

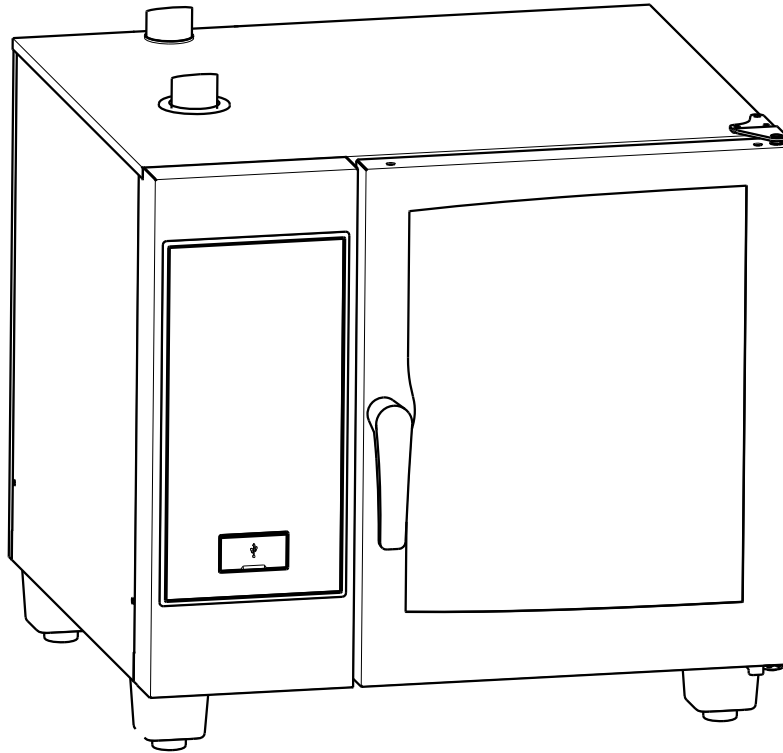
09/10/2019

Mod: SBES/XC-10

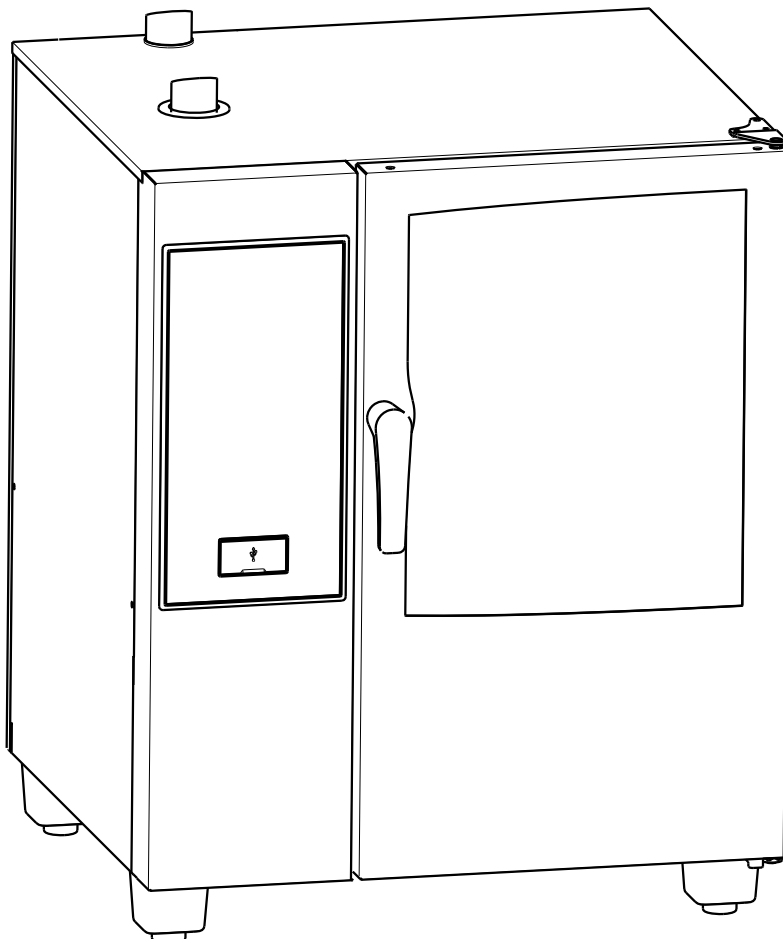
Production code: 228822

ELECTRIC OVENS

Electrical Documentation

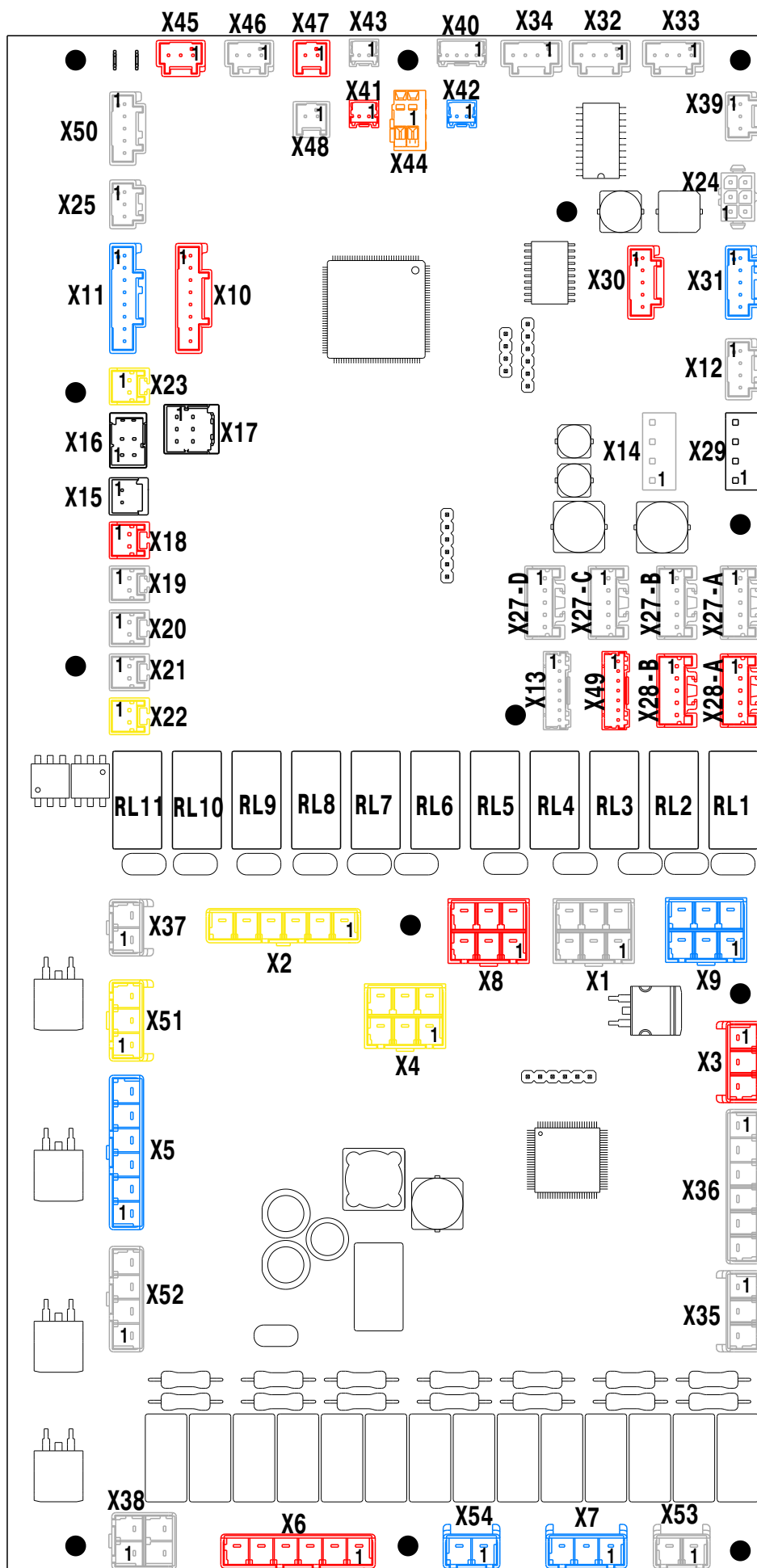


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MAIN BOARD ACU



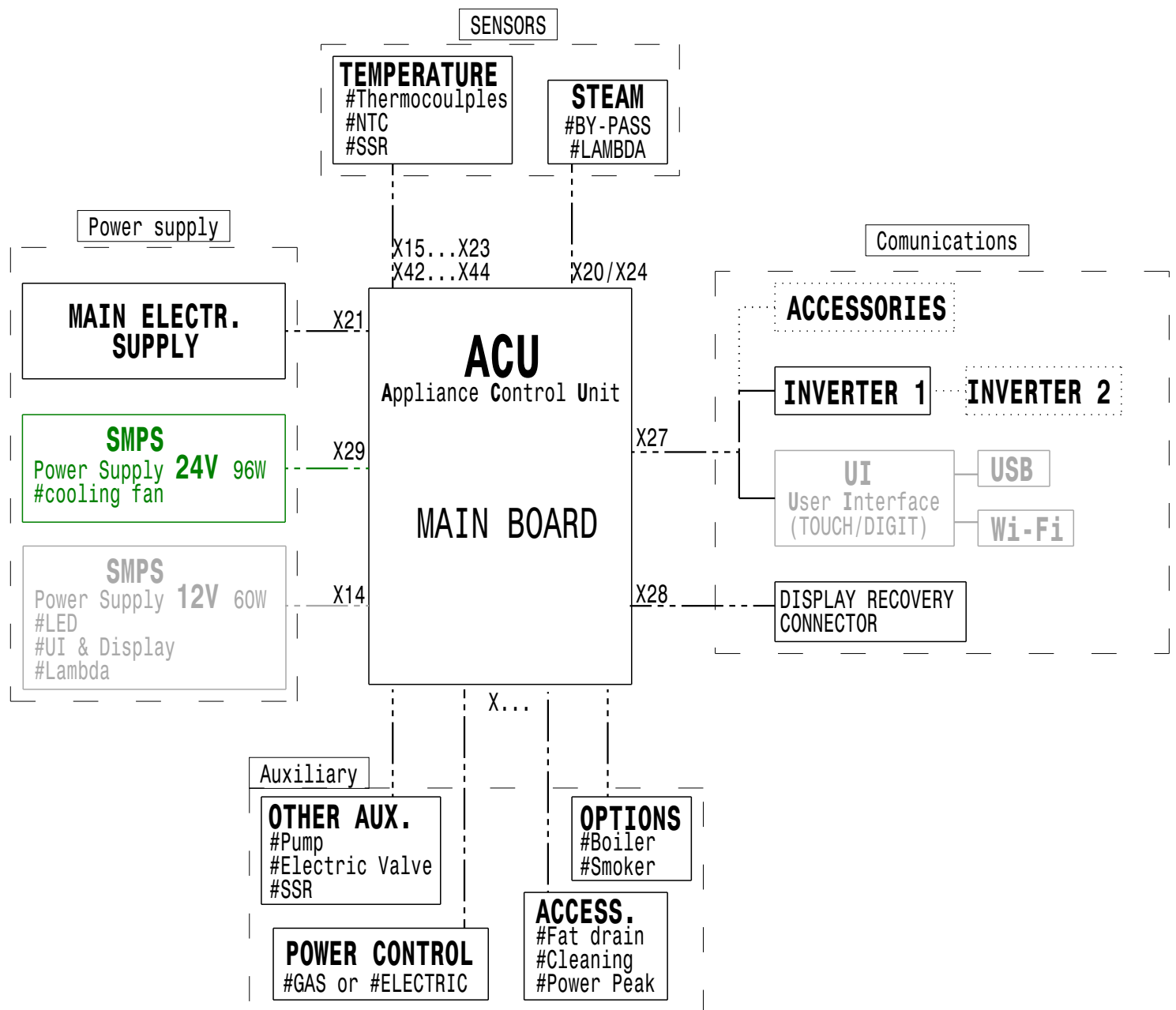
ACU LEGENDA

Ref.	Group	Pin	Direct.	Function
X1	Power Supply	1	IN	L Power Supply
		2	IN	N Power Supply
		3	IN	L Power Supply
		4	IN	N Power Supply
		5	IN	
		6	OUT	SW-OFF Auto switch off
X2	Water Service	1	OUT	EV1 Instant steam solenoid valve
		2	OUT	EV2 Quenching solenoid valve
		3	OUT	EV4 Spray unit solenoid valve
		4	OUT	BV3 Cavity drain ball valve OPEN
		5	OUT	BV3 Cavity drain ball valve CLOSE
		6	OUT	N
