


Customer:

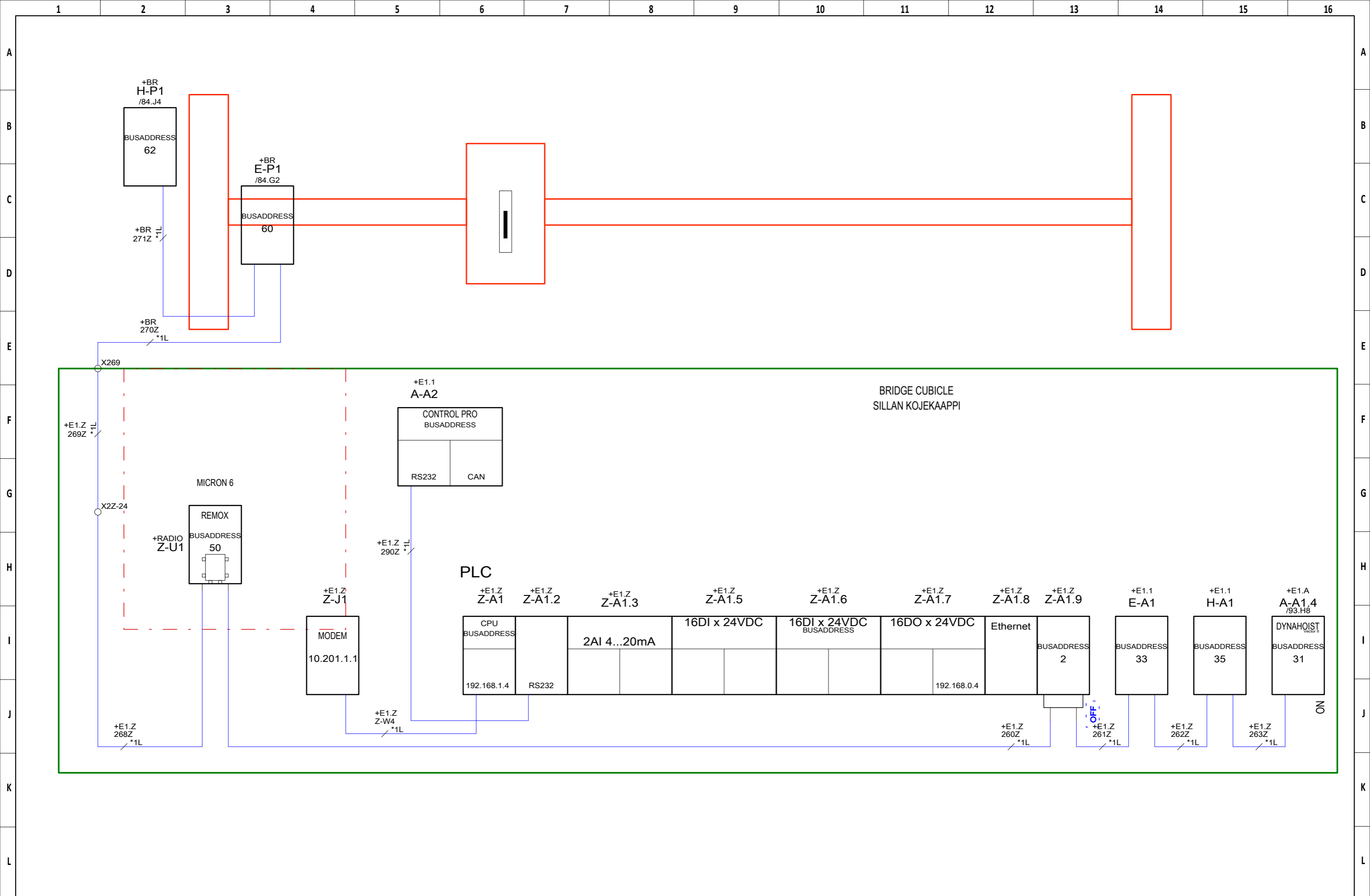
Project:ECM Sample Project CK17017 Overhead Smart Crane

Order Number:

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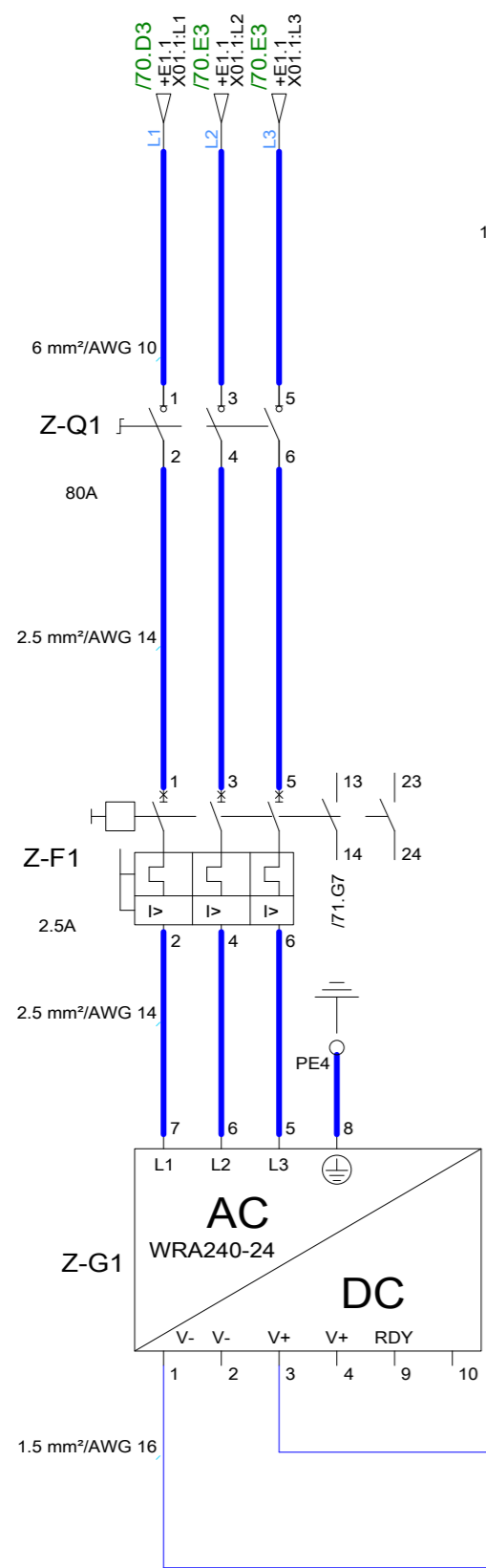
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		ETTSXU		PINION SPINDLE				02105726140070			
		ETTSXU		PIN SET							PETROLEUM 1
PINION	LOAD BALANCER	BRAKE HUB	END STOP	PINION SHAFT		PINION GEAR WHEEL	PILLAR	PIN			110 PHOTOCELL



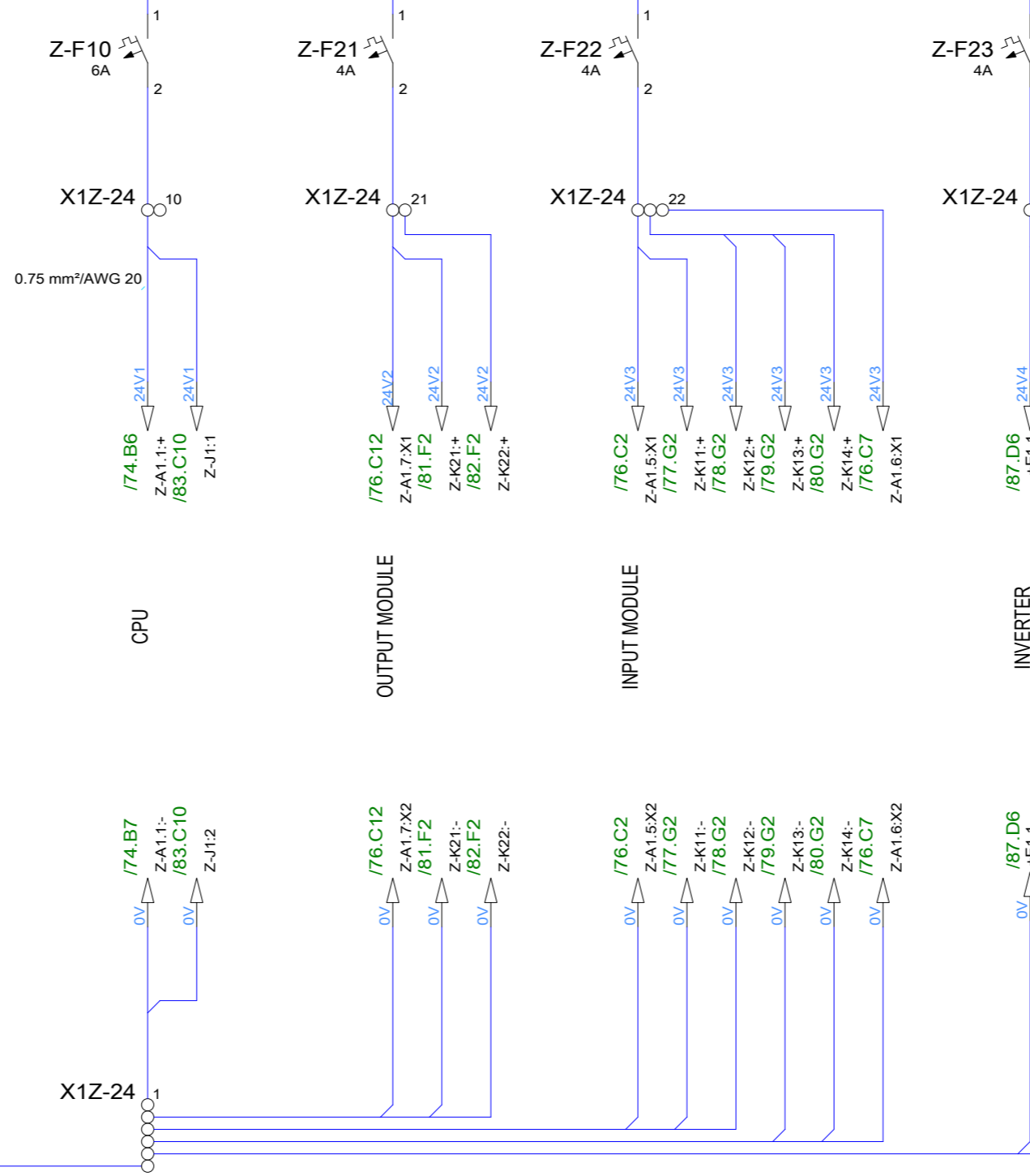
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		ETTSKU	Approver Name	CAN VÄYLÄ LAY-OUT PIIRUSTUS				02105726140070								
		ETTSKU	Approver Sign													
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:								PETROLEUM69	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	OF 110

24VDC POWER SUPPLY
24VDC VIRRRANSYÖTTÖ

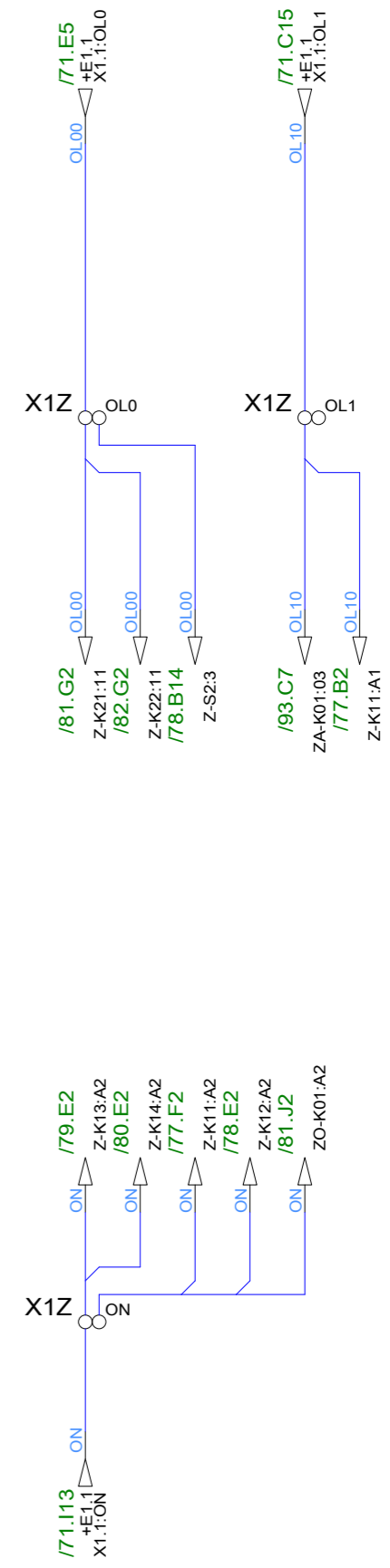
CONTROL VOLTAGE
OHJAUSJÄNNITE



1.5 mm²/AWG 16



LASER DISTANCE SENSOR X2Z-24.V+



ETTSKU	Approver Date
ETTSKU	Approver Name
ETTSKU	Approver Sign
PINION Change	Date Name PINION SHAFT

PLC POWER SUPPLY UNIT
PLC VIRRRANSYÖTTÖPAKETTI

PINION GEAR WHEEL: Replace:

STD
02105726140070

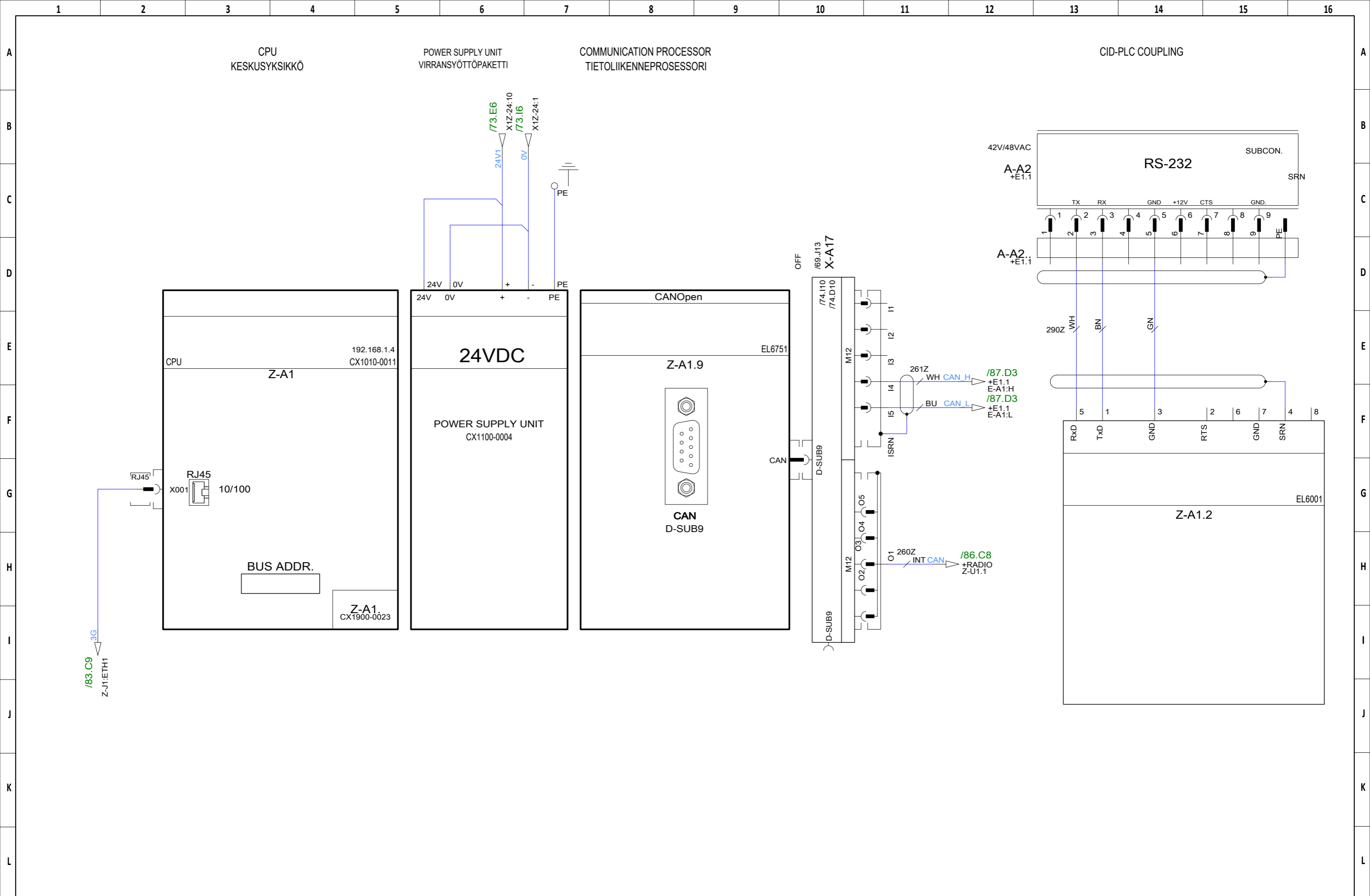
Replace By:



EPRJ0242501

+E1.Z

PETROLEUM:73
OF 110



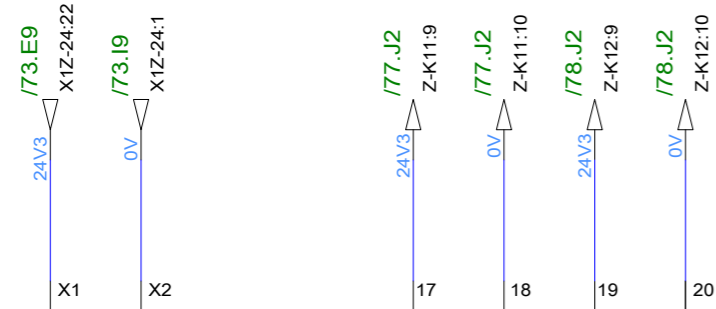
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		ETTSKU	Approver Name	PLC			02105726140070						+E1.Z		
		ETTSKU	Approver Sign	PINION SHAFT			Replace By:						PETROLEUM74		
PINION	Change	Date	Name	PINION GEAR WHEEL:			Replace By:						OF 110		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

FIX:
 REMOVE ANALOG INPUT CARDS AND INCLINOMETER IF NO PLC15,
 PLC16, PLC18 or FC07 = ACT

FIX:
 REMOVE ANALOG INPUT CARDS AND INCLINOMETER IF NO PLC15,
 PLC16, PLC18 or FC07 = ACT

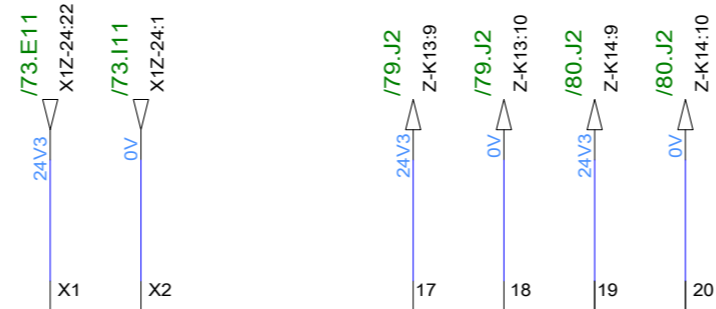
2AI 4...20mA		Z-A1.3		
		EL3052		
<input type="radio"/>	1	AI 001	/85.B3 +E2A XZA:3	Rope angle sensor X-out 4...20mA
<input type="radio"/>	2			
<input type="radio"/>	3			
<input type="radio"/>	4			
<input type="radio"/>	5	AI 002	/85.B4 +E2A XZA:4	Rope angle sensor Y-out 4...20mA
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<input type="radio"/>	7			
<input type="radio"/>	8			

DIGITAL INPUT MODULE
DIGITAALINEN TULOYKSIKKÖ



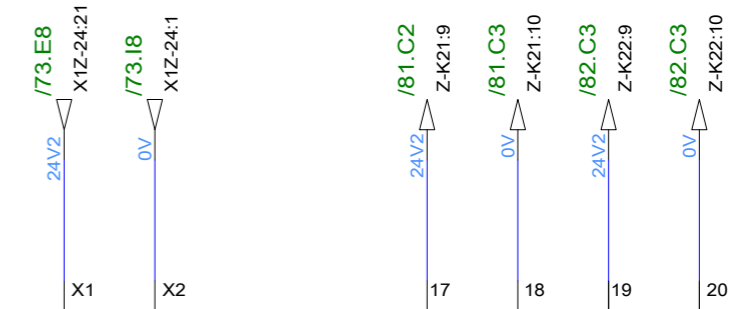
		+24V		0 V		+24V		0 V			
		16DI x 24VDC				Z-A1.5		EL1862			
○ 1	DI 001	/77.J3	Z-K11:1	Main contactor ON 1=O-K1 energized							
○ 2	DI 002	/77.J5	Z-K11:2	Radio safety channel 1 = control active							
○ 3	DI 003	/77.J7	Z-K11:3	Hoist A1 Up limit 0 = Up position							
○ 4	DI 004	/77.J8	Z-K11:4	Hoist A1 Ultimate Lsw 1 = Ok							
○ 5	DI 005	/77.J10	Z-K11:5	Anticollision SD / D1 0 = Slowdown							
○ 6	DI 006	/77.J11	Z-K11:6	Anticollision Stop / D1 0 = Stop							
○ 7	DI 007	/77.J13	Z-K11:7	Anti-collision SD / D2 0 = Slowdown							
○ 8	DI 008	/77.J14	Z-K11:8	Anticollision Stop / D2 0 = Stop							
○ 9	DI 009	/78.J4	Z-K12:1	Trolley Anti-collision SD 0=Slowdown							
○ 10	DI 010	/78.J5	Z-K12:2	Trolley Anticollision St 0 = Stop							
○ 11	DI 011	/78.J7	Z-K12:3	Hoist B1 Up Limit 0 = Up position							
○ 12	DI 012	/78.J8	Z-K12:4	Hoist B1 Ultimate Lsw 1 = Ok							
○ 13	DI 013	/78.J10	Z-K12:5	Hoist A Rope Over Wrapped 0 = Over Wrapped							
○ 14	DI 014	/78.J11	Z-K12:6	Hoist B Rope Over Wrapped 0 = Over Wrapped							
○ 15	DI 015	/78.J13	Z-K12:7	Intermediate load sel 1 1 = not active							
○ 16	DI 016	/78.J15	Z-K12:8	Service mode switch 1 = Active							

