

ACER GROUP

Company / customer

Project description

SUPRA-618II ASD surface grinder

drawing number

Commission

Manufacturer (company)

ACER GROUP

Path

Project name

SUPRA-618IIASD-INV-Z-DELTA

make

Type

SUPRA-618II ASD

Place of installation

Responsible for project

Part feature

Created on

2011/11/8

Edit date

2011/11/8

by (short name)










Number of pages




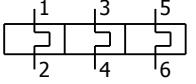
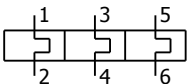
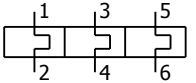
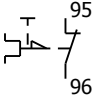
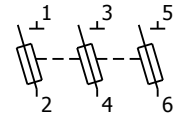

35

			Date	2011/11/8		ACER GROUP	Title page		= CA	
			Ed.						+	
			Appr		SUPRA-618II ASD surface grinder					Page 1
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Device tag list

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device tag part number Type number	function text Article designation	X-Ref	symbol
=CA01-A1 DELTA.DVP12SC11T DVP12SC11T	Main controller SC series controller	=CA01/7.2	
=CA01-A1-X20	Extension port	=CA01/7.6	
=CA01-A1-X21	POWER	=CA01/7.3	
=CA01-A1-X22	RS-485	=CA01/7.4	
=CA01-A1-X23	DI C	=CA01/7.5	
=CA01-A1-X24	DO C0	=CA01/7.5	
=CA01-A2 DELTA.DVP16SP11R DVP16SP11R	Digital input/output unit S series 8DI/8DO extension unit	=CA01/7.6	
=CA01-A2-X25	DI C	=CA01/7.7	
=CA01-A2-X26	DO C0	=CA01/7.7	

device tag part number Type number	function text Article designation	X-Ref	symbol
=CA01-A15	Resistors	=CA01/4.7	
=CA01-A15-R1	1/4W	=CA01/4.7	
=CA01-A15-R2	=	=CA01/4.8	
=CA01-FR1 TECO.RHU-10K1.7,2-10A RHU-10K1.7,2-10A	Grinding wheel motor overload Motor overload switch	=CA01/1.3	
=CA01-FR2 TECO.RHU-10K1.3,5-4,8A RHU-10K1.3,5-4,8A	Hydraulic motor overload Motor overload switch	=CA01/1.5	
=CA01-FR3 TECO.RHU-10K1.1,8-2,5A RHU-10K1.1,8-2,5A	Coolant motor overload Motor overload switch	=CA01/1.7	
=CA01-FR5	Vacuum motor overload	=CA01/6.8	
=CA01-FU1	Main fuses	=CA01/1.0	
=CA01-FU2		=CA01/5.1	

Date	2011/11/3	ACER GROUP	Device tag list : =CA01+-A1 - =CA01+-FU2	= CA +	Page 6
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Device tag list

F03_001










device tag part number Type number	function text Article designation	X-Ref	symbol
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=CA01-FU4		=CA01/5.3	
=CA01-FU5		=CA01/5.1	
=CA01-FU6		=CA01/7.2	
=CA01-FU7		=CA01/3.3	
=CA01-FU8		=CA01/3.4	
=CA01-GS1 DELTA.DVP-2401 DVP-2401	Power supply Power supply unit, 1-phase	=CA01/7.2	
=CA01-KA1 OMRON.LY2N-J.110VAC LY2N-J.110VAC	Elevator power starter Control relay	=CA01/6.7	
=CA01-KA2 OMRON.MY2N-J.110VAC MY2N-J.110VAC	In/outward starter Control relay	=CA01/6.6	










device tag part number Type number	function text Article designation	X-Ref	symbol
=CA01-KM1 TECO.CU-11E10 CU-11E10	G. W. motor starter Motor contactor	=CA01/6.1	
=CA01-KM2 TECO.CU-11E10 CU-11E10	Hydraulic motor starter Motor contactor	=CA01/6.2	
=CA01-KM3 TECO.CU-11E10 CU-11E10	Coolant motor starter Motor contactor	=CA01/6.3	
=CA01-KM4 TECO.CU-11E10 CU-11E10	Cross feed power starter Motor contactor	=CA01/6.5	
=CA01-KM6 TECO.CU-11E10 CU-11E10	Vacuum starter Motor contactor	=CA01/6.8	
=CA01-M1 CB.MS01362346-2,3KW MS01362346	Grinding wheel motor 3-phase induction motor	=CA01/1.3	
=CA01-M4 CB.MC01402200-40W MC01402200-40W	Cross feed motor 3-phase induction motor	=CA01/2.3	
=CA01-M5 CB.MSUD29902A MSUD29902A	Stepping motor 2-phases stepping motor	=CA01/4.1	
=CA01-QS1	Main switch	=CA01/1.0	

Date	2011/11/3	ACER GROUP	Device tag list : =CA01+-FU3 - =CA01+-QS1	= CA +	Page 7
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Device tag list

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


device tag part number Type number	function text Article designation	X-Ref	symbol
=CA01-R2		=CA01/3.5	
=CA01-TC1 LGE.500VA.110V.12V 500VA.110V.12V	Control transformer Transformer	=CA01/5.0	
=CA01-U1 GSENN.2A.AD.INV.001 2A.AD.INV.001	Motion controller Motion controller for AD with inverter	=CA01/3.2	
=CA01-U1-TB1		=CA01/3.5	
=CA01-U1-TB2		=CA01/3.2	
=CA01-U1-TB3		=CA01/3.6	
=CA01-U1-TB4		=CA01/3.4	
=CA01-U2 ZS.ZS.2D4022 ZS.2D4022	2 phases stepping driver 2-phase stepping motor driver	=CA01/4.0	
=CA01-U2-X11		=CA01/4.1	










device tag part number Type number	function text Article designation	X-Ref	symbol
=CA01-U2-X12	OVH-	=CA01/4.5	
=CA01-U3 DELTA.VFD004M23A VFD004M23A	Cross feed motor drive Inverter	=CA01/2.2	
=CA01-U3-DTB1		=CA01/2.3	
=CA01-U3-DTB2		=CA01/2.3	
=CA01-U3-J1	RS485	=CA01/2.6	
=CA01-U3-J4		=CA01/2.7	
=CA01-U3-J5		=CA01/2.4	
=CA01-XS1 LLE.LLPM509-30-7 LLPM509-30-7	Hydraulic unit socket 7P power socket	=CA01/1.5	
=CA01-XS2 LLE.LLPM508-25-4 LLPM508-25-4	Coolant unit socket 4P power socket	=CA01/1.7	

Date	2011/11/3	ACER GROUP	Device tag list : =CA01+-R2 - =CA01+-XS2	= CA +	Page 8
Ed.					
Appr		SUPRA-618II ASD surface grinder	Replaced by	Replaced by	Page 35
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Device tag list

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

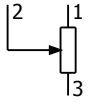
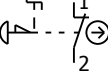


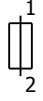

device tag part number Type number	function text Article designation	X-Ref	symbol
=CA01-XS3 YYE.LK-3021F LK-3021F	Female receptacle		
=CA02-A3 GSENN.AD-MB-002 AD-MB-002	Operator's panel Membrane panel for AD series	=CA02/1.0	
=CA02-A3-AP1 GSENN.KEYSW1 KEYSW1	Operating element Elements of operating panel	=CA02/1.0	
=CA02-A3-AP1-CN1		=CA02/1.1	
=CA02-A3-AP1-CN2		=CA02/1.1	
=CA02-A3-AP1-CN3		=CA02/1.2	
=CA02-A3-AP1-CN12		=CA02/1.3	
=CA02-A3-AP1-CN21		=CA02/1.4	
=CA02-A3-AP1-CN22		=CA02/1.4	









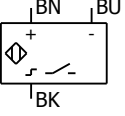
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=CA02-A3-AP1-CN26		=CA02/1.5	
=CA02-A3-AP1-U3 GSENN.PLC-PANELV2.2 PLC-PANELV2.2	Panel controller Panel controller	=CA02/1.0	
=CA02-A3-AP1-U3-CN1		=CA02/1.1	
=CA02-A3-AP1-U3-CN2		=CA02/1.1	
=CA02-A3-AP1-U3-CN3		=CA02/1.2	
=CA02-A3-AP1-U3-CN12		=CA02/1.3	
=CA02-A3-AP1-U3-CN21		=CA02/1.4	
=CA02-A3-AP1-U3-CN22		=CA02/1.4	
=CA02-A3-AP1-U3-CN26		=CA02/1.5	

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		Ed.					=CA02+-A3-AP1-U3-CN26		+	
Modification	Date	Name	Original	Replaced by	Replaced by			Page	9	
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Device tag list

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device tag part number Type number	function text Article designation	X-Ref	symbol
=CA02-A3-AP1-U3-TB1	POWER	=CA02/1.4	
=CA02-A3-AP1-U3-TB2	RS-485	=CA02/1.3	
=CA02-A3-AP1-VRCN		=CA02/1.8	
=CA02-A3-RP1 TOKOS.RV24YN20S503 RV24YN20S503	Jog incremental adjustment Potentiometer	=CA02/1.8	
=CA02-A3-SB1 MOE.A22-ESTOP-K11 A22-ESTOP-K11	Emergency stop Emergency stop pushbutton	=CA02/1.7	
=CA03-A13	12V working light (Option)	=CA03/1.2	
=CA03-A131	110V working light (Option)	=CA03/1.5	
=CA03-A131-FU1		=CA03/1.6	
=CA03-A131-U1		=CA03/1.5	

device tag part number Type number	function text Article designation	X-Ref	symbol
=CA03-A301	Optical linear scale counter	=CA03/2.2	
=CA03-A301-PWR		=CA03/2.3	
=CA03-A301-X	Scale connector	=CA03/2.4	
=CA03-A302	Linear scale unit	=CA03/2.2	
=CA03-A302-A302		=CA03/2.4	
=CA03-X9	Working light cinnectors	=CA03/1.3	
=CA03-XP1	Working light plug	=CA03/1.5	
=CA03-XP2		=CA03/2.3	
=CA04-SQ1 KFPS.TL-B5NE1 TL-B5NE1	Leftward switching detect Proximity switch (NO contact)	=CA04/1.5	

Date	2011/11/3	ACER GROUP	Device tag list : =CA02+-A3-AP1-U3-TB1 - =CA04+-SQ1	= CA			
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Original							
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Device tag list