X3	Clean. Syst. Basic	1	OUT	EV7 Cleaning water fill solenoid valve
		2	OUT	M8 Cleaning pump
		3	OUT	N
X4	Cleaning System Drawer Rinse	1	OUT	EV11 Drawer fill solenoid valve
		2	OUT	EV12 Drawer drain solenoid valve
		3	OUT	
		4	OUT	
		5	OUT	
		6	OUT	N
X5	Boiler Fill & Clean	1	OUT	EV5 Boiler fill solenoid valve
		2	OUT	
		3	OUT	BV6 Boiler drain ball valve OPEN
		4	OUT	BV6 Boiler drain ball valve CLOSE
		5	OUT	
		6	OUT	N
X6	Sensing	1	IN	TSC Cavity safety thermostat
		2	IN	BBC1 Cavity gas blower burner
		3	IN	
		4	IN	HV14 Motor drive fuse
		5	IN	
		6	IN	
X7	Sensing	1	IN	TSB Boiler safety thermostat
		2	IN	BBB1 Boiler gas blower burner
		3	IN	
X8	Cavity GAS burner	1	OUT	N
		2	OUT	FCU Cavity flame control unit reset
		3	OUT	
		4	IN	FCU Cavity flame control unit power supply IN
		5	OUT	FCU Cavity flame control unit power supply OUT
		6	OUT	
X9	Boiler GAS burner	1	OUT	N
		2	OUT	FBU Boiler flame control unit reset
		3	OUT	
		4	IN	FBU Boiler flame control unit power supply IN
		5	OUT	FBU Boiler flame control unit power supply OUT
		6	OUT	
X10	Cavity GAS blower	1	OUT	VTCU Cavity blower control Power supply
		2	IN	VTCU Cavity blower control Tachometer
		3	IN	
		4	OUT	VTCU Cavity blower control Speed
		5	IN	
		6	IN	
		7	OUT	
		8	OUT	VTCU Boiler blower control GND
X11	Boiler GAS blower	1	OUT	VTBU Boiler blower control Power supply
		2	IN	VTBU Boiler blower control Tachometer
		3	IN	
		4	OUT	VTBU Boiler blower control Speed control
		5	IN	
		6	IN	
		7	OUT	
		8	OUT	VTBU Boiler blower control GND