DIGITAL INPUT MODULE
DIGITAALINEN TULOYKSIKKÖ

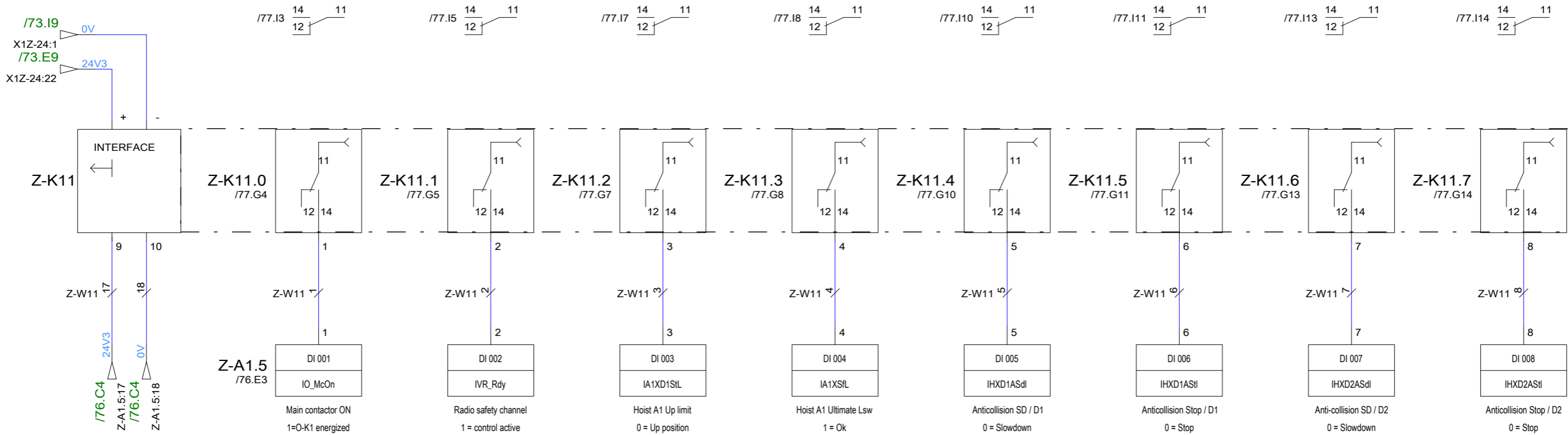
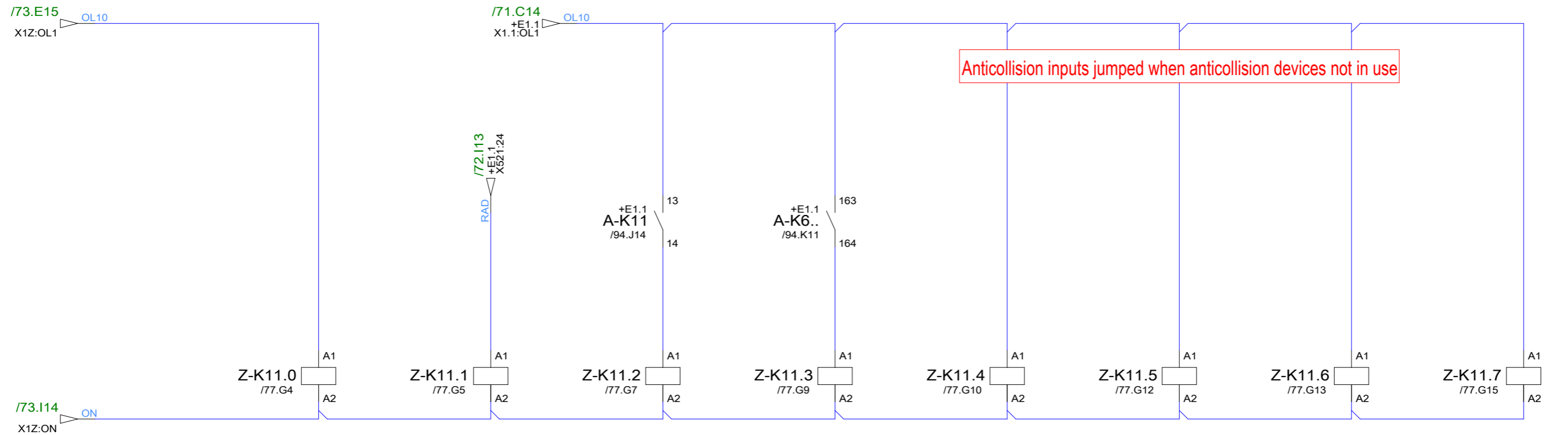


		+24V		0 V		+24V		0 V			
		16DI x 24VDC				Z-A1.6		EL1862			
○ 1	DI 017	/79.J3	Z-K13:1	Hoist direction 1 1 = ON							
○ 2	DI 018	/79.J5	Z-K13:2	Hoist direction 2 1 = ON							
○ 3	DI 019	/79.J7	Z-K13:3	Hoist acceleration 1 = ON							
○ 4	DI 020	/79.J8	Z-K13:4	Trolley direction 1 1 = ON							
○ 5	DI 021	/79.J10	Z-K13:5	Trolley direction 2 1 = ON							
○ 6	DI 022	/79.J11	Z-K13:6	Trolley acceleration 1 = ON							
○ 7	DI 023	/79.J13	Z-K13:7	Bridge direction 1 1 = ON							
○ 8	DI 024	/79.J14	Z-K13:8	Bridge direction 2 1 = ON							
○ 9	DI 025	/80.J4	Z-K14:1	Bridge acceleration 1 = ON							
○ 10	DI 026	/80.J5	Z-K14:2	Machinery 1 1 = Selected							
○ 11	DI 027	/80.J7	Z-K14:3	Machinery 2 2 = Selected							
○ 12	DI 028	/80.J8	Z-K14:4	PENDANT CONTROL 1 = CONNECTED							
○ 13	DI 029	/80.J10	Z-K14:5	Alarm Horn 1 = ON							
○ 14	DI 030	/80.J11	Z-K14:6	Floodlights 1 = ON							
○ 15	DI 031	/80.J13	Z-K14:7	Air conditioner on 1 = ON							
○ 16	DI 032	/80.J15	Z-K14:8	Air conditioner fault 1 = FAULT							

DIGITAL OUTPUT MODULE
DIGITAALINEN LÄHTÖYKSIKKÖ



		+24V		0 V		+24V		0 V			
		16DO x 24VDC				Z-A1.7		EL2872			
○ 1	DO 001	/81.C4	Z-K21:1	Main contactor on 1 = On/Hold							
○ 2	DO 002	/81.C5	Z-K21:2	Horn signal 1 = Signal (O-H2)							
○ 3	DO 003	/81.C7	Z-K21:3	Wireless Powered 1 = Off							
○ 4	DO 004	/81.C8	Z-K21:4	Hoist A dir 1 (Up) 1 = D1 (A-A1:S1)							
○ 5	DO 005	/81.C10	Z-K21:5	Hoist A dir 2 (Down) 1 = D2 (A-A1:S2)							
○ 6	DO 006	/81.C11	Z-K21:6								
○ 7	DO 007	/81.C13	Z-K21:7	Floodlights On/Off toggle 1 = Toggle (T-K01)							
○ 8	DO 008	/81.C15	Z-K21:8	Blue indication light 1 = On (Z-H10)							
○ 9	DO 009	/82.C4	Z-K22:1	White indication light 1 = On (Z-H10)							
○ 10	DO 010	/82.C5	Z-K22:2	Yellow indication light 1 = On							
○ 11	DO 011	/82.C8	Z-K22:3	Hoist B dir 1 (Up) 1 = D1 (B-A1:S1)							
○ 12	DO 012	/82.C10	Z-K22:4	Hoist B dir 2 (Down) 1 = D2 (B-A1:S2)							
○ 13	DO 013	/82.C11	Z-K22:5								
○ 14	DO 014	/82.C12	Z-K22:6	Hoist A/B MF1 1 = Active							
○ 15	DO 015	/82.C13	Z-K22:7	Hoist A/B MF2 1 = Active							
○ 16	DO 016	/82.C15	Z-K22:8								



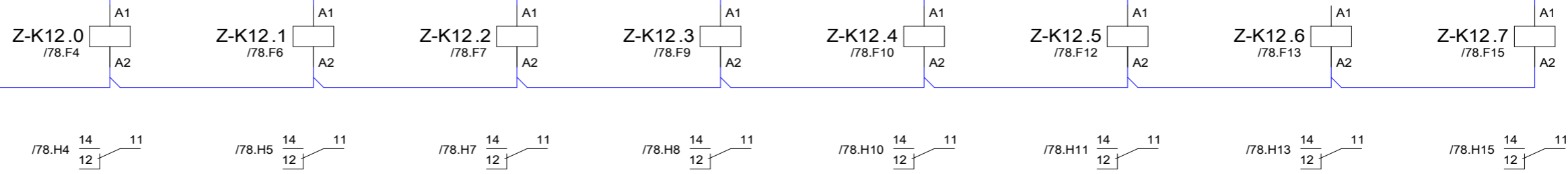
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		ETTSKU	Approver Name					PETROLEUM77 OF 110							
		ETTSKU	Approver Sign												
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:								

/71.C14
+E1.1
X1.1:OL1

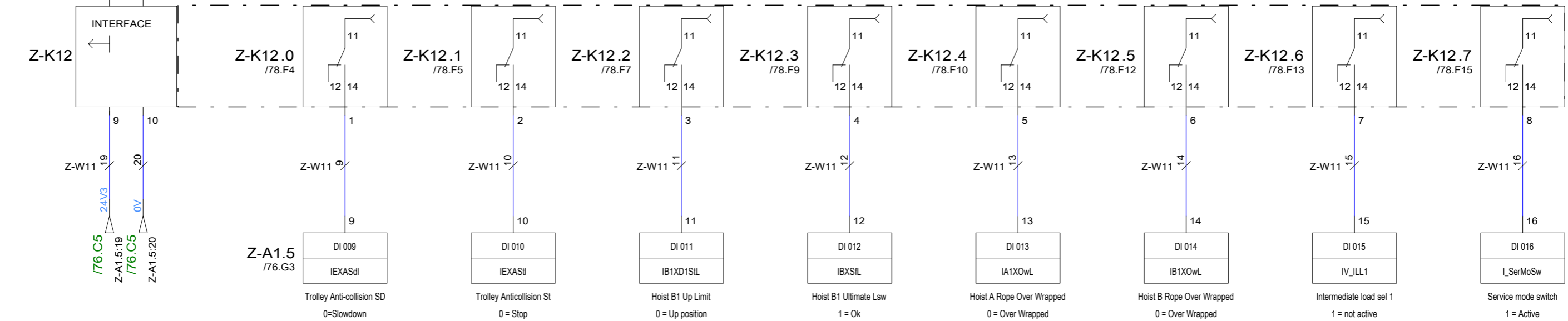
Overwrap-input jumped if device not in use

/73.E14
X12:OL0

/73.I14
X12:ON

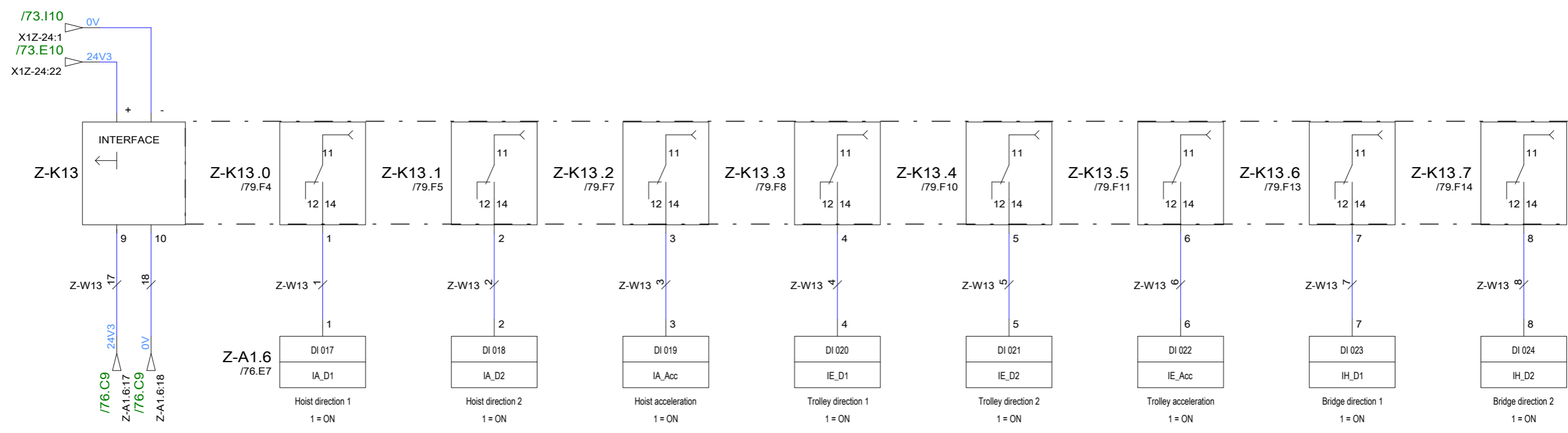
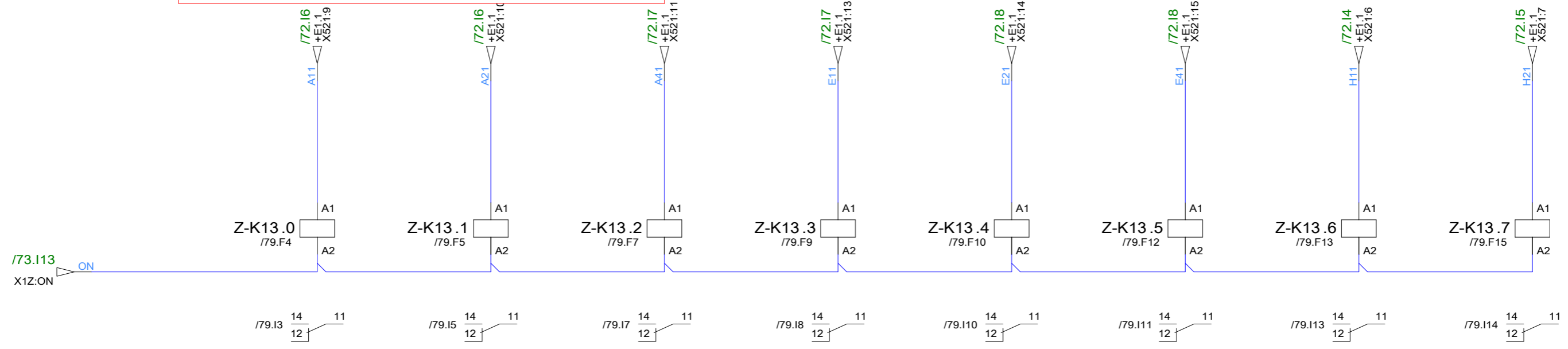


/73.I10
X12-24:1
/73.E10
X12-24:22



ETTSKU		Approver Date		PLC DIGITAL INPUT				STD		ECM INDUSTRIAL		EPRJ0242501			
ETTSKU		Approver Name		PLC DIG.TULO				02105726140070							
ETTSKU		Approver Sign													
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:							PETROLEUM78	OF 110

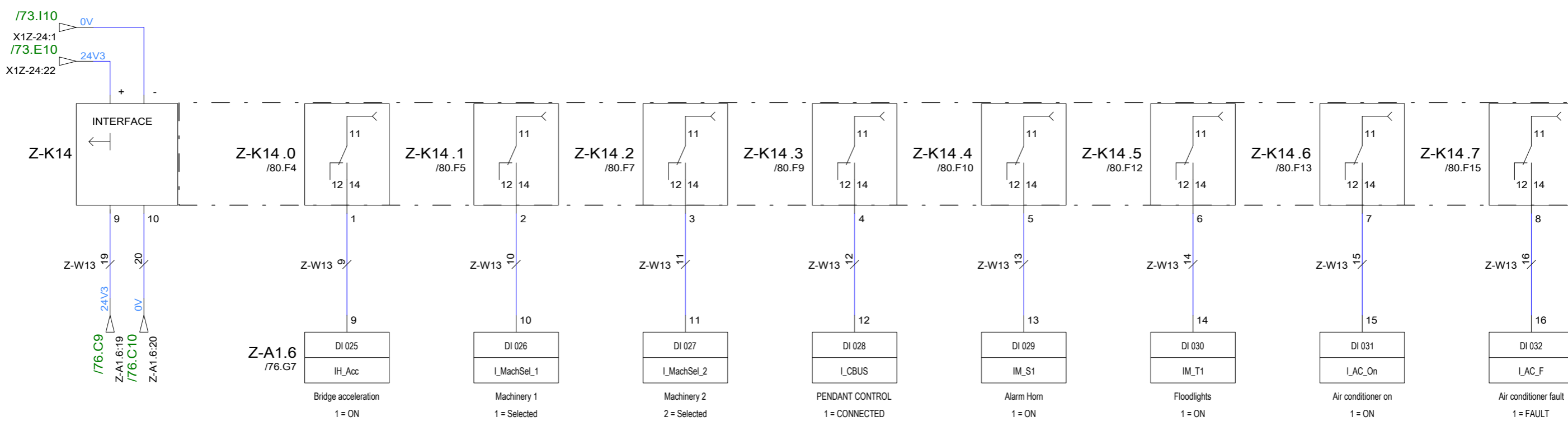
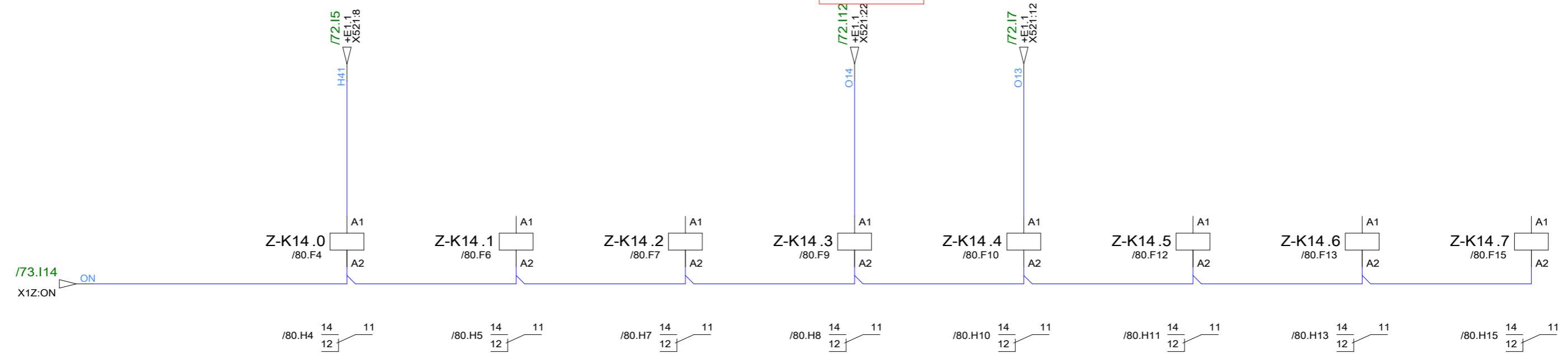
REMOVE Z-K13,Z-K14 and Z-A1.4 if no pendant control
 IF PENDANT CONTROL ADD CONNECTIONS TO CONTROLPLUG