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device tag part number Type number	function text Article designation	X-Ref	symbol
=CA04-SQ2 KFPS.TL-B5NE1 TL-B5NE1	Rightward switching detect Proximity switch (NO contact)	=CA04/1.3	
=CA04.1-SQ4 HLE.AH-8104 AH-8104	Inward moving stroke Limit switch	=CA04.1/1.3	
=CA04.1-SQ5 HLE.AH-8104 AH-8104	Outward move stroke Limit switch	=CA04.1/1.4	
=CA04.1-SQ6 HLE.Z15G1308 Z15G1308	Upward limit detect Limit switch	=CA04.1/1.5	
=CA04.1-SQ7 HLE.Z15G1308 Z15G1308	In/outward limit detect Limit switch	=CA04.1/1.6	
=CA04.2-SQ3 OMRON.V-152-1A5 V-152-1A5	Throttle in safe detect Limit switch	=CA04.2/1.4	
=CA06-A11 CB.EV3V221101 EV3V221101	Hydraulic tank unit Hydraulic solenoid drive	=CA06/1.2	
=CA07-A401		=CA07/1.3	
=CA07-A401-M51 CB.MWPU402346-0,1KW MWPU402346	Coolant pump motor 3-phase induction motor	=CA07/1.4	

device tag part number Type number	function text Article designation	X-Ref	symbol
=CA07-A401-M52	Vacuum motor	=CA07/1.6	
=CA09-A14-M6 CB.CHCY.EL-1-110VAC CHCY.EL-1-110VAC	Electro magnetic pump	=CA09/1.4	
=CA10-A51-AP4 CB.DVM-1 DVM-1	Chuck controller (Option) Display device	=CA10/1.1	
=CA10-A51-AP4-CN3		=CA10/1.5	
=CA10-A51-AP4-CN6		=CA10/1.4	
=CA10-A51-AP4-CN7		=CA10/1.6	
=CA10-A51-AP4-CN8		=CA10/1.5	
=CA10-A51-AP4-CN9		=CA10/1.6	
=CA10-A51-AP4-INPUT		=CA10/1.4	

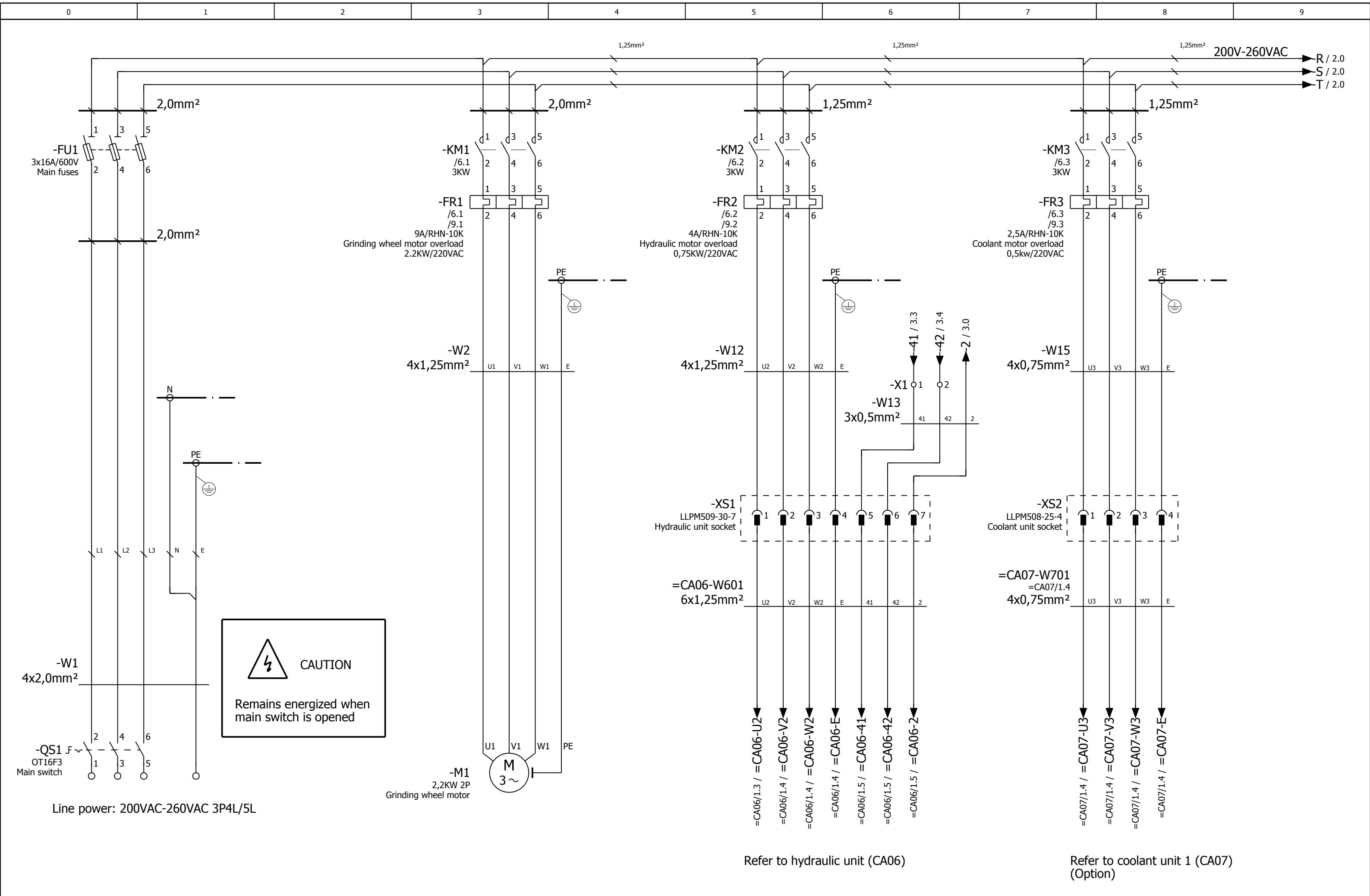
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			Ed.		SUPRA-618II ASD surface grinder					+	
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device tag part number Type number	function text Article designation	X-Ref	symbol
=CA10-A51-AP4-TB1		=CA10/1.4	 ○ E
=CA10-A51-AP4-TB2		=CA10/1.2	 ○ COM
=CA10-A51-AP4-TB4		=CA10/1.3	 ○ C
=CA10-A51-AP4-TB5		=CA10/1.5	 ○ 0
=CA10-A52	Electrical magnetic chuck (Option)	=CA10/1.3	┌───────────┐ └───────────┘

device tag part number Type number	function text Article designation	X-Ref	symbol



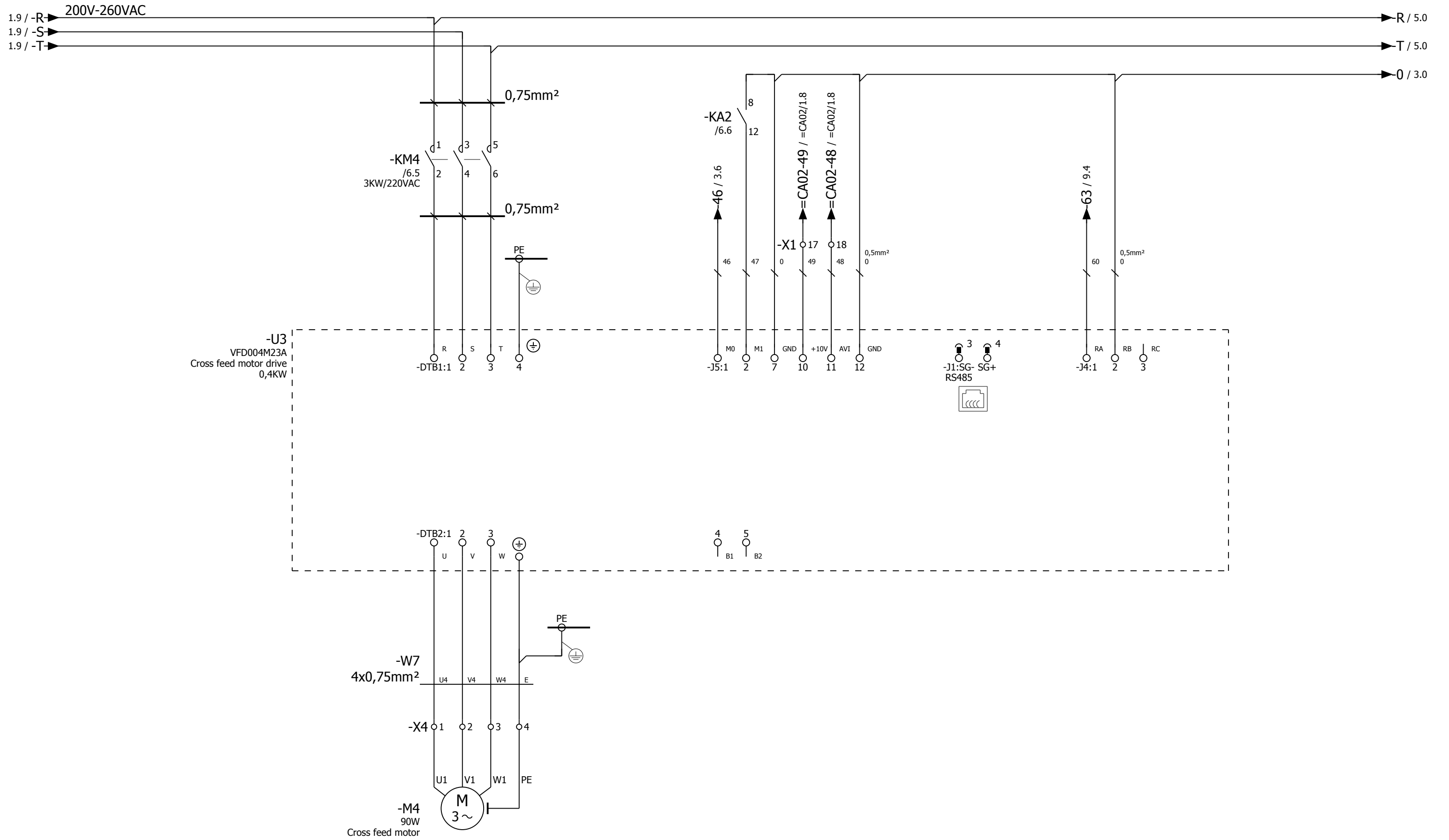
CAUTION
 Remains energized when main switch is opened