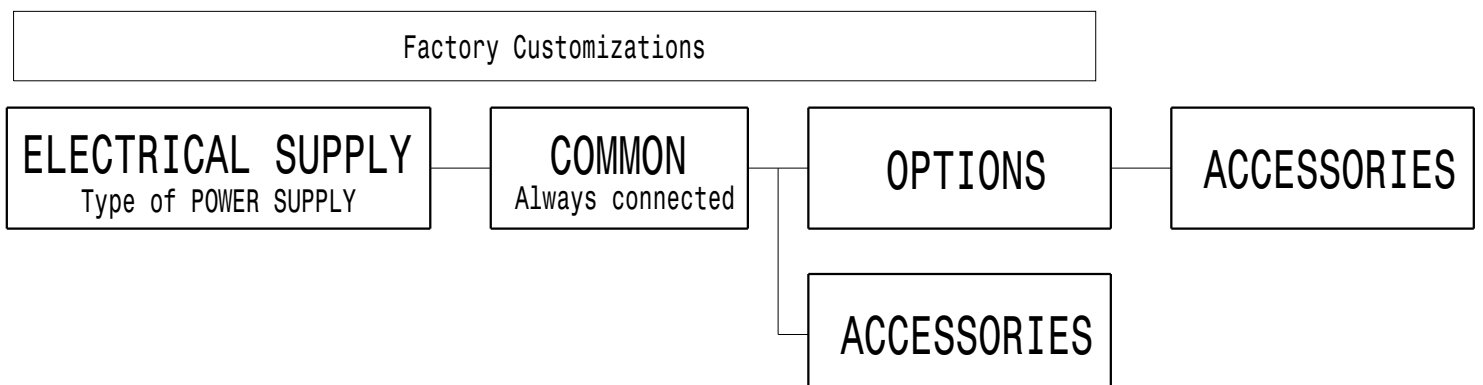
Ref.	Group	Pin	Direct.	Function
X12	Led	1	OUT	H1 LED lighting 1 anode
		2	IN	H1 LED lighting 1 catode
		3	IN	H2 LED lighting 2 catode
		4	OUT	H2 LED lighting 2 anode
X13				Adress
X14	12V	1	IN	+12V dc
		2	IN	
		3	IN	0V dc
		4	IN	
X15		A1	IN	TFP 1 st point food probe temperature
		B1	IN	
		A1	IN	TFP 2 nd point food probe temperature
		B1	IN	
X16		A2	IN	TFP 3 rd point food probe temperature
		B2	IN	
		A1	IN	TFP 4 th point food probe temperature
		B1	IN	
X17		A2	IN	TFP 5 th point food probe temperature
		B2	IN	
		A3	IN	TFP 6 th point food probe temperature
		B3	IN	
X18	Temper.	1	IN	TCAV Cavity Thermocouple
		2	IN	
X19	Temper.	1	IN	TBOI Boiler Thermocouple
		2	IN	
X20	Temper.			-- NOT USE --
X21	Temper.			-- NOT USE --
X22	Temper.	1	IN	TQS Quenching System Thermocouple
		2	IN	
X23	Temper.	1	IN	TAR Aromatizer Thermocouple
		2	IN	
X24	Lambda			Lambda sensor
X25	Boiler level	1	IN/OUT	SL Boiler safety level dection probe
		2	IN/OUT	WL Boiler working level dection probe
		3	IN	REF Boiler level detection probes reference
X27-A			IN/OUT	PMACS communication BUS
X27-B			IN/OUT	PMACS communication BUS
X27-C			IN/OUT	PMACS communication BUS
X27-D			IN/OUT	PMACS communication BUS
X28-A			IN/OUT	PMACS Recovery communication BUS
X28-B			IN/OUT	PMACS Recovery communication BUS
X29	24V	1	IN	+24V dc
		2	IN	
		3	IN	0V dc
		4	IN	
X30	Cavity SSR	1	OUT	KC1 Cavity 1 solid state relay
		2	OUT	KC2 Cavity 2 solid state relay
		3	OUT	
		4	OUT	
		5	OUT	0V dc
X31	Boiler SSR	1	OUT	KB1 Boiler 1 solid state relay
		2	OUT	KB2 Boiler 2 solid state relay
		3	OUT	
		4	OUT	
		5	OUT	0V dc

