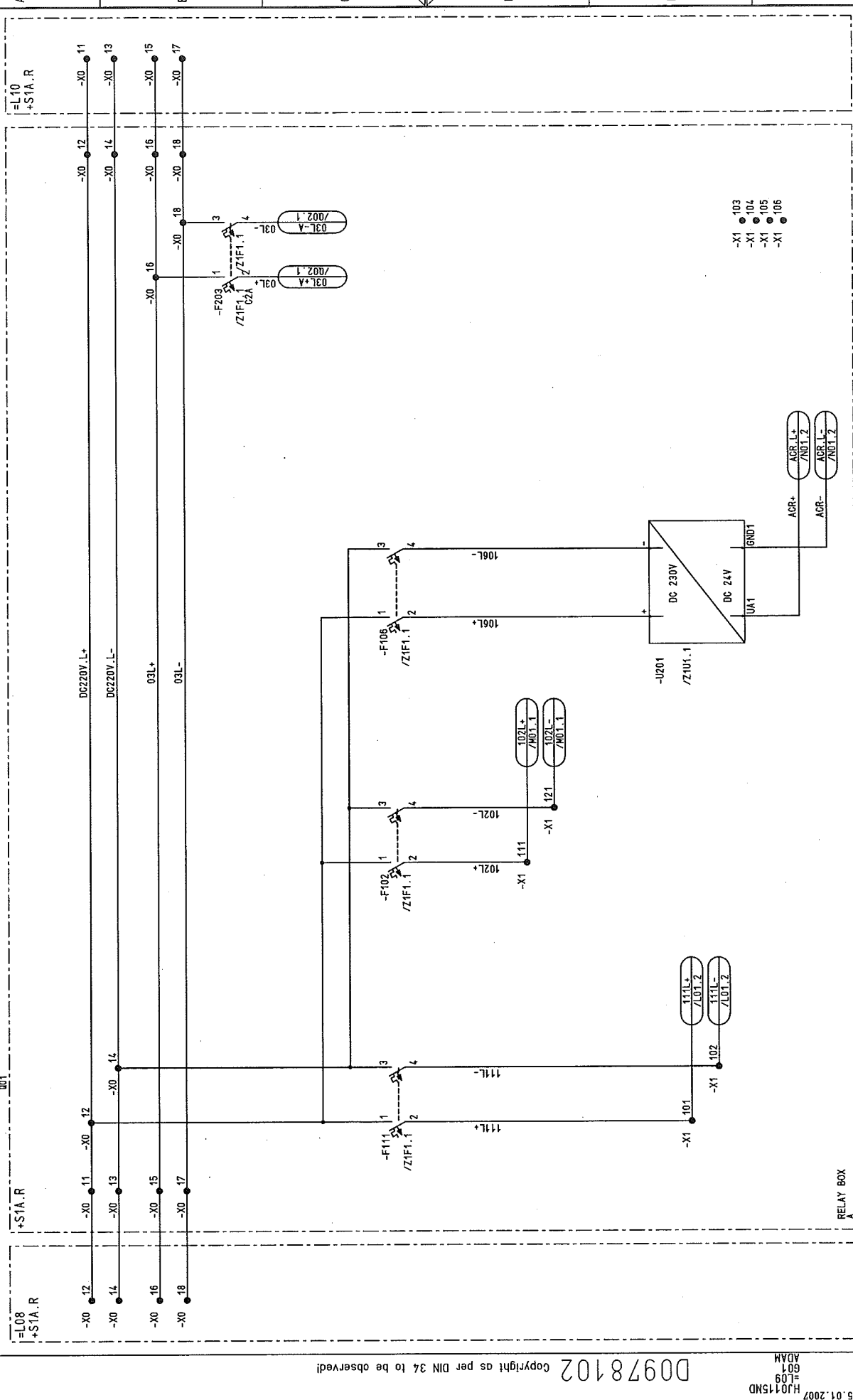
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	Fact.-Rev.	09.11.2005	AD	Draught ADAM	50_3023-01			DC DISTR.		
01	Approval	20.03.2005	AD	Check GROHMANN	SUBSTATION T80			PANEL	Type: 06 CROSS COUPLING	Sheet 10 93Sh.
NQ.	Alteration	Date	NameStd.	Orig.	Iss.for	Iss.by:		09	D009781.02_609-3_AHA	

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05.01.2007  
H0115MD  
G01  
ADAM

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	CIRCUIT DIAGRAM	50.3023.01.A3.741.230	S	=L09	/601
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	DC DISTR.				Sheet 11
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80	PANEL				93Sh.
NO.	Alteration	Date	Name	Std.	Iss. for	Iss. by:					
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CIRCUIT-BREAKER  
MOTOR DRIVE  
CONTROL  
DE DISTR.  
POWER SUPPLY  
INSTRU. AND CONTROL



03	AS BUILT	05.12.2005	AD	Date	10.06.2005	US STEEL KOSICE/SLOVAKIA	 <b>AREVA</b>	CIRCUIT DIAGRAM		50.3023.01.A3.741.230	\$=L09	/ 602
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		RING CIRCUIT				
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL		Typ: 06		
	Alteration	Date	Name	Std.		Orig.:		iss.by:		CROSS COUPLING	D009781.02.609-3.AHA	
NC.												







01.2007  
HJ0115MD  
-LD9  
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D0978102

102L+  
S1A.R  
M01.8

102L-  
102L+  
M01.8

102L-C  
M04.1

102L-  
126  
-X1

176  
-X1

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A1

A2

K71  
Z1/K1.1

117  
-X1

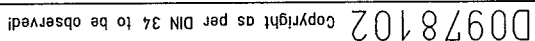
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K71

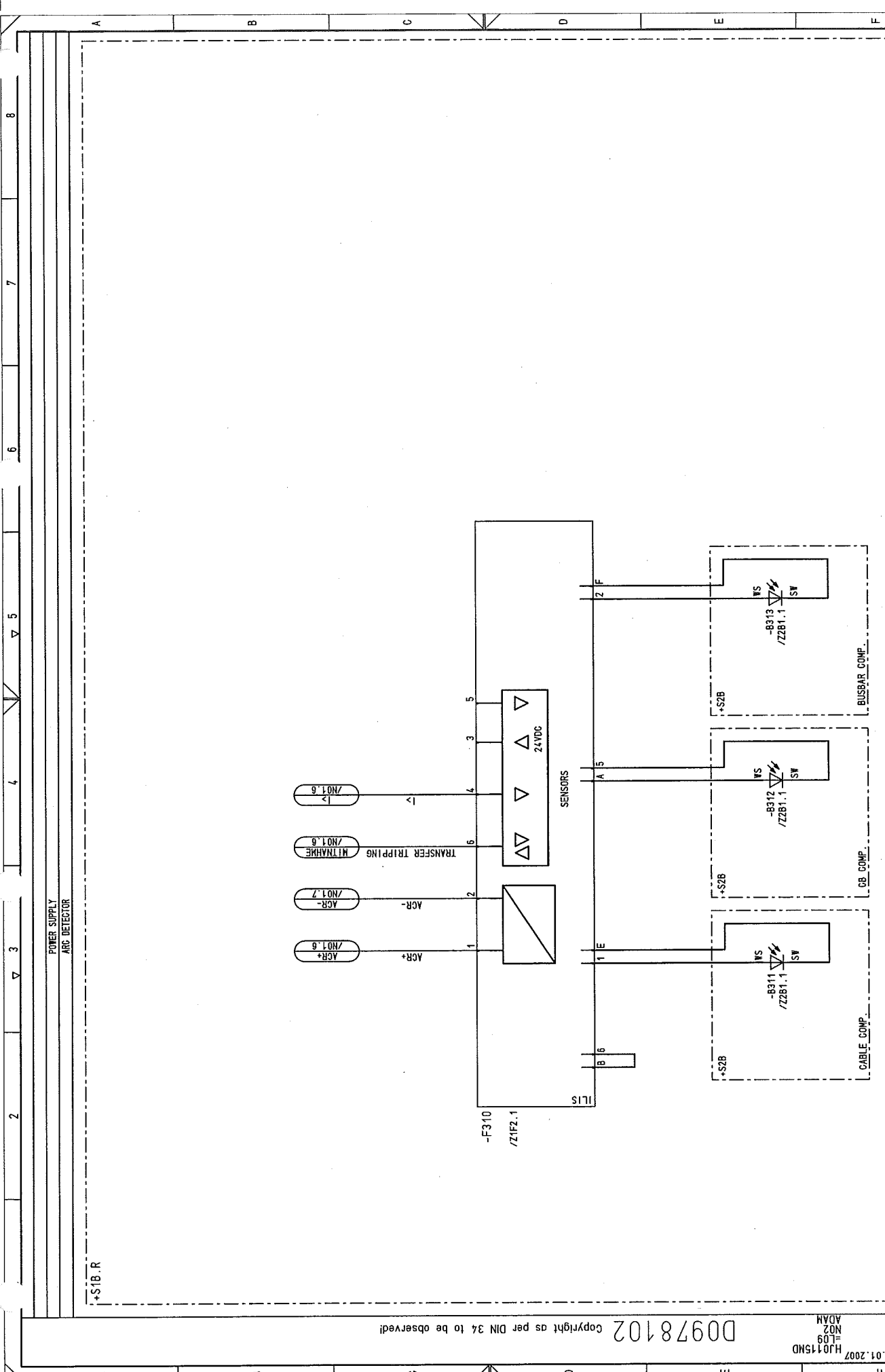
PANEL

126  
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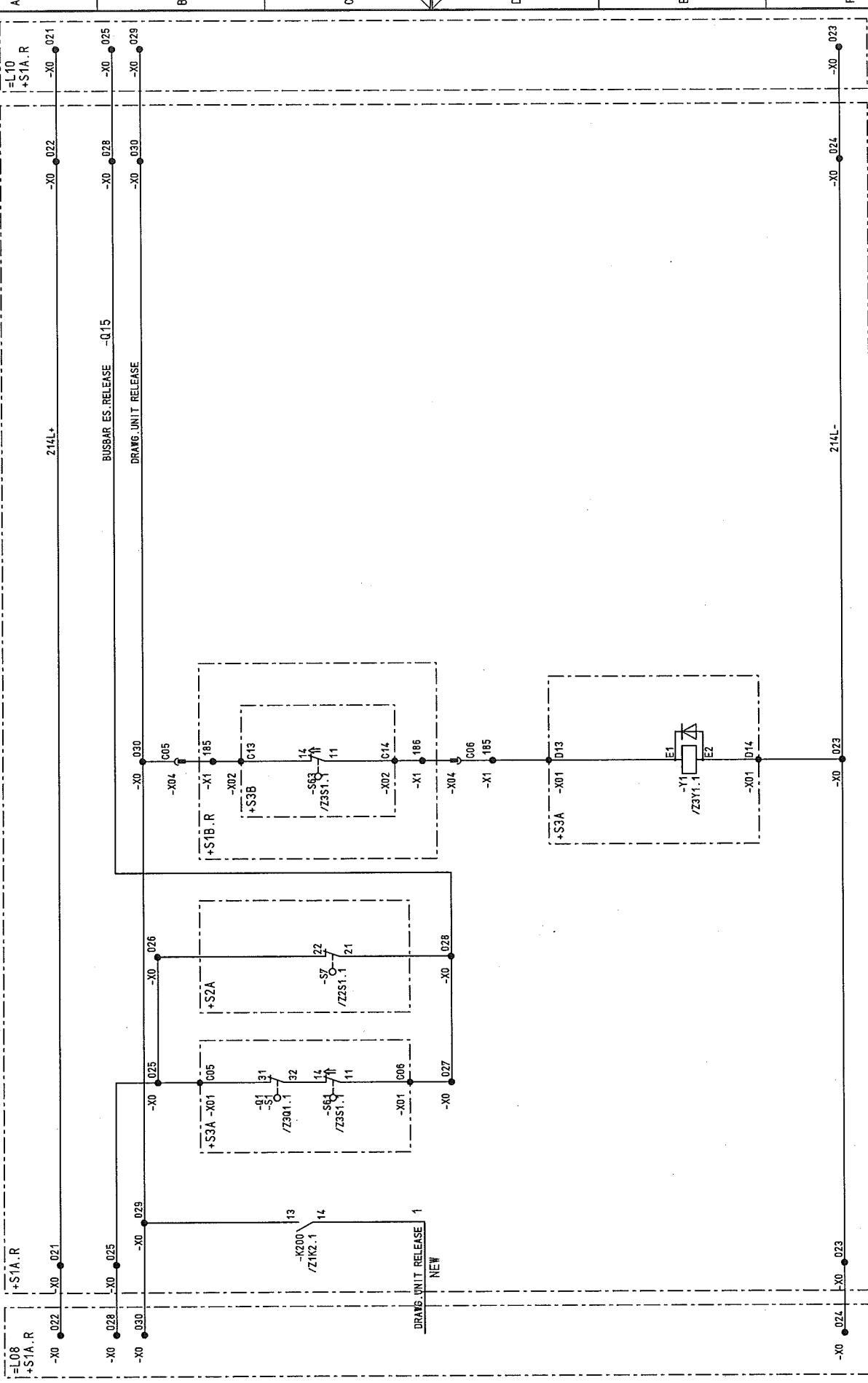




05.01.2007		HJ0115MD		NO2		ADAM		D0978102		Copyright as per DIN 34 to be observed!	
03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		CIRCUIT DIAGRAM		50.3023.01.A3.741.230	
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	SUBSTATION T80		ARC DETECTOR		S-L09	
01	Approval	20.09.2005	AD	Check	GROHMANN	Iss. for		PANEL		Typ: 06	
NO.	Alteration	Date	Name	Std.	Iss. by:	Iss. for		GROSS COUPLING		D009781.02.609-3.AHA	
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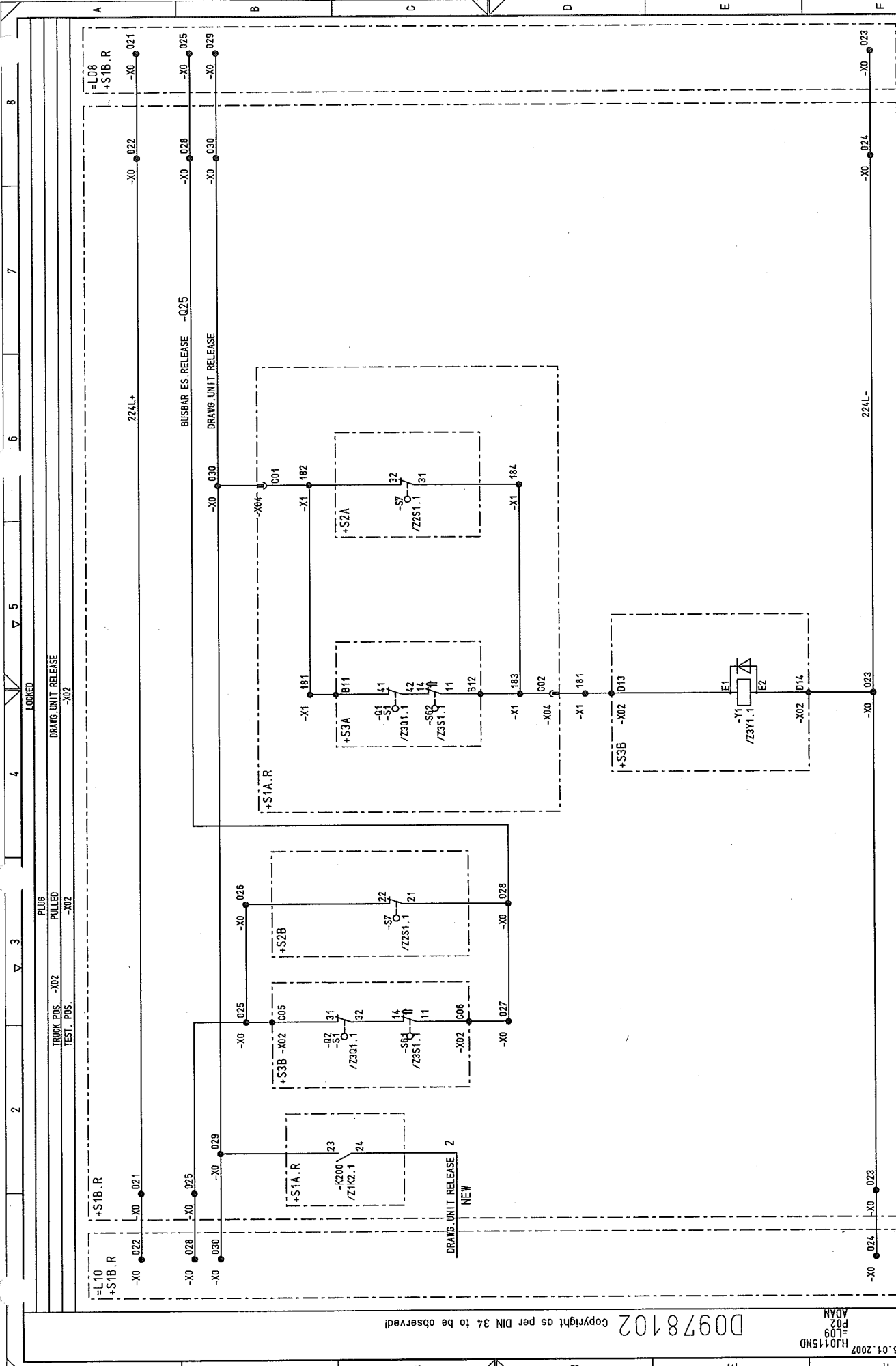
D0978102 Copyright as per DIN 34 to be observed!