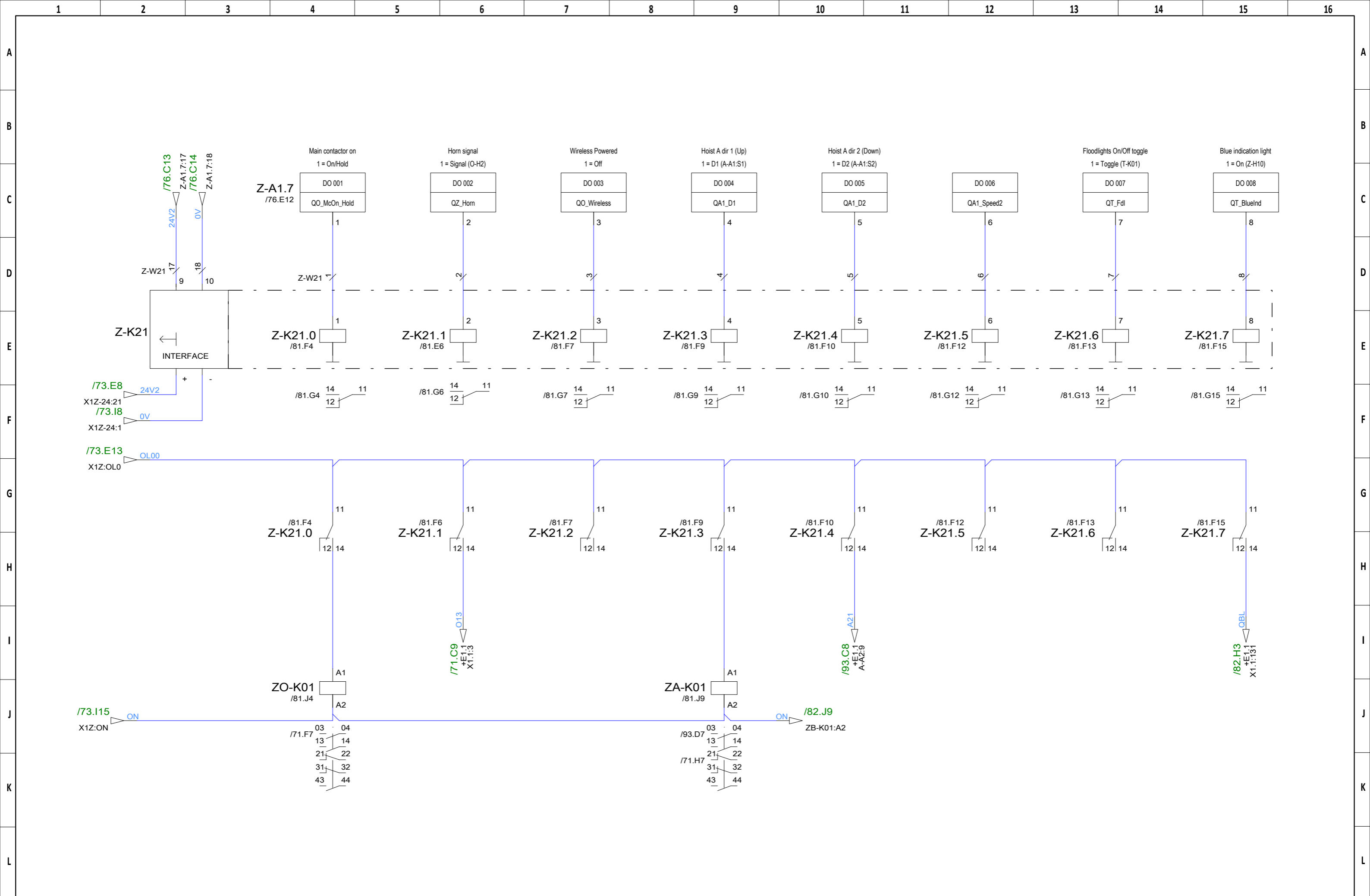
PINION		Change		ETTSKU	ETTSKU	ETTSKU	Approver Date	Approver Name	Approver Sign	PLC DIGITAL INPUT PLC DIG.TULO		STD 02105726140070		ECM INDUSTRIAL		EPRJ0242501		+E1.Z		PETROLEUM:79 OF 110	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

REMOVE Z-K13,Z-K14 and Z-A1.4 if no pendant control

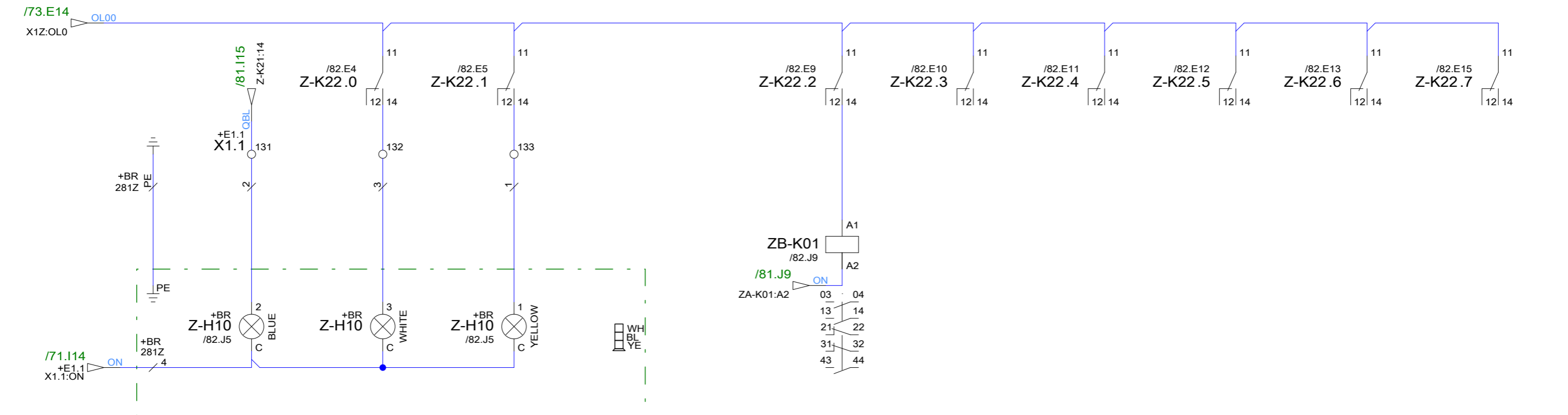
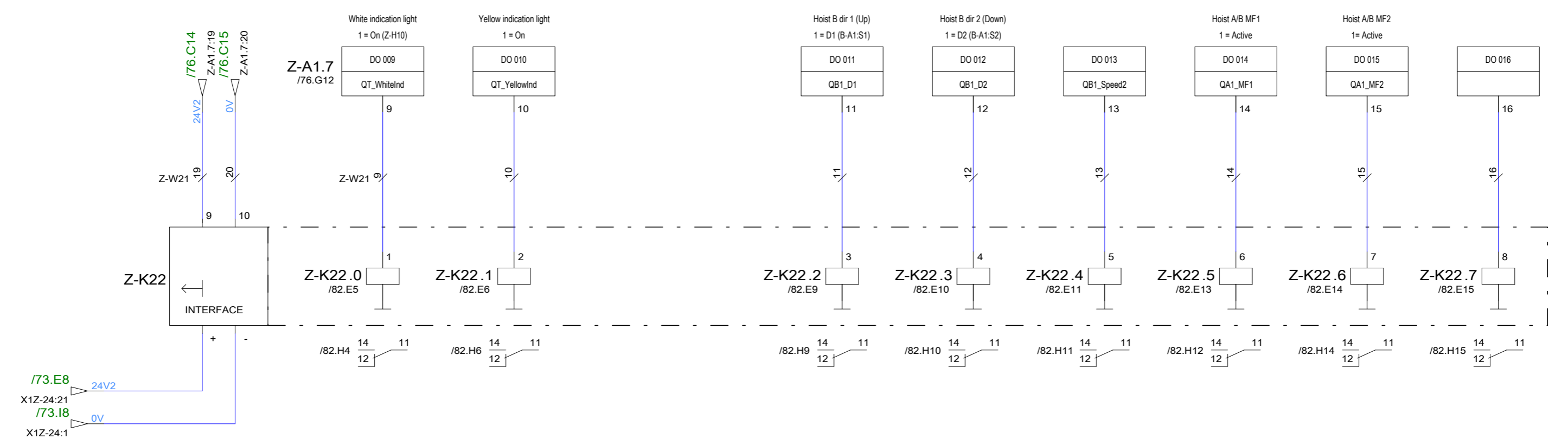
ADD JUMPER TO PENDANT



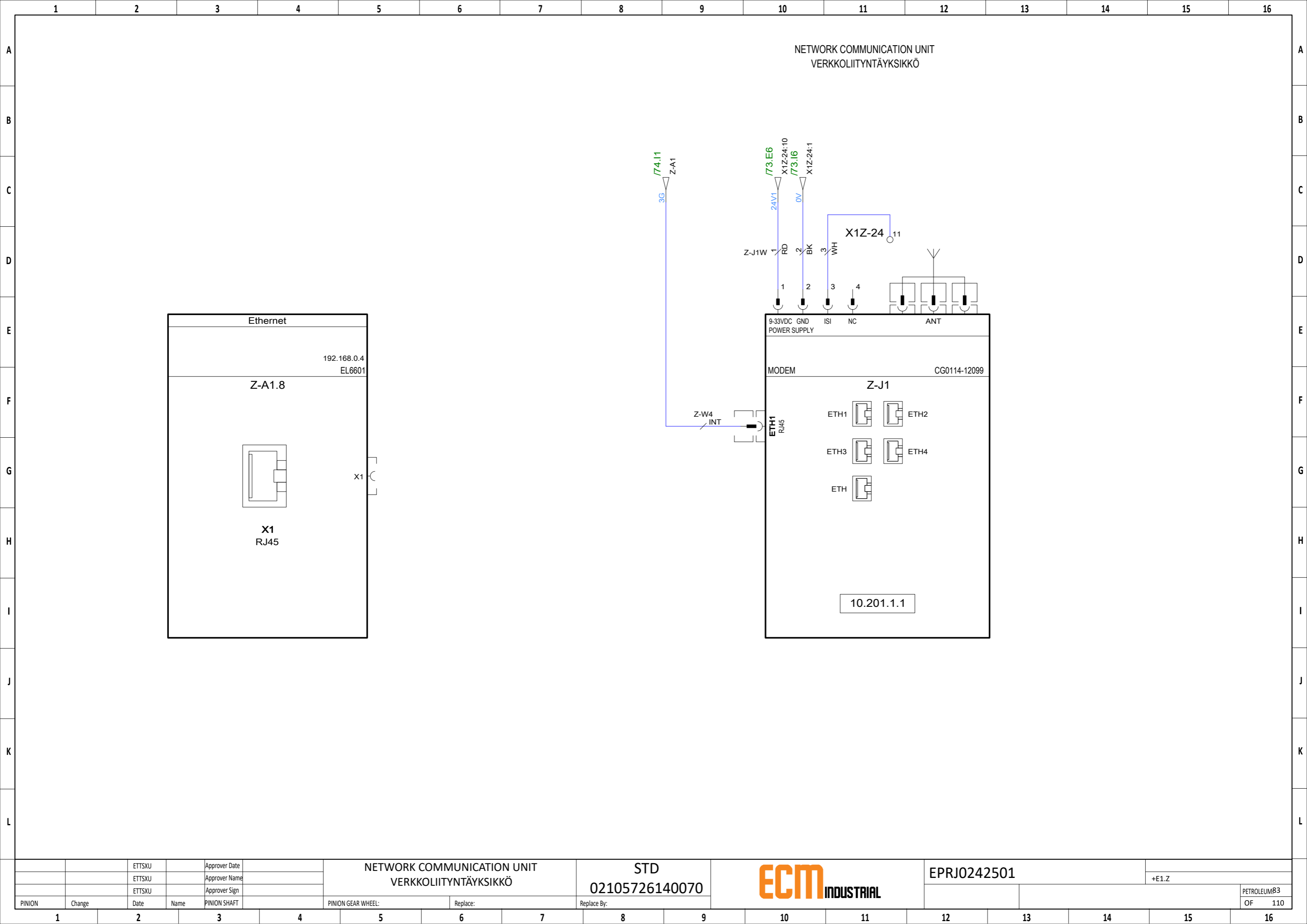
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ETTSKU		Approver Name		PLC DIG.TULO				02105726140070							
ETTSKU		Approver Sign													
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:								PETROLEUM80
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16



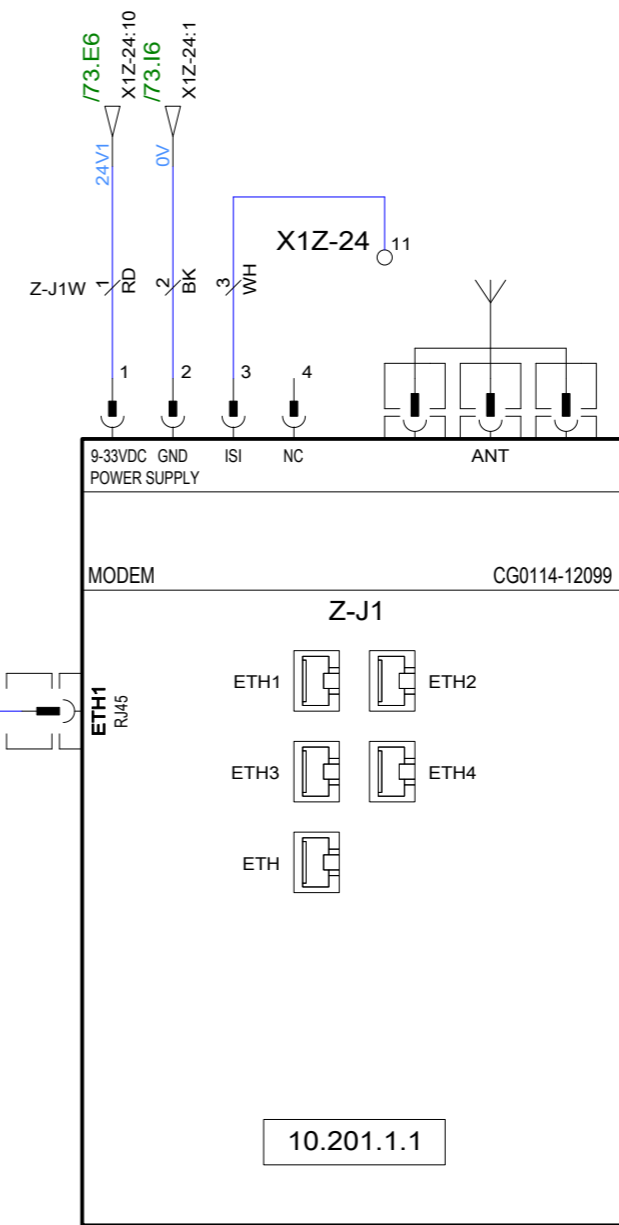
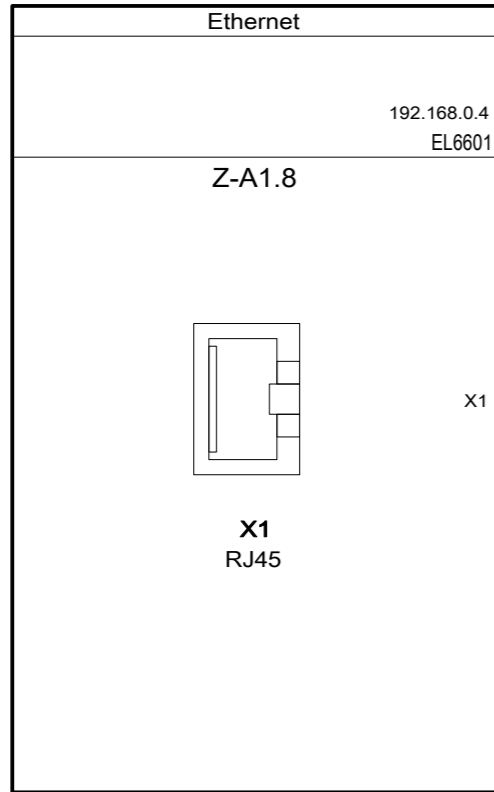
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		ETTSKU	Approver Name	PLC DIGITAALINEN LÄHTÖYKSIKKÖ				02105726140070							
		ETTSKU	Approver Sign												
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:		Replace:	Replace By:					PETROLEUM81		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
													OF	110	



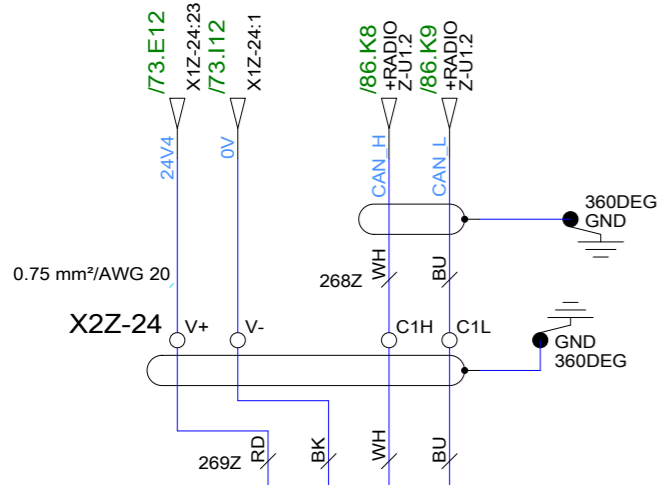
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ETTSKU		Approver Name		PLC DIGITAALINEN LÄHTÖYKSIKKÖ				02105726140070		ECM INDUSTRIAL		+E1.Z	
ETTSKU		Approver Sign										PETROLEUM82	
PINION	Change	Date	Name	PINION SHAFT		PINION GEAR WHEEL:	Replace:	Replace By:					OF 110



NETWORK COMMUNICATION UNIT
VERKKOLIITYNTÄYKSIKKÖ

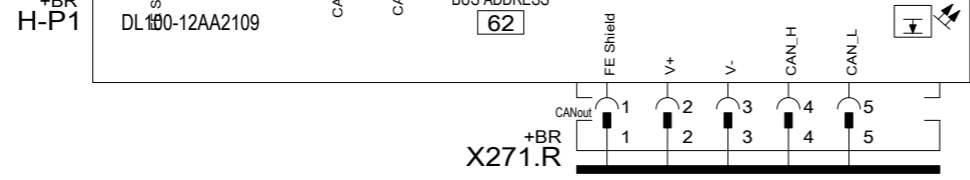
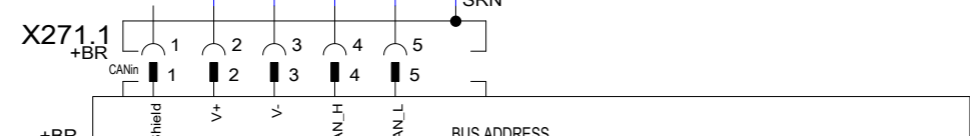
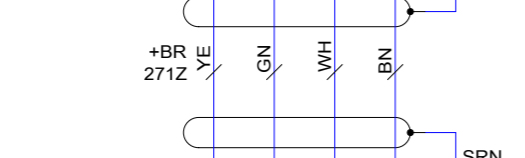
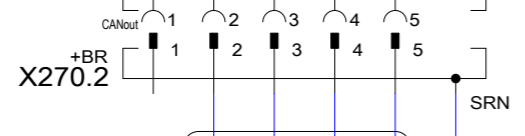
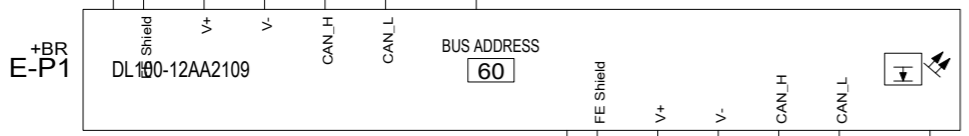
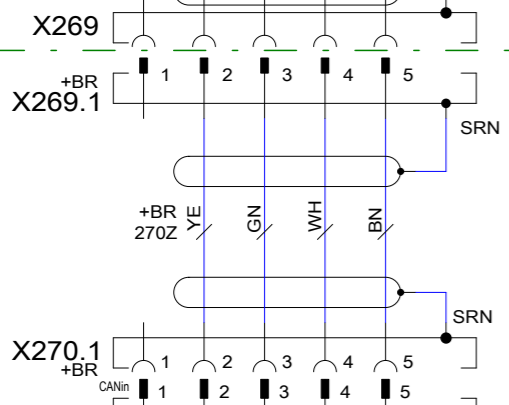


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		ETTSKU	Approver Name											PETROLEUM83	
		ETTSKU	Approver Sign											OF 110	
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:		Replace:	Replace By:							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