Line power: 200VAC-260VAC 3P4L/5L

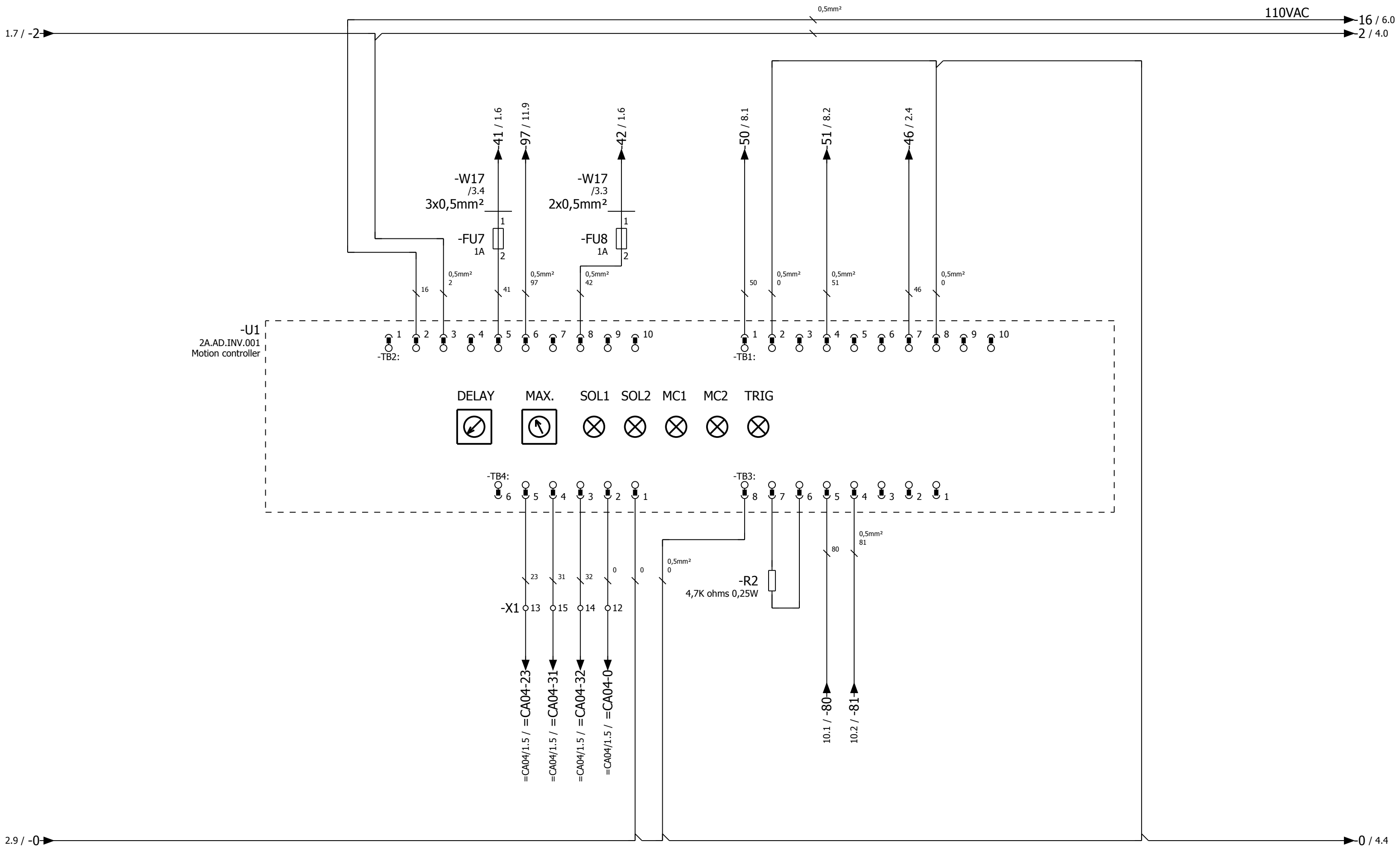
Refer to hydraulic unit (CA06)

Refer to coolant unit 1 (CA07) (Option)

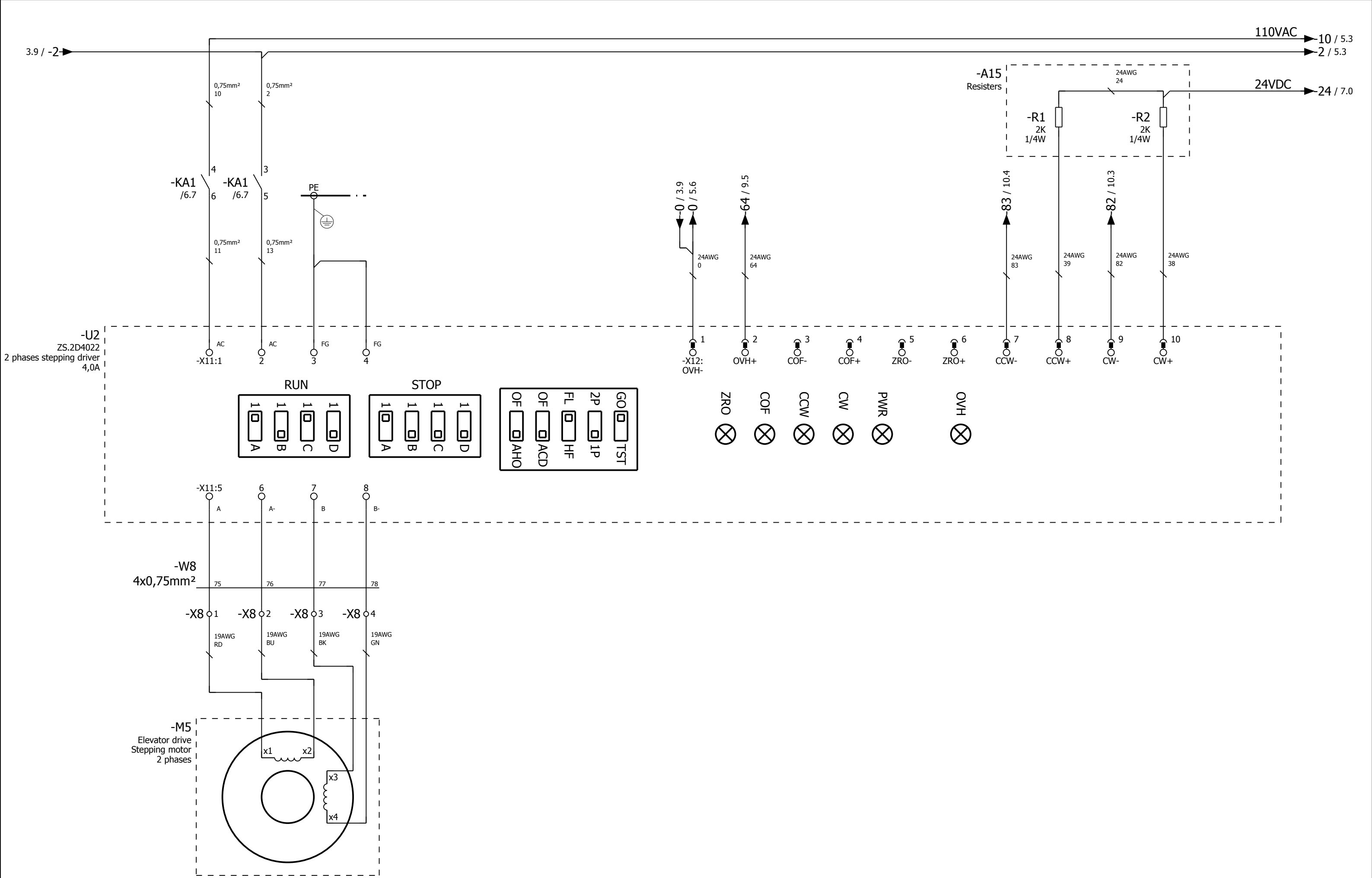
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				Ed.		SUPRA-618II ASD surface grinder				+	
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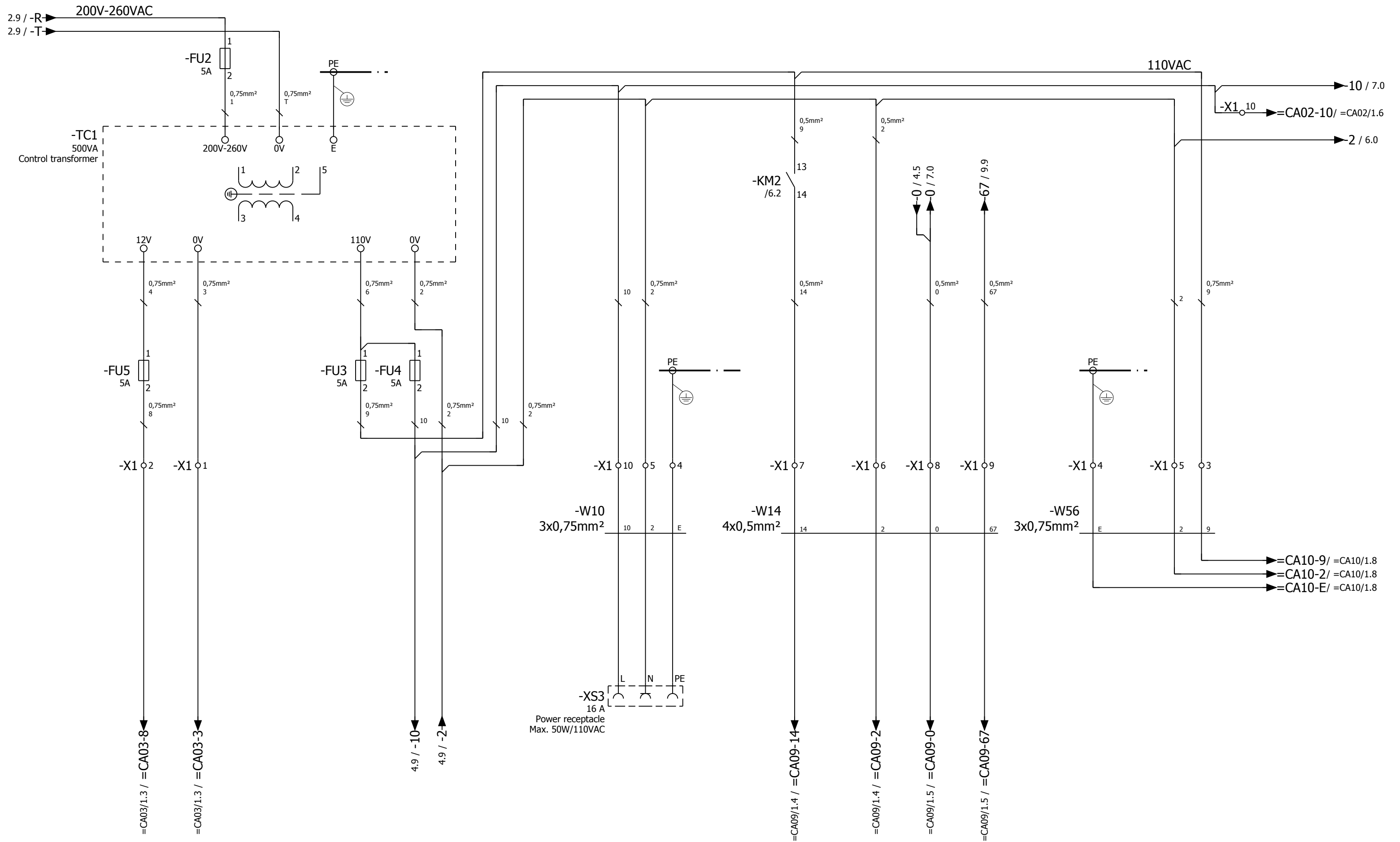
1		Date	2011/11/8	ACER GROUP	Cross feed motor drive	= CA01
		Ed.				+
		Appr		SUPRA-618II ASD surface grinder		Page 2
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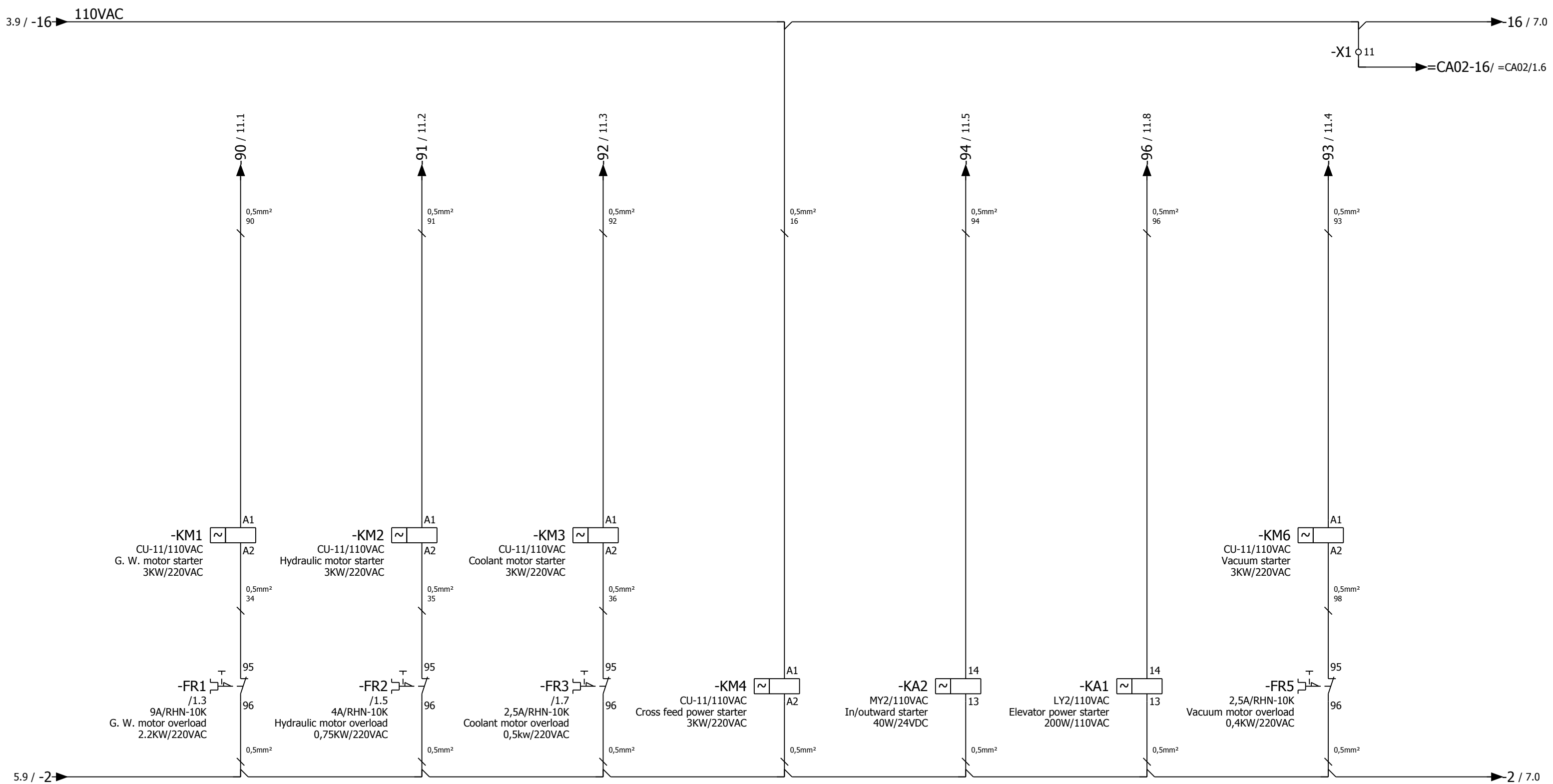
			Date	2011/11/8	ACER GROUP		Left/rightward & in/outward motion drive		= CA01	
			Ed.						+	
			Appr		SUPRA-618II ASD surface grinder				Page 3	
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			Date	2011/11/8	ACER GROUP		Elevating motor drive		= CA01	
			Ed.						+	
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			Date	2011/11/8	ACER GROUP		Control power		= CA01	
			Ed.		SUPRA-618II ASD surface grinder				+	
			Appr		Replaced by		Replaced by		Page 5	
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Grinding wheel starter Hydraulic pump starter Coolant pump starter Cross feed power starter In/outward moving starter Elevator power starter Vacuum starter (Option)