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P01  
ADAM



03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	CIRCUIT DIAGRAM	50.3023.01.A3.741.230	S	=L09	/ P01
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	INTERLOCK				Sheet 19
01	Approval	20.08.2005	AD	Check	GROHMANN	SUBSTATION T80	PANEL				93Sh.
NO.	Alteration	Date	Name	Std.	Iss. for	Orig.	Iss. by:	CROSS COUPLING	D009781.02.609-3. AHA	Typ: D6	

2	3	4	5	6	7	8
LOCKED						
TRUCK POS. -X01	DRANG UNIT RELEASE					
TEST. POS. -X01						



NO.		Alteration	Date	Name	Std.	2	3	4	5	6	7	8
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02	Fact. - Rev.	09.11.2005	AD	50.3023.01								
01	Approval	20.09.2005	AD	CHECK GROHMANN								
NO.		Alteration	Date	Name	Std.	2	3	4	5	6	7	8
		Iss. for										
		Iss. by:										
		Panel										
		Interlock										
		Circuit Diagram										
		50.3023.01.A3.741.230										
		S										
		Sheet 20										
		93Sh.										
		D009781.02.609-3.AHA										
		CROSS COUPLING										
		Typ: 06										
		50.3023.01.A3.741.230										
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		93Sh.										

D00978102 Copyright as per DIN 34 to be observed!

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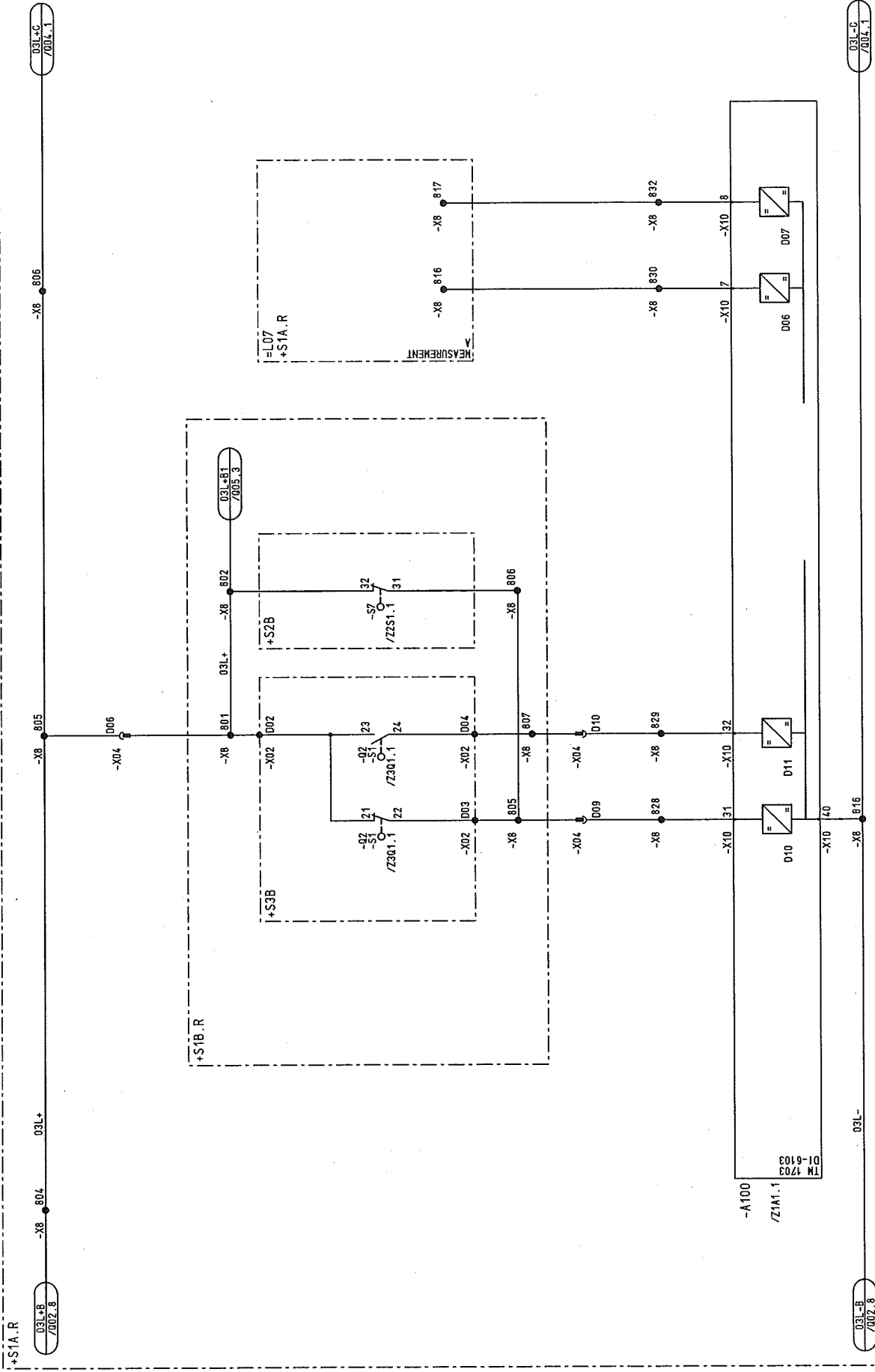




D0978102 Copyright as per DIN 34 to be observed!

H0115MD  
L09  
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ADAM

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	CIRCUIT DIAGRAM	50.3023.01.A3.741.230	S1=L09	/ 003
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	INTERFACE			Sheet 23
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80	PANEL			93Sh.
NO.	Alteration	Date	Name	Std.	Iss.	for	Iss.	by:		
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CIRCUIT DIAGRAM  
INTERFACE  
PANEL

50.3023.01.A3.741.230

S1=L09

/ 003

Sheet 23

93Sh.

D09781.02.609-3.AHA

CROSS COUPLING

Typ: D6

09

ISS.

BY:

AREVA

US STEEL KOSICE/SLOVAKIA

50.3023.01

SUBSTATION T80

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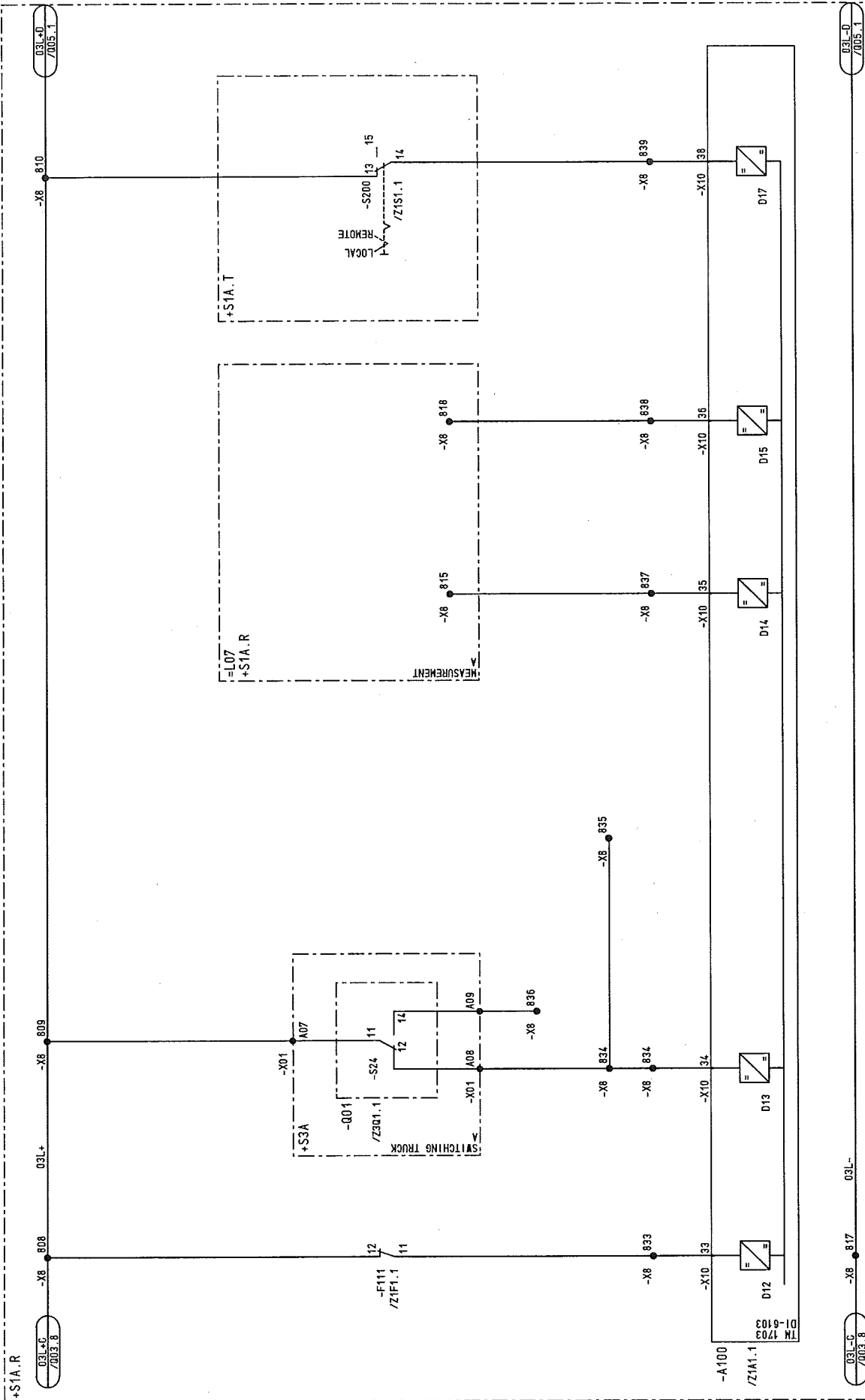
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293

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ADAM

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	CIRCUIT DIAGRAM	50.3023.01.A3.741.230	S=L09	/004
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	INTERFACE			
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80	PANEL			Sheet 24
NO.	Alteration	Date	Name	Std.	Iss. for	Iss. by:	09	CROSS COUPLING	D009781.02.609-3.AHA	93Sh.