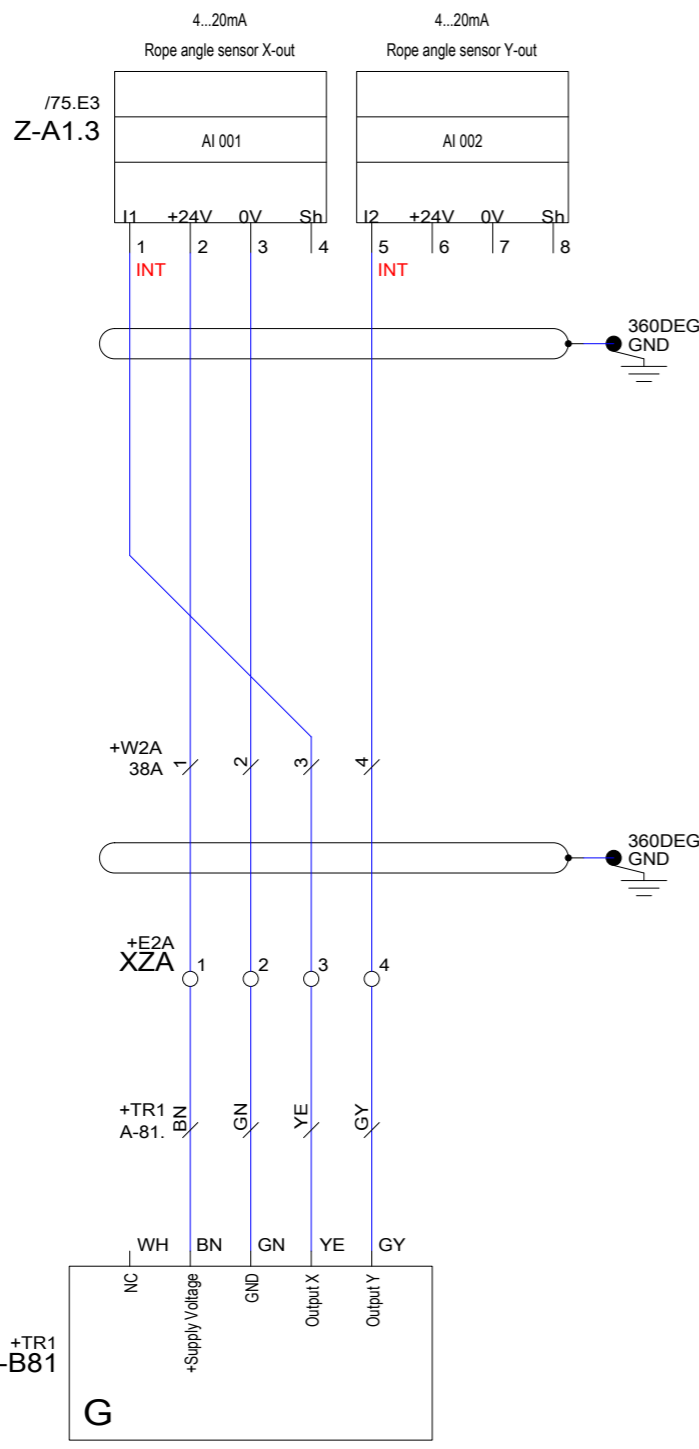


CHANGE cables 267Z / 269Z to entry W2431 if 600mm height cubicle
(W2430 is 5meter long version for KA- and H15 cubicles)
(W2431 is 2 meter long for smaller cubicles)

PLUGS AT BRIDGE PANEL



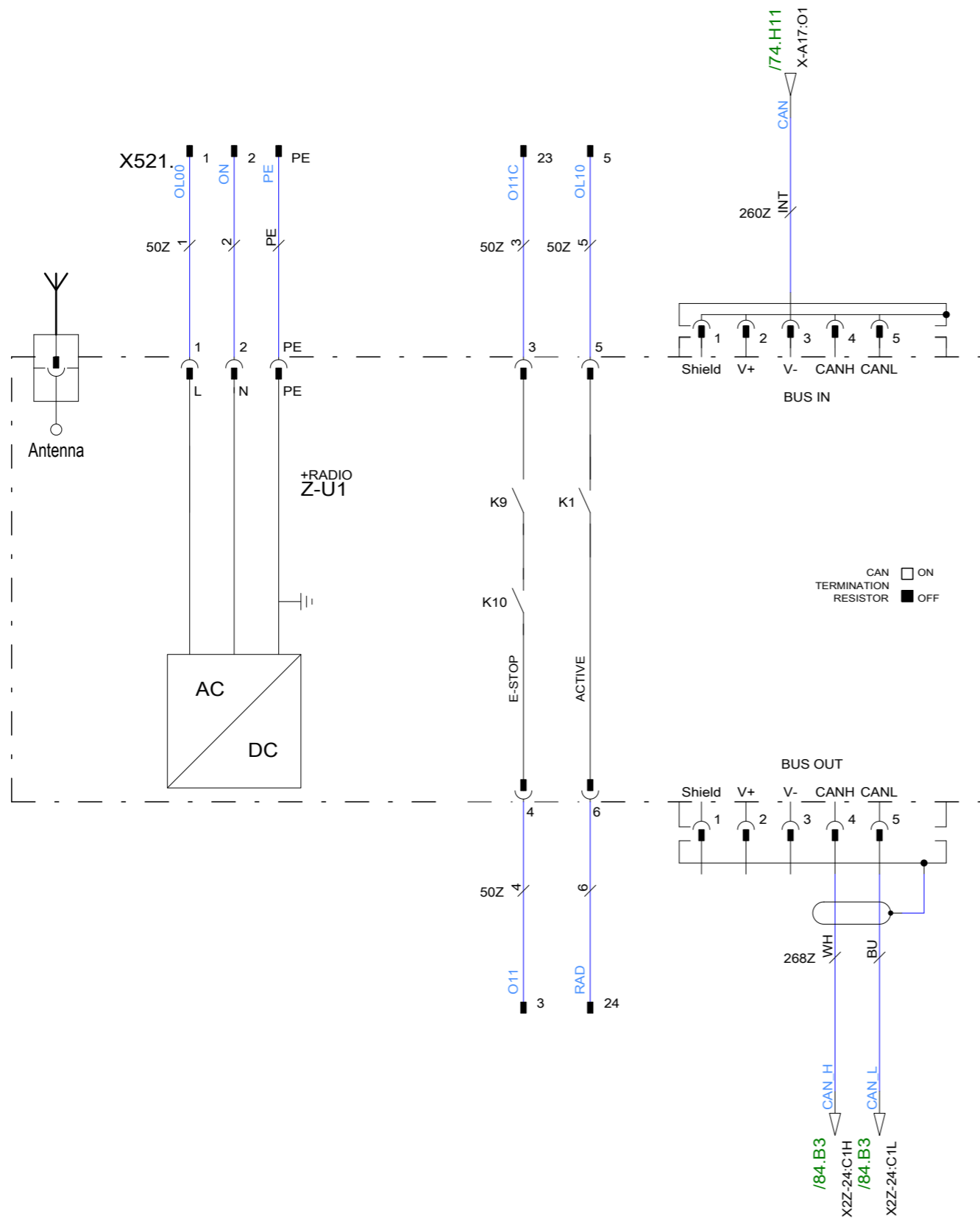
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		ETTSKU	Approver Name	MITTALAITE				02105726140070		+E1.Z					
		ETTSKU	Approver Sign					ECM INDUSTRIAL		PETROLEUM84					
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:					OF	110		
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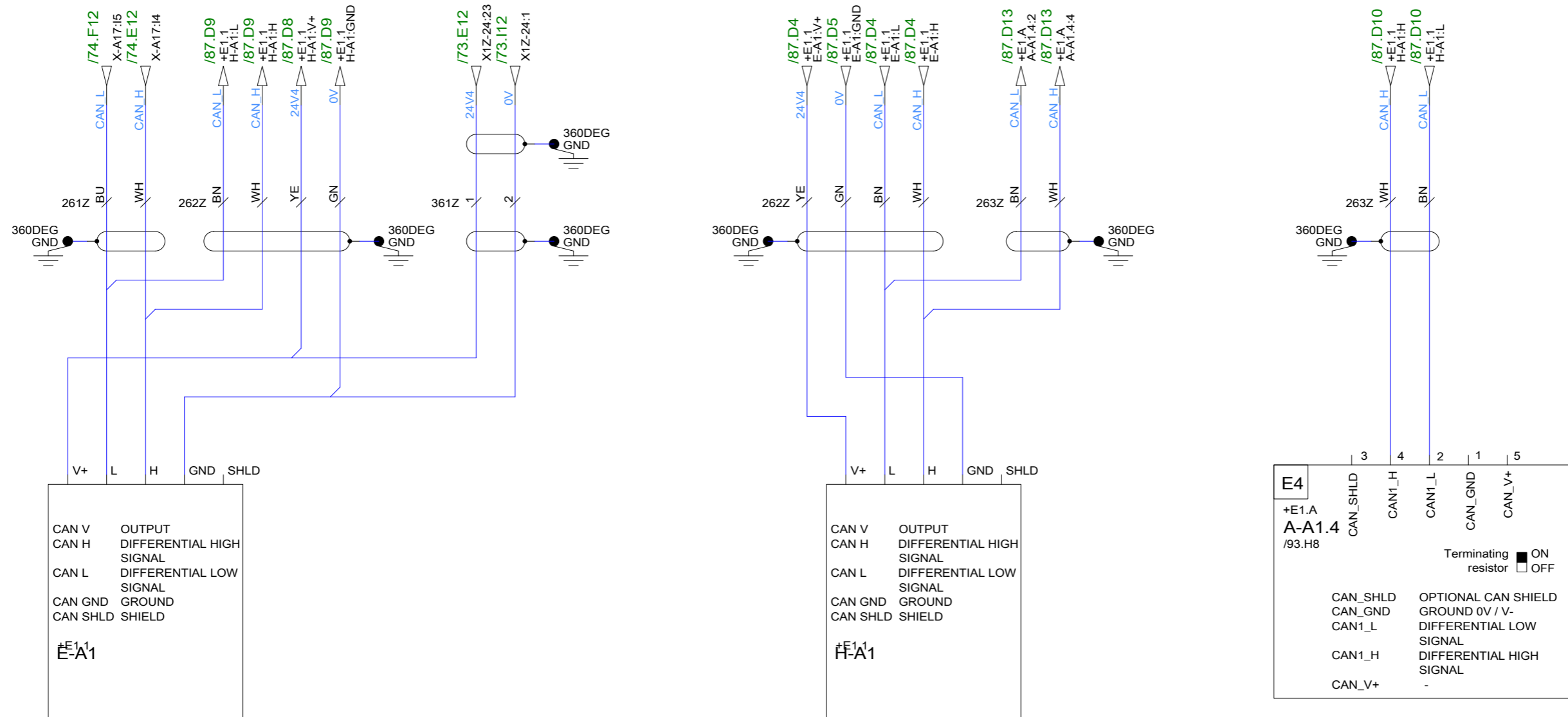
HOIST A INCLINOMETER
NOSTIN A KALTEVUUSMITTARI

FIX:
 REMOVE ANALOG INPUT CARDS AND INCLINOMETER IF NO PLC15,
 PLC16, PLC18 or FC07 = ACT

		ETTSKU	Approver Date	INCLINOMETER KALTEVUUSMITTARI			STD 02105726140070				EPRJ0242501				
		ETTSKU	Approver Name												
		ETTSKU	Approver Sign												
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:							PETROLEUM85	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
													OF 110		



		ETTSKU	Approver Date	RADIO CONTROL SYSTEM				STD		ECM INDUSTRIAL		EPRJ0242501			
		ETTSKU	Approver Name	RADIO-OHJAIN				02105726140070				+E1.Z			
		ETTSKU	Approver Sign									PETROLEUM86			
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:		Replace:	Replace By:			OF 110				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16



ETTSKU	Approver Date
ETTSKU	Approver Name
ETTSKU	Approver Sign
PINION	Change
Date	Name

CAN BUS CONNECTION CAN VÄYLÄ LIITÄNTÄ	
PINION GEAR WHEEL:	Replace:

STD 02105726140070
Replace By:



EPRJ0242501

+E1.Z

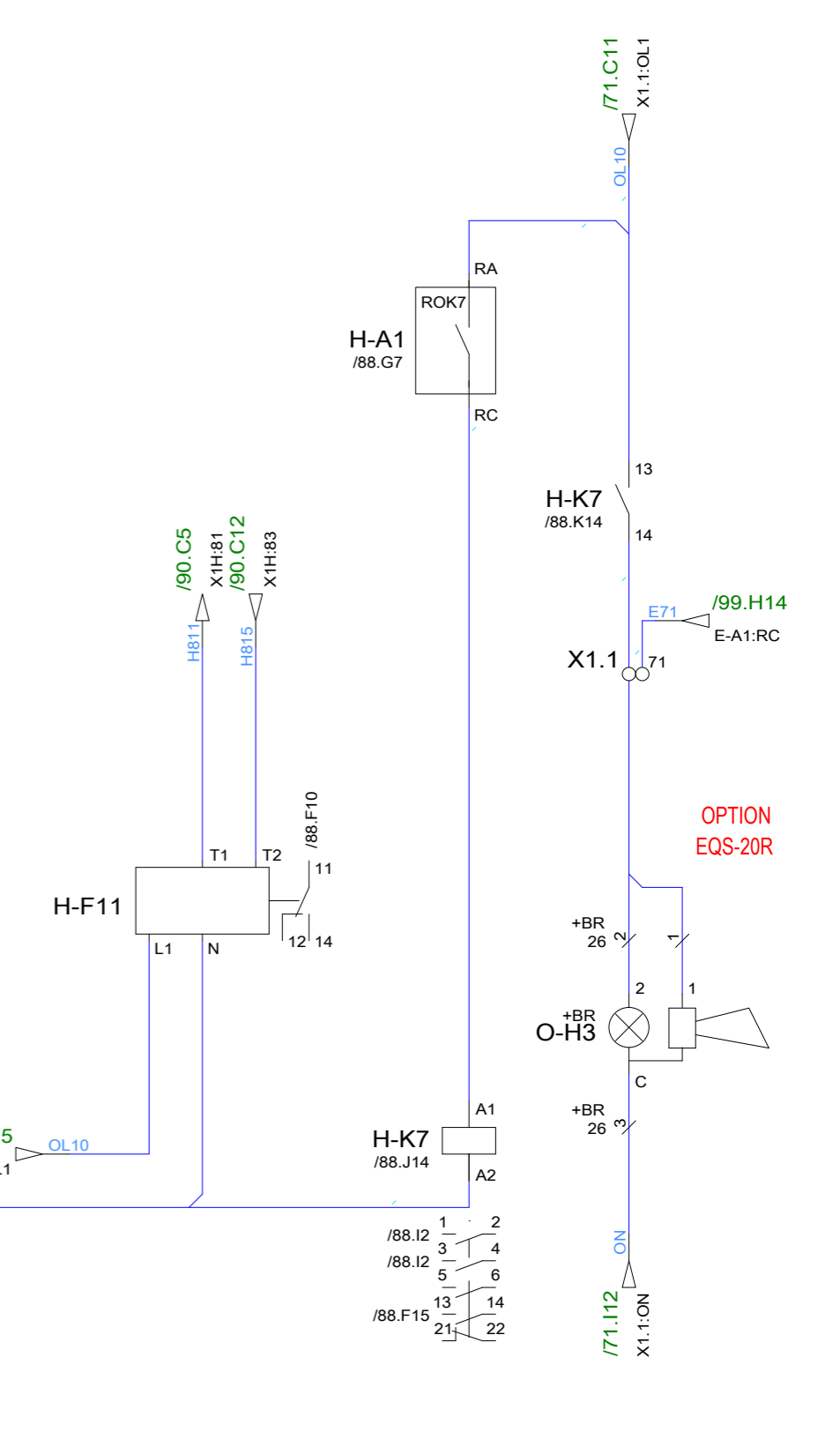
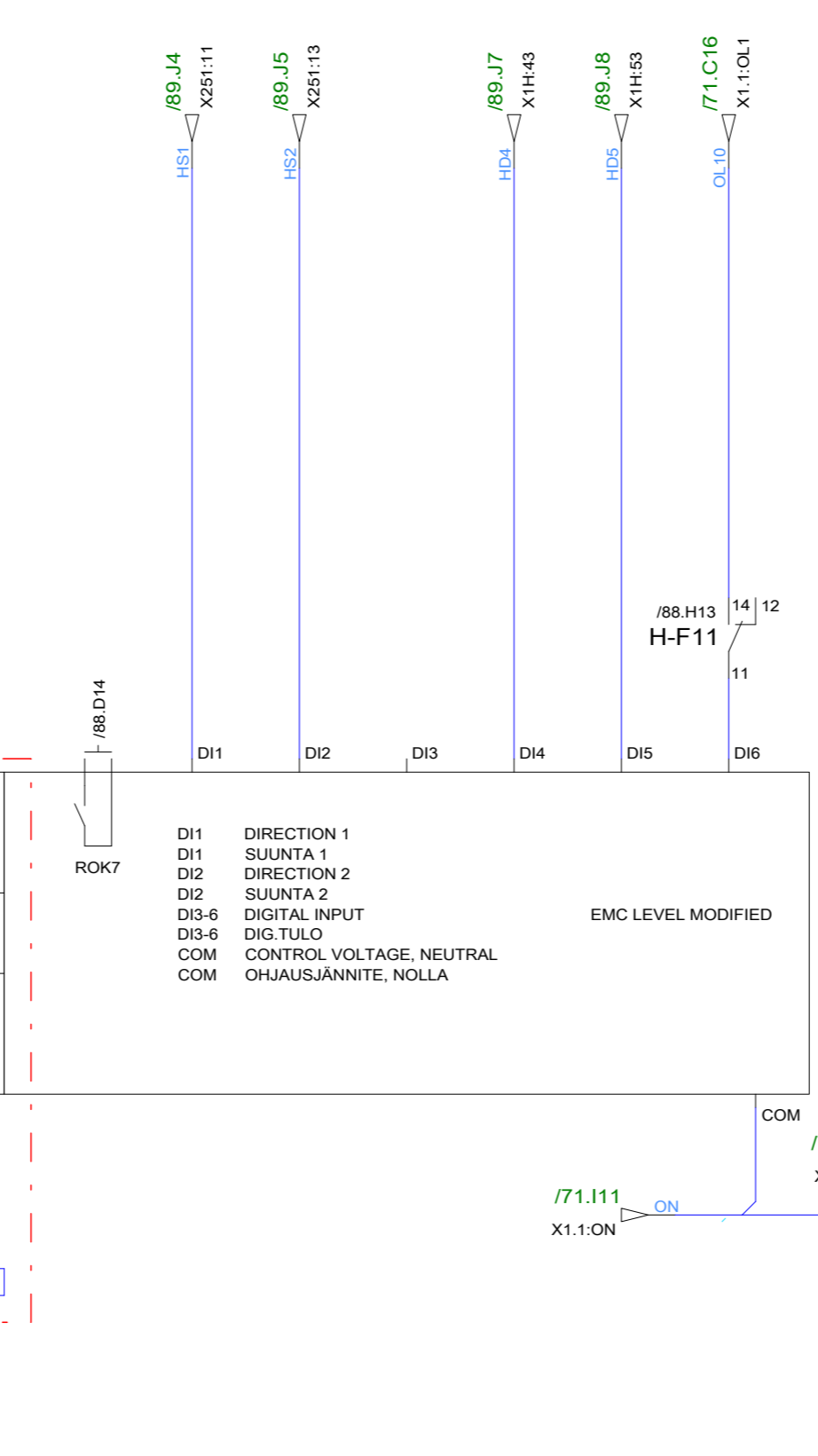
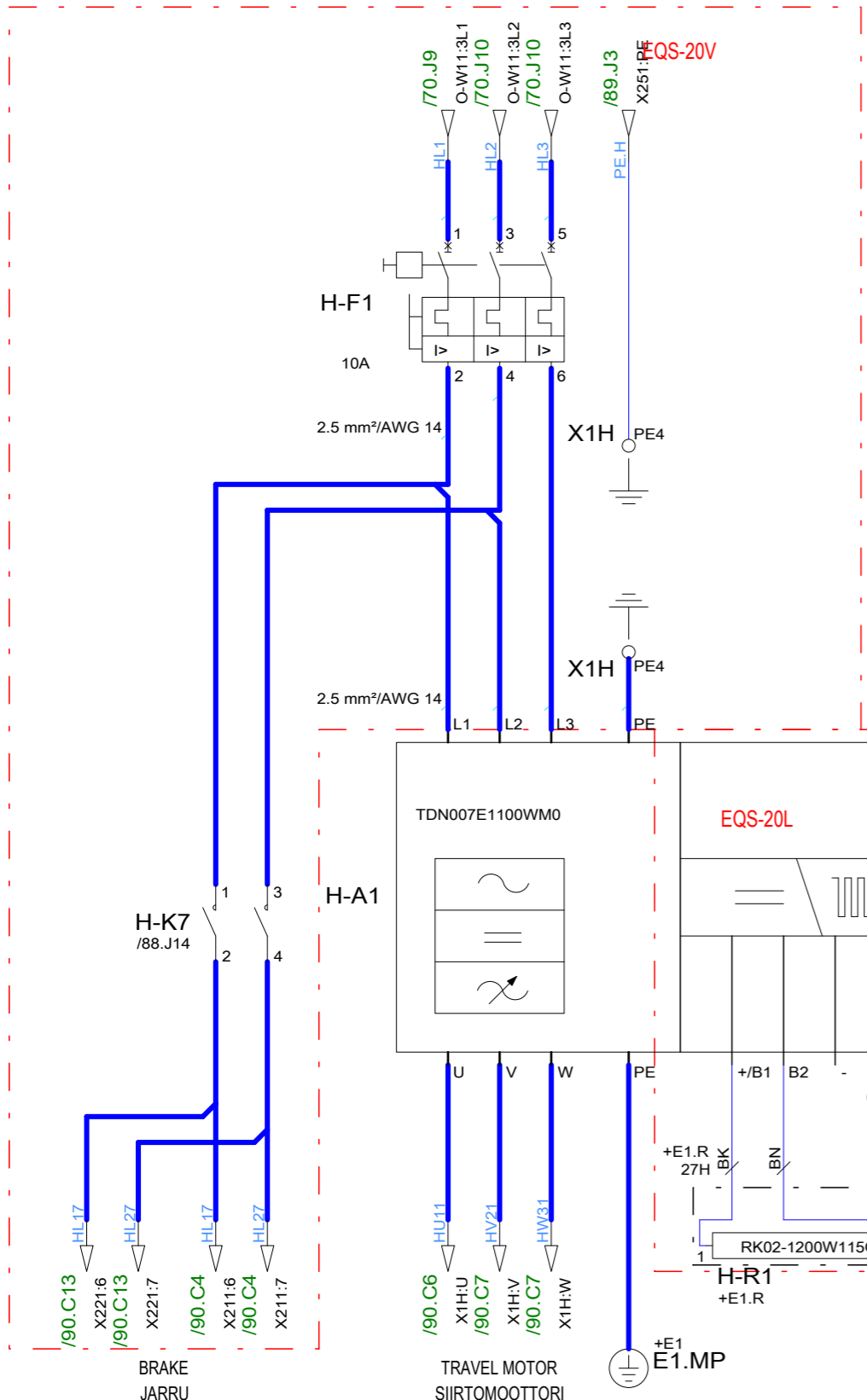
POWER SUPPLY
VIRRANSYÖTÖ