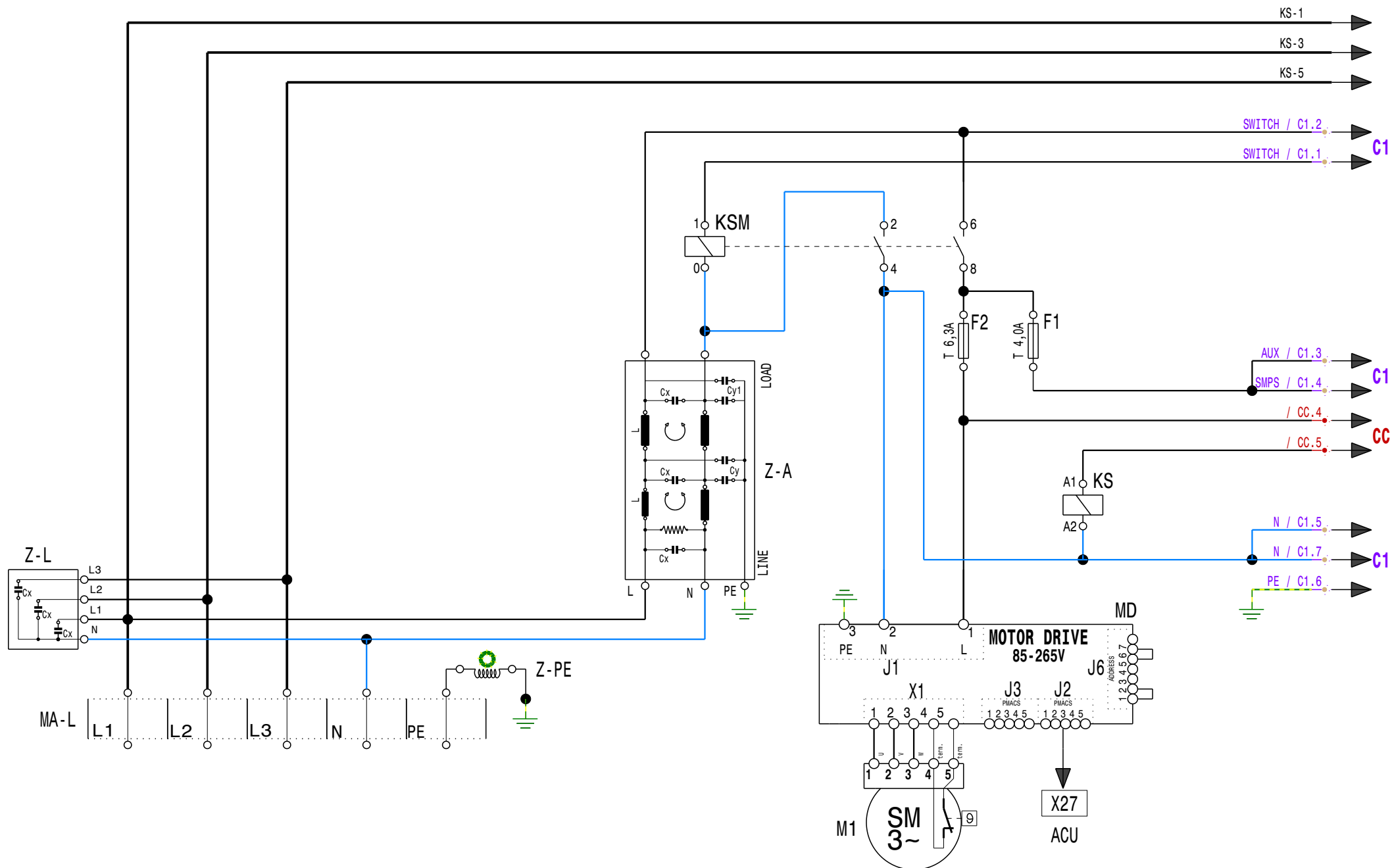
Ref.	Group	Pin	Direct.	Function
X32	Cooling Fan 1	1	OUT	FAN1 Cooling fan 1 power supply 24Vdc
		2	IN	FAN1 Cooling fan 1 tachometer sensor
		3	OUT	FAN1 Cooling fan 1 speed control
		4	OUT	FAN1 Cooling fan 1 power supply 0Vdc
X33	Cooling Fan 2			-- NOT USE --
X32	Cooling Fan 3			-- NOT USE --
X35	Vent. Valve	1	OUT	VV1 Venting valve 1 cw rotation
		2	OUT	N
		3	OUT	VV1 Venting valve 1 ccw rotation
X36				-- NOT USE --
X37	KS	1	OUT	KS Safety contactor
		2	OUT	
X38	Smoker	1	OUT	N
		2	OUT	R1 (Smoker heating element)
		3	OUT	
		4	IN	
X39	Flow meter	1		
		2	OUT	FM Flow mer reference
		3	IN	FM Flow mer feedback
X40	Temper.	1	OUT	NCC NTC cabinet components
		2	IN	
		3	OUT	NM8 NTC pump M8
		4	IN	
X41	Temper.	1	OUT	NHSC NTC Cavity SSR heatsink
		2	IN	
X42	Temper.	1	OUT	NHSB NTC Boiler SSR heatsink
		2	IN	
X43	Temper.			-- NOT USE --
X44	Softner	1	OUT	SSW1 Softner interface
		2	IN	
X45	Switch	1	OUT	24V Reference
		2	IN	DS Door switch
		3	IN	AFS Air filter switch
X46	switch	1	OUT	24V Reference
		2	IN	SVV1 Venting valve CLOSE switch
		3	IN	SVV1 Venting valve OPEN switch
X47		1	OUT	0V dc
		2	IN	SF Fat drain valve status switch
X48	Switch	1	OUT	24V Reference
		2	IN	DRS Cleaning drawer switch
X49				Recovery Adress
X50		1	OUT	24V Reference
		2	IN	HER Hood error
		3	IN	
		4	IN	
		5	IN	
X51	Liquid Clean. Syst.	1	OUT	P1 Liquid dergent pump
		2	OUT	P2 Liquid rinse pump
		3	OUT	N
X52		1	OUT	HS2 Hood speed 2
		2	OUT	HS1 Hood speed 1
		3	OUT	HON Hood ON
		4	OUT	N Neutral
X53		1	IN	PPM1 Peak power managment 1
		2	IN	PPM2 Peak power managment 2
X54				-- NOT USE --