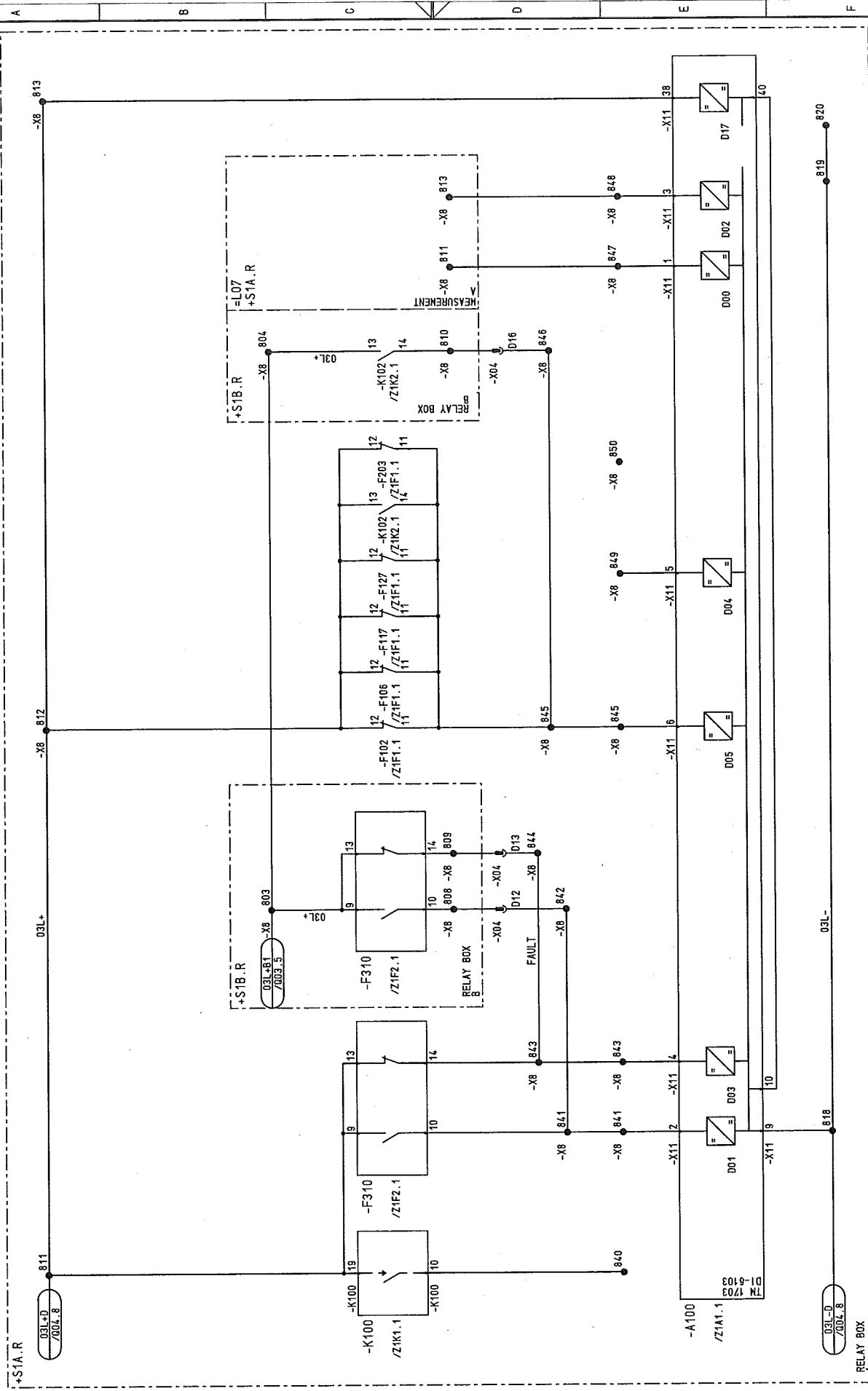


DOUBLE THROW SWITCH  
LOCAL / REMOTE

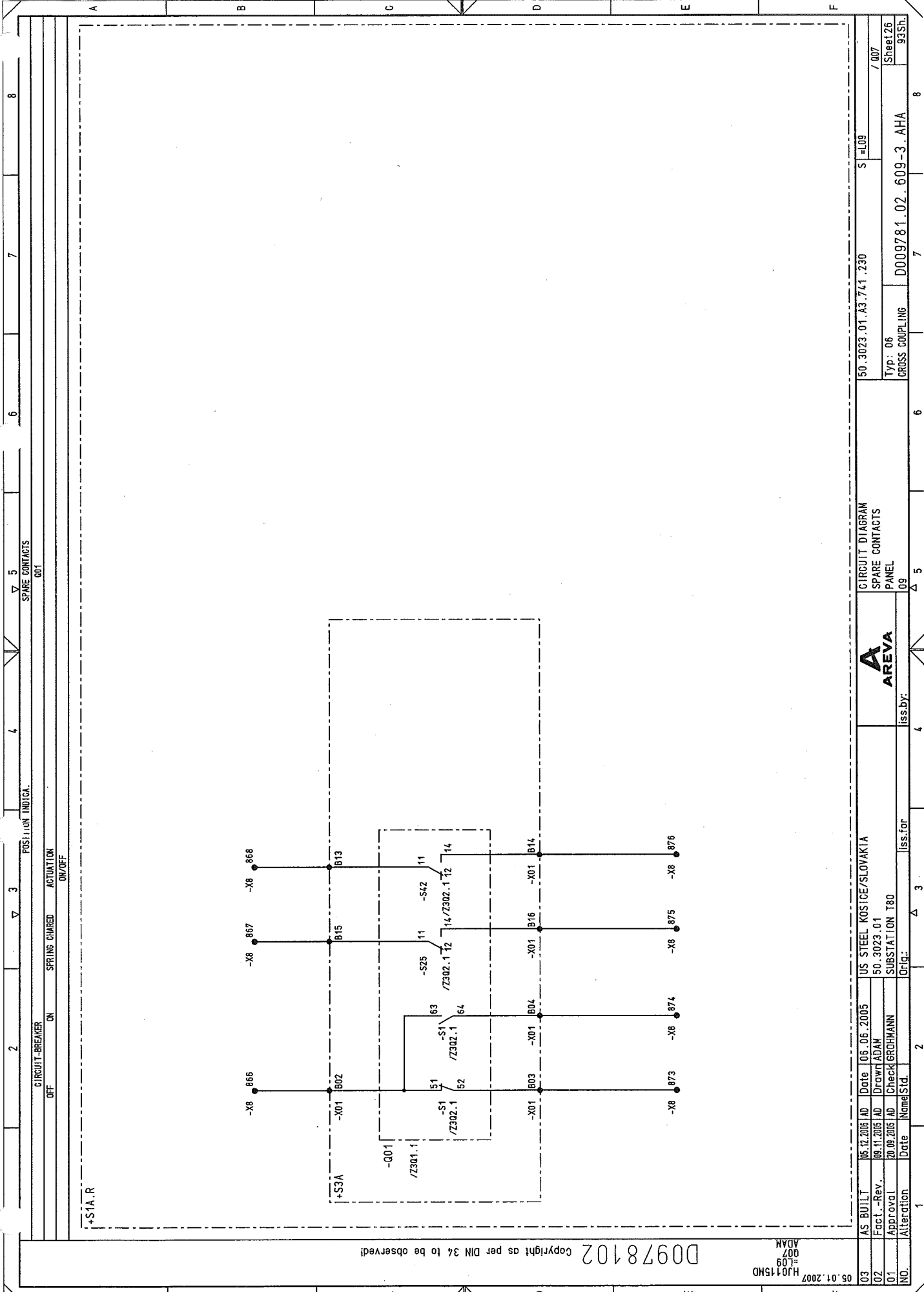
M.C.B. TRIPPED  
YT SS1

SPRING-ENERGY MECH  
CHARGED RELEASED

M.C.B. TRIPPED  
MOTOR DRIVE



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	A											
03	AS BUILT	05.12.2005	AD	Date	05.06.2005	US STEEL KOSTICE/SLOVAKIA		CIRCUIT DIAGRAM		50_3023_01_A3.741_230		S=L09
02	Fact. - Rev.	09.11.2005	AD	Drawn	ADAM	50_3023_01		INTERFACE				/ 005
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL		Typ: 06		Sheet 25
NO.	Alteration	Date	Name	Sld.		iss.for		iss.by:	09	CROSS COUPLING	D009781.02_609-3_AHA	93SD
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						Δ		Δ		7		8

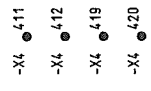


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ADAM

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		CIRCUIT DIAGRAM	50.3023.01.A3.741.230	S1 L09	8
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01		SPARE CONTACTS	Typ: 06	93Sh	8
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80		PANEL	CROSS COUPLING	D009781.02.609-3.AHA	7
NO.	Alteration	Date	Name	Std.	Iss. for	Iss. by:		09			



03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		 <b>AREVA</b>	CIRCUIT DIAGRAM		50..3023.01.A3.741..230		S = L09	
02	Fact.-Rev.	02.11.2005	AD	Drawn	ADAM	50..3023..01			SIGNALLING		Typ: 06		/ R01	
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80			PANEL		CROSS COUPLING		Sheet 27	
NO.	Alteration	Date	Name	Std.		Orig.	Iss. for	Iss. by:	09	D009781.02..609..3..AHA		93Sh.		

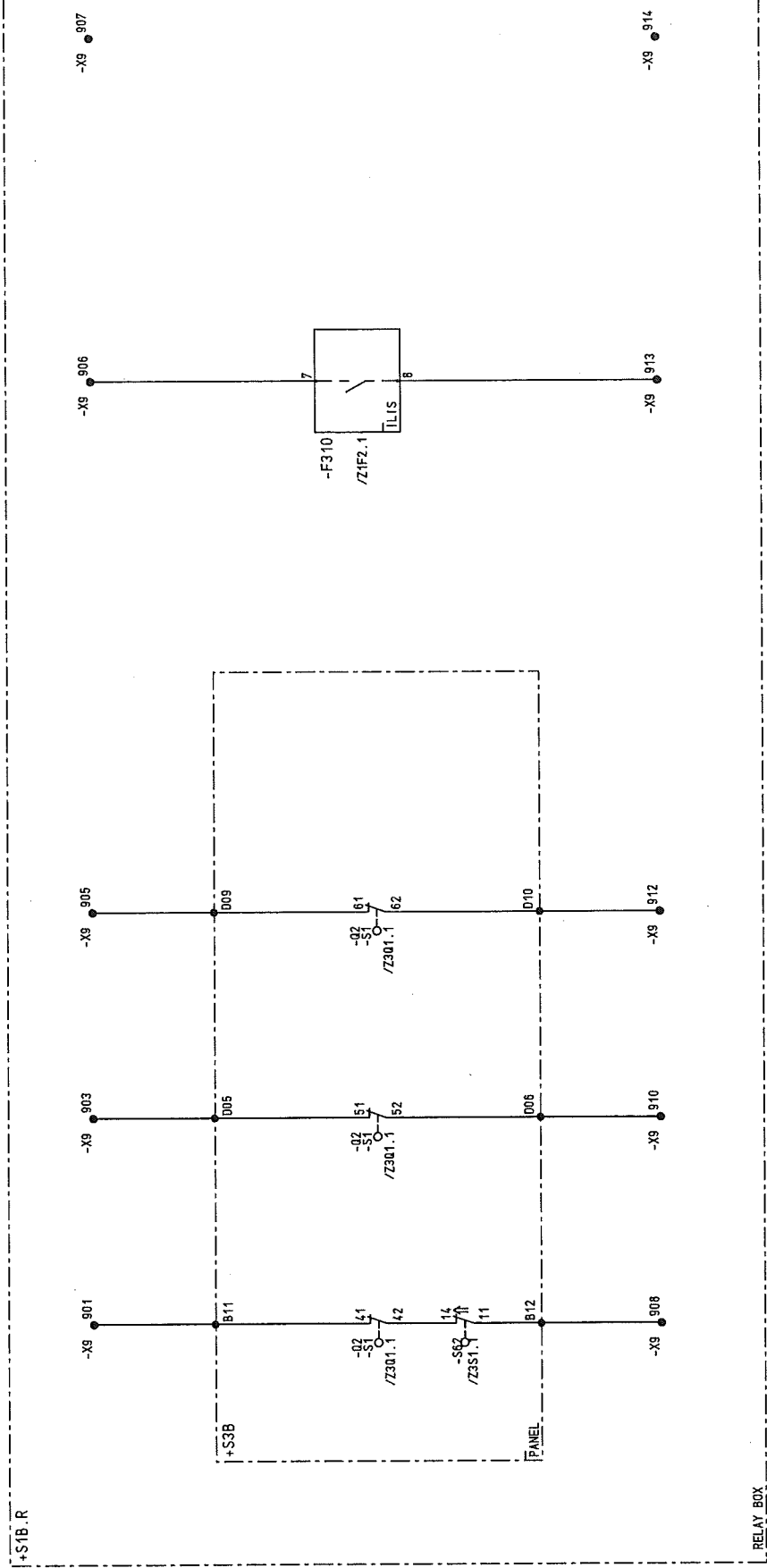


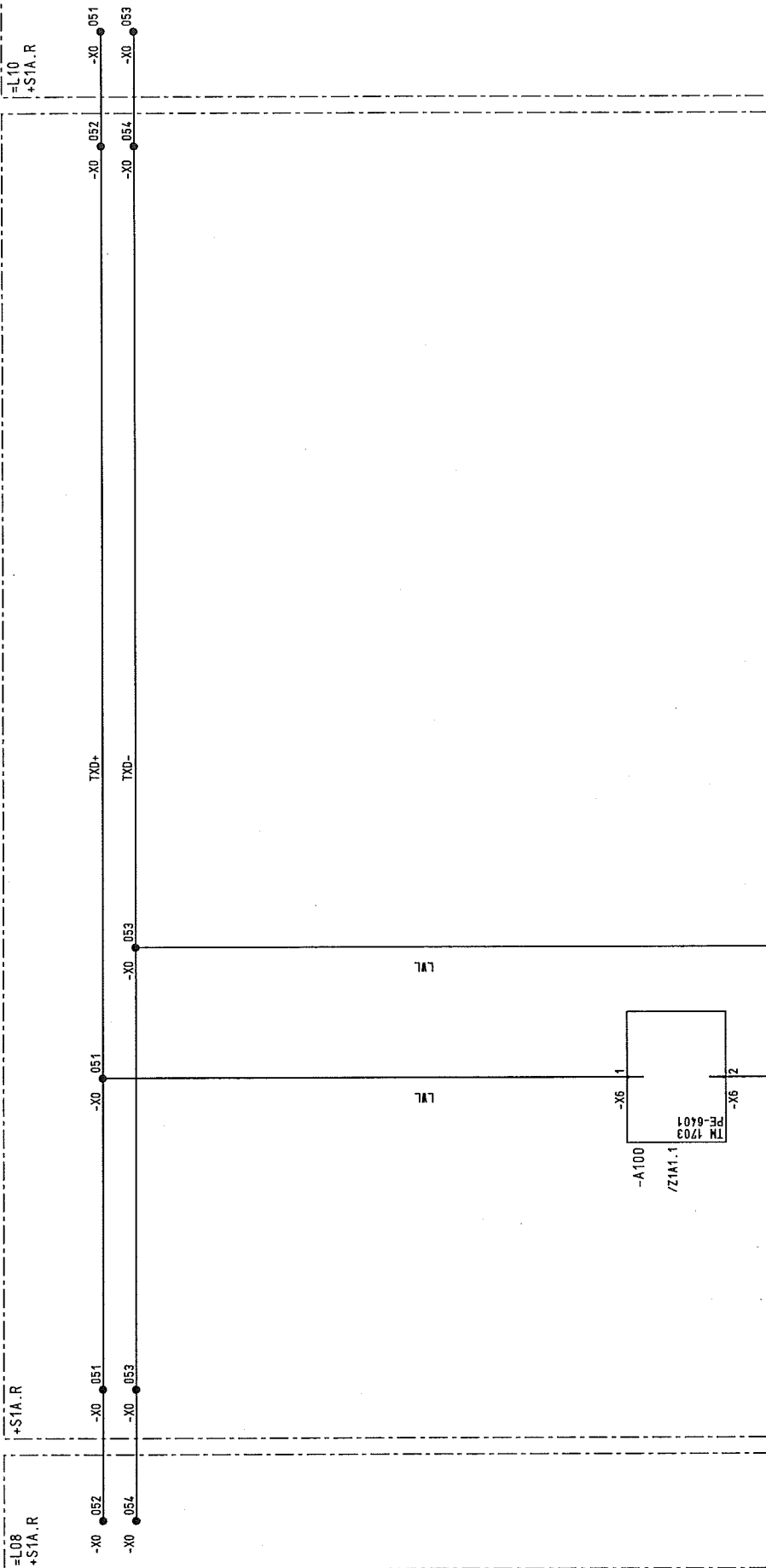


03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	 <b>AREVA</b>	CIRCUIT DIAGRAM VOLTAGE TRANSF. PANEL	50.3023.01.A3.741.230		\$=L09	/ T01	
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01							
01	Approval	20.09.2005	AD	Checked	GROHMANN	SUBSTATION T80							
00	Approval	Date	Name/Std.	Orig.:					iss.for	iss.by:	09		
NC	Alteration	Date	Name/Std.	Orig.:					iss.for	iss.by:	09		
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										GROSS COUPLING		83Sh.	
										D009781.02.609-3.AHA			

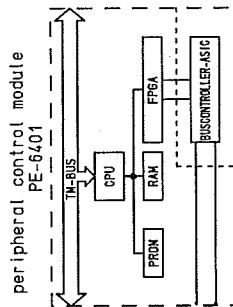
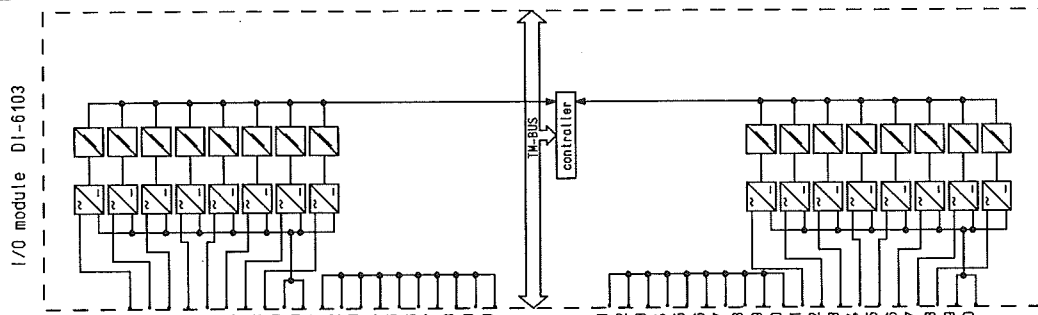


03	AS BUILT	05.12.2005	AD	Date	05.06.2005	US STEEL KOSICE/SLOVAKIA	 <b>AREVA</b>	CIRCUIT DIAGRAM SPARE CONTACTS PANEL	50.3023.01.A3.74.1.230	S=L09	/ V02				
	Fact.-Rev.	09.11.2005	AD	Drawn	ADAN	50.3023.01									
	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80									
	Alteration	Date	Name	Sid.	Iss. for	Iss. by:						09	Typ: 06 CROSS COUPLING	D009781.02.609-3.AHA	93Sh.