1 ~ 2 /1.3
3 ~ 4 /1.3
5 ~ 6 /1.3

1 ~ 2 /1.5
3 ~ 4 /1.5
5 ~ 6 /1.5
13 ~ 14 /5.5

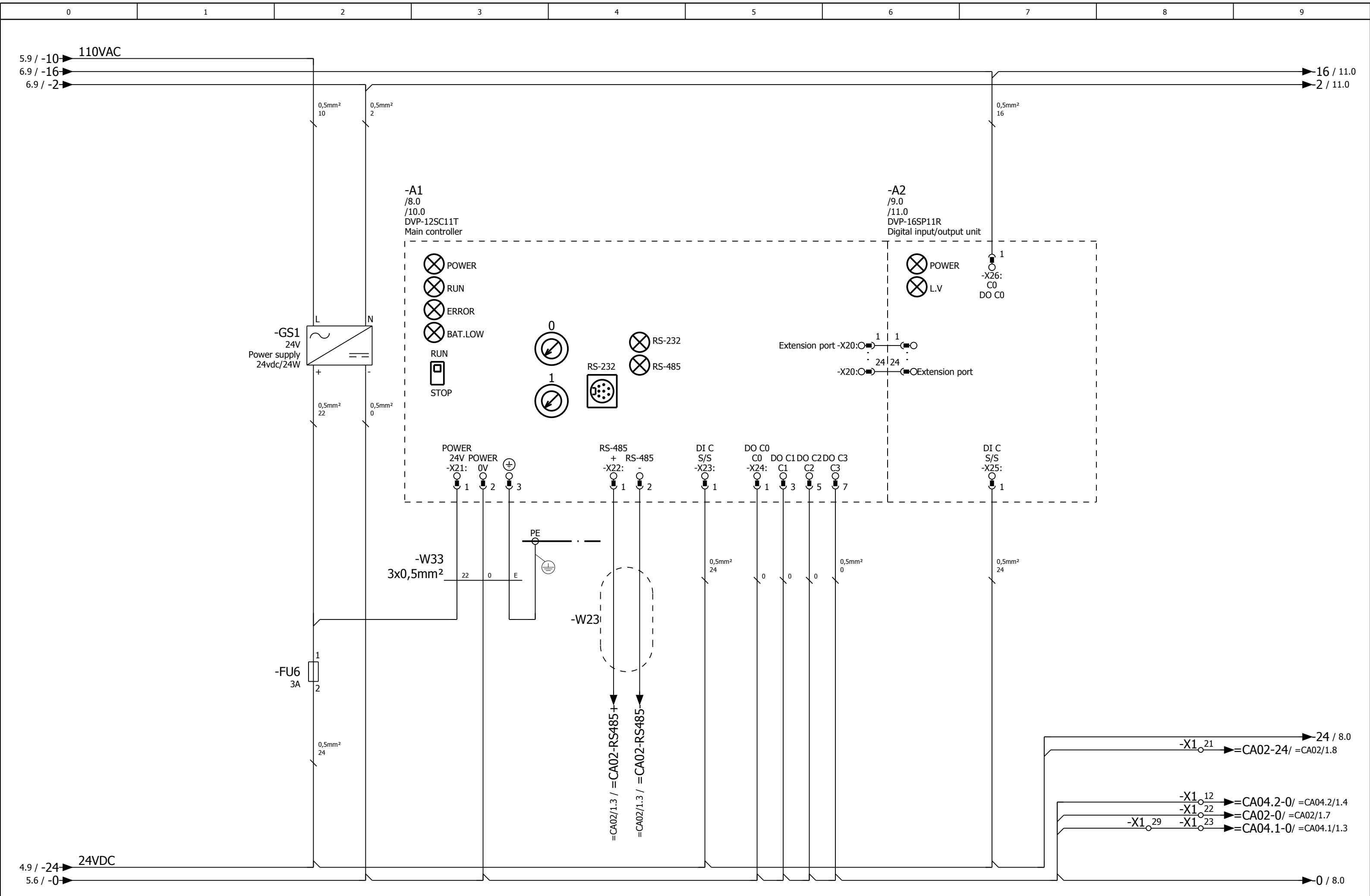
1 ~ 2 /1.7
3 ~ 4 /1.8
5 ~ 6 /1.8

1 ~ 2 /2.3
3 ~ 4 /2.3
5 ~ 6 /2.3

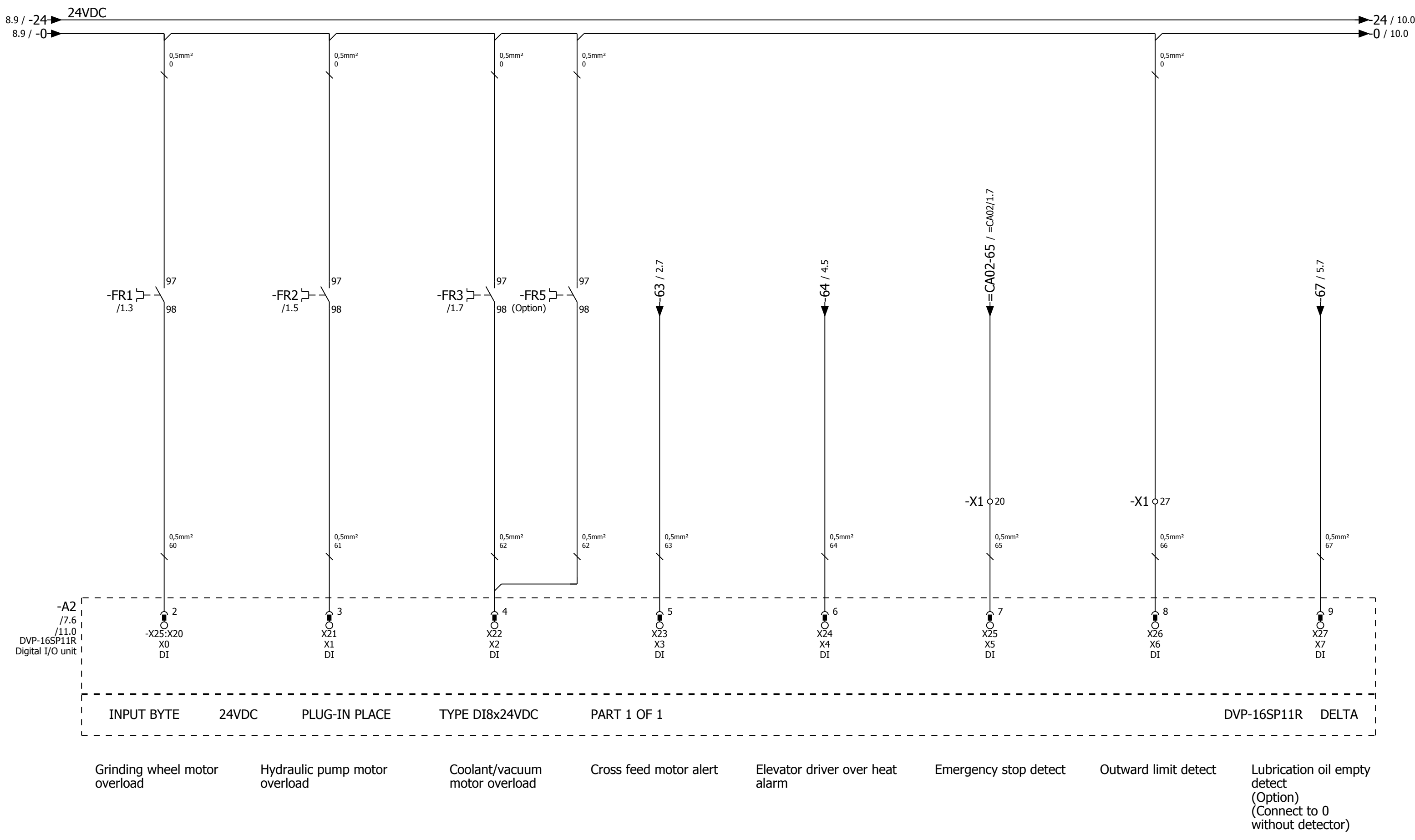
8 ~ 12 /2.5

3 ~ 5 /4.1
4 ~ 6 /4.1

			Date	2011/11/8	ACER GROUP		Magnetic contacts & relays		= CA01	
			Ed.		SUPRA-618II ASD surface grinder				+	
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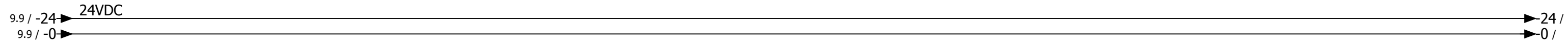
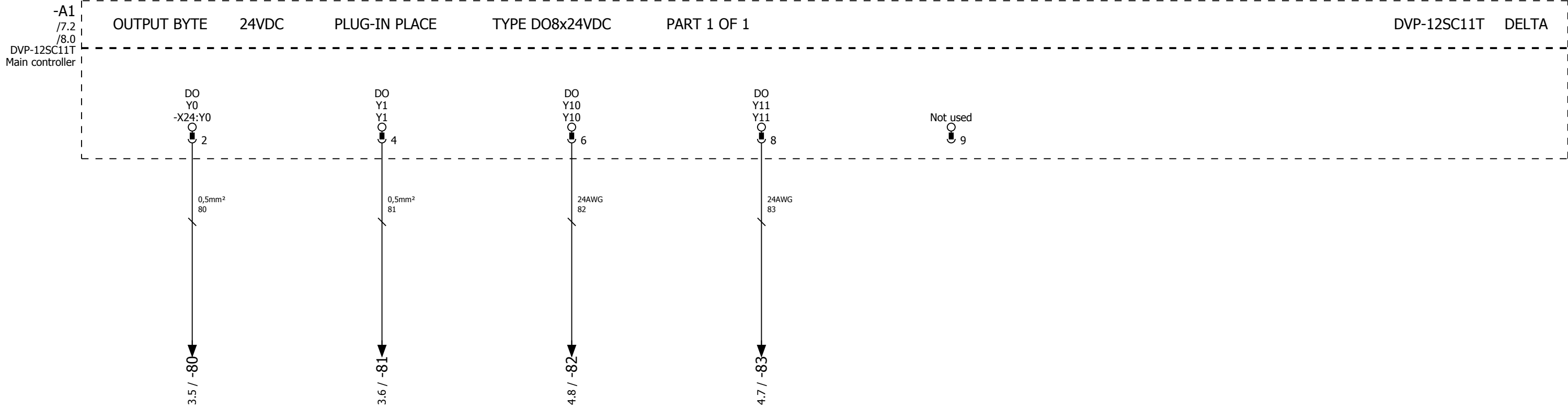


6				8			
Date	2011/11/8	ACER GROUP		Controller power		= CA01	