LOGIC DIAGRAM



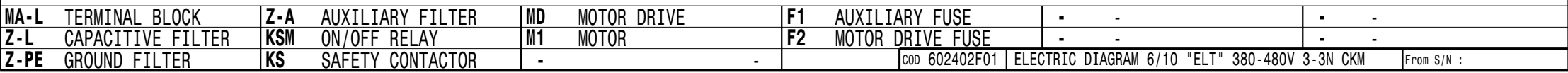
HARNESS DIAGRAM

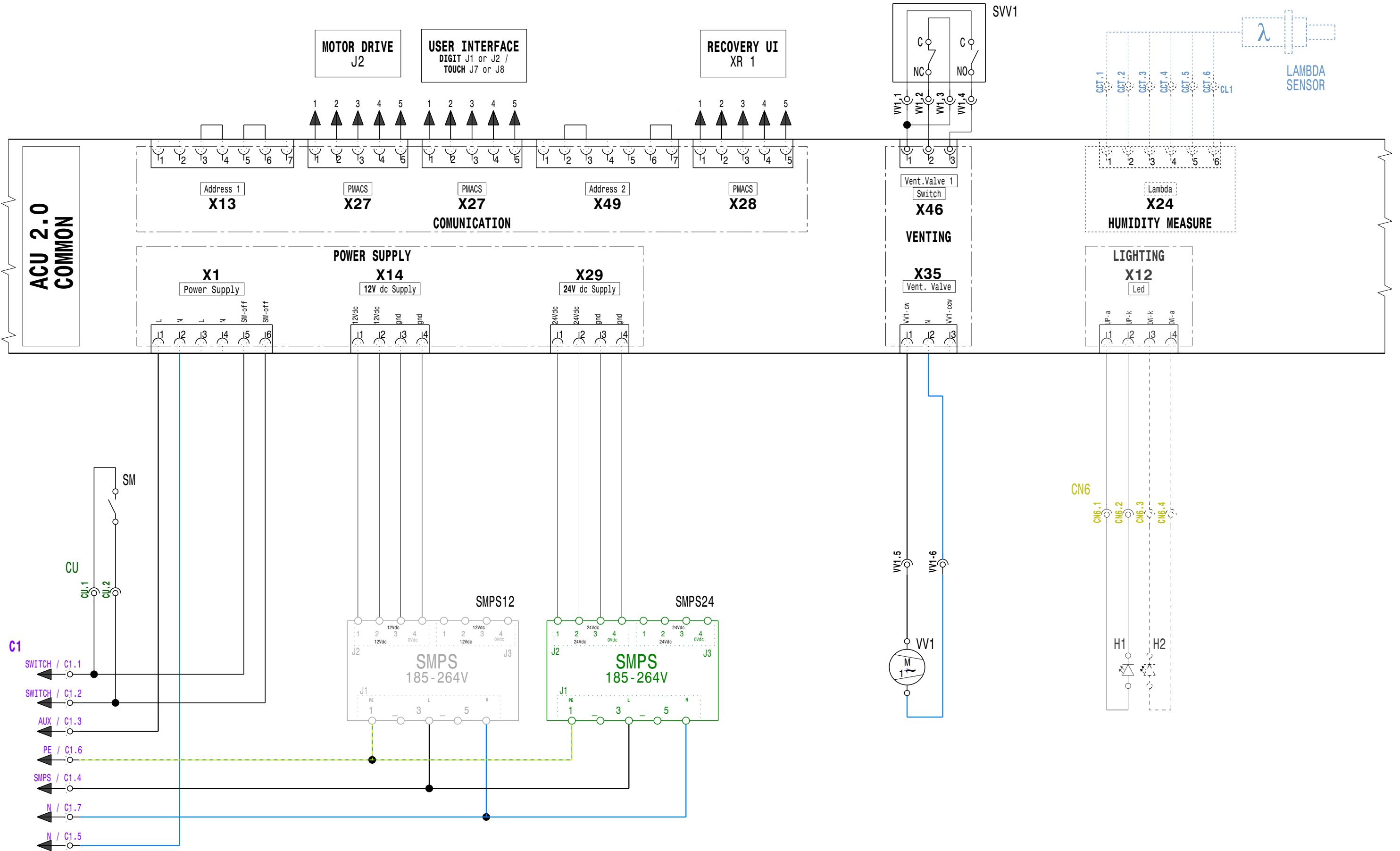




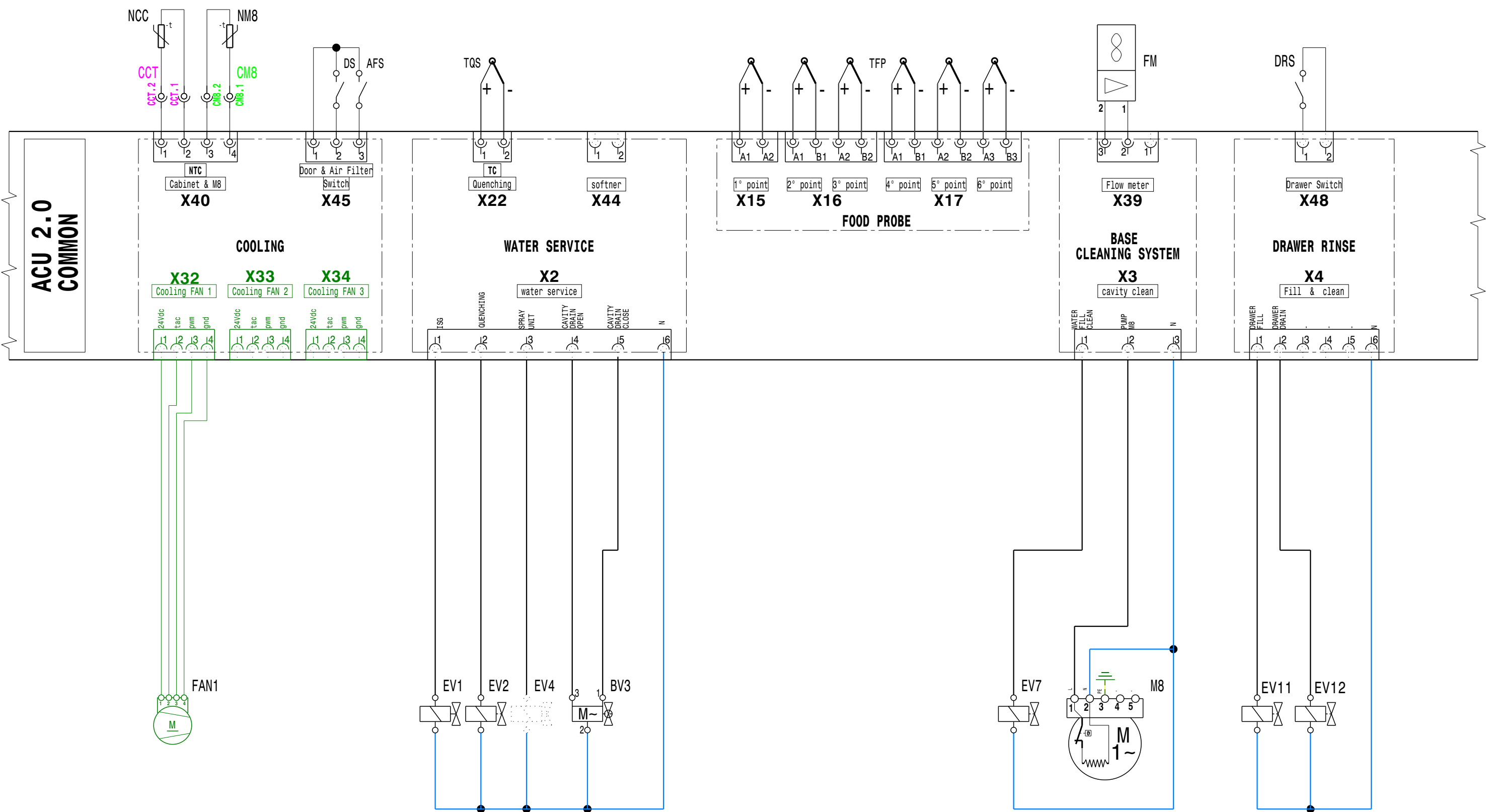
MA-L TERMINAL BLOCK	Z-A AUXILIARY FILTER	MD MOTOR DRIVE	F1 AUXILIARY FUSE	-	-	-	-
Z-L CAPACITIVE FILTER	KSM ON/OFF RELAY	M1 MOTOR	F2 MOTOR DRIVE FUSE	-	-	-	-
Z-PE GROUND FILTER	KS SAFETY CONTACTOR	-	-		COD 602402F01	ELECTRIC DIAGRAM 6/10 "ELT" 380-480V 3-3N CKM	From S/N :

"ELECTRIC"