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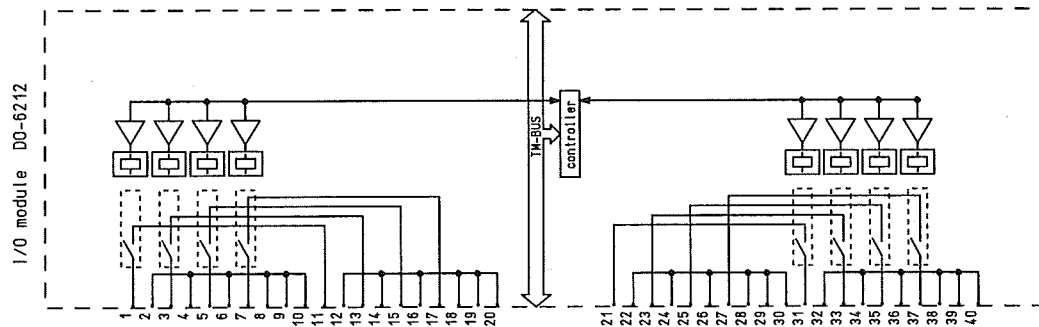
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03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSTICE/SLOVAKIA
02	Fact. - Rev.	09.11.2005	AD	Drawn	ADAM	50_3023_01
01	Approval	20.09.2005	AD	Checked	GROHMANN	SUBSTATION T80
	Alteration	Date	None	Sig.	Orig.:	Iss.

		LIST OF EQUIPMENT
	iss.by:	PANEL 09

50.3023.01.A3.741.230	S	=L09	/ Z1A10
Type: 06 CROSS COUPLING		D009781.02.609-3.AHA	
		Sheet 34	93Sh.

Mounting	+SIA.R	APP.
APPA DESIG-A100		REF.
PIN	-X20	7/21A1.1
MEANING	STATUS	REF.
COM00		/MOL.3
AUX V0-		
COM01		/MOL.4
AUX V0-		
COM02		/MOL.4
AUX V0-		
COM03		/MOL.5
AUX V0-		
AUX V0-		
AUX V0-		
OUT D00		/MOL.3
AUX V0+		
OUT D01		/MOL.4
AUX V0+		
OUT D02		/MOL.4
AUX V0+		
OUT D03		/MOL.5
AUX V0+		
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OUT D04		
AUX V1+		
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OUT D06		
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COM06		
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COM07		
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AUX V1-		



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03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	LIST OF EQUIPMENT	50.3023.01.A3.741.230	S1=L09	7/21A11
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	PANEL	Typ: D6		Sheet 35
01	Approval	20.08.2005	AD	Check	GROHMANN	SUBSTATION T80	09	CROSS COUPLING	D009781.02.609-3.AHA	93Sh.
NO.	Alteration	Date	Name	Std.	Iss. for	Iss. by:				

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ADAM

D0978102

1	2	3	4	5	6	7	8
STUCK- TITEL	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS MOUNTING APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	WITH REFERENCES TO DETAILS CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)			
2	M.C.B. AUXILIARY SWITCH HH RATED CURRENT : 6A TECHNICAL COMPONENTS AUXILIARY SWITCH CB SH/HH-R ORDER NO 672570	MANUF. : PO NO. : 566311 TYPE EP102 UC B6 CHARACTERISTIC : B ORDER NO 672570					
1	M.C.B. AUXILIARY SWITCH HH RATED CURRENT : 0.5A TECHNICAL COMPONENTS AUXILIARY SWITCH CB SH/HH-R ORDER NO 672570	MANUF. : PO NO. : 566336 TYPE EP102 UC C0.5 CHARACTERISTIC : C ORDER NO 672570					
2	SICHERUNGSAUTOMAT HILFSSCHALTER HH NENNSTROM NOMINAL CURRENT : 6A TECHNICAL COMPONENTS HILFSSCHALTER CB SH/HH-R ORDER NO 672570	MANUF. : PO NO. : 566311 TYPE EP61 B6 CHARACTERISTIC : B ORDER NO 672570					
1	M.C.B. AUXILIARY SWITCH HH RATED CURRENT : 2A TECHNICAL COMPONENTS AUXILIARY SWITCH CB SH/HH-R ORDER NO 672570	MANUF. : PO NO. : 566311 TYPE C 2A CHARACTERISTIC : C ORDER NO 672570					

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	LIST OF EQUIPMENT	50.3023.01.A3.741.230	S	L09	/ ZIF1
02	Fact.-Rev.	09.11.2005	AD	Date	09.11.2005	DRAWIT ADAM	PANEL	09	Typ: 06	CROSS COUPLING	D009781.02.609-3.AHA
01	Approval	20.08.2005	AD	Date	20.08.2005	CHECK GROHMANN	ISS.BY:				
NO.	Alteration	Date	Name/Std.	2	3	4	5	6	7	8	93Sh.



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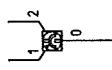
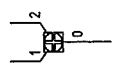
STÜCK- TITEL	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA SETTINGS	MANUFACTURER, TYPE, ORDERING DATA MOUNTING	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	REMARK
2	ARC DETECTOR DC 24V	MANUF.: AREVA PO NO.: C66622	TYPE ILIS			
		TECHNICAL COMPONENTS	TYP	ORDER NO		
		APPLICATION	SETTINGS	MOUNTING	SYM IDENTIFIER	
		ARC DETECTOR		*S1A.R	-F310	
		ARC DETECTOR		*S1B.R	-F310	
1	CURRENT SENSING RELAY	MANUF.: ALSTOM PO NO.:	TYPE MS 641			
		AUXILIARY VOLTAGE : 230V AC				
		TECHNICAL COMPONENTS	TYP	ORDER NO		
		MONITORING	SETTINGS	MOUNTING	SYM IDENTIFIER	
		MONITORING		*S1A.R	-F320	

03.	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	LIST OF EQUIPMENT	50.3023.01.A3.741.230	S	±L09	/Z1F2
02.	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	PANEL	Typ: 06			Sheet 37
01.	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80	09	CROSS COUPLING			93Sh.
NO.	Alteration	Date	Name	Std.	2	Iss. for	Iss. by:	D009781.02.609-3.AHA	7		8

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STUCK- TITEL		2		3		4		5		6		7		8	
DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION		MANUFACTURER, TYPE, ORDERING DATA SETTINGS MOUNTING APPA. DESIG.		APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)		WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)									
1		STELLUNGSMELDER RUECKMELDER		MANUF.: BRESSNO PO NO.: EST-L-1746-08-330-21 TRENNSCHALTER		TYPE EST-L									
		TECHNICAL COMPONENTS		TYP		: 220VAC/220VDC		: 0ELB							
		APPLICATION		MOUNTING		BTM IDENTIFIER									
		CIRCUIT-BREAKER		ON/OFF		SETTINGS		MOUNTING		BTM IDENTIFIER					
								+S1A.T		-H01					
2		STELLUNGSMELDER RUECKMELDER		MANUF.: BRESSNO PO NO.: EST-L-1746-08-231-21 SCHALTWAGEN		TYPE EST-L									
		TECHNICAL COMPONENTS		TYP		: 220VAC/220VDC		: 0ELB							
		APPLICATION		MOUNTING		BTM IDENTIFIER									
		SWITCHING TRUCK		SERVICE POS. TEST POS.		SETTINGS		MOUNTING		BTM IDENTIFIER					
								+S1A.T		-H011					
								+S1A.T		-H021					



AS BUILT		05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		LIST OF EQUIPMENT		50.3023.01.A3.741.230		S=I09		/Z1H1	
Fact.-Rev.		09.11.2005	AD	Drawn	ADAM	50.3023.01		PANEL		Typ: 06		D009781.02.609-3.AHA		Sheet 38	
Approval		20.08.2005	AD	Check	GROHMANN	SUBSTATION T80		09		CROSS COUPLING				93Sh.	
Alteration		Date	Name	Std.	Iss.by:	Iss.for									

STUCK-TITTY	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	SETTINGS	MANUFACTURER, TYPE, ORDERING DATA MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	WITH REFERENCES TO DETAILS	REMARK
1	TIME RELAY OUTPUT PULSE t=50ms	MANUF.: AREVA PO NO.: 701917/1	TYPE C27900				
	FUNCTION : IMPULSDEHNER	RATED VOLTAGE : 24-240AC/DC					
	TECHNICAL COMPONENTS	TYP	ORDER NO				
	APPLICATION : PULSE EXPD.	SETTINGS	MOUNTING : +S1A.R	BTM IDENTIFIER : -K100			
4	AUXILIARY CONTACTOR	MANUF.: Schneider Electric PO NO.: CA3-KN31 M03	TYPE CA3-KN31 M03				
	RATED VOLTAGE : 220VDC	TYP	ORDER NO				
	TECHNICAL COMPONENTS						
	APPLICATION : C.B. OPEN	SETTINGS	MOUNTING : +S1A.R	BTM IDENTIFIER : -K01A			
	C.B. CLOSED		+S1A.R	-K01E			
	ANTI-PUMPING FEATURE		+S1A.R	-K201			
			+S1A.R	-K71			

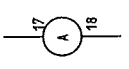
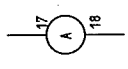
05.01.2007 HJ0115MD  
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						LIST OF EQUIPMENT		50.3023.01.A3.741.230		\$ =L09	

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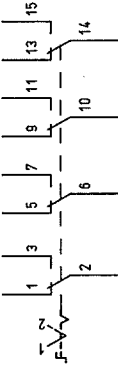
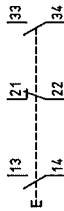
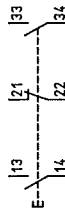
03.01.2007  
HJ015ND  
Z12  
ADAM

1	2	3	4	5	6	7	8
STÜCK- TITEL	DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION	MANUFACTURER, TYPE, ORDERING DATA MOUNTING	APPA. DESIG.	APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)	WITH REFERENCES TO DETAILS		REMARK
1	MEAS. UNIT BIMETALLIC AMMETER SCALE: MEASUREMENT VARIABLE: 1A TECHNICAL COMPONENTS	MANUF.: WEIGEL PO NO.: 20% OVERLOAD TRANSFORMER CONNECTION 7A/1A TYP	TYPE B1072K ORDER NO				
2	MEAS. UNIT MOVING-IRON AMMETER SCALE: MEASUREMENT VARIABLE: 1A TECHNICAL COMPONENTS	MANUF.: WEIGEL PO NO.: 100 % OVERLOAD TRANSFORMER CONNECTION 7A/1A TYP	TYPE E072K ORDER NO				
	APPLICATION CURRENT MEAS L2	SETTINGS	MOUNTING +S1A.T	BTM IDENTIFIER -P402			
	MEAS. UNIT	MANUF.: WEIGEL PO NO.:	TYPE E072K				
	MOVING-IRON AMMETER SCALE: MEASUREMENT VARIABLE: 1A TECHNICAL COMPONENTS	MANUF.: WEIGEL PO NO.: 100 % OVERLOAD TRANSFORMER CONNECTION 7A/1A TYP	TYPE E072K ORDER NO				
	APPLICATION CURRENT MEAS L1	SETTINGS	MOUNTING +S1A.T	BTM IDENTIFIER -P401			
	CURRENT MEAS L3	SETTINGS	MOUNTING +S1A.T	BTM IDENTIFIER -P403			

03	AS BUILT	05.12.2005 AD	Date	06.06.2005	US STEEL KOSTICE/SLOVAKIA	LIST OF EQUIPMENT	50.3023.01.A3.741.230	S=L09	/ Z1P1
02	Fact.-Rev.	08.11.2005 AD	Drawn	ADAM	50.3023.01	PANEL			Sheet 41
01	Approval	20.08.2005 AD	Checked	BROHMANN	SUBSTATION T80	09	Typ: 06 CROSS COUPLING	D009781.02.609-3.AHA	93Sh.
NO.	Alteration	Date	Name	Std.	Orig.	Iss.by:	Iss.for		

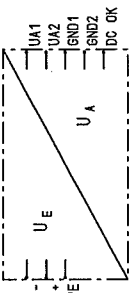
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02	Fact.-Rev.	05.11.2005 AD	Date	Drawn ADAM	50.3023.01					Sheet 42
01	Approval	20.09.2005 AD	Date	Check GROHMANN	SUBSTATION T80	PANEL	Typ: 06			93Sh.
NO.	Alteration	Date	Name/Std.	Iss. for	Iss. by:		CROSS COUPLING	D009781.02.609-3.AHA		

STUCK-TITTY		DESCRIPTION, DESIGN, TECHNICAL DATA		MANUFACTURER, TYPE, ORDERING DATA		APPARATUS SYMBOL DIAGRAM		WITH REFERENCES TO DETAILS		REMARK	
APPLICATION		SETTINGS		MOUNTING		REFERENCE TO INDIVIDUAL TREATMENT		CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)			
1	PB	MANUF.: Schneider Electric	TYPE HARMONY Style 5	PO NO.:							
	PUSH-BUTTON OFF	RED-AND-WHITE CIRCLE									
	SWITCHING CONTACTS : 2S, 10	CONTACT SEQUENCE									
	TECHNICAL COMPONENTS	TYP	ORDER NO								
1	RED-AND-WHITE CIRCLE	S071457	ZBE-AM32								
1	FLYING FLANGE	S071460	ZBE-A2009								
1	AUXILIARY SWITCH (NO)	S071461	1S (NO)								
1	AUXILIARY SWITCH (NC)	S071462	10 (NC)								
	APPLICATION	SETTINGS	MOUNTING	BTM IDENTIFIER							
	CIRCUIT-BREAKER	OFF	+S1A.T	-S01A							
1	PB	MANUF.: Schneider Electric	TYPE HARMONY Style 5	PO NO.:							
	PUSHBUTTON ON	GREEN-AND-WHITE BAR									
	SWITCHING CONTACTS : 2S, 10	CONTACT SEQUENCE									
	TECHNICAL COMPONENTS	TYP	ORDER NO								
1	GREEN-AND-WHITE BAR	S071458	ZBE-AM31								
1	FLYING FLANGE	S071460	ZBE-A2009								
1	AUXILIARY SWITCH (NO)	S071461	1S (NO)								
1	AUXILIARY SWITCH (NC)	S071462	10 (NC)								
	APPLICATION	SETTINGS	MOUNTING	BTM IDENTIFIER							
	CIRCUIT-BREAKER	ON	+S1A.T	-S01E							
1	SWITCH	MANUF.: SONTHEIMER	TYPE WS4/8ZN/NS-T1.0511+T	PO NO.:							
	INSCRIPTION:	2-REMOTE									
	1=LOCAL										
	SWITCHING CONTACTS : 4	POSITIONS	: 2								
	TECHNICAL COMPONENTS	TYP	ORDER NO								
	APPLICATION	SETTINGS	MOUNTING	BTM IDENTIFIER							
	DOUBLE THROW SWITCH LOCAL/OFF/REMOTE		+S1A.T	-S200							