Ed.		SUPRA-618II ASD surface grinder				+	
Appr		Replaced by	Replaced by			Page	7
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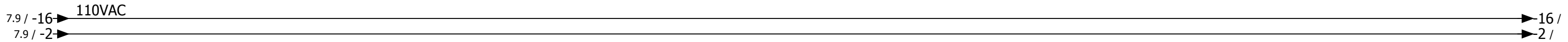
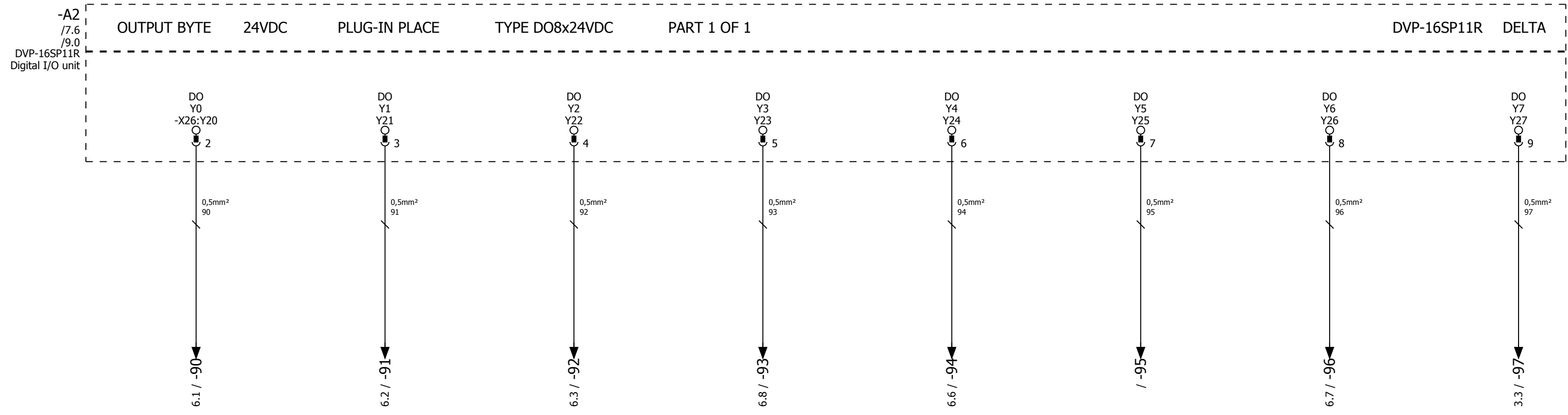
		Date	2011/11/8		ACER GROUP		Sensors & detectors (X20-X27)		= CA01	
		Ed.			SUPRA-618II ASD surface grinder				+	
Modification	Date	Name	Original	Replaced by	Replaced by			Page		9
								Page		35

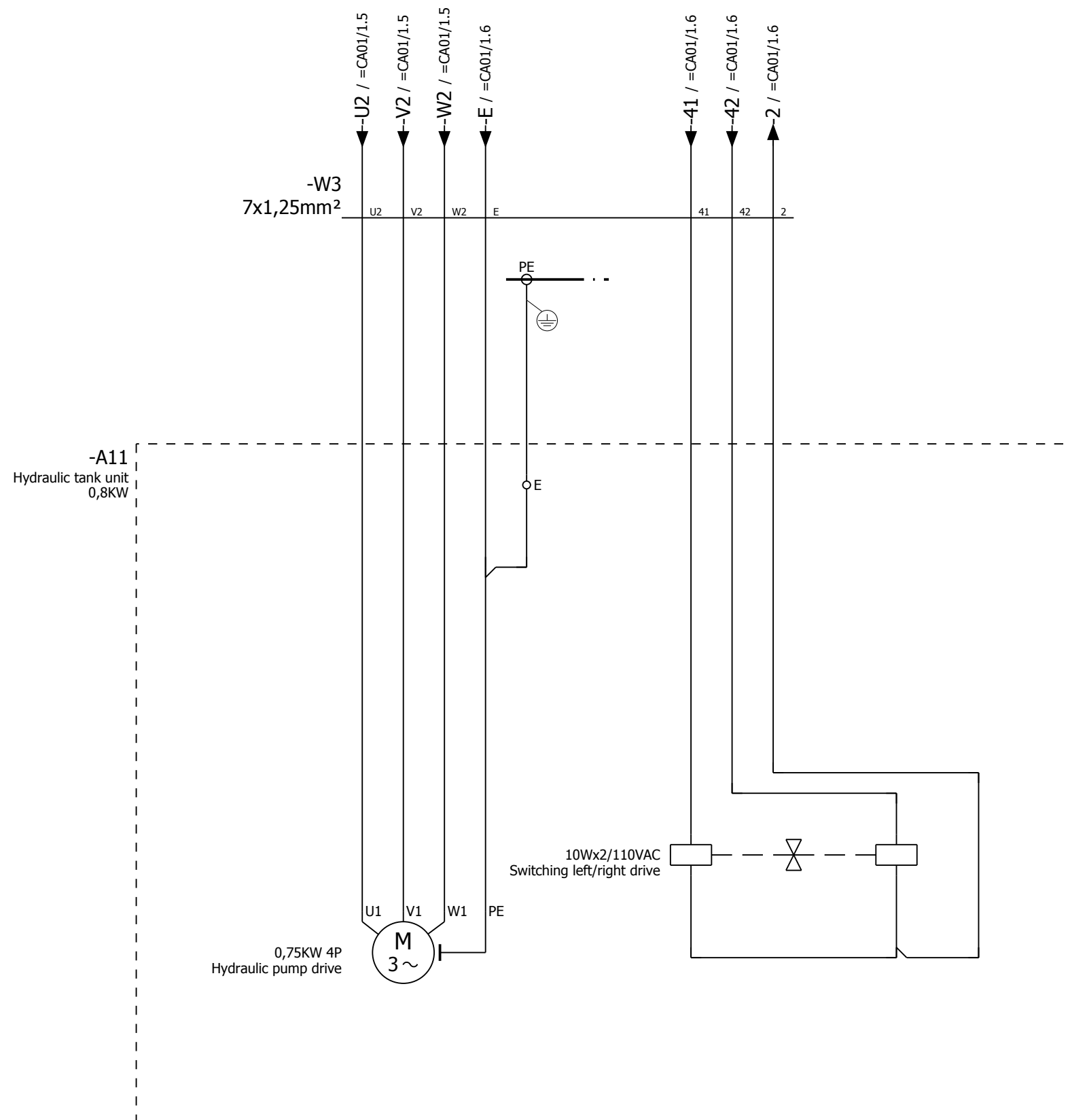
Jog cross feeding output Rapid cross feeding output Elevator series pulse output Elevator direction output