DIRECTION 1
SUUNTA 1

DIRECTION 2
SUUNTA 2

THERMAL PROTECTION
LÄMPÖSUOJAT

THERMISTOR RELAY
TERMISTORIRELE



- DI1 DIRECTION 1
- DI1 SUUNTA 1
- DI2 DIRECTION 2
- DI2 SUUNTA 2
- DI3-6 DIGITAL INPUT
- DI3-6 DIG.TULO
- COM CONTROL VOLTAGE, NEUTRAL
- COM OHJAUSJÄNNITE, NOLLA

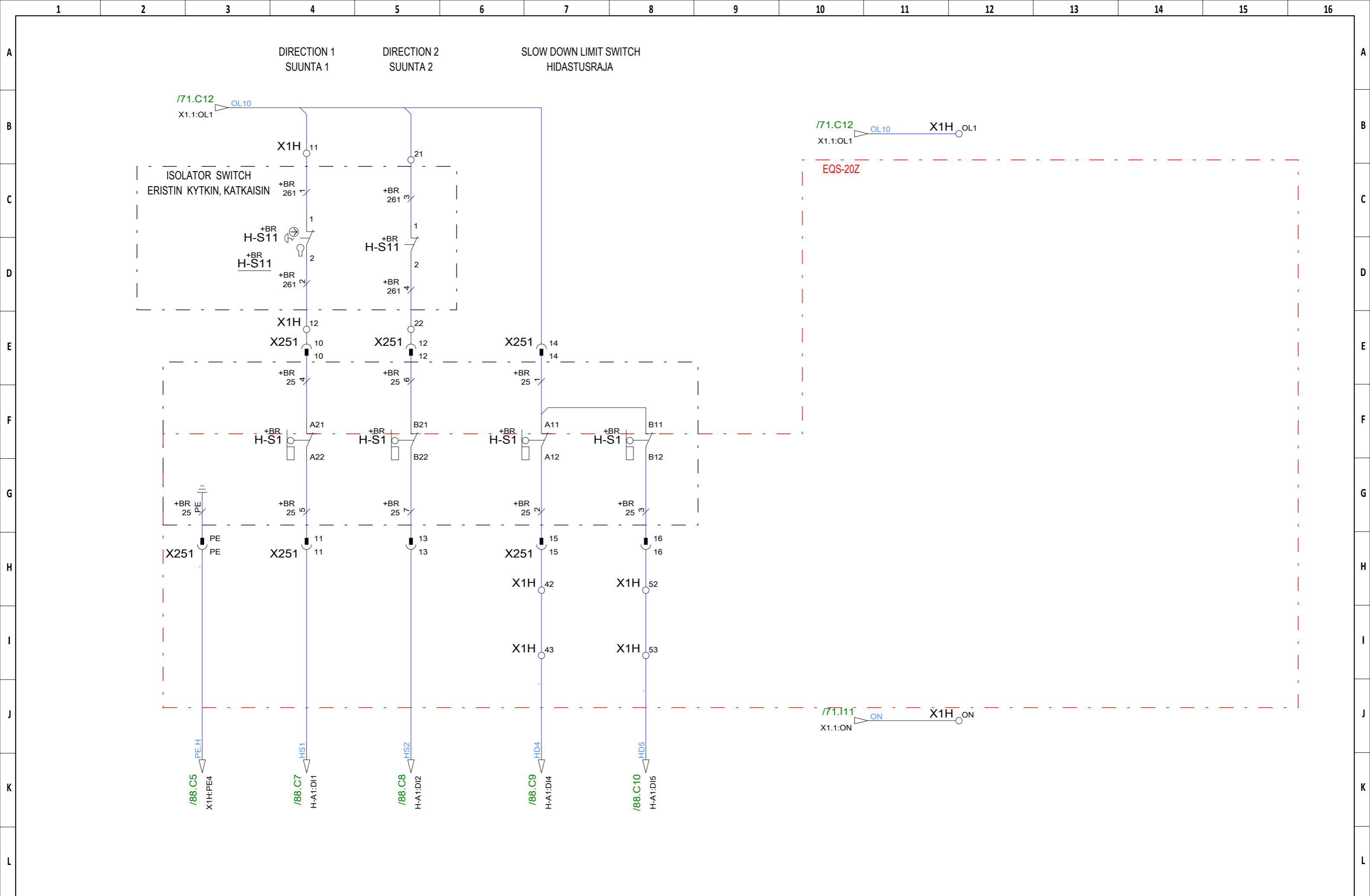


ETTSKU	Approver Date
ETTSKU	Approver Name
ETTSKU	Approver Sign
PINION	Name
Change	PINION SHAFT

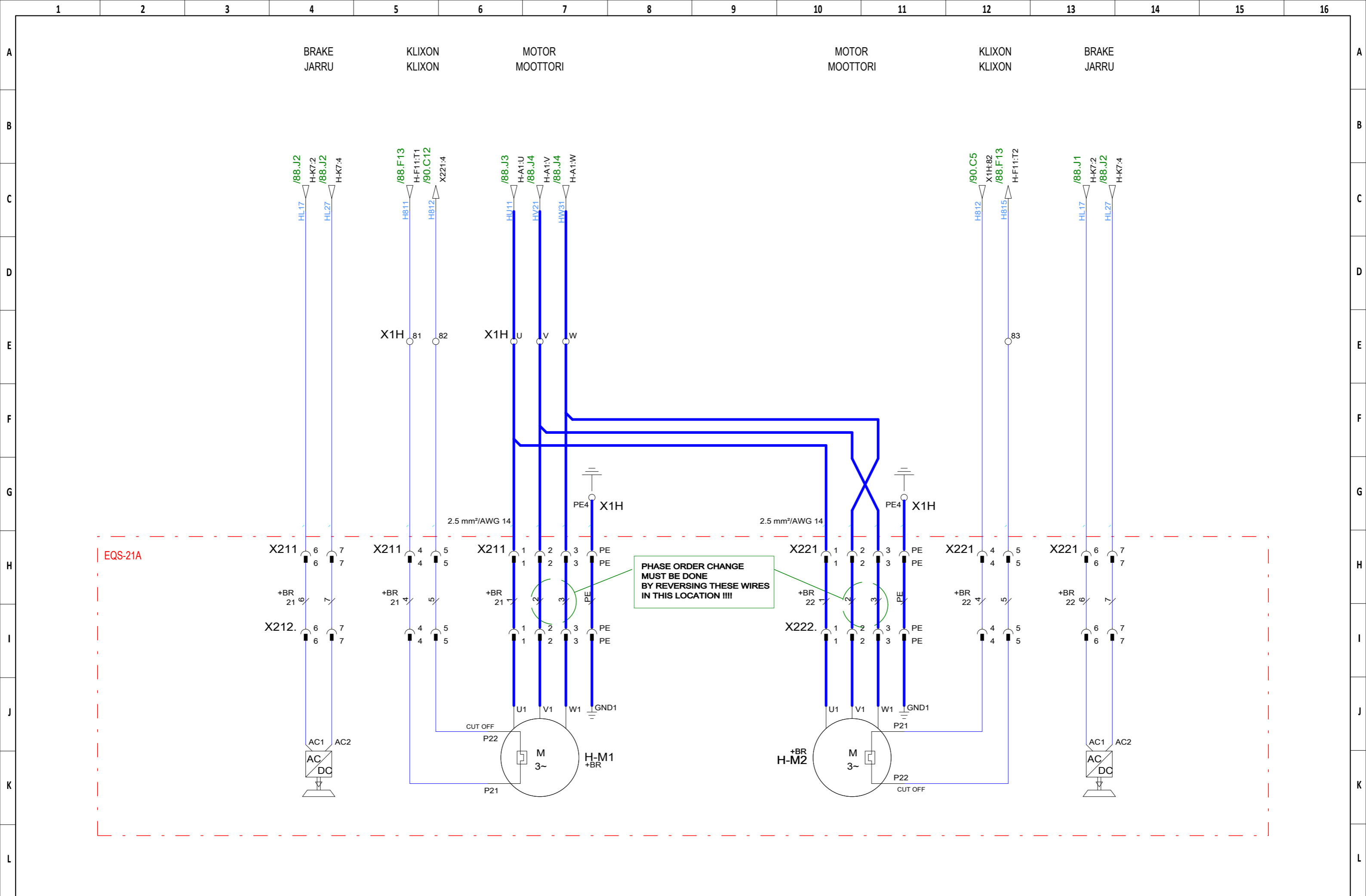
BRIDGE CONTROL SILLAN OHJAUS	
PINION GEAR WHEEL:	Replace:

STD 02105726140070
Replace By:

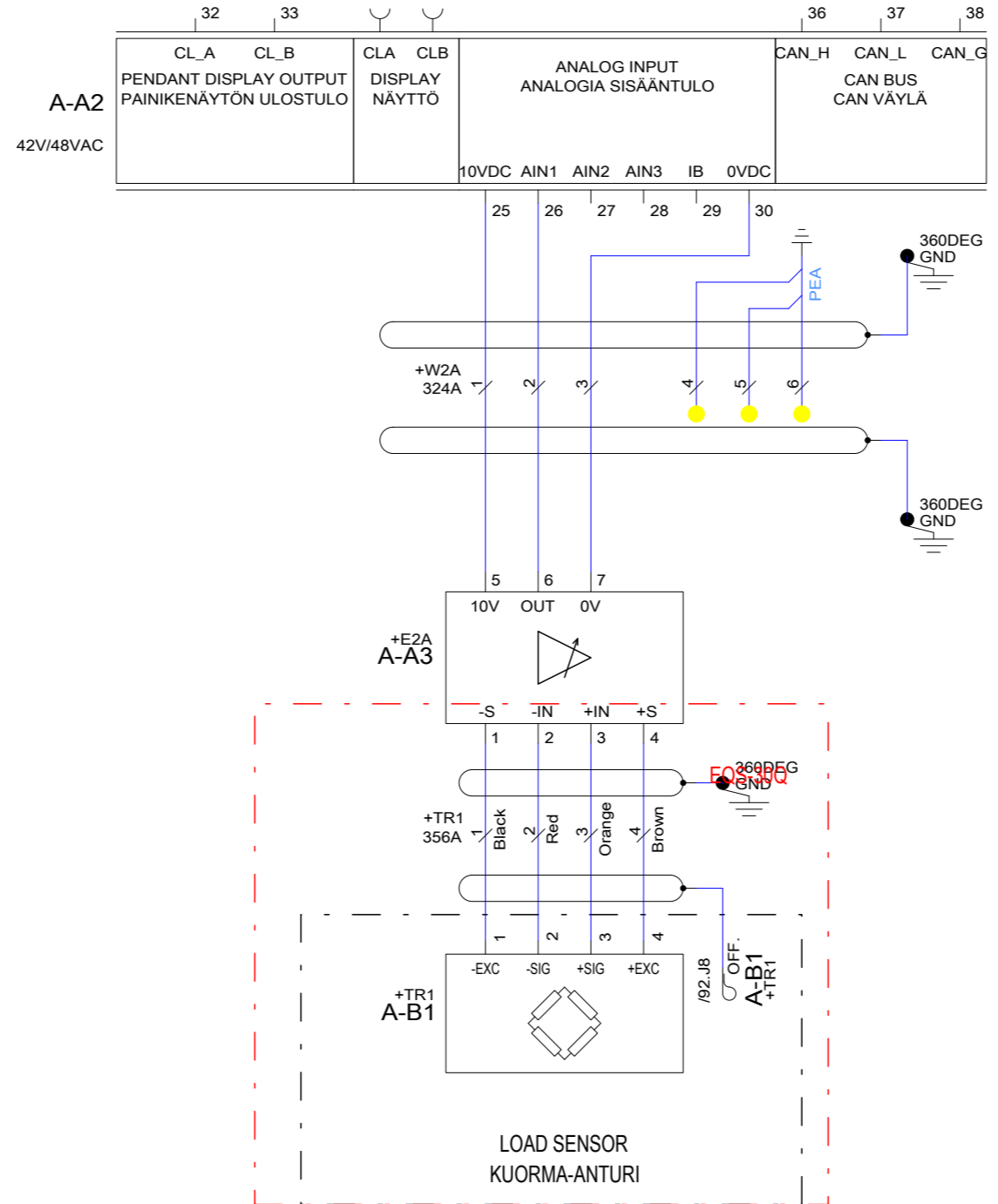
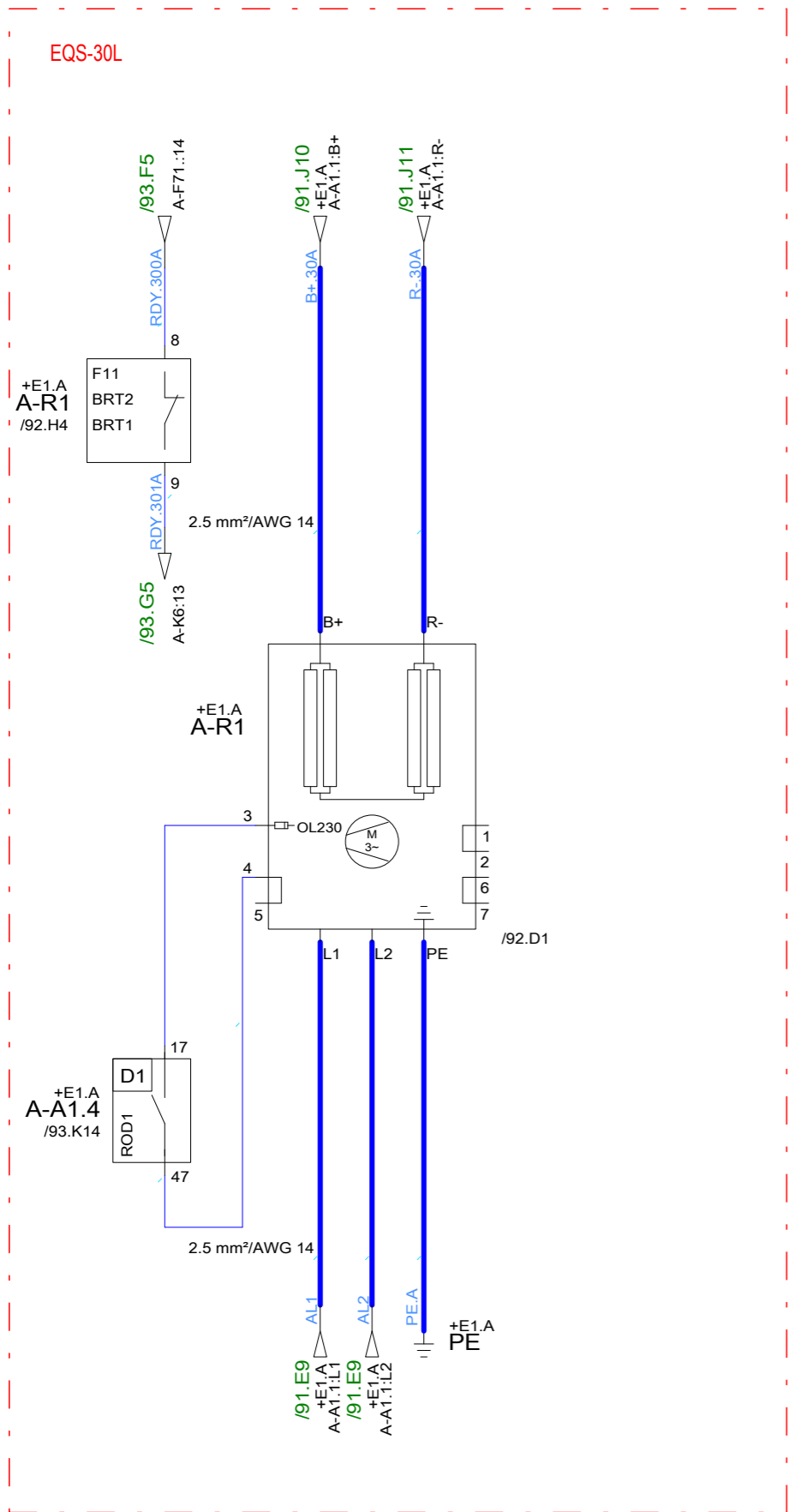
EPRJ0242501	+E1.1	PETROLEUM88
		OF 110



		ETTSKU	Approver Date	BRIDGE LIMIT SWITCH				STD		ECM INDUSTRIAL		EPRJ0242501			
		ETTSKU	Approver Name	SILTA RAJAKYTKIN				02105726140070				+E1.1			
		ETTSKU	Approver Sign									PETROLEUM89			
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:					OF 110			

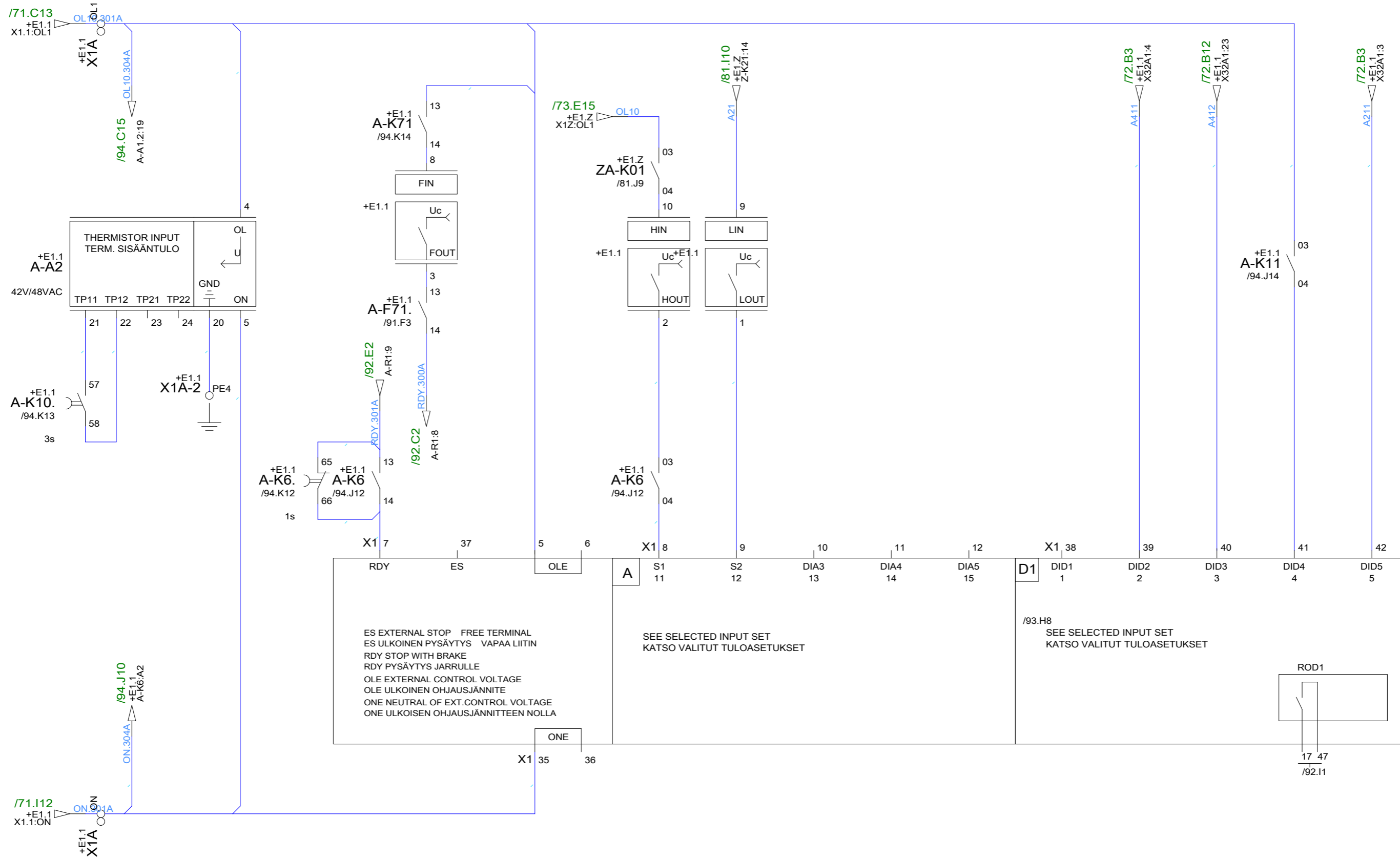


				BRIDGE STEPLESS SILTA				STD 02105726140070				EPRJ0242501			
												+E1.1			
												PETROLEUM90			
												OF 110			