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05.01.2007  
HJ0115ND  
L09  
Z1U1  
ADAM

1		2		3		4		5		6		7		8	
STUCK-TITEL		DESCRIPTION, DESIGN, TECHNICAL DATA		MANUFACTURER, TYPE, ORDERING DATA		MOUNTING		APPA. DESIG.		APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)		WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)		REMARK	
1		DC/DC WANDLER DC 230V IN DC 24V		Manuf.: DEUTRONIC Ord.No.:		Type: DCM 120-120									
		Technical components per device		Type		Ordering number									
		Application		Settings		Location		Item designation							
		DC/DC WANDLER IVIS-F WELDERINGLEITUNG				*STA.R		-U201							

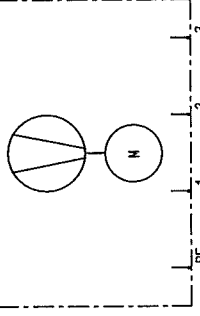
AS BUILT		05.12.2005 AD		Date		05.06.2005		US STEEL KOSICE/SLOVAKIA		LIST OF EQUIPMENT		50.3023.01.A3.Z11.230		S L09	
03		Fact.-Rev.		09.11.2005 AD		Drawn ADAM		50.3023.01		PANEL		Typ: D6		7 Z1U1	
02		Approval		20.09.2005 AD		Check GROHMANN		SUBSTATION T80		iss.by:		D009781.02.609-3.AHA		Sheet 43	
01		Alteration		Date		Name Std.		Orig.		iss.for		CROSS COUPLING		93Sh.	
NO.		1		2		3		4		5		6		8	


[illegible]



00978102 Copyright as per DIN 34 to be observed

H2015MD  
Z2E1  
ADAM

1		2		3		4		5		6		7		8	
STÜCK- TITEL		DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION		MANUFACTURER, TYPE, ORDERING DATA SETTINGS MOUNTING APPA. DESIG.		APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT		CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)		WITH REFERENCES TO DETAILS		REMARK			
6		FAN		MANUF. : PO NO. :		TYPE									
		VOLTAGE : 230V AC													
		TECHNICAL COMPONENTS		TYPE		ORDER NO									
		APPLICATION		SETTINGS		MOUNTING		BTM IDENTIFIER							
		FAN				+S2A		-E101		/003.2		/003.2			
		FAN				+S2A		-E102		/003.4		/003.4			
		FAN				+S2A		-E103		/003.6		/003.5			
		FAN				+S2B		-E101		/004.2		/004.2			
		FAN				+S2B		-E102		/004.4		/004.4			
		FAN				+S2B		-E103		/004.6		/004.5			



AREVA

LIST OF EQUIPMENT			
50.3023.01.A3.741.230			
Typ: 06		S: L09	
CROSS COUPLING		/ Z2E1	
D009781.02.609-3.AHA		Sheet 45	
93Sh.		93Sh.	

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
NO.	Alteration	Date	Name	Std.	Iss. for	Orig.

D0978102 Copyright as per DIN 34 to be observed

05.01.2007  
L09  
ZS1  
ADAM

STÜCK- LISTE		1		2		3		4		5		6		7		8	
DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION		MANUFACTURER, TYPE, ORDERING DATA SETTINGS		MOUNTING		APPA. DESIG.		APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT		CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)		WITH REFERENCES TO DETAILS				REMARK	
2		AUXILIARY SWITCH		MANUF.: AREVA PO NO.:		TYPE		PULLED PLUGGED		12 22 32 11 21 31							
		TECHNICAL COMPONENTS		TYP		ORDER NO											
		APPLICATION		SETTINGS		MOUNTING		BTM IDENTIFIER									
		PLUG PULLED		+S2A		+S2B		-S7		/PO1.3		/PO2.6					
		PLUG PULLED		+S2B		+S2B		-S7		/PO1.7		/PO2.3		/PO3.5			

US STEEL KOSICE/SLOVAKIA

50.3023.01

SUBSTATION T80

Orig.:

AS BUILT

05.12.2005

AD

09.11.2005

AD

20.09.2005

AD

Fact -Rev.

Approval

Alteration

03

02

01

NO.

06.06.2005

Drawn ADAM

Check GROHMANN

Name Std.

2

3

4

5

6

7

8

LIST OF EQUIPMENT

PANEL

09

50.3023.01.A3.741.230

S1=L09

1/22S1

Sheet 46

93Sh.

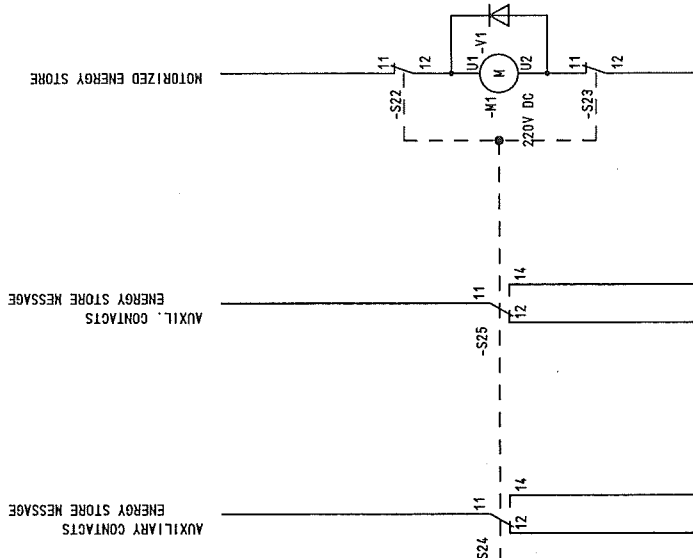
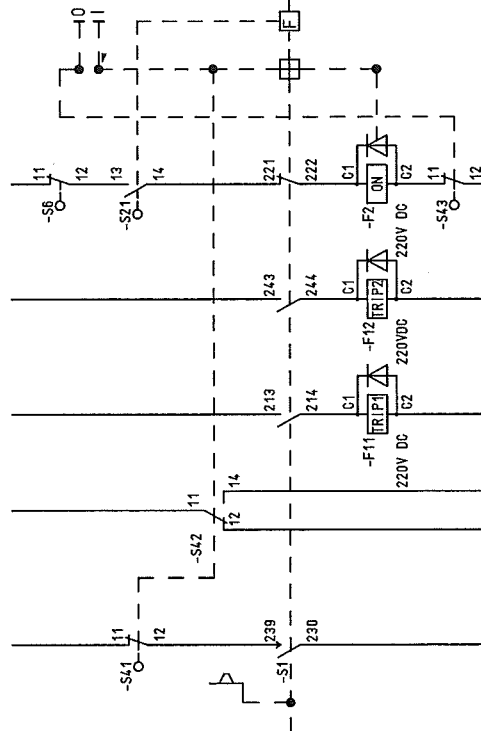
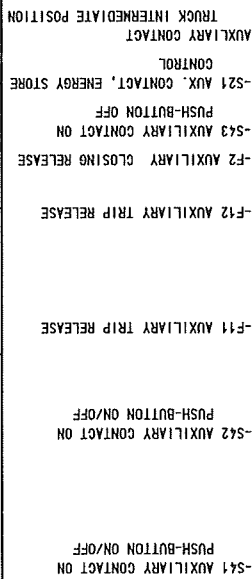
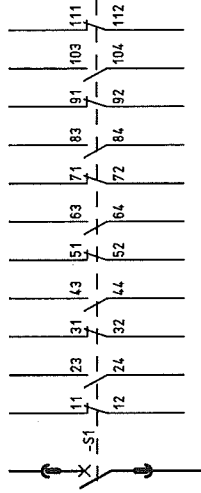
D009781.02.609-3.AHA

Typ: 06

CROSS COUPLING

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	 <b>AREVA</b>	LIST OF EQUIPMENT		50.3023.01.A3.741.230	S=L09	
02	Facit -Rev.	09.11.2005	AD	Drawn	ADAM		50.3023.01				
01	Approval	20.09.2005	AD	Check	GROHMANN		SUBSTATION T80	PANEL	Typ: 06		
ND	Alteration			Date	Name		Std.	iss.for	iss.by:	09	
							Orig:		D009781.02.609-3.AHA	93Sh.	

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	 <b>AREVA</b>	LIST OF EQUIPMENT		50_3023_01.A3.741.230		S =109
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50_3023_01						/ Z301
01	Approval	20.04.2005	AD	Checked	GROHMANN	SUBSTATION 180		PANEL		Type: 06		Sheet 48
NO.	Alteration	Date	None/Std.	Iss. for	Orig.			09		CROSS COUPLING		D009781 02.609-3.AHA



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	Checked	BROHMANN	SUBSTATION T80
NO.	Alteration	Date	Name	Std.	Orig.	Iss.

PANEL	09	LIST OF EQUIPMENT
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50.3023.01.A3.741.230	S=L09		
		Sheet L9	93Sh.
		/ Z302	
Type: 06		D009781.02.609-3.AHA	
CROSS COUPLING			

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05.01.2007  
HJ0115MD  
L09  
Z3S1  
ADAM

STUCK- TITTY		DESCRIPTION, DESIGN, TECHNICAL DATA APPLICATION		2		3		4		5		6		7		8	
		SETTINGS		MANUFACTURER, TYPE, ORDERING DATA MOUNTING		APPA. DESIG.		APPARATUS SYMBOL DIAGRAM REFERENCE TO INDIVIDUAL TREATMENT (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)		WITH REFERENCES TO DETAILS (CIRCUIT DIAGRAM, SHEET NO., CIRCUIT NO.)							
6		ANSTOOSCHALTER		MANUF.: ALSTOM PO NO.:		TYPE		ORDER NO									
		TECHNICAL COMPONENTS		TYP													
		APPLICATION		SETTINGS		MOUNTING		BTM IDENTIFIER									
		CRANK INSERTED		SLIDE-IN MODULE		+S3A		-S61									
		CRANK INSERTED		SLIDE-IN MODULE		+S3A		-S62									
		CRANK INSERTED		SLIDE-IN MODULE		+S3A		-S63									
		CRANK INSERTED		SLIDE-IN MODULE		+S3B		-S61									
		CRANK INSERTED		SLIDE-IN MODULE		+S3B		-S62									
		CRANK INSERTED		SLIDE-IN MODULE		+S3B		-S63									

11 12  
11

03		AS BUILT		05.12.2006		AD		Date		06.06.2005		US STEEL KOSICE/SLOVAKIA		LIST OF EQUIPMENT		50.3023.01.A3.741.230		S		=L09	
02		Fact.-Rev.		09.11.2005		AD		Drawn		ADAM		50.3023.01		PANEL		Typ: 06		D009781.02.609-3.AHA		/ Z3S1	
01		Approval		20.09.2005		AD		Check		GROHMANN		SUBSTATION T80		09		CROSS COUPLING		93Sh			
NO.		Alteration		Date		Name		Std.		Iss.for		Orig.		Iss.by:							



03	AS BUILT	05.12.2005	AD	Date	05.06.2005	US STEEL KOSICE/SLOVAKIA	 <b>AREVA</b>	LIST OF EQUIPMENT		50.3023.01.A3.741.230		S=L09	/ 231	
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01			PANEL		Typ.: 06			Sheet 51
01	Approval	20.09.2005	AD	Checked	GROHMANN	SUBSTATION T80			09		CROSS COUPLING			93Sh.
00	Alteration	Date	Name	Std.	Orig.	Iss.for	Iss.by:	09		D009781.02.609-3.AHA				

03	AS BUILT	05.12.2005	AD	Date	05.06.2005	US STEEL KOSICE/SLOVAKIA		TERMINAL DIAGRAM	50.3023.01.A3.741.230	V	=L09 +S1A.R
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.	Iss. for	Orig.	Iss. by:	09	Type: 06 CROSS COUPLING	D009784.02.609-3. AHA	Sheet 152 of 93Sh.



03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		TERMINAL DIAGRAM	50_3023_01.A3.741.230	V = 409	/ K02
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50_3023_01					
01	Approval	20.09.2005	AD	Check	GRÖHMANN	SUBSTATION T80					
NO.	Alteration	Date	Name	Std.	Orig.	Iss for	Iss by:	PANEL	Type: 06	GROSS COUPLING	Sheet53 / K02
								09	D009781.02.609-3.AHA		93Sh.

NO	CABLE	WIRES USED SHEET/STATE	CABLE-TYPE SECTION	CORES	-ROUTE	CIRCUIT DIAGRAM	CABLE MATERIAL	Ø	COLOR	TERM. TYPE	8
-X0											
Rück-REF.	NO	CORES/LINE	DESTINAT. DESIG.	EXTERNAL	POT	NO	DESTINAT. DESIG.	INTERN	CORES/LINE	REMARK	
/T01.2	1	2	3	4	5	6	7	8	9	10	11
/T01.8	2	±L08	+S1A.R -X0	614	SS2 L3	613					
/T01.2	2	±L10	+S1A.R -X0	613		614					
/T01.8	2	±L08	+S1A.R -X0	616		615					
/T01.2	2	±L10	+S1A.R -X0	615		616					

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D0978102

AS BUILT		105.12.2005 AD		Date		106.06.2005		US STEEL KOSICE/SLOVAKIA		TERMINAL DIAGRAM		50.3023.01.A3.741.230		V = L08		/ K03	
Fact.-Rev.		09.11.2005 AD		Drawn		ADAM		50.3023.01		PANEL		Typ: 06		+S1A.R		/ K03	
Approval		20.09.2005 AD		Checked		GROHMANN		SUBSTATION T80		09		CROSS COUPLING		D009781.02.609-3.AHA		Sheet 54	
Alteration		Date		Name		Std.		Orig.		Iss. for						935h	

NO.   CABLE		WIRES USED SHEET STATE		CABLE-TYPE SECTION		CORES		-ROUTE		CIRCUIT DIAGRAM		CABLE MATERIAL		Ø		COLOR		TERM. TYPE	
1		2		3		4		5		6		7		8		9		10	
RÜCK-REF.		NO		DESTINAT. DESIG.		EXTERNAL		POT		NO		DESTINAT. DESIG.		INTERN		CORES/ LINE		REMARK	
/001.4		1	2	3	4	5	6	7	8	9	10	11	12	17L1	-F117	2			
/003.2														107L1	-K101	1	Q		
/002.2														107L1	-K320	25	Q		
/003.8														107L1	-K320	15	Q		
/001.4														N	-X101	002			
/002.2														N	-X101	005			
/003.7														N	-X101	008			
/003.4														N	-X101	011			
/003.5														N	-X101	014			
/003.6														N	-X101	001			
/003.2														N	-X101	001			
/003.4														N	-X101	007			
/003.5														N	-X101	013			
/003.7														N	-X101	003			
/003.4														N	-X101	009			
/003.6														N	-X101	015			
/003.3														N	-X101	004			
/003.5														N	-X101	010			
/003.6														N	-X101	016			
/001.6														127L1	-X04	007			
/001.6														N	-X04	008			
/004.7														127L1	-K320.B	13			
/004.7														N	-K320.B	14			
/004.7														N	-K320.B	33			
/004.7														N	-K320.B	34			

-X1

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00978102

05.01.2007

03 AS BUILT 05.12.2006 AD Date 06.06.2005

02 Fact.-Rev. 02.11.2005 AD Drawn ADAM

01 Approval 20.09.2005 AD Check GROHMANN

NO. Alteration Date Name Std.