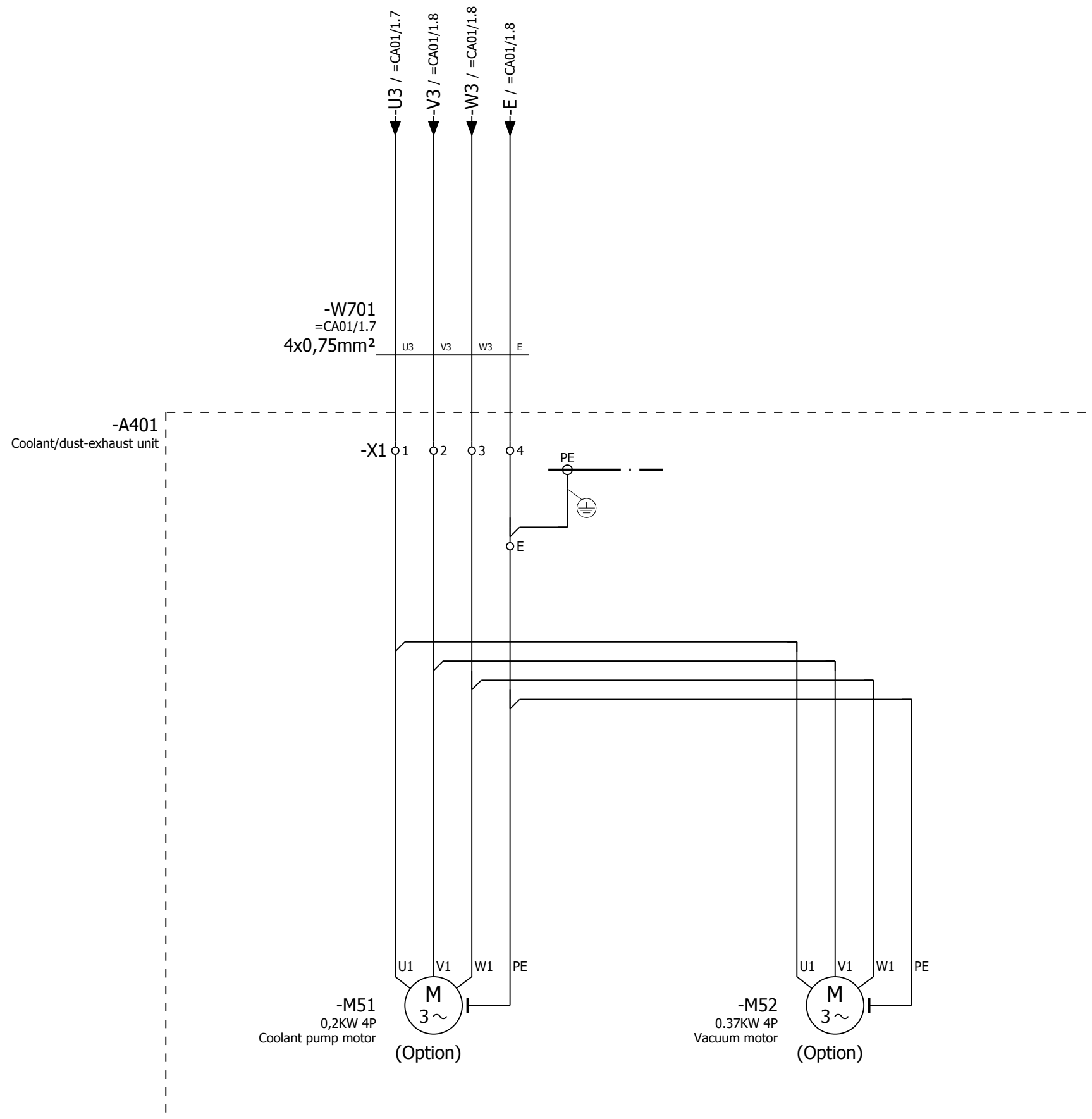
			Date	2011/11/8	ACER GROUP	Control signals (Y0, Y1, Y10, Y11)	= CA01 +	
			Ed.					
			Appr		SUPRA-618II ASD surface grinder			Page 10
Modification	Date	Name	Original	Replaced by				Replaced by

Grinding wheel enabled Hydraulic pump enabled Coolant/vacuum enabled Vacuum enabled (Option) Inward moving enabled Outward moving enabled Elevator power enabled Left/right switching enabled

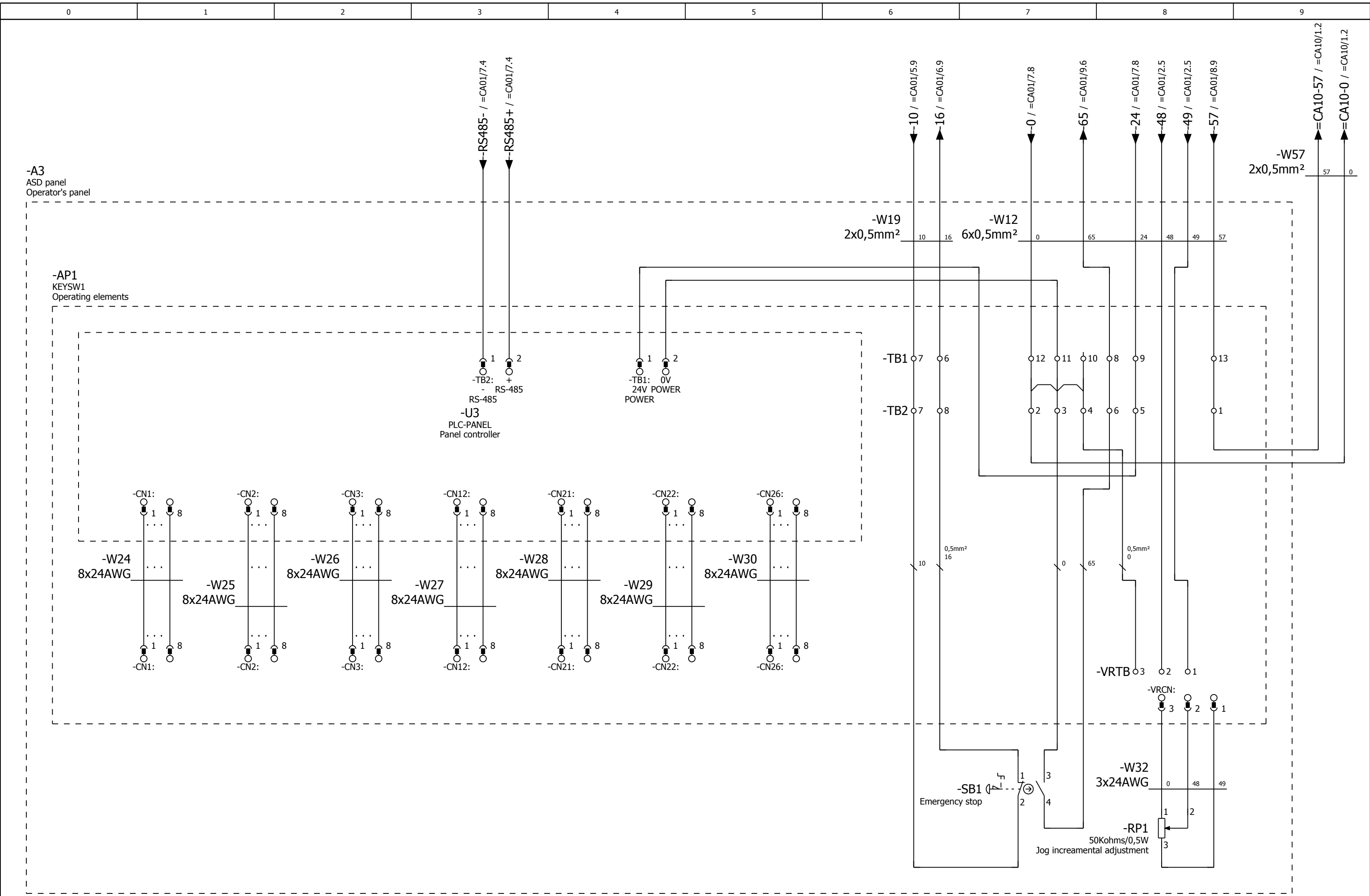




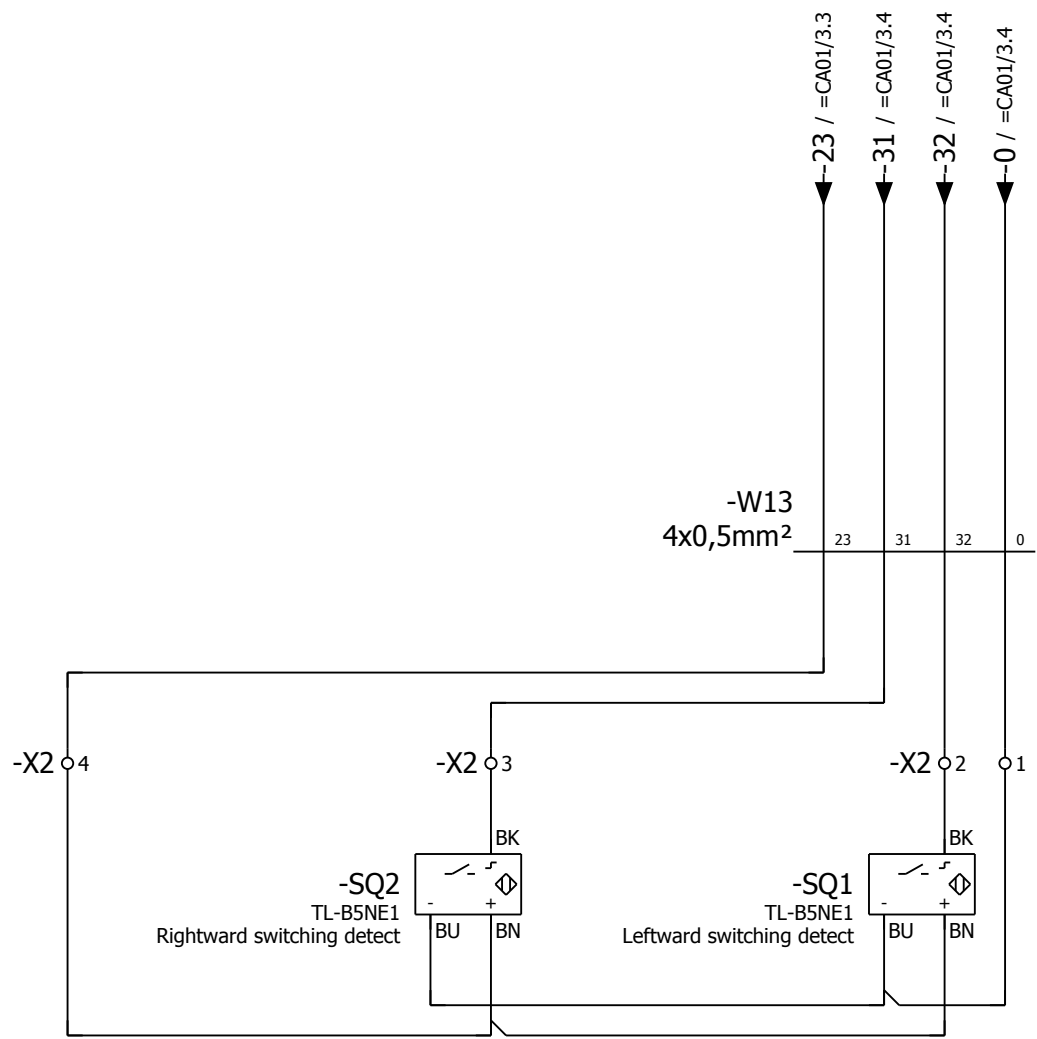
			Date	2011/11/8	ACER GROUP	Hydraulic unit	= CA06	+	Page	1
			Ed.						Page	35
			Appr		SUPRA-618II ASD surface grinder					
Modification	Date	Name	Original		Replaced by	Replaced by				