		ETTSKU	Approver Date	HOISTING NOSTO				STD		ECM INDUSTRIAL	EPRJ0242501			
		ETTSKU	Approver Name					02105726140070						
		ETTSKU	Approver Sign											
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:					PETROLEUM92 OF 110		

DIRECTION 1 DIRECTION 2
SUUNTA 1 SUUNTA 2



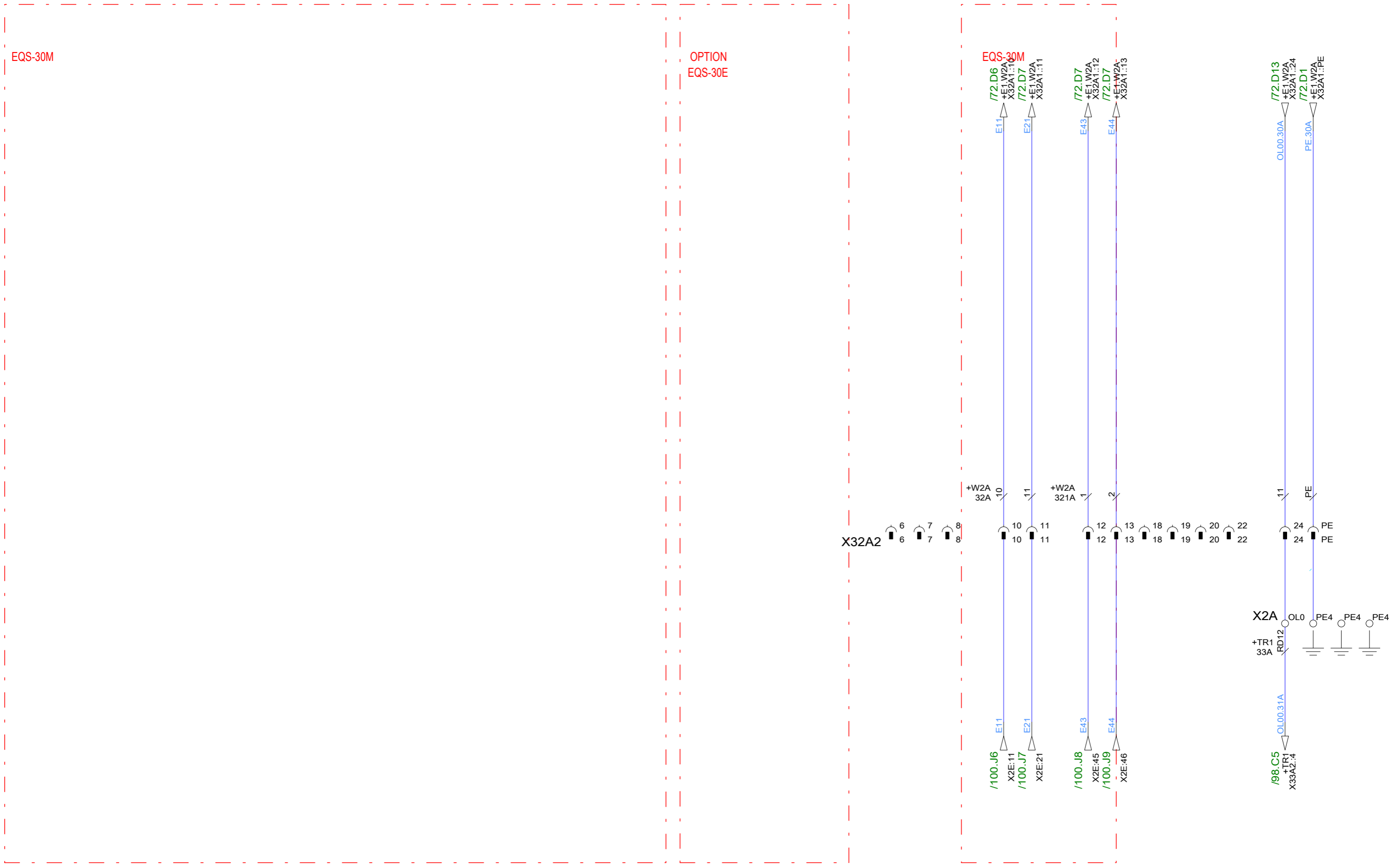
RDY	ES	OLE	A	S1	S2	DIA3	DIA4	DIA5	D1	DID1	DID2	DID3	DID4	DID5
ES EXTERNAL STOP FREE TERMINAL ES ULKOINEN PYSÄYTYS VAPAA LIITIN RDY STOP WITH BRAKE RDY PYSÄYTYS JARRULLE OLE EXTERNAL CONTROL VOLTAGE OLE ULKOINEN OHJAUSJÄNNITE ONE NEUTRAL OF EXT.CONTROL VOLTAGE ONE ULKOISEN OHJAUSJÄNNITTEEN NOLLA			SEE SELECTED INPUT SET KATSO VALITUT TUULOASETUKSET			/93.H8 SEE SELECTED INPUT SET KATSO VALITUT TUULOASETUKSET					ROD1 			
			ONE							17 47 /92.I1				

		ETTSKU	Approver Date	HOISTING NOSTO				STD		ECM INDUSTRIAL		EPRJ0242501			
		ETTSKU	Approver Name					02105726140070							
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PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:							PETROLEUM93	OF 110

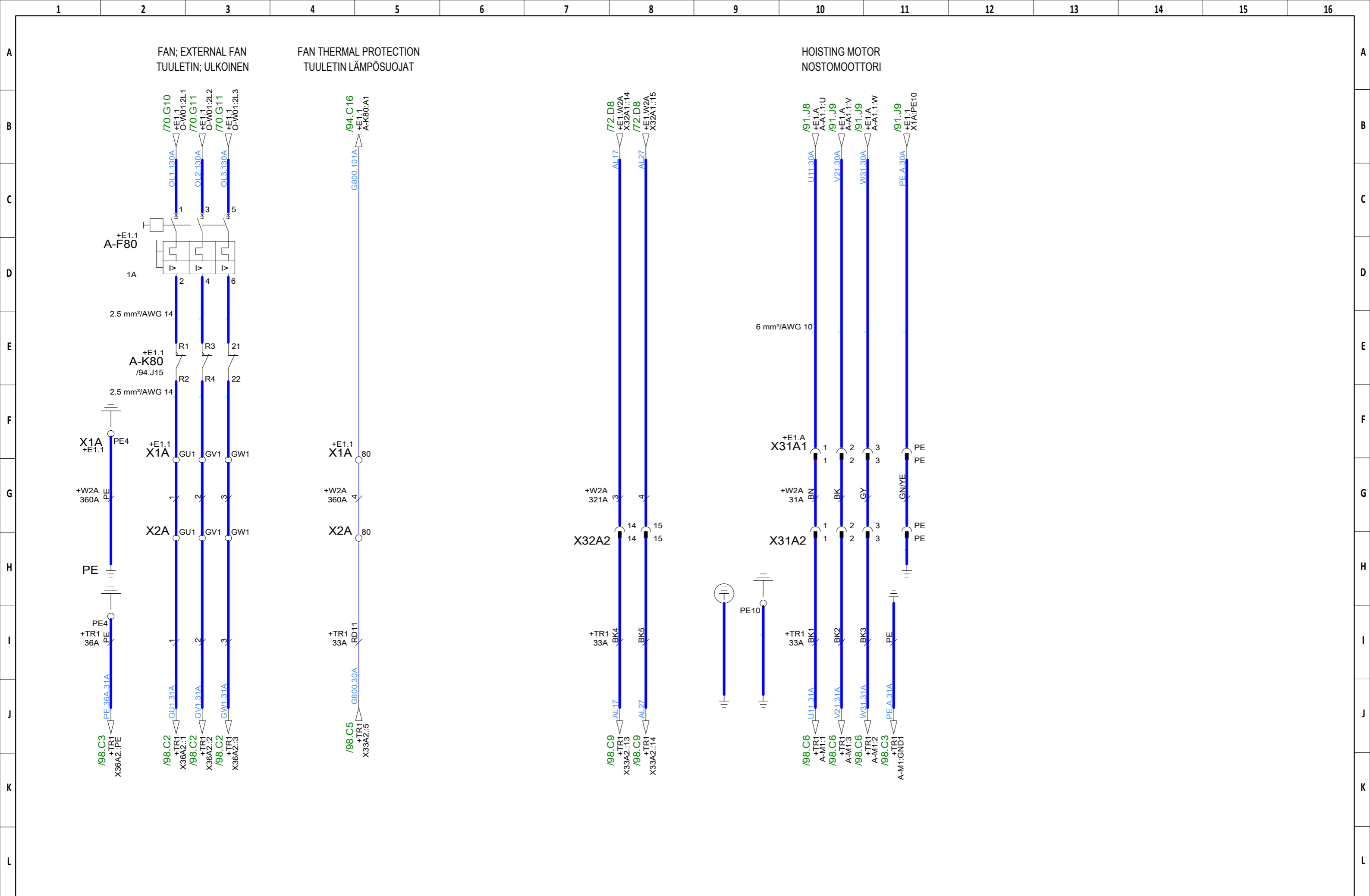
EQS-30M

OPTION
EQS-30E

EQS-30M



		ETTSKU	Approver Date	HOISTING NOSTO				STD		ECM INDUSTRIAL		EPRJ0242501			
		ETTSKU	Approver Name					02105726140070				+E2A			
		ETTSKU	Approver Sign									PETROLEUM95			
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:		Replace:	Replace By:			OF 110				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

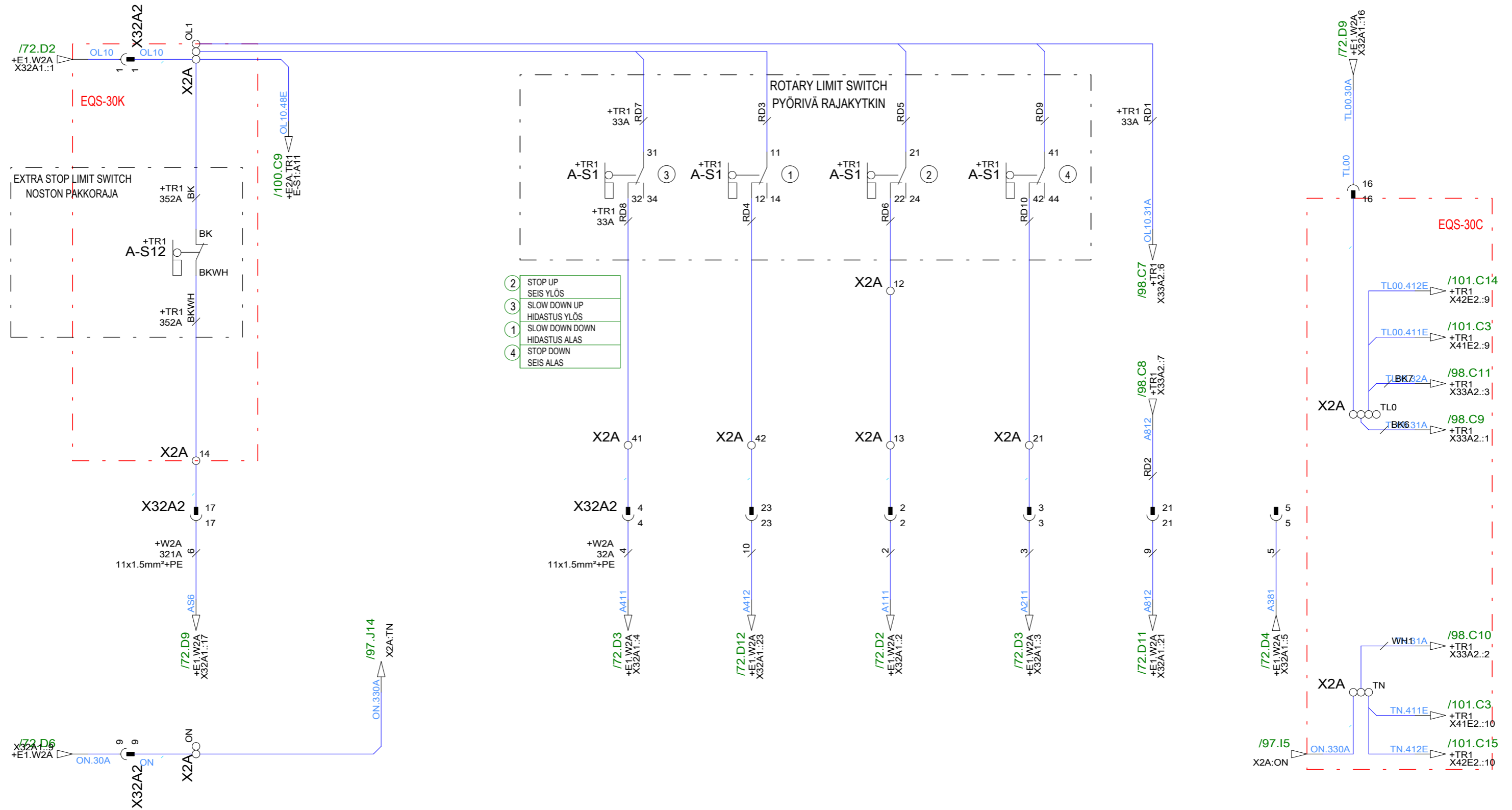


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		ETTSKU	Approver Name			02105726140070						+E2A	
		ETTSKU	Approver Sign									PETROLEUM96	
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:					OF 110	

SLOW DOWN LIMIT SWITCHES
HIDASTUS RAJAKYTKIMET

STOP LIMIT SWITCHES
SEIS RAJAKYTKIMET

THERMAL PROTECTION
LÄMPÖSUOJAT



- ② STOP UP
SEIS YLÖS
- ③ SLOW DOWN UP
HIDASTUS YLÖS
- ① SLOW DOWN DOWN
HIDASTUS ALAS
- ④ STOP DOWN
SEIS ALAS

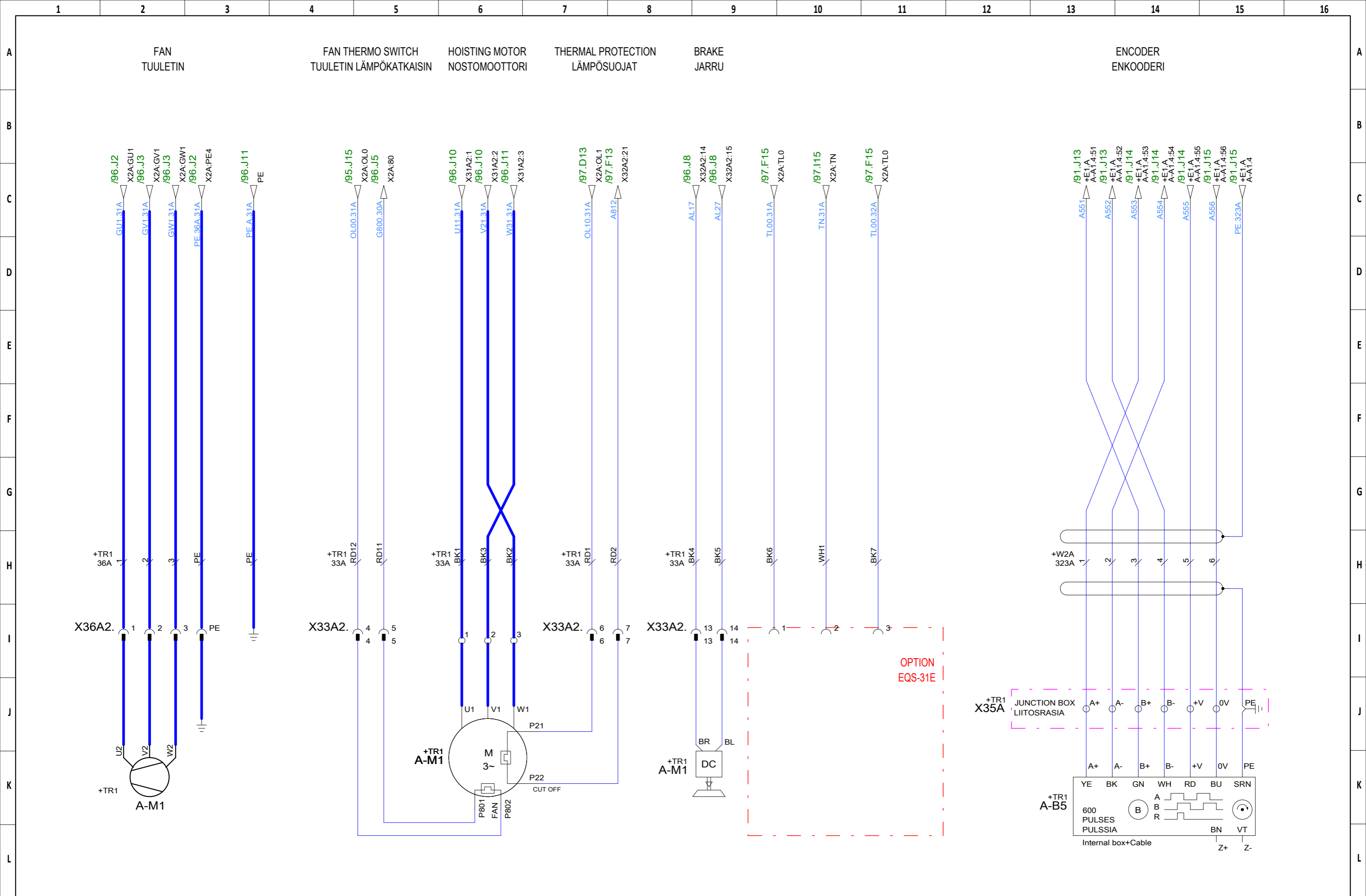
ETTSKU	Approver Date
ETTSKU	Approver Name
ETTSKU	Approver Sign
PINION Change	Date Name

HOISTING NOSTO	
PINION GEAR WHEEL:	Replace:

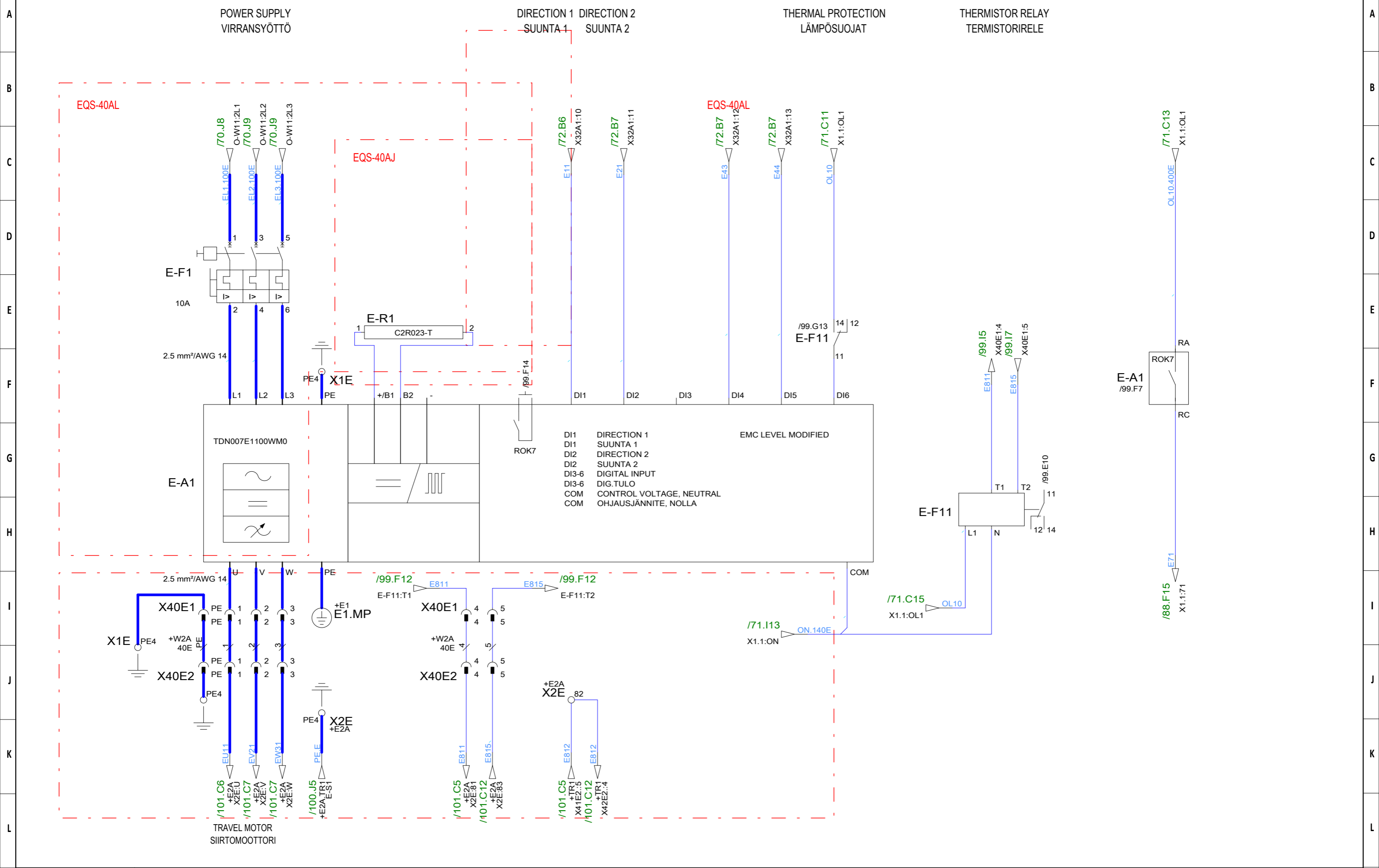
STD
02105726140070
Replace By:



EPRJ0242501	+E2A
PETROLEUM97	OF 110



ETTSKU			Approver Date		HOISTING; STEPLESS NOSTO; PORTAATON			STD		EPRJ0242501			
ETTSKU			Approver Name					02105726140070		ECM INDUSTRIAL		+E2A	
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PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:					OF 110	

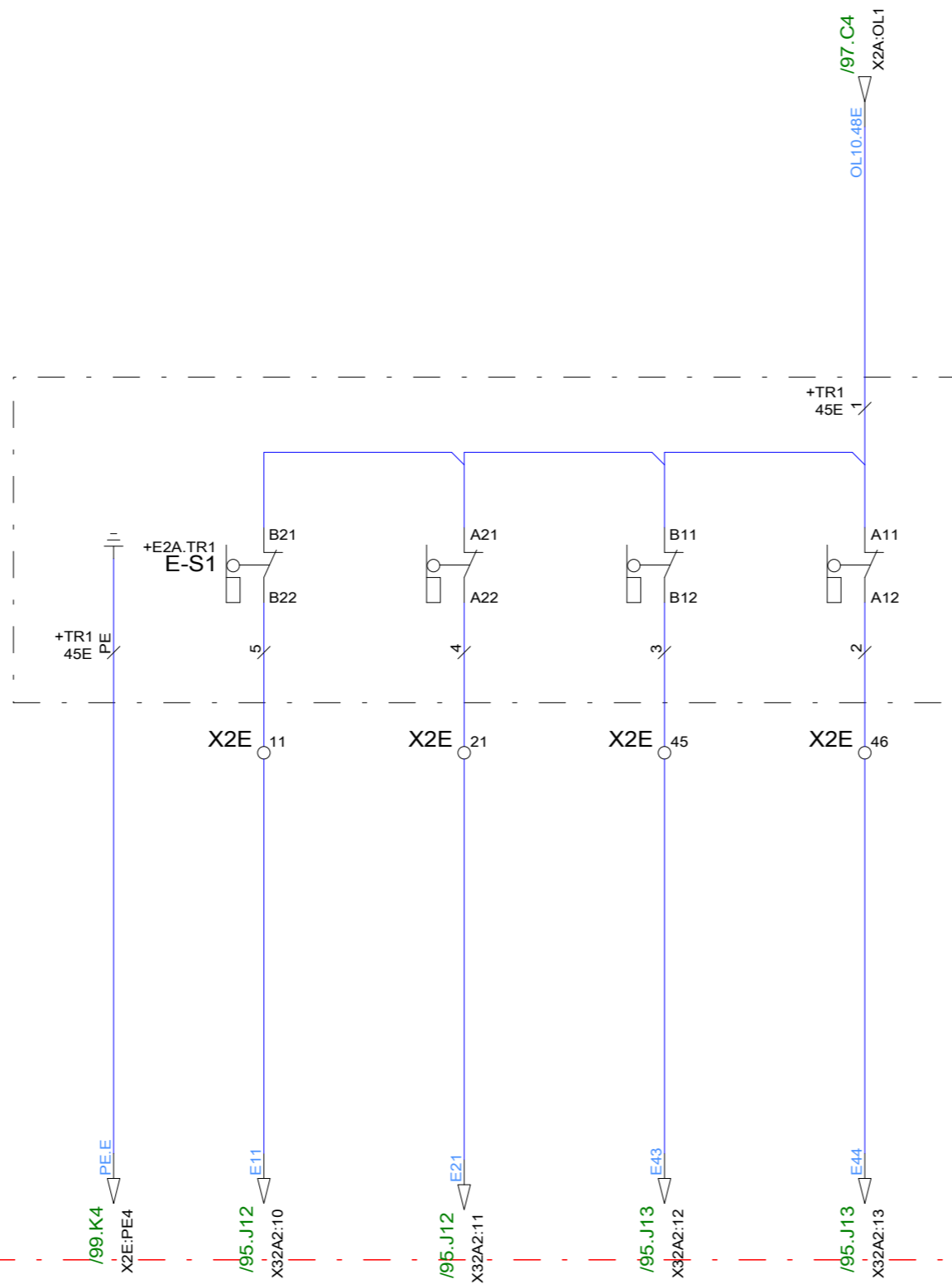


PINION		Change	ETTSKU	ETTSKU	ETTSKU	ETTSKU	TROLLEY CONTROL VAUNUN OHJAUS		STD 02105726140070		ECM INDUSTRIAL		EPRJ0242501		+E1.1		PETROLEUM99 OF 110	
Date		Name	Approver Date		Approver Name		Approver Sign		Replace:		Replace By:							

DIRECTION 1 SUUNTA 1 DIRECTION 2 SUUNTA 2 SLOW DOWN LIMIT SWITCH HIDASTUSRAJA

EQS-40AF

NOTICE!
CHECK THE TROLLEY LIMIT
CABLE LOCATION!!



TROLLEY LIMIT SWITCH
VAUNU RAJAKYTKIN

STD
02105726140070



EPRJ0242501

+E2A

PETROLEUM 3.00
OF 110

		ETTSKU		Approver Date	
		ETTSKU		Approver Name	
		ETTSKU		Approver Sign	
PINION	Change	Date	Name	PINION SHAFT	

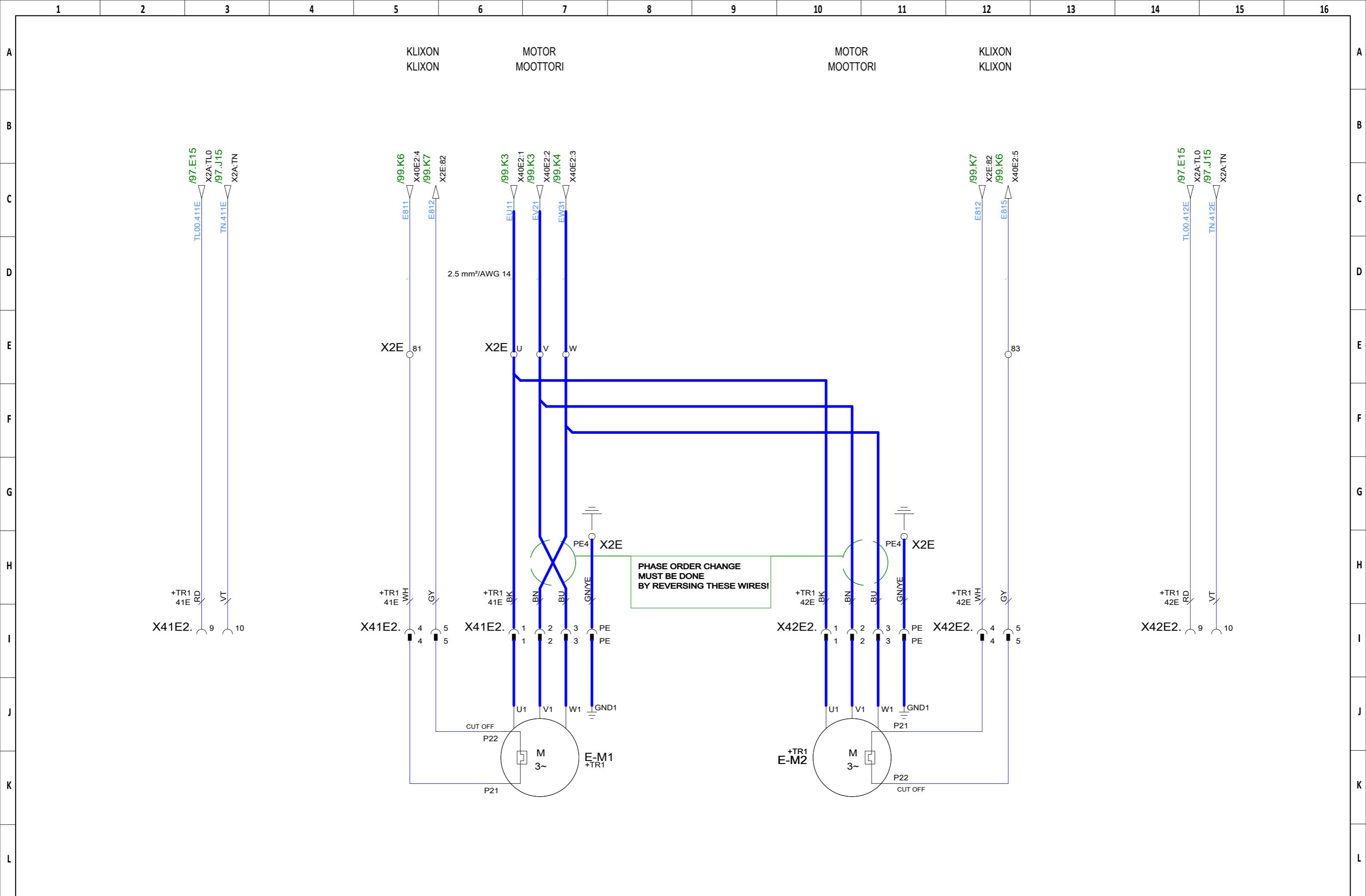
PINION GEAR WHEEL:	Replace:	Replace By:
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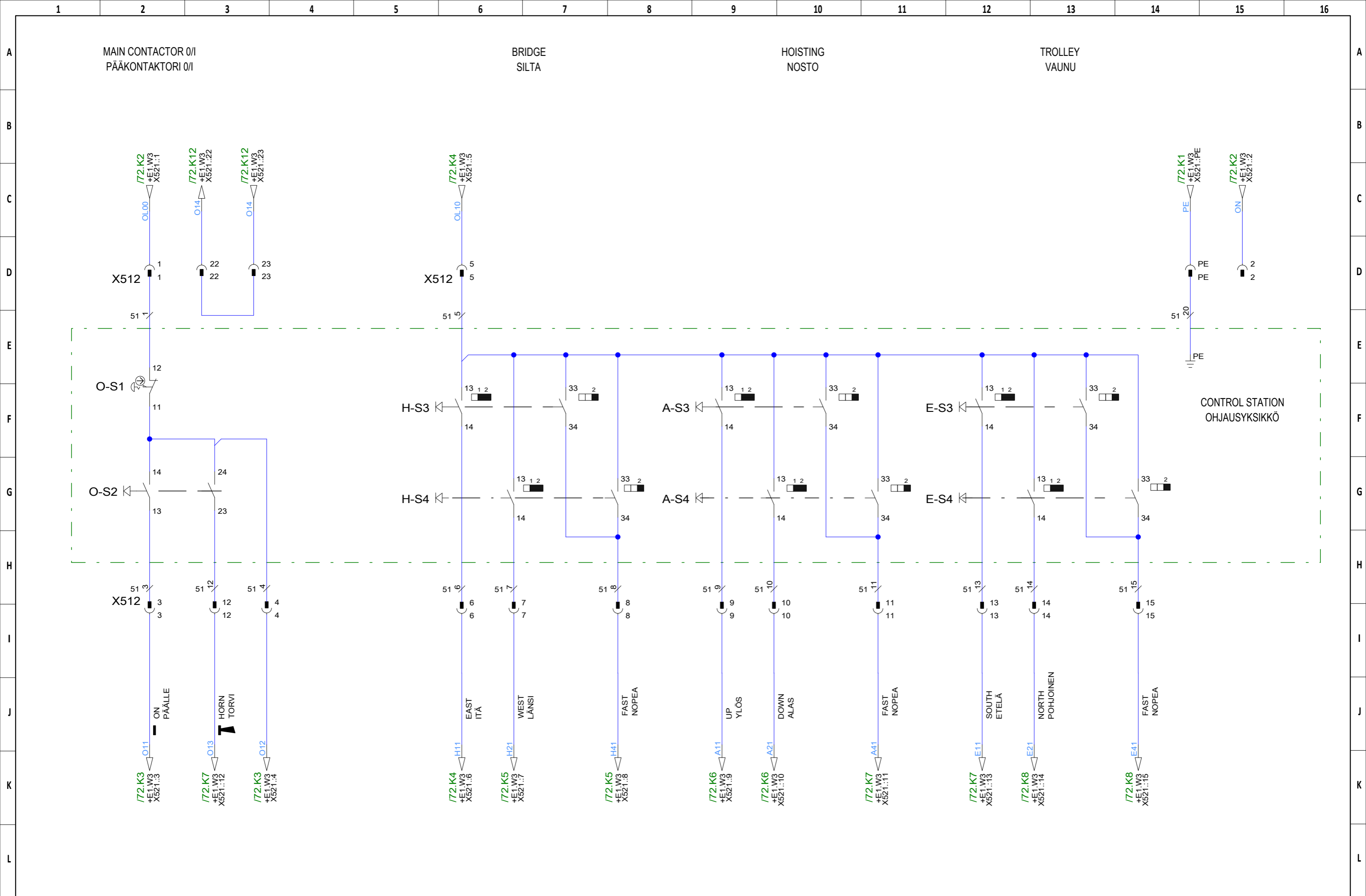
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PHASE ORDER CHANGE
MUST BE DONE
BY REVERSING THESE WIRES!

					TROLLEY STEPLESS VAUNU			STD 02105726140070		ECM INDUSTRIAL		EPRJ0242501				
													+E2A			
					PINION GEAR WHEEL:			Replace By:					PETROLEUM 101			
					Replace:								OF 110			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	

ETTSKU	Approver Date
ETTSKU	Approver Name
ETTSKU	Approver Sign
PINION Change	PINION SHAFT
Date	Name



ETTSKU	Approver Date
ETTSKU	Approver Name
ETTSKU	Approver Sign
PINION	Name
Change	DATE

PENDANT PUSH-BUTTON CONTROL STATION
PAINIKEOHJAIN

PINION GEAR WHEEL: Replace:

STD
02105726140070

Replace By:

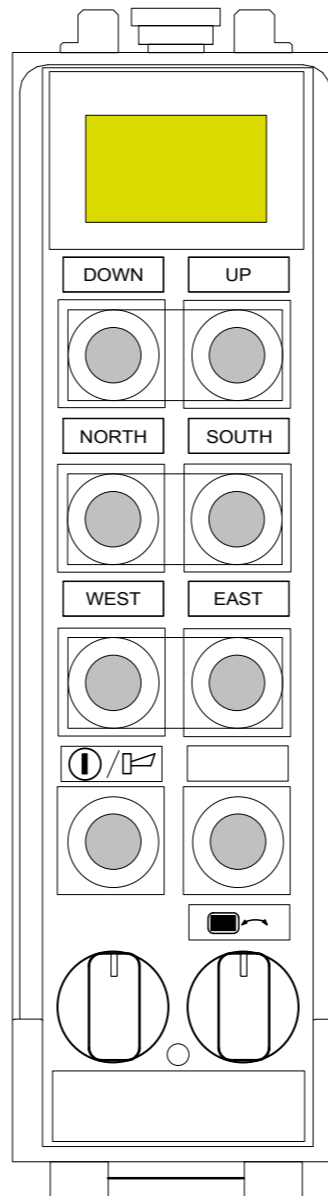


EPRJ0242501

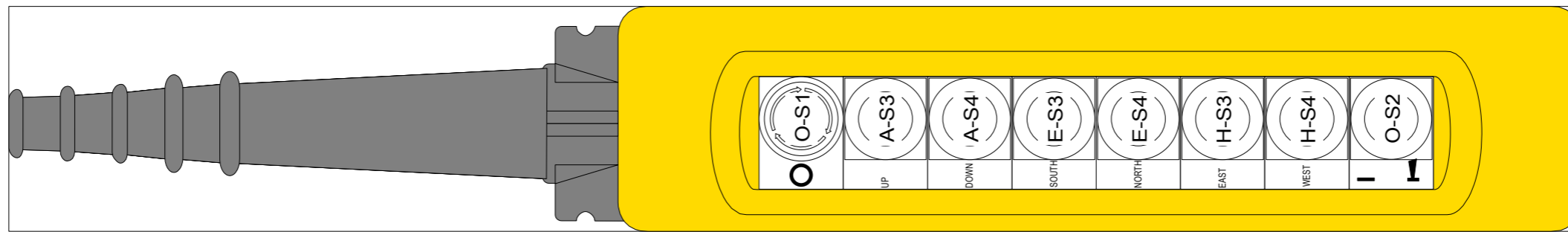
+E3

PETROLEUM 02
OF 110

Micron 7



		ETTSKU	Approver Date		RADIO CONTROL SYSTEM				STD		EPRJ0242501				
		ETTSKU	Approver Name		RADIO-OHJAIN				02105726140070		+RADIO				
		ETTSKU	Approver Sign											PETROLEUM 03	
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:		Replace:	Replace By:				OF 110			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16