US STEEL KOSICE/SLOVAKIA

50.3023.01

SUBSTATION T80

Orig.: Iss. for

50.3023.01.A3.741.230

V=L09

+S1A.R

/K10

Sheet 15

935h

50.3023.01.A3.741.230

Typ: 06

CROSS COUPLING

D009781.02.609-3.AHA

8

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	<div> <b>AREVA</b></div>	TERMINAL DIAGRAM	50.3023.01.A3.741.230	V = L09	/ K11
02	Fact. - Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01			*SIA.R		
01	Approval	20.09.2005	AD	Checked	GROHMANN	SUBSTATION T80		PANEL	Type: 06	Sheet 56	
00	Alteration			Date		Orig.		09	CROSS COUPLING	93Sh.	
				Name/Std.		iss.for	iss.by:				
1		2		3		4		5	6	7	8

[illegible]

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	50.3023.01	TERMINAL DIAGRAM	150.3023.01.A3.741.230	V	1.09	8
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01						
01	Approval	20.06.2005	AD	Check	GROHMANN	SUBSTATION T80						
NO.	Alteration	Date	Name	Std.	Iss.	for	Iss.	by:	Panel	09	Typ: 06	8
											CROSS COUPLING	
											D009781.02.609-3.AHA	
											Sheet 58	
											93 Sh.	

NO. CABLE												WIRES USED SHEET STATE												CABLE-TYPE SECTION												CORES												-ROUTE												CIRCUIT DIAGRAM												CABLE MATERIAL												COLOR												TERM. TYPE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		TERMINAL DIAGRAM	50_3023_01.A3.741.230	V = L09 *STA.R	/ K40
02	Fact. - Rev.	09.11.2005	AD	Drawn	ADAM	50_3023_01					
01	Approval	20.09.2005	AD	Checked	GROHMANN	SUBSTATION T80					
NO.	Alteration	Date	Name	Std.		Or(g):	Iss for	Iss by:	PANEL 09	Typ: 06 GROSS COUPLING	Sheet 59 93Sh.

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	 <b>AREVA</b>	TERMINAL DIAGRAM	50_3023_01_A3_74_1_230	V=L09	S1A.R	/K50	Sheet 60	93Sh.
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50_3023_01								
01	Approval	20.09.2005	AD	Checked	GROHMANN	SUBSTATION T80								
NO.	Alteration	Date	Name	Sid	Orla:	Iss for								



NO. CABLE WIRES USED SHEET STATE CABLE-TYPE SECTION CORES -ROUTE												CIRCUIT DIAGRAM		CABLE MATERIAL		TERM. TYPE		
												INSTALLATION		H07V-K 1.5MM2 SW		SW		
														H05V-K 1.0MM2 SW		SW		
Rück-REF.	NO												POT	DESTINAT. DESIG.		INTERN	CORES/LINE	REMARK
	1	2	3	4	5	6	7	8	9	10	11	12						
/002.3													03L+	-F203		A15	0	
/002.4													03L+			D02	0	
/002.5													03L+			33		
/002.6													03L+			801		
/003.4													03L+			D06		
/003.7													03L+					
/004.2													03L+			12		
/004.3													03L+			A07	0	
/004.7													03L+			13		
/005.1													03L+			9		
/005.4													03L+			12		
/005.8													03L+			38		
/002.3													03L-	-F203		-X10	10	
/002.6													03L-			-X10		
/003.4													03L-			-X10	40	
/004.2													03L-			-X11		
/005.2													03L-			9		
/005.7													03L-					
/005.8													03L-					
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/002.5													03L-			34		
/002.4													03L-			D04	0	
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/002.6													03L-			807		
/003.4													03L-			809		
/003.4													03L-			D09		
/003.7													03L-			D10		
/003.7													03L-			816		
/004.2													03L-			817		
/004.2													03L-			11		
/004.3													03L-			A08	0	
/004.4													03L-					
/004.3													03L-			A09	0	

03	AS BUILT	05.12.2005 AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	50.3023.01	TERMINAL DIAGRAM	150.3023.01.A3.741.230	V	=L09	/K80	
02	Fact.-Rev.	09.11.2005 AD	Drawn	ADAM						+S1A.R		
01	Approval	20.09.2005 AD	Check	GROHMANN	SUBSTATION T80						Sheet 61	
NO.	Alteration	Date	Name	Std.	Orig.	Iss.for	Iss.by:	09	06	CROSS COUPLING	D009781.02.609-3.AHA	93Sh.

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		TERMINAL DIAGRAM			50_3023_01.A3.741_230	V=L09	
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50_3023_01							
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTITUTION T80			PANEL	Type: 06			
00	Alteration			Date		Origin:			09	CROSS COUPLING			
				Name/Sid		Iss by:							
										D009781_02_609-3_AHA			93Sh.

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		TERMINAL DIAGRAM	50.3023.01.A3.74.230	V=L09 *S1A.R	/ K30
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01					
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80	PANEL 09	Type: 06 CROSS COUPLING	D009781.02.609-3.AHA 935H:		
00	Alteration			Date	Named	Ord.				iss by:	

1

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 1.5MM2	H07V-K SW	-X0	2 -F117	1 -F127				
D02	1 1.5MM2	H07V-K SW		-F320	12 -K320.A	A1			
D02	1 1.5MM2	H07V-K SW		-F320	15 -K320.B	A1			
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	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			
601	106L+ 1 1.5MM2	H07V-K SW		-F106	2 -U201	+			
601	106L- 1 1.5MM2	H07V-K SW		-F106	4 -U201	-			
601	DC220V L+ 1 1.5MM2	H07V-K SW	-X0	12 -F102	1 -F106	1 -F111	1		
601	DC220V L- 2 2.5MM2	H07V-K SW	-X0	14 -F102	3 -F106	3 -F111	3		
M01	102L- 1 1.5MM2	H07V-K SW	-X1	122 -K01E	34 -K201	A2			
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			

05.01.2007

0978102

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03 AS BUILT 06.12.2005 AD Date 106.06.2005

02 Fact.-Rev. 09.11.2005 AD Drawl ADAM

01 Approval 20.09.2005 AD Czech GRCHMANN

00 Alteration Date Name/Std.

US STEEL KOSTICE/SLOVAKIA

50.3023.01

SUBSTATION T80

ISS. BY: AREVA

ISS. FOR: 09

ORIG.: 09

CROSS CONNECT. LIST

RELAY BOX

PANEL

50.3023.01.A3.741.230

V=L09

ASIA.R

Typ: 06

CROSS COUPLING

D009781.02.609-3.AHA

Sheet 65

93Sh

## CROSS CONNECTION

REFERENCE	POTENTIAL ITER. GR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6	
										A
M01	1 1.5MM2	H07V-K SW	-X1	14 -K201	13 -K201	21				A
M04	1 1.5MM2	H07V-K SW		-A100 -X20	1 -K01A A1					B
M04	1 1.5MM2	H07V-K SW		-A100 -X20	3 -K01E A1					C
M04	102L+ 1 1.5MM2	H07V-K SW	-X1	118 -A100 -X20	11 -A100 -X20	13 -A100 -X20	15 -A100 -X20	17		D
M04	102L- 1 1.5MM2	H07V-K SW	-X1	127 -K01A	A2 -K01E A2					E
Q05	1 1.5MM2	H07V-K SW		-A100 -X11	10 -A100 -X11	40				F
Q05	03L+ 1 1.5MM2	H07V-K SW	-X8	811 -F310	9 -F310	13 -K100	19			G
Q05	03L+ 1 1.5MM2	H07V-K SW	-X8	812 -F102	12 -F106	12 -F117	12 -F203	12 -K102	13	H
Q05	1 1.5MM2	H07V-K SW	-X8	845 -F102	11 -F106	11 -F117	11 -F127	11 -K102	14	I
R01	1 1.5MM2	H07V-K SW		-K01A	22 -K01E	21				J
R01	1 1.5MM2	H07V-K SW	-X4	416 -F102	22 -F106	22 -F111	22 -F127	22 -F203	22	K
R01	1 1.5MM2	H07V-K SW	-X4	417 -F102	21 -F106	21 -F111	21 -F127	21 -F203	21	L
S01	2 2.5MM2	H07V-K SW		-F320	7 P402	17				M
										N
										O
										P
										Q
										R
										S
										T
										U
										V
										W
										X
										Y
										Z

Copyright as per DIN 34 to be observed!

D0978102

05.01.2007

AS BUILT Date 06.06.2005 US STEEL KOSICE/SLOVAKIA CROSS CONNECT. LIST V=L09 / 011

Fact.-Rev. 09.11.2005 AD Drawn ADAM 50.3023.01.A3.741.230 +S1A.R

Approval 20.09.2005 AD Check GROHMANN SUBSTATION T80 PANEL RELAY BOX Typ: 06 D009781.02.609-3.AHA Sheet66 93Sh.

Date Name Srd Iss for Panel 09

## CROSS CONNECTION

[illegible]

[illegible]

05.01.2007  
HJ0115MD  
=L09+S1A  
S01  
ADAM

03	AS BUILT	05.12.2005	AD	Date	05.06.2005	US STEEL KOSICE/SLOVAKIA	 <b>AREVA</b>	PLUG DIAGRAM CIRCUIT-BREAKER PANEL	50.3023.01.A3.741.230 V=109 *STA.R
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	Sld.	Orig.:	Iss. for			
							iss.by:	09	Type: 06 CROSS COUPLING
									D009781.02.609-3.AHA 93Sh.



# TERMINAL DIA. , 64-POLE , FAN SOCKET

+S1A.R -X101  
 CABLE MATERIAL H05V-K 1.0mm2 SW

A				B				C				+
1	A01		B01					-X1 /D03.2			-X1 /D03.6	1
2	A02		B02					-X1 /D03.2			-XPE /D03.6 H05V-K 1.0MM2 GN/ YE	2
3	A03		B03					-X1 /D03.2				3
4	A04		B04					-X1 /D03.3				4
5	A05		B05					-X1 /D03.2				5
6	A06		B06					-XPE /D03.2 H05V-K 1.0MM2 GN/ YE				6
7	A07		B07					-X1 /D03.4				7
8	A08		B08					-X1 /D03.4				8
9	A09		B09					-X1 /D03.4				9
10	A10		B10					-X1 /D03.5				10
11	A11		B11					-X1 /D03.4				11
12	A12		B12					-XPE /D03.4 H05V-K 1.0MM2 GN/ YE				12
13	A13		B13					-X1 /D03.5				13
14	A14		B14					-X1 /D03.5				14
15	A15		B15					-X1 /D03.6				15
16	A16		B16					-X1 /D03.6				16
												+

03	AS BUILT	05.12.2005 AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	PLUG DIAGRAM	150.3023.01.A3.741.230	V	=I09	/S101
02	Fact.-Rev.	09.11.2005 AD	Drawn	ADAM	50.3023.01	FAN			+S1A.R	/S101
01	Approval	20.06.2005 AD	Check	GROHMANN	SUBSTATION T80	PANEL				Sheet/70
NO.	Alteration	Date	NomeStd.	Iss.for	Iss.by:	09	CROSS COUPLING	D009781.02.609-3.AHA	Typ: 06	93Sh.

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

H0115ND  
 S101  
 S109-S1A  
 ADAM

D00978102

003	AS BUILT	05.12.2005	AD	Date	06.05.2005	US STEEL KOSTICE/SLOVAKIA
002	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01
001	Approval	20.03.2005	AD	Checked	GROHMANN	SUBSTATION T80
NO.	Alteration	Date	Name	Std.	Qrta.	Iss.

ASSEMBLY/INSTRUCT.		CABLE MATERIAL STANDARD: HD7V-K 1.5MM2		-X04		TERM. TYPE STANDARD:					
RÜCK- REF.	LTG (ø IN MM2) CABLE	CORE	DESTINAT. DESIG.	SOCKET	POT	NO	DESTINAT. DESIG.	PIN	LTG (ø IN MM2) CABLE	CORE	REMARK
/COST.2						009					
/COST.2						010					
/COST.2						011					
/COST.2						012					
/COST.2						013					
/COST.2						014					
/COST.2						015					
/COST.2						016					
/001.5			-X3	305	102L+	D01	+S1B. R -X3	301			
/COST.3						D02					
/COST.3						D03					
/001.5			-X3	328		D04	+S1B. R -X3	305			
/001.5			-X3	330		D05	+S1B. R -X3	307			
/003.4			-X8	805	03L+	D06	+S1B. R -X8	801			
/COST.3						D07					
/COST.3						D08					
/003.4			-X8	828		D09	+S1B. R -X8	805			
/003.4			-X8	829		D10	+S1B. R -X8	807			
/COST.3						D11					
/005.3			-X8	842		D12	+S1B. R -X8	808			
/005.4			-X8	844	FAULT	D13	+S1B. R -X8	809			
/COST.3						D14					
/COST.3						D15					
/005.7			-X8	846		D16	+S1B. R -X8	810			

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	PLUG DIAGRAM	150.3023.01.A3.741.230	V ±09	7	8
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	NIEDERSPG.-SCHR.A-	NIEDERSPG.-SCHR.B	+S1A.R	7	8
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80	PANEL	Typ: 06		93Sh	
NO.	Alteration	Date	Name	Std.	Iss.for	Orig.	iss.by:	CROSS COUPLING	D009781.02.609-3.AHA		

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		TERMINAL DIAGRAM	50.3023.01.A3.74.1.230	V=L09 +S18.R	Sheet/2 93Sh.
02	Fact.-Rev.	09.11.2005	AD	Drawn/ADAN		50.3023.01					
01	Approval	20.09.2005	AD	Checked	GROHMANN	SUBSTATION T80		PANEL			
00	Alteration	Date	Name/Sid			Orig.:	Iss. for	Iss. by:	Type: 06 GROSS COUPLING	D009781.02.609-3.AHA	

D0978102 Copyright as per DIN 34 to be observed

05.01.2007

1		2		3		4		5		6		7		8					
NO. CABLE		WIRES USED SHEET STATE		CABLE-TYPE SECTION		CORES		CIRCUIT DIAGRAM		CABLE MATERIAL		Ø		TERM. TYPE					
										H07V-K 1.5MM2		SW		STANDARD: UK5N					
-X1																			
Rück-REF.		NO.		DESTINAT. DESIG.		EXTERNAL		POT		NO		DESTINAT. DESIG.		INTERN		CORES/LINE		REMARK	
/001.7		1		+SIA.R -X04		B07		127L1		21		-K101		1					
/004.2		2						127L1		22		-X1		43					
/004.7		3						127L1		23									
/004.8		4						127L1		24		-K320		15					
/001.7		5		+SIA.R -X04		B08		N		25		-X201		002					
/004.3		6						N		26		-X201		005					
/004.7		7		-K101		A2		N		27		-X201		008					
/004.4		8						N		28		-X201		011					
/004.5		9						N		29		-X201		014					
/004.6		10						N		30		-X201		001					
/004.2		11		-K101		2		N		31		-X201		001					
/004.4		12		-K101		4		N		32		-X201		007					
/004.5		13		-K101		6		N		33		-X201		013					
/004.3		14						N		34		-X201		003					
/004.4		15		+SIA.R -X04		B10		N		35		-X201		009					
/004.6		16		-K320		28		N		36		-X201		015					
/004.3		17						N		37		-X201		004					
/004.5		18						N		38		-X201		010					
/004.7		19		-K102		A1		N		39		-X201		016					
/004.7		20		+SIA.R -X04		B09		127L1		43		-X1		23					
/004.8		21						127L1		44		-K320		25					
/004.7		22		+SIA.R -X04		B12		N		45		-K320		22					
/004.8		23		+SIA.R -X04		B11		N		46		-K320		Y1					

NO.		Date		Name		Date		Name		Date		Name		Date		Name		Date	
03		05.12.2005		AD		06.06.2005		AD		06.06.2005		AD		06.06.2005		AD		06.06.2005	
02		09.11.2005		AD		09.11.2005		AD		09.11.2005		AD		09.11.2005		AD		09.11.2005	
01		20.06.2005		AD		20.06.2005		AD		20.06.2005		AD		20.06.2005		AD		20.06.2005	
00		05.01.2007		AD		05.01.2007		AD		05.01.2007		AD		05.01.2007		AD		05.01.2007	

TERMINAL DIAGRAM	
PANEL 09	



US STEEL KOSICE/SLOVAKIA	
50.3023.01	
SUBSTATION T80	

Iss. for	
Orig.	