			Date	2011/11/8	ACER GROUP	Coolant unit	= CA07	Page 1
			Ed.					
Modification	Date	Name	Original	Replaced by	Replaced by			



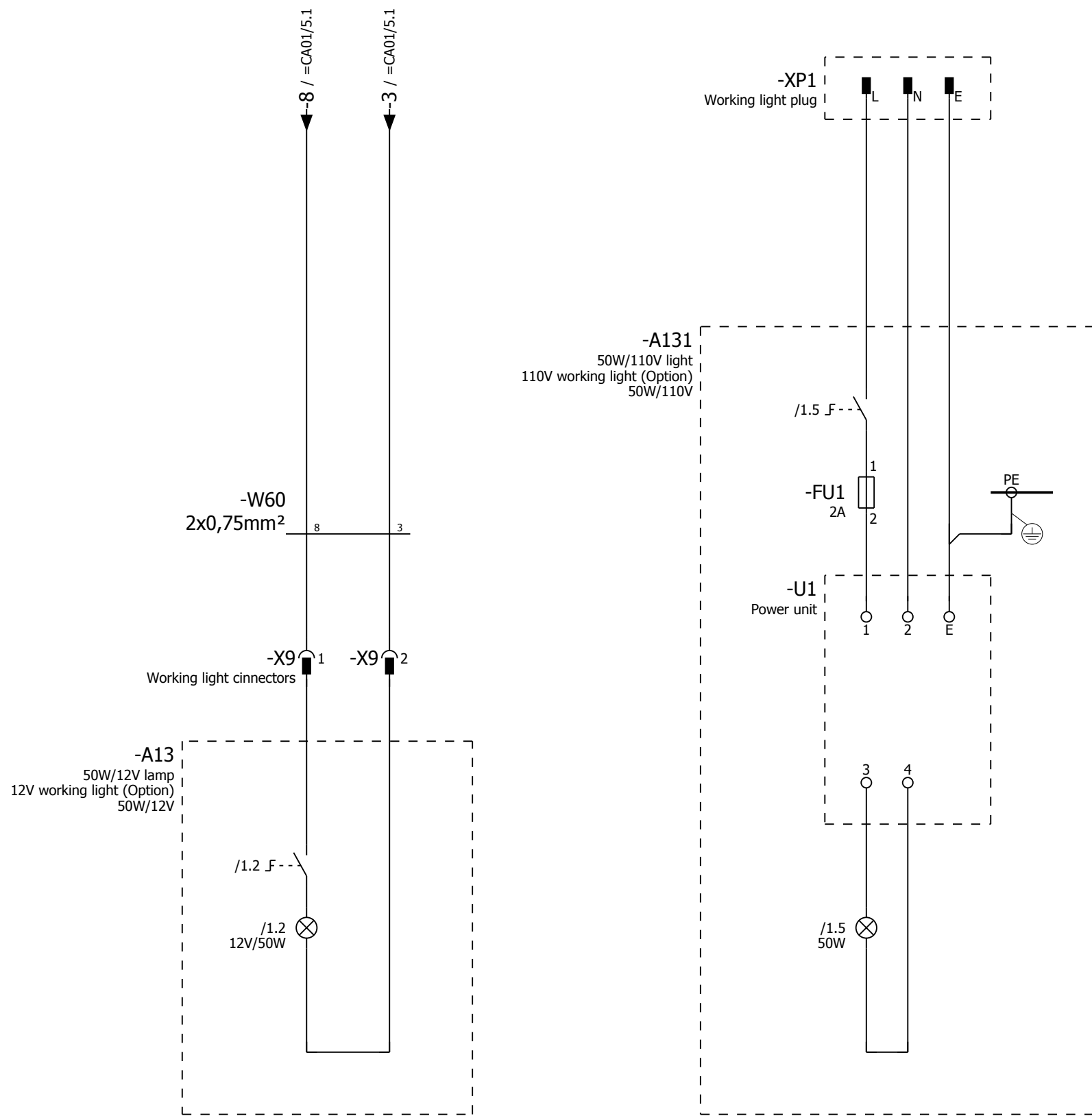
=CA07/1				=CA04/1			
Date	2011/11/8	ACER GROUP		Operating panel		= CA02	
Ed.		SUPRA-618II ASD surface grinder				+	
Appr		Replaced by	Replaced by			Page	1
Modification	Date	Name	Original			Page	35



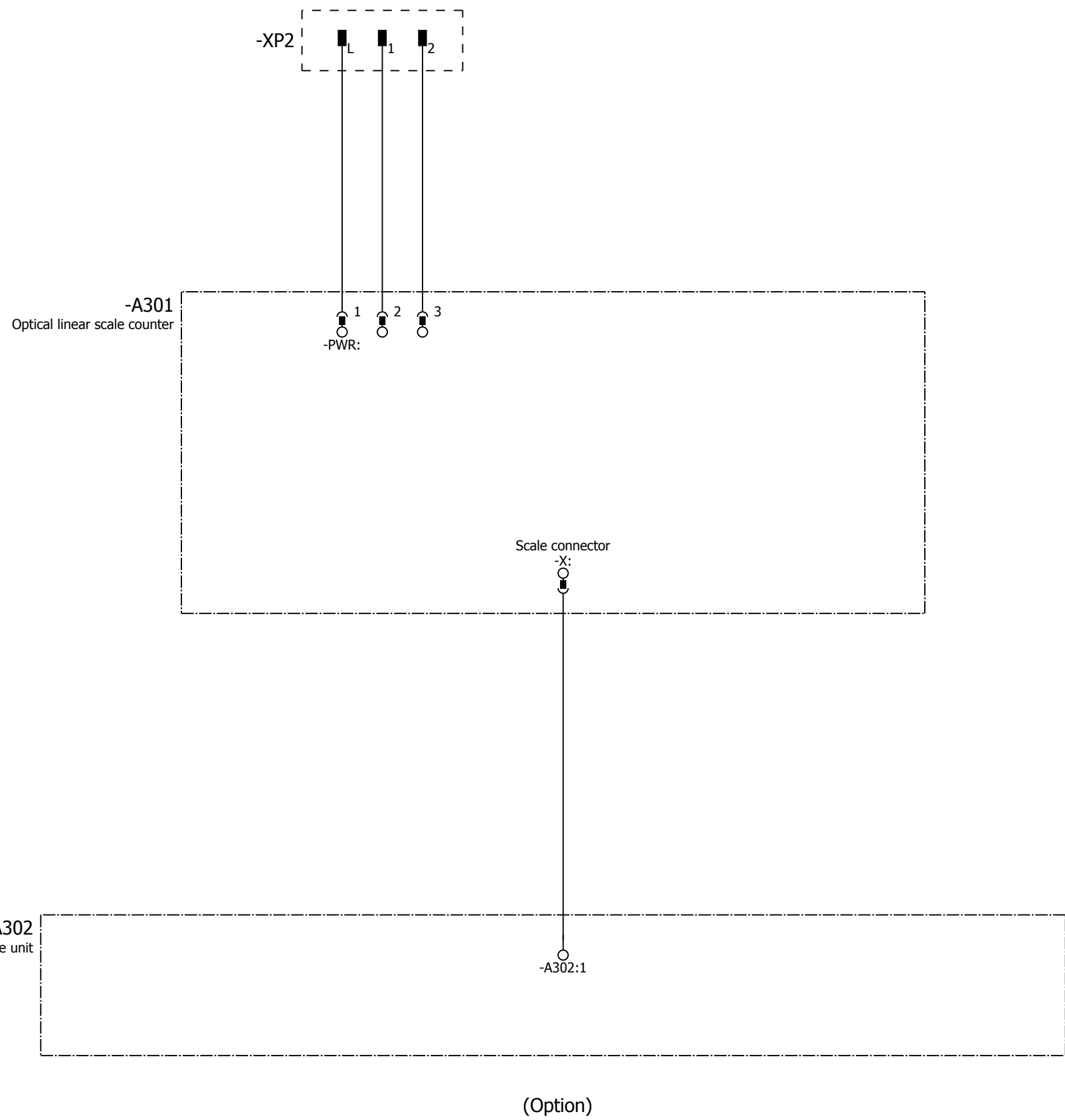
=CA02/1

=CA03/1

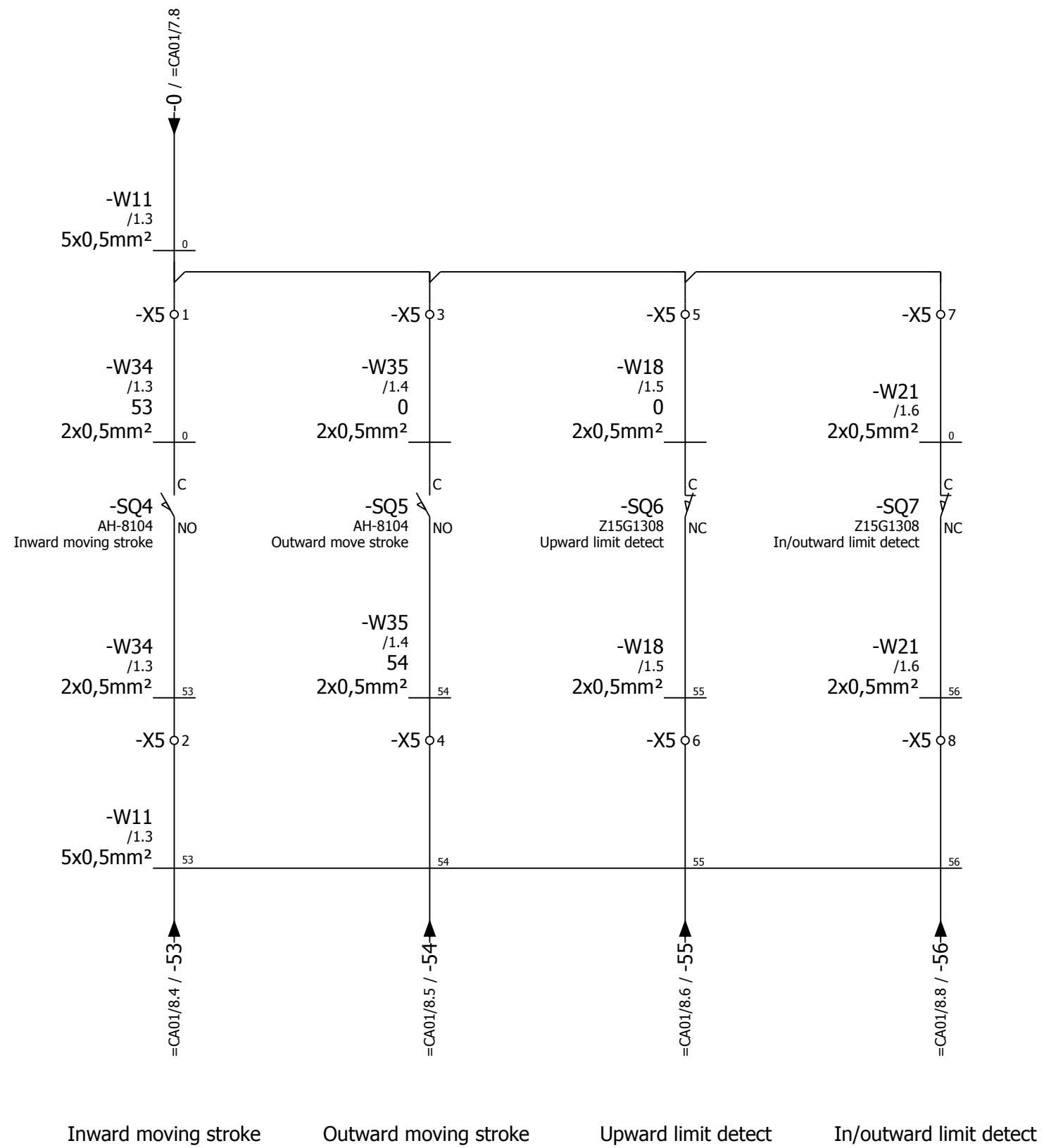
			Date	2011/11/8	ACER GROUP	Left/rightward switching switches	= CA04	Page 1
			Ed.					
Modification	Date	Name	Original		Replaced by	Replaced by		