PENDANT PUSH-BUTTON CONTROL STATION
PAINIKEOHJAIN

STD
02105726140070



EPRJ0242501

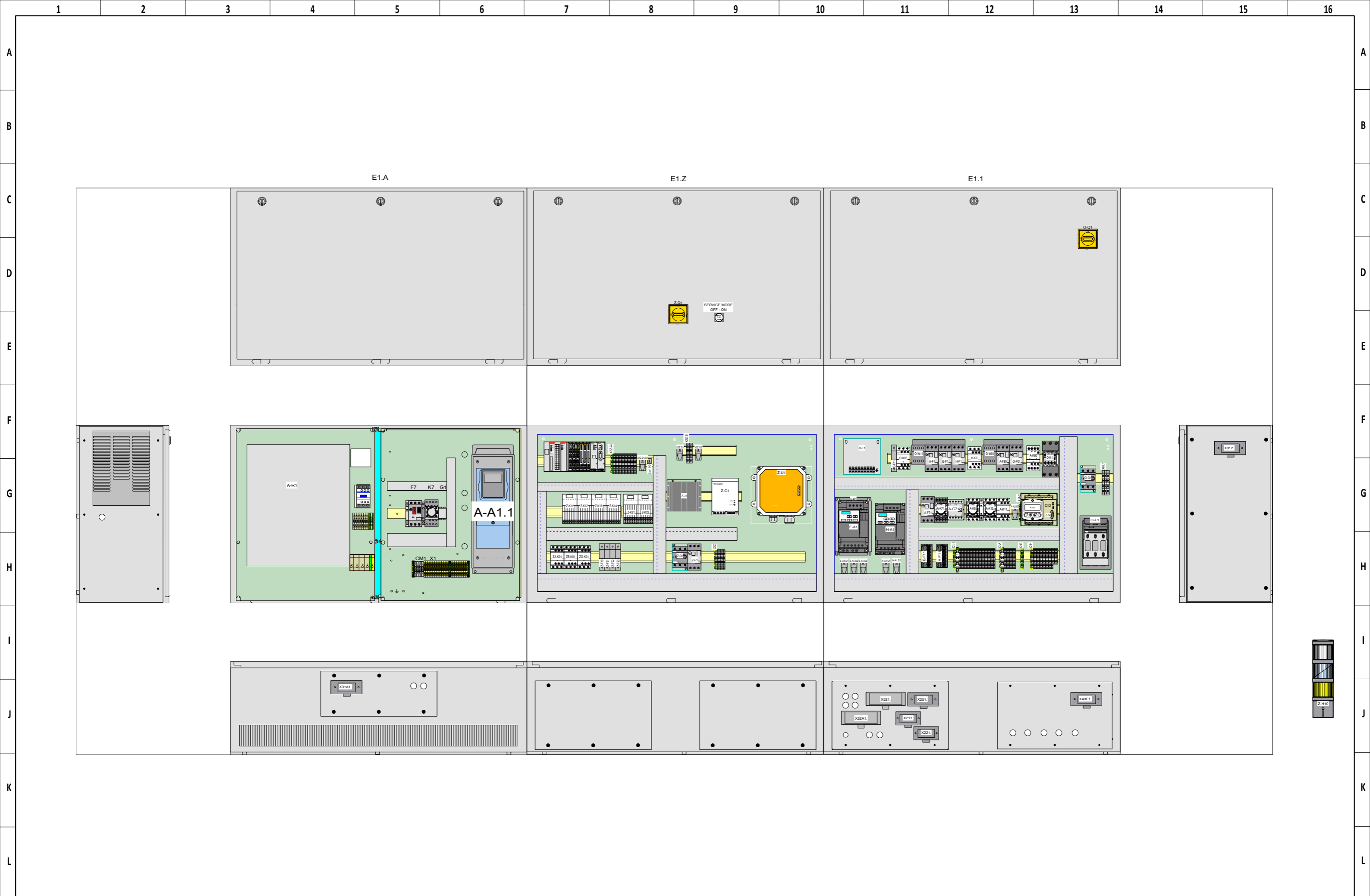
+E3

PETROLEUM 3.04
OF 110

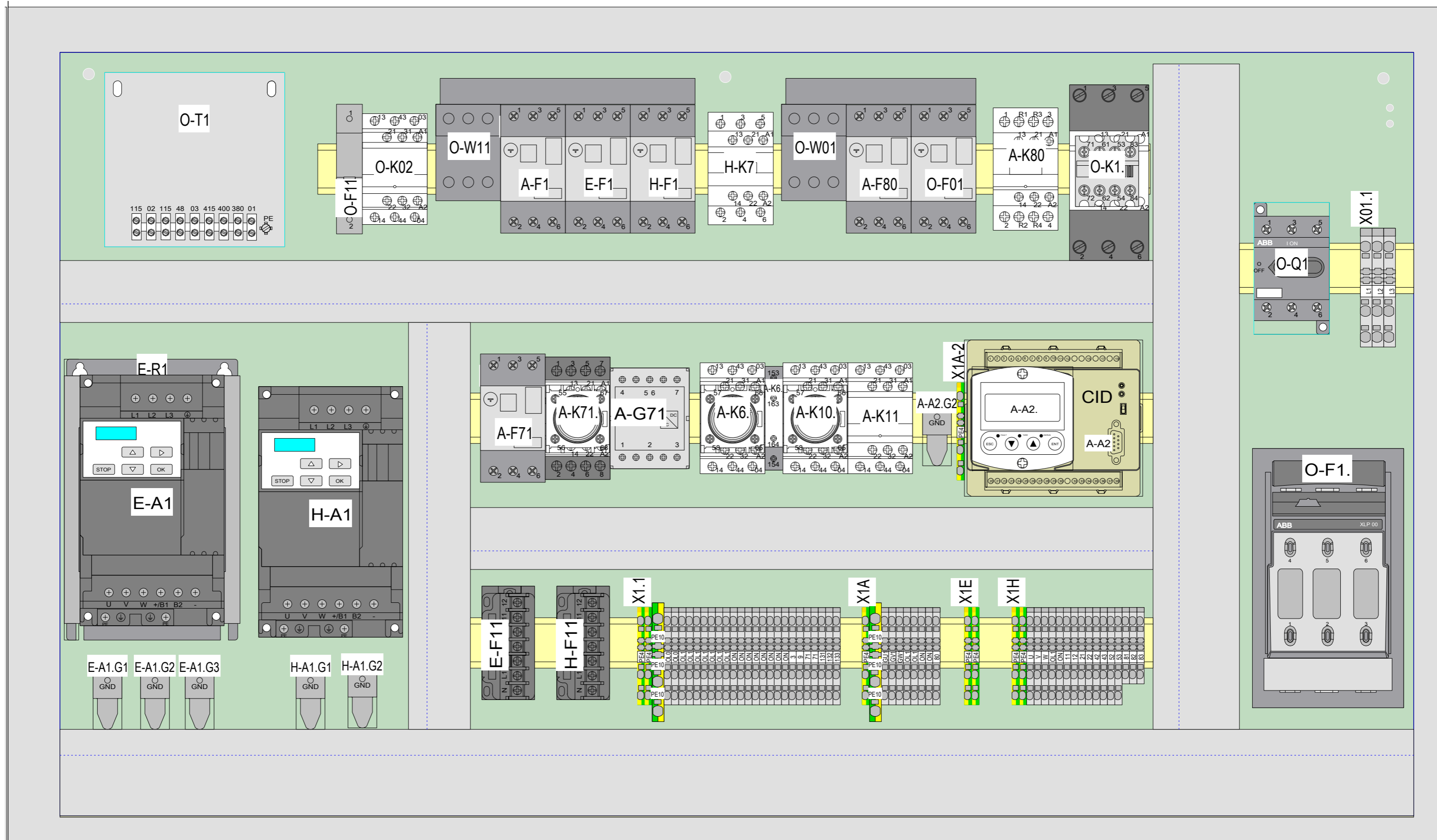
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		ETTSKU		Approver Name	
		ETTSKU		Approver Sign	
PINION	Change	Date	Name	PINION SHAFT	

PINION GEAR WHEEL:		Replace:	Replace By:
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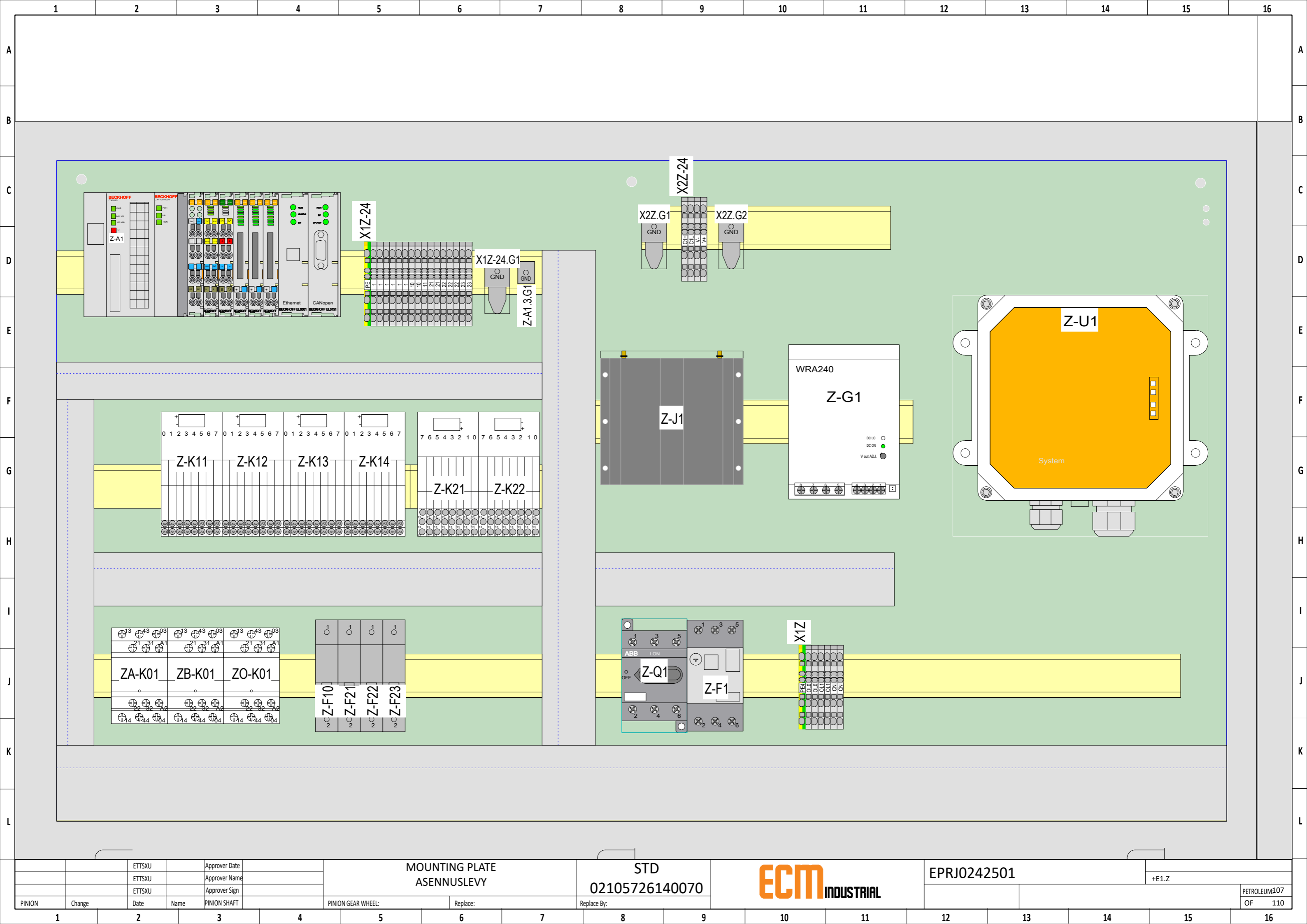
EPRJ0242501												+E3		PETROLEUM 3.04	
														OF 110	



				BRIDGE CUBICLE SILLAN KOJEKAAPPI				STD 02105726140070			ECM INDUSTRIAL				EPRJ0242501					+E1.1		PETROLEUM 05	
				PINION GEAR WHEEL:				Replace:			Replace By:									OF 110			
ETTSKU				Approver Date																			
ETTSKU				Approver Name																			
ETTSKU				Approver Sign																			
PINION		Change		Date		Name		PINION SHAFT															



		ETTSKU	Approver Date	MOUNTING PLATE		STD		ECM INDUSTRIAL		EPRJ0242501					
		ETTSKU	Approver Name	ASENNUSLEVY		02105726140070						+E1.1			
		ETTSKU	Approver Sign									PETROLEUM 06			
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:					OF 110			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16



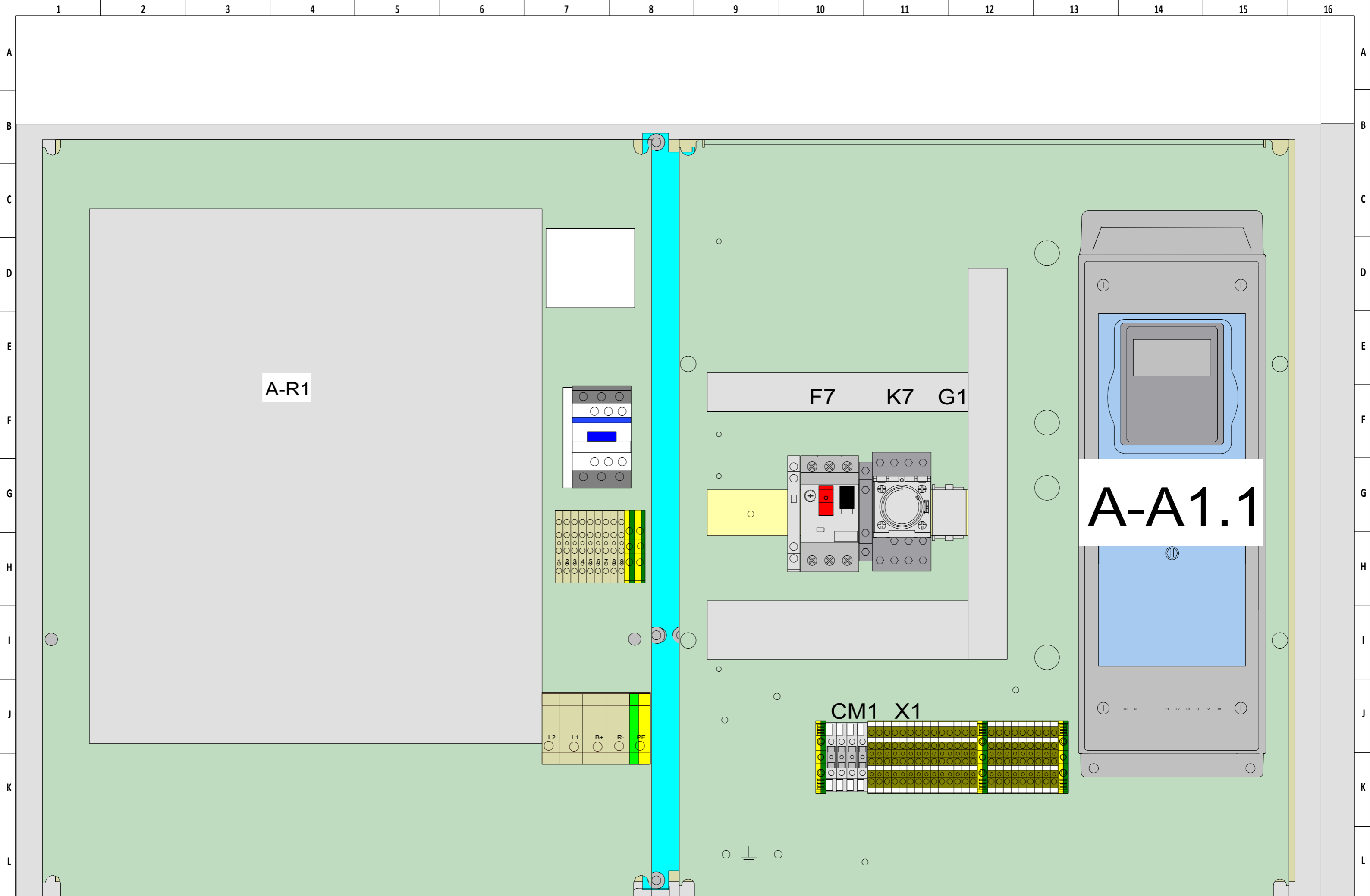
	ETTSKU	Approver Date
	ETTSKU	Approver Name
	ETTSKU	Approver Sign
PINION	Change	Date
	Name	PINION SHAFT

MOUNTING PLATE	
ASENNUSLEVY	
PINION GEAR WHEEL:	Replace:

STD
02105726140070
Replace By:



EPRJ0242501	+E1.Z
	PETROLEUM 07
	OF 110



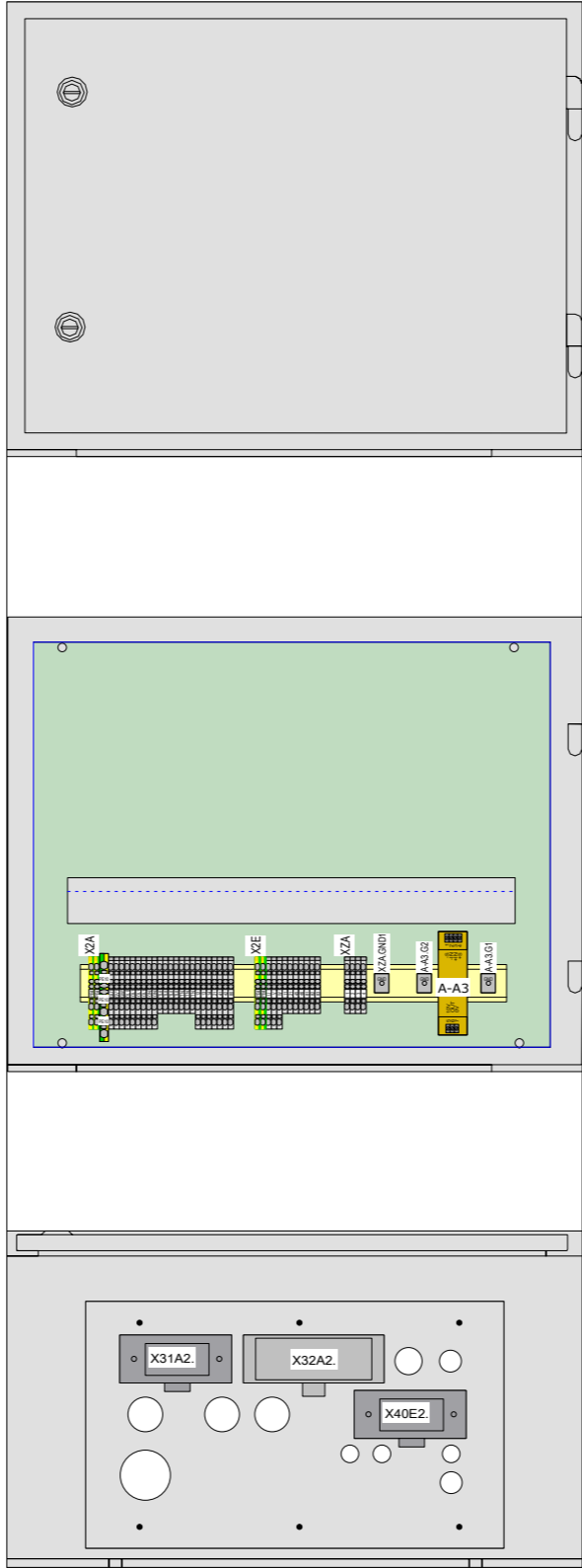
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		ETTSKU		Approver Sign
PINION	Change	Date	Name	PINION SHAFT

MOUNTING PLATE		STD	
ASENNUSLEVY		02105726140070	
PINION GEAR WHEEL:		Replace By:	

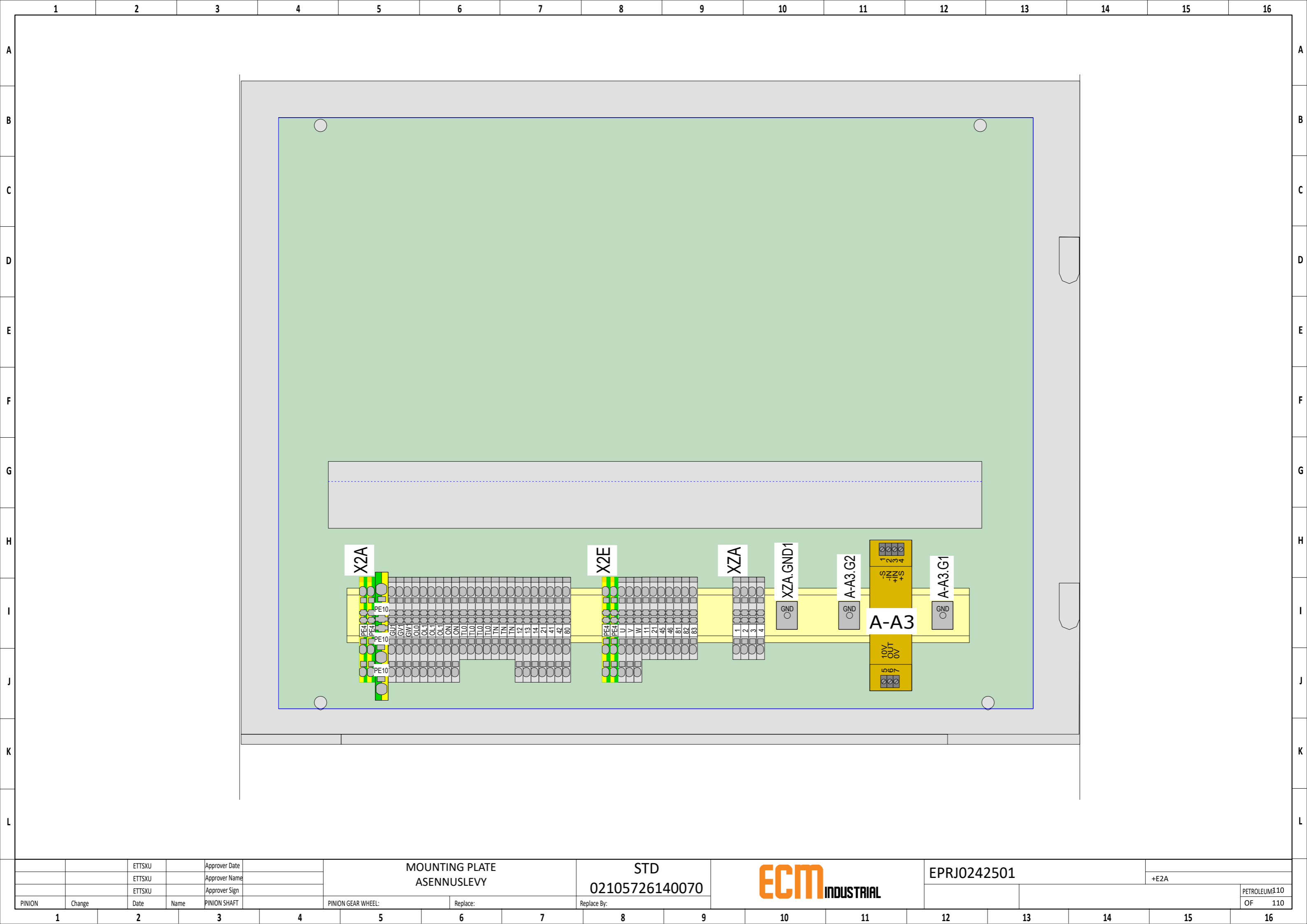
ECM INDUSTRIAL	
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EPRJ0242501		+E1.A	
		PETROLEUM 3.08	
		OF 110	

E2A



		ETTSKU	Approver Date	HOIST PANEL				STD		ECM INDUSTRIAL			EPRJ0242501				
		ETTSKU	Approver Name	NOSTIMEN KOJEKAAPPI				02105726140070								+E2A	
		ETTSKU	Approver Sign										PETROLEUM 1.09				
PINION	Change	Date	Name	PINION SHAFT		PINION GEAR WHEEL:	Replace:	Replace By:						OF	110		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		



		ETTSKU	Approver Date		MOUNTING PLATE ASENNUSLEVY				STD		ECM INDUSTRIAL		EPRJ0242501			
		ETTSKU	Approver Name						02105726140070						+E2A	
		ETTSKU	Approver Sign										PETROLEUM 10			
PINION	Change	Date	Name	PINION SHAFT	PINION GEAR WHEEL:	Replace:	Replace By:							OF	110	