Iss. by	
PANEL 09	

Type: 06	
CROSS COUPLING	

D09781.02.609-3.AHA	
93Sh.	

V = 1.09	
+S1B.R	

/K10	
Sheet 73	

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA		TERMINAL DIAGRAM 50_3023_01_A3_741_230	V = 09 ±518.R
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50_3023_01			
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80			
NO.	Alteration			Name	Sid.				
				Orig.	iss for	iss by:		PANEL 09	Type: 06 CROSS COUPLING D009781.02.609-3.AHA 93Sh.

1

[illegible]



003	AS BUILT	05.12.2005	AD	Date	05.06.2005	US STEEL KOSTICE/SLOVAKIA		TERMINAL DIAGRAM	
002	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50_3023.01			
001	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80			
000	Alteration	Date	Drawn	By	Issued	Origin	iss by:	09	
							Type: 06 CROSS COUPLING		Sheet 77 93Sh.
							V = L09 +S1B.R		50_3023.01_A3_741_230

1



# TERMINAL DIA. , 64-POLE , CIRCUIT-BREAKER SOCKET

+S1B.R -X02  
CABLE MATERIAL H05V-K 1.0mm2 SW

A		B		C		
+						+
1	A01	B01	C01	D01	E01	1
2	A02	B02	C02	D02	E02	2
3	A03	B03	C03	D03	E03	3
4	A04	B04	C04	D04	E04	4
5	A05	B05	C05	D05	E05	5
6	A06	B06	C06	D06	E06	6
7	A07	B07	C07	D07	E07	7
8	A08	B08	C08	D08	E08	8
9	A09	B09	C09	D09	E09	9
10	A10	B10	C10	D10	E10	10
11	A11	B11	C11	D11	E11	11
12	A12	B12	C12	D12	E12	12
13	A13	B13	C13	D13	E13	13
14	A14	B14	C14	D14	E14	14
15	A15	B15	C15	D15	E15	15
16	A16	B16	C16	D16	E16	16
+						+

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

D0978102

HJ015MD  
S01  
09+S1B  
ADAM

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	Checked	GROHMANN	SUBSTATION T80
NO.	Alteration	Date	Name	Std.	Iss.for	Orig.



PLUG DIAGRAM  
CIRCUIT-BREAKER  
PANEL

50.3023.01.A3.741.230  
V=L03  
+S1B.R  
Typ: 06  
CROSS COUPLING  
D009781.02.609-3.AHA

Sheet 80  
93Sh.

TERMINAL DIA. , 64-POLE , FAN  
SOCKET

+S1B.R -X201  
CABLE MATERIAL H05V-K 1.0mm2 SW

A		B		C		
+						+
1	A01	B01	S1 -X1 /D04.2	31 -X1 /D04.6	D01	1 30
2	A02	B02	S2 -X1 /D04.2	25 -XPE /D04.6	D02	2 PE H05V-K 1.0MM2 GN/ YE
3	A03	B03	S3 -X1 /D04.3	34	D03	3
4	A04	B04	S4 -X1 /D04.3	37	D04	4
5	A05	B05	S5 -X1 /D04.3	26	D05	5
6	A06	B06	S6 -XPE /D04.2	PE H05V-K 1.0MM2 GN/ YE	D06	6
7	A07	B07	S7 -X1 /D04.4	32	D07	7
8	A08	B08	S8 -X1 /D04.4	27	D08	8
9	A09	B09	S9 -X1 /D04.4	35	D09	9
10	A10	B10	S10 -X1 /D04.5	38	D10	10
11	A11	B11	S11 -X1 /D04.4	28	D11	11
12	A12	B12	S12 -XPE /D04.4	PE H05V-K 1.0MM2 GN/ YE	D12	12
13	A13	B13	S13 -X1 /D04.5	33	D13	
14	A14	B14	S14 -X1 /D04.5	29	D14	
15	A15	B15	S15 -X1 /D04.6	36	D15	
16	A16	B16	S16 -X1 /D04.7	39	D16	16
+						+

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

05.01.2007  
HJ0115ND  
S101  
ADAM

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	PLUG DIAGRAM	150.3023.01.A3.741.230	V =L09
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		Sheet 81
NO.	Alteration	Date	Name	Std.	Iss.for	Orig.	Iss.by:	CROSS COUPLING	93Sh.

D009781.02.609-3.AHA

Typ: 06

## CROSS CONNECTION

NO.	DATE	REVISION	REFERENCE	POTENTIAL ITEM	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
				CR. SECTION								
D03	(Adervverbinding)	N	-X101	C01 -E101	1							
D03	(Adervverbinding)		-X101	C02 -E101	2							
D03	(Adervverbinding)		-X101	C03 -B101	3							
D03	(Adervverbinding)	N	-X101	C04 -B101	4							
D03	(Adervverbinding)		-X101	C05 -B101	5							
D03	(Adervverbinding)		-X101	C06 -E101	PE							
D03	(Adervverbinding)	N	-X101	C07 -E102	1							
D03	(Adervverbinding)		-X101	C08 -E102	2							
D03	(Adervverbinding)		-X101	C09 -B102	3							
D03	(Adervverbinding)	N	-X101	C10 -B102	4							
D03	(Adervverbinding)		-X101	C11 -B102	5							
D03	(Adervverbinding)		-X101	C12 -E102	PE							
D03	(Adervverbinding)	N	-X101	C13 -E103	1							
D03	(Adervverbinding)		-X101	C14 -E103	2							
D03	(Adervverbinding)		-X101	C15 -B103	3							
D03	(Adervverbinding)	N	-X101	C16 -B103	4							
D03	(Adervverbinding)		-X101	D01 -B103	5							
D03	(Adervverbinding)		-X101	D02 -E103	PE							

Copyright as per DIN 34 to be observed

D0978102

H1015ND  
L109+52A  
ADAM  
020

+S2A	-X101
CABLE MATERIAL	H05V-K 1.0mm2 SW

03	AS BUILT	05.12.2006	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	 <b>AREVA</b>	PLUG DIAGRAM	50.3023.01.A3.741.230	V=L09	Sheet 83 93Sh.	
02	Fact.-Rev.	08.11.2005	AD	Drawn	ADAM	50.3023.01		FAN		+S2A		
01	Approval	20.09.2005	AD	Check	GRÖHMANN	SUBSTATION T80		PANEL	Typ: 06			
IND.	Alteration	Date	Name	Std.	Iss. for	Orig.	Iss. by:	09	CROSS COUPLING	D009781.02.609-3.AHA		

## CROSS CONNECTION

REFERENCE	POTENTIAL ITEM OR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
D04	(Aderverbindung) N		-X201	C01 -E101	1				
D04	(Aderverbindung)		-X201	C02 -E101	2				
D04	(Aderverbindung)		-X201	C03 -B101	3				
D04	(Aderverbindung) N		-X201	C04 -B101	4				
D04	(Aderverbindung)		-X201	C05 -B101	5				
D04	(Aderverbindung)		-X201	C06 -E101	PE				
D04	(Aderverbindung) N		-X201	C07 -E102	1				
D04	(Aderverbindung)		-X201	C08 -E102	2				
D04	(Aderverbindung)		-X201	C09 -B102	3				
D04	(Aderverbindung) N		-X201	C10 -B102	4				
D04	(Aderverbindung)		-X201	C11 -B102	5				
D04	(Aderverbindung)		-X201	C12 -E102	PE				
D04	(Aderverbindung) N		-X201	C13 -E103	1				
D04	(Aderverbindung)		-X201	C14 -E103	2				
D04	(Aderverbindung)		-X201	C15 -B103	3				
D04	(Aderverbindung) N		-X201	C16 -B103	4				
D04	(Aderverbindung)		-X201	D01 -B103	5				
D04	(Aderverbindung)		-X201	D02 -E103	PE				
Copyright as per DIN 34 to be observed									
D0978102									
HJ0115MD 020 L09+S2B ADAM									
03	AS BUILT	05.12.2005 AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	GROSS CONNECT. LIST		50.3023.01.A3.741.230	
02	Fact.-Rev.	08.11.2005 AD	Drawn	ADAM	50.3023.01	PANEL		V =L09 +S2B / 020	
01	Approval	20.09.2005 AD	Check	GROHMANN	SUBSTATION T80	PANEL		Typ: 06 GROSS COUPLING	
00.	Alteration	Date	Name	Std.	Orig:	Iss.by:		D009781.02.609-3.AHA 93Sh.	

Copyright as per DIN 34 to be observed!

HJ0115MD  
=L09+S2B  
020  
ADAM

33	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSTICE/SLOVAKIA
32	Fact. - Rev.	09.11.2005	AD	Drawn	ADAM	50_3023_01
31	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80
30	Alteration	Date	Name	Std.	Orig.	Iss.

**A**  
**AREVA**  
iss.by:

CROSS CONNECT. LIST

50.3023.01.A3.741.230	Typ: 06 CROSS COUPLING	D009
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=L09
' +\$2B

	/ Q20	Sheet 84	93Sh.
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# TERMINAL DIA., 64 POLIG., FAN PIN

+S2B -X201 CABLE MATERIAL H05V-K 1.0mm2 SW															
A				B				C				D			
+															+
1	A01		B01					E101 /D04.2	1			B103 /D04.6	1		5
2	A02		B02					E101 /D04.2	2			E103 /D04.6	2	PE GN/ YE	5
3	A03		B03					B101 /D04.3	3				3		
4	A04		B04					B101 /D04.3	4				4		
5	A05		B05					B101 /D04.3	5				5		
6	A06		B06					E101 /D04.2	PE GN/ YE				6		
7	A07		B07					E102 /D04.4	1				1		
8	A08		B08					E102 /D04.4	2				2		
9	A09		B09					B102 /D04.4	3				3		
10	A10		B10					B102 /D04.5	4				4		
11	A11		B11					B102 /D04.4	5				5		
12	A12		B12					E102 /D04.4	PE GN/ YE				12		
13	A13		B13					E103 /D04.5	1				1		
14	A14		B14					E103 /D04.5	2				2		
15	A15		B15					B103 /D04.6	3				3		
16	A16		B16					B103 /D04.7	4				4		
+															+

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

H0115ND  
S101  
L09+S2B  
ADAM

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	PLUS DIAGRAM	50.3023.01.A3.741.230	V	=L09	/S101
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	FAN			+S2B	/S101
01	Approval	20.02.2005	AD	Check	GROHMANN	SUBSTATION T80	PANEL				Sheet 85
NO.	Alteration	Date	Name	Std.	Iss. for	Iss. by:	Substation	Typ: 06	CROSS COUPLING	D009781.02.609-3.AHA	93Sh.

## CROSS CONNECTION

REFERENCE	POTENTIAL ITEM OR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
L01	111L+ 0 1.0MW2	H05V-K SW	-X01	A01 -S22	-001 11				
L01	111L- 0 1.0MW2	H05V-K SW	-X01	A02 -S23	-001 12				
M01	0 1.0MW2	H05V-K SW	-F2	-001 C1 -S1	-001 222				
M01	0 1.0MW2	H05V-K SW	-F2	-001 C2 -S43	-001 11				
M01	0 1.0MW2	H05V-K SW	-S1	-001 221 -S21	-001 14				
M01	0 1.0MW2	H05V-K SW	-S21	-001 13 -S6	-001 12				
M01	0 1.0MW2	H05V-K SW	-X01	A03 -S1	-001 213				
M01	102L- 0 1.0MW2	H05V-K SW	-X01	A04 -F11	-001 C2				
M01	0 1.0MW2	H05V-K SW	-X01	A05 -S6	-001 11				
M01	0 1.0MW2	H05V-K SW	-X01	A06 -S43	-001 12				
P01	0 1.0MW2	H05V-K SW	-S1	-01 32 -S61	14				
P01	0 1.0MW2	H05V-K SW	-X01	C05 -S1	-01 31				
P01	BUSBAR ES. RELEASE 0 1.0MW2	H05V-K SW	-X01	C06 -S61	11				
P01	0 1.0MW2	H05V-K SW	-X01	D13 -Y1	E1				
P01	214L- 0 1.0MW2	H05V-K SW	-X01	D14 -Y1	E2				
P02	0 1.0MW2	H05V-K SW	-S1	-01 42 -S62	14				
P02	DRAWG. UNIT RELEASE 0 1.0MW2	H05V-K SW	-X01	B11 -S1	-01 41				
P02	0 1.0MW2	H05V-K SW	-X01	B12 -S62	11				
001	102L+ 0 1.0MW2	H05V-K SW	-X01	A12 -S1	-001 11 -S1	-001 23			
001	0 1.0MW2	H05V-K SW	-X01	A13 -S1	-001 12				

03 AS BUILT 05.12.2005 AD Date 06.06.2005 US STEEL K05ICE/SLOVAKIA

02 Fact.-Rev. 09.11.2005 AD Drawt ADAM 50.3023.01

01 Approval 20.09.2005 AD Check GROHMANN SUBSTATION T80

NO. Alteration Date Name Std. Iss. for Iss. by:

AREVA

CROSS CONNECTION LIST

CROSS CONNECTION LIST SWITCHING TRUCK

CROSS CONNECTION LIST PANEL

CROSS CONNECTION LIST

50.3023.01.A3.741.230

50.3023.01.A3.741.230

50.3023.01.A3.741.230

50.3023.01.A3.741.230

50.3023.01.A3.741.230

Typ: 06

CROSS COUPLING

D009781.02.609-3.AHA

D009781.02.609-3.AHA

D009781.02.609-3.AHA

Sheet 86

93Sh.

93Sh.

93Sh.

93Sh.