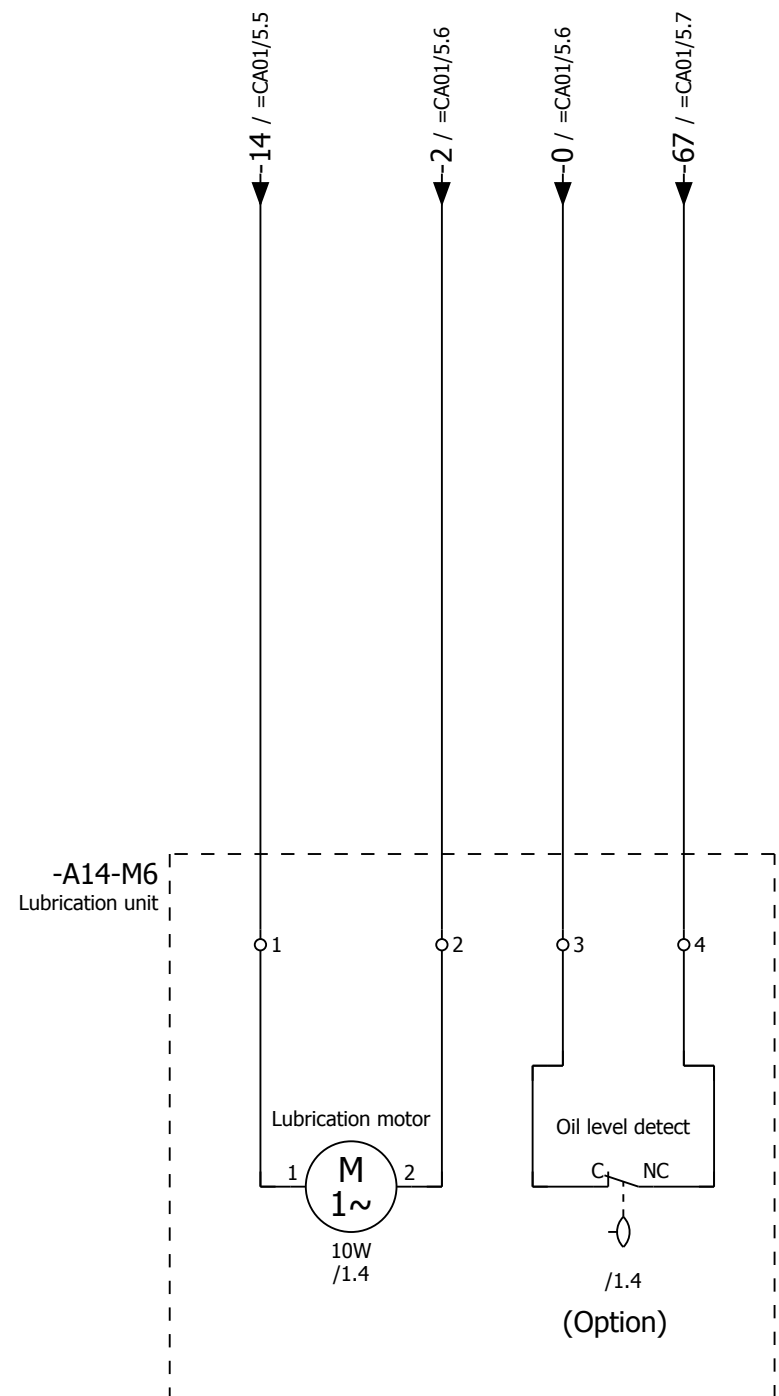
			Date	2011/11/8	ACER GROUP	Working lamp	= CA03	+	Page	1
			Ed.						Page	35
Modification	Date	Name	Original		Replaced by	Replaced by				
					SUPRA-618II ASD surface grinder					



			Date	2011/11/8	ACER GROUP	Optical linear scale unit	= CA03	Page 2
			Ed.					
Modification	Date	Name	Original		Replaced by			



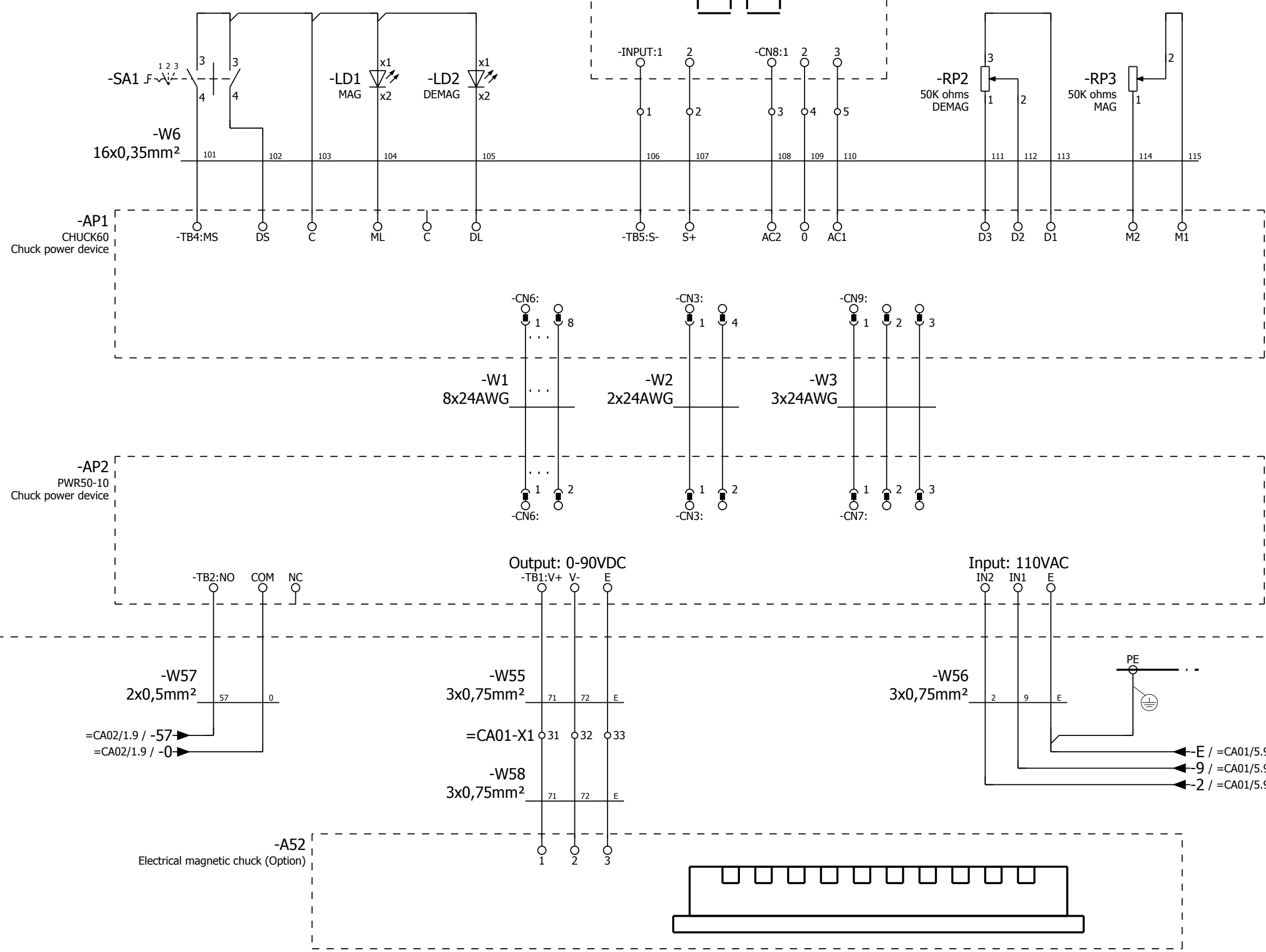
			Date	2011/11/8	ACER GROUP	In, out & top limit switches	= CA04.1	+	Page 1
			Ed.						
			Appr						
Modification	Date	Name	Original	Replaced by	Replaced by				Page 35



			Date	2011/11/8	ACER GROUP	Slide guide lubrication unit	= CA09	Page 1
			Ed.					
Modification	Date	Name	Original		Replaced by	Replaced by		

-A51-AP4
CMR-5C
Chuck controller (Option)

-AP3
DVM1
Display device



=CA09/1

=CA20/1

Date	2011/11/8	ACER GROUP	Chuck control unit (Option)	= CA10
Ed.				+
Appr		SUPRA-618II ASD surface grinder		Page 1
Modification	Date	Name	Original	Replaced by
				Replaced by

Table of alert messages and troubleshooting

Alert message	Definition	Troubleshooting methods
E-StoP	Emergency stop	Release or check the emergency stop button.
oL-S	Overload of the grinding wheel motor	Contact the technical service personnel.
oL-H	Overload of the hydraulic pump motor	
oL-c	Overload of the coolant pump motor	
oL-d	Overload of the vacuum motor	
oL-F	Overload of the cross-feed motor	
oL-U	Alarm of the elevating driver	
LS-i	The saddle traveled over the inward or outward limit.	
LS-U	The grinding wheel ascended over the upper limit.	Contact the technical service personnel.
E-01	The starting position is lower than the 1 st reference point.	<ol style="list-style-type: none"> 1. Raise high the starting position. 2. Clear the 1st reference point.
E-02	The 1 st reference point is higher than the 2 nd reference point.	Reset the reference points.
E-04	The electrical chuck lost its power or fault as the table in automatic motion.	<ol style="list-style-type: none"> 1. Check the connection box of magnetic chuck. 2. Contact the technical service personnel.
E-09	The throttle is off as the saddle in automatic motion.	<ol style="list-style-type: none"> 1. Chose the cross feed direction again after the throttle on for continually. 2. Check the safety limit of the throttle.