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D00978102

H10115NO  
030  
09+33A

CROSS CONNECTION										2	3	4	5	6	7	8
REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6	A	B	C	D	E	F	
001	0 1.0MM2	H05V-K SW	-X01	A14 -S1	-001 24											
001	0 1.0MM2	H05V-K SW	-X01	C15 -S1	-01 11	-01 13										
001	0 1.0MM2	H05V-K SW	-X01	C16 -S1	-01 12											
001	0 1.0MM2	H05V-K SW	-X01	D01 -S1	-01 14											
002	0 1.0MM2	H05V-K SW	-X01	A15 -S1	-001 31	-001 43										
002	0 1.0MM2	H05V-K SW	-X01	A16 -S1	-001 32											
002	0 1.0MM2	H05V-K SW	-X01	B01 -S1	-001 44											
002	0 1.0MM2	H05V-K SW	-X01	D02 -S1	-01 21	-01 23										
002	0 1.0MM2	H05V-K SW	-X01	D03 -S1	-01 22											
002	0 1.0MM2	H05V-K SW	-X01	D04 -S1	-01 24											
004	0 1.0MM2	H05V-K SW	-X01	A07 -S24	-001 11											
004	0 1.0MM2	H05V-K SW	-X01	A08 -S24	-001 12											
004	0 1.0MM2	H05V-K SW	-X01	A09 -S24	-001 14											
007	0 1.0MM2	H05V-K SW	-X01	B02 -S1	-001 51	-001 63										
007	0 1.0MM2	H05V-K SW	-X01	B03 -S1	-001 52											
007	0 1.0MM2	H05V-K SW	-X01	B04 -S1	-001 64											
007	0 1.0MM2	H05V-K SW	-X01	B13 -S42	-001 11											
007	0 1.0MM2	H05V-K SW	-X01	B14 -S42	-001 14											
007	0 1.0MM2	H05V-K SW	-X01	B15 -S25	-001 11											
007	0 1.0MM2	H05V-K SW	-X01	B16 -S25	-001 14											

03.01.2007

H0115ND  
=09+53A  
ADAM

00978102

Copyright as per DIN 34 to be observed!

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSTOJ/SLOVAKIA	<div><div>AREVA</div><div>CROSS CONNECT. LIST SWITCHING TRUCK PANEL</div></div>	50.3023.01.A3.741.230	V=I09 +53A	/ 031
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.	Iss.for	Iss.by:				

009781.02.609-3.AHA

CROSS COUPLING

Typ: 06

Sheet 87

93Stl.

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D0978102

03	AS BUILT	05.12.2005	AD	US STEEL KOSICE/SLOVAKIA	50.3023.01	ISSUE	1
02	Fact.-Rev.	09.11.2005	AD	Drawn ADAM	50.3023.01	ISSUE	2
01	Approval	20.09.2005	AD	Check GROMANN	SUBSTATION T80	ISSUE	3
NO.	Alteration	Date	Name	Issued for	Issued by	Issued for	Issued by

50.3023.01.A3.741.230	V	-L09	-S3A	/031	Sheet 87	93Sh.
Typ: 06	CROSS COUPLING	D009781.02.609-3-AHA				

# CROSS CONNECTION

REFERENCE	POTENTIAL ITEM CR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
007	0 1.0MM2	H05Y-K SW	-X01	D07 -S1	-Q1 33				
007	0 1.0MM2	H05Y-K SW	-X01	D08 -S1	-Q1 34				
R01	0 1.0MM2	H05Y-K SW	-X01	A10 -S41	-001 11				
R01	0 1.0MM2	H05Y-K SW	-X01	A11 -S1	-001 230				
V01	0 1.0MM2	H05Y-K SW	-X01	B05 -S1	-001 71				
V01	0 1.0MM2	H05Y-K SW	-X01	B06 -S1	-001 72				
V01	0 1.0MM2	H05Y-K SW	-X01	B07 -S1	-001 83				
V01	0 1.0MM2	H05Y-K SW	-X01	B08 -S1	-001 84				
V01	0 1.0MM2	H05Y-K SW	-X01	B09 -S1	-001 91				
V01	0 1.0MM2	H05Y-K SW	-X01	B10 -S1	-001 92				
V01	0 1.0MM2	H05Y-K SW	-X01	C09 -S1	-001 103				
V01	0 1.0MM2	H05Y-K SW	-X01	C10 -S1	-001 104				
V01	0 1.0MM2	H05Y-K SW	-X01	C11 -S1	-001 111				
V01	0 1.0MM2	H05Y-K SW	-X01	C12 -S1	-001 112				
V01	0 1.0MM2	H05Y-K SW	-X01	C13 -S63	14				
V01	0 1.0MM2	H05Y-K SW	-X01	C14 -S63	11				
V01	0 1.0MM2	H05Y-K SW	-X01	D05 -S1	-Q1 51				
V01	0 1.0MM2	H05Y-K SW	-X01	D06 -S1	-Q1 52				
V01	0 1.0MM2	H05Y-K SW	-X01	D09 -S1	-Q1 61				
V01	0 1.0MM2	H05Y-K SW	-X01	D10 -S1	-Q1 62				

05.01.2007		HJ0145ND		L09453A		032		ADAM	
03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSTICE/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.	Iss. for	Iss. by:			
						AREVA			
						CROSS CONNECT LIST			
						SWITCHING TRUCK			
						PANEL			
						109			
						50.3023.01.A3.741.230			
						V=L09			
						+SSA			
						Typ: 06			
						CROSS COUPLING			
						D009781.02.609-3.AHA			
						Sheet 88			
						93Sh.			

Copyright as per DIN 34 to be observed!

D00978102

## CROSS CONNECTION

[illegible]

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	 AREVA	CROSS CONNECT. LIST SWITCHING TRUCK PANEL	50.3023.01.A3.74.1.230 V = 109 +53A	/ 033	Sheet 89 93Sh.
02	Fact. - Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01					
01	Approval	20.09.2005	AD	Checked	GROHMANN	SUBSTATION T80					
INC.	Alteration	Date	Name	Std.	Qrta.	Iss. for	Iss. by:	Type: 06 CROSS COUPLING	D009781.02.609-3.AHA		

Copyright as per DIN 34 to be observed

HJ0115ND  
=L09+S3A  
Q33  
ADAM

# TERMINAL DIA., 64 POLIG, CIRCUIT-BREAKER PIN

+S3A -X01  
CABLE MATERIAL H05V-K 1.0mm2 SW

A				B				C				D				+
1	-001 /L01.2	-S22	11	-001 /L01.2	-S1	-001 /M01.5	44	-001 /M01.5	-S1	243	-01 /D01.3	-S1	14	1		
2	-001 /L01.2	-S23	12	-001 /L01.2	-S1	-001 /M01.5	51 Q	-001 /M01.5	-F12	C2	-01 /D02.4	-S1	21 Q	2		
3	-001 /M01.6	-S1	213	-001 /M01.6	-S1	-001 /M01.5	52	-001 /M01.5	-S1		-01 /D02.4	-S1	22	3		
4	-001 /M01.6	-F11	C2	-001 /M01.6	-S1	-001 /M01.5	64	-001 /M01.5	-S1		-01 /D02.4	-S1	24	4		
5	-001 /M01.7	-S6	11	-001 /M01.7	-S1	-001 /M01.5	71	-001 /M01.5	-S1	31	-01 /D05	-S1	51	5		
6	-001 /M01.7	-S13	12	-001 /M01.7	-S1	-001 /M01.5	72	-001 /M01.5	-S1	11	-01 /D06	-S1	52	6		
7	-001 /M04.3	-S24	11	-001 /M04.3	-S1	-001 /M01.2	83	-001 /M01.2	-S1		-01 /D07	-S1	33	7		
8	-001 /M04.3	-S24	12	-001 /M04.3	-S1	-001 /M01.2	84	-001 /M01.2	-S1		-01 /D08	-S1	34	8		
9	-001 /M04.3	-S24	14	-001 /M04.3	-S1	-001 /M01.2	91	-001 /M01.2	-S1	103	-01 /D09	-S1	61	9		
10	-001 /M01.3	-S41	11	-001 /M01.3	-S1	-001 /M01.2	92	-001 /M01.2	-S1	104	-01 /D10	-S1	62	10		
11	-001 /M01.3	-S1	230	-001 /M01.3	-S1	-001 /M01.2	41	-001 /M01.2	-S1	111	-01 /D11	-S1	43	11		
12	-001 /M01.2	-S1	11 Q	-001 /M01.2	-S1	-001 /M01.2	11	-001 /M01.2	-S1	112	-01 /D12	-S1	44	12		
13	-001 /M01.2	-S1	12	-001 /M01.2	-S42	-001 /M01.3	11	-001 /M01.3	-S1	14	-01 /D13	-S1	E1	13		
14	-001 /M01.2	-S1	24	-001 /M01.2	-S42	-001 /M01.3	14	-001 /M01.3	-S1	11	-01 /D14	-S1	E2	14		
15	-001 /M02.3	-S1	31 Q	-001 /M02.3	-S25	-001 /M01.3	11	-001 /M01.3	-S1	11 Q	-01 /D15	-S1		15		
16	-001 /M02.3	-S1	32	-001 /M02.3	-S25	-001 /M01.3	14	-001 /M01.3	-S1	12	-01 /D16	-S1		16		
																+

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

H0015MD  
S09+33A  
ADAM

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	PLUG DIAGRAM	50.3023.01.A3.741.230	V=L09	/S01
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50.3023.01	CIRCUIT-BREAKER		+S3A	/S01
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80	PANEL			Sheet 90
NG.	Alteration	Date	Named	Std.	Iss. for	Iss. by:		Typ: 06	CROSS COUPLING	935H

D009781.02.609-3.AHA

# CROSS CONNECTION

REFERENCE	POTENTIAL ITEM GR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
P01	0 1.0MW2	H05V-K SW		-X02	C13 -S63	14			
P01	0 1.0MW2	H05V-K SW		-X02	C14 -S63	11			
P02	0 1.0MW2	H05V-K SW		-S1	-02 32 -S61	14			
P02	0 1.0MW2	H05V-K SW		-X02	C05 -S1	-02 31			
P02	0 1.0MW2	H05V-K SW		-X02	C06 -S61	11			
P02	0 1.0MW2	H05V-K SW		-X02	D13 -Y1	E1			
P02	0 1.0MW2	H05V-K SW		-X02	D14 -Y1	E2			
001	0 1.0MW2	H05V-K SW		-X02	C15 -S1	-02 11 -S1			
001	0 1.0MW2	H05V-K SW		-X02	C16 -S1	-02 12			
001	0 1.0MW2	H05V-K SW		-X02	D01 -S1	14			
003	0 1.0MW2	H05V-K SW		-X02	D02 -S1	-02 21 -S1			
003	0 1.0MW2	H05V-K SW		-X02	D03 -S1	-02 22			
003	0 1.0MW2	H05V-K SW		-X02	D04 -S1	-02 24			
V02	0 1.0MW2	H05V-K SW		-S1	-02 42 -S62	14			
V02	0 1.0MW2	H05V-K SW		-X02	B11 -S1	-02 41			
V02	0 1.0MW2	H05V-K SW		-X02	B12 -S62	11			
V02	0 1.0MW2	H05V-K SW		-X02	D05 -S1	-02 51			
V02	0 1.0MW2	H05V-K SW		-X02	D06 -S1	-02 52			
V02	0 1.0MW2	H05V-K SW		-X02	D07 -S1	-02 33			
V02	0 1.0MW2	H05V-K SW		-X02	D08 -S1	-02 34			

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D0978102

03	AS BUILT	05.12.2005 AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	 <b>AREVA</b>	CROSS CONNECT. LIST		150.3023.01.A3.741.230	V	-L09
02	Fact.-Rev.	09.11.2005 AD	Date	01.01.2006	50.3023.01		SWITCHING TRUCK				
01	Approval	20.09.2005 AD	Date	01.01.2006	SUBSTATION T80		PANEL				
NO.	Alteration		Date		Orig.:		Iss.by:				

Typ: 06  
CROSS COUPLING

D009781.02.609-3.AHA

Sheet 91  
93 Sh.

CROSS CONNECTION

	REFERENCE	POTENTIAL ITEM GR. SECTION	CABLE MATERIAL COLOR	OUTPUT TERMINAL	DESTINATION 1	DESTINATION 2	DESTINATION 3	DESTINATION 4	DESTINATION 5	DESTINATION 6
V02	—	0 1.OHWZ	H05Y-K SW	-X02	D09 -S1	-Q2 61				A
V02	—	0 1.OHWZ	H05Y-K SW	-X02	D10 -S1	-Q2 62				B
V02	—	0 1.OHWZ	H05Y-K SW	-X02	D11 -S1	-Q2 43				C
V02	—	0 1.OHWZ	H05Y-K SW	-X02	D12 -S1	-Q2 44				D
										E
										F
										G
										H
										I
										J
										K
										L
										M
										N
										O
										P
										Q
										R
										S
										T
										U
										V
										W
										X
										Y
										Z

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D0978102

ADAM  
=L09.S3B  
HJ015ND  
03 / 031  
05.01.2007

AS BUILT	Date 05.06.2005	US STEEL KOSICE/SLOVAKIA	GROSS CONNECT LIST SWITCHING TRUCK PANEL	ISO 3023-01-A3-741-230 V=L09-S3B
Fact.-Rev.	Drawn ADAM	50.3023-01		/031
Approval	Check BROHMANN	SUBSTATION T80		Sheet 92
Alteration	Name Srd	Orig:	Type: 06 CROSS COUPLING	93Sh.
	(Date)	Iss.for		D009781-02-609-3.AHA



TERMINAL DIA., 64 POLIG, CIRCUIT-BREAKER  
PIN

+S3B	-X02	
CABLE MATERIAL	H05V-K 1.0mm2	SW

+		B				C		D		+
A	B	C	D							
1	A01	B01	-02 /001.6	-S1						14
2	A02	B02	-02 /003.4	-S1						21
3	A03	B03	-02 /003.4	-S1						22
4	A04	B04	-02 /003.4	-S1						24
5	A05	B05	-02 /002.2	-S1	31					51
6	A06	B06	-S61 /002.2	-S1	11					52
7	A07	B07	-02 /002.3	-S1						33
8	A08	B08	-02 /002.3	-S1						34
9	A09	B09	-02 /002.4	-S1						61
10	A10	B10	-02 /002.4	-S1						62
11	A11	B11	-02 /002.2	-S1	41					43
12	A12	B12	-S62 /002.2	-S1	11					44
13	A13	B13	-S63 /001.4	-S1						E1
14	A14	B14	-S63 /001.4	-S1	11					E2
15	A15	B15	-02 /001.6	-S1	11					
16	A16	B16	-02 /001.5	-S1	12					

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

00978102

HJ0115MD  
=L09+S3B  
S01  
ADAM

03	AS BUILT	05.12.2005	AD	Date	06.06.2005	US STEEL KOSICE/SLOVAKIA	 <b>AREVA</b>	PLUG DIAGRAM CIRCUIT-BREAKER PANEL 09	50_3023_01.A3.741.230 V=L09 *S38	/ S01
02	Fact.-Rev.	09.11.2005	AD	Drawn	ADAM	50_3023_01				
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80				
00	Alteration	Date	Name	Sid.	Orla:	Iss. for	Iss. by:			
01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80				
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01	Approval	20.09.2005	AD	Check	GROHMANN	SUBSTATION T80				