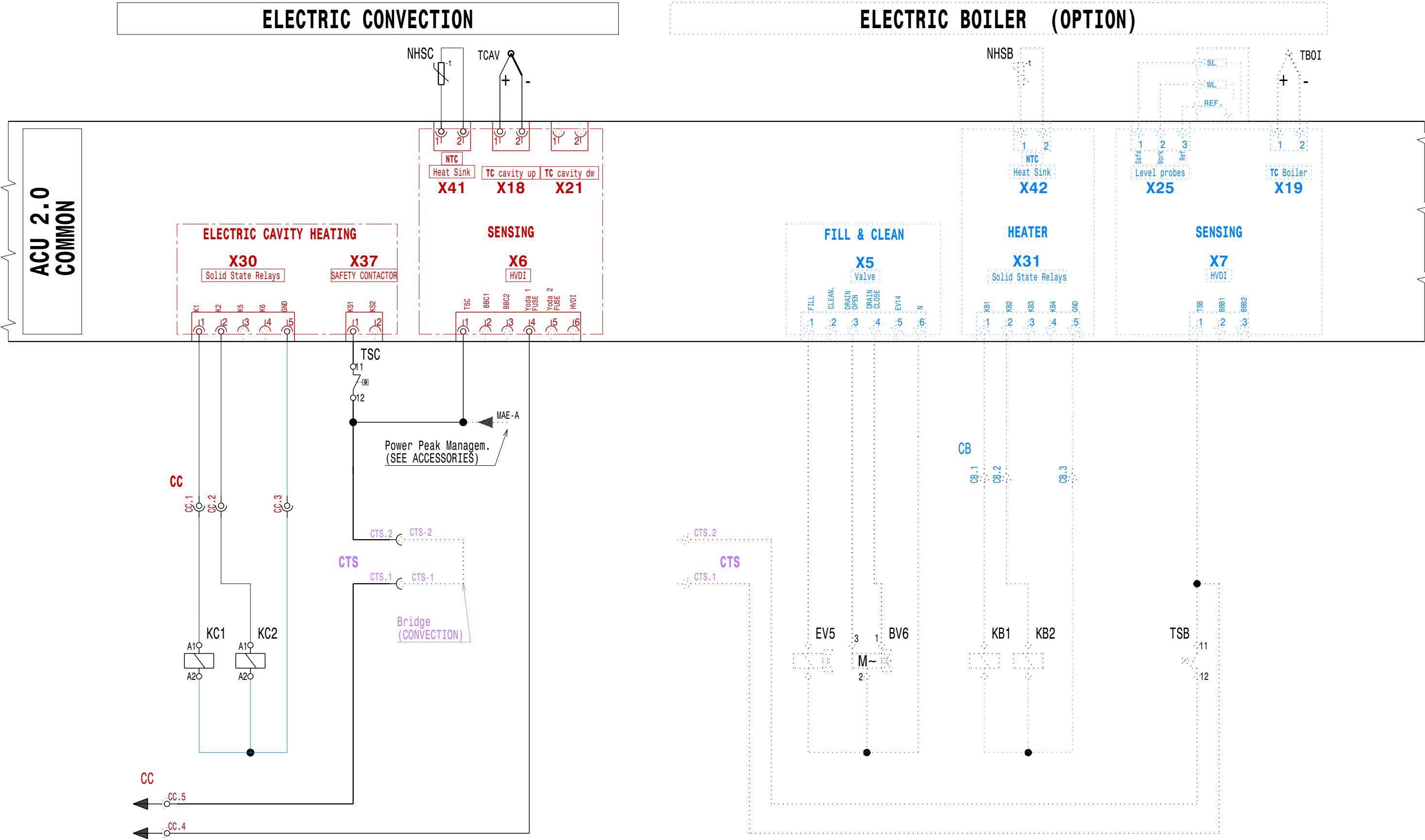




SM	MAIN SWITCH	-	-	SMPS12	SMPS 12V	VV1	VENTING VALVE 1	H1	LED LIGHTING 1	-	-
-	-	-	-	SMPS24	SMPS 24V	SVV1	VENTING VALVE SWITCHES	H2	LED LIGHTING 2	-	-
-	-	-	-	-	-	-	COD 602402F01	ELECTRIC DIAGRAM 6/10 "ELT" 380-480V 3-3N CKM			From S/N :



FAN1	COOLING FAN	DS	DOOR SWITCH	TFP	FOOD PROBE TEMPERATURE	FM	FLOW METER	DRS	DRAWER SWITCH
NCC	NTC CABINET COMPONENTS	AFS	AIR FILTER SWITCH	EV1	INSTANT STEAM SOLENOID VALVE	EV7	CLEANING WATER FILL S. VALVE	EV11	DRAWER FILL S. VALVE
NM8	NTC PUMP M8	TQS	QUENCHING THERMOC.	EV2	QUENCHING SOL.VALVE	M8	CLEANING PUMP	EV12	DRAWER DRAIN S. VALVE
-	-	-	-	BV3	CAVITY DRAIN BALL VALVE	COD 602402F01 ELECTRIC DIAGRAM 6/10 "ELT" 380-480V 3-3N CKM			From S/N :

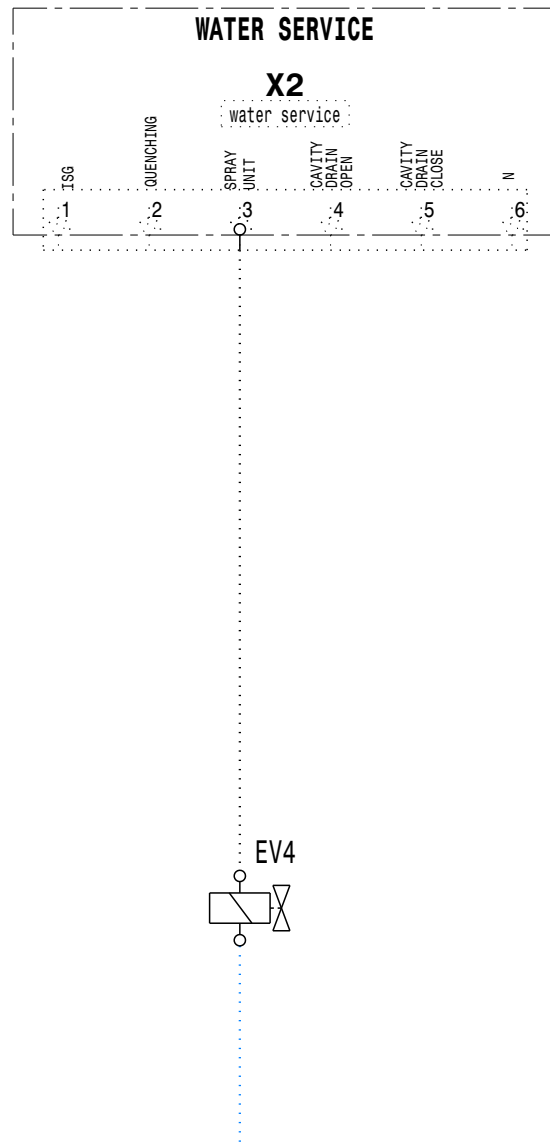


-	-	KC1	CAVITY SOLID STATE RELAY 1	NHSC	NTC CAVITY SSR HEAT SINK	-	-	-	-
-	-	KC2	CAVITY SOLID STATE RELAY 2	TCAV	CAVITY THERMOCOUPLE	-	-	-	-
-	-	TSC	CAVITY SAFETY THERMOSTAT	-	-	-	-	-	-
						COD 602402F01	ELECTRIC DIAGRAM 6/10 "ELT" 380-480V 3-3N CKM		From S/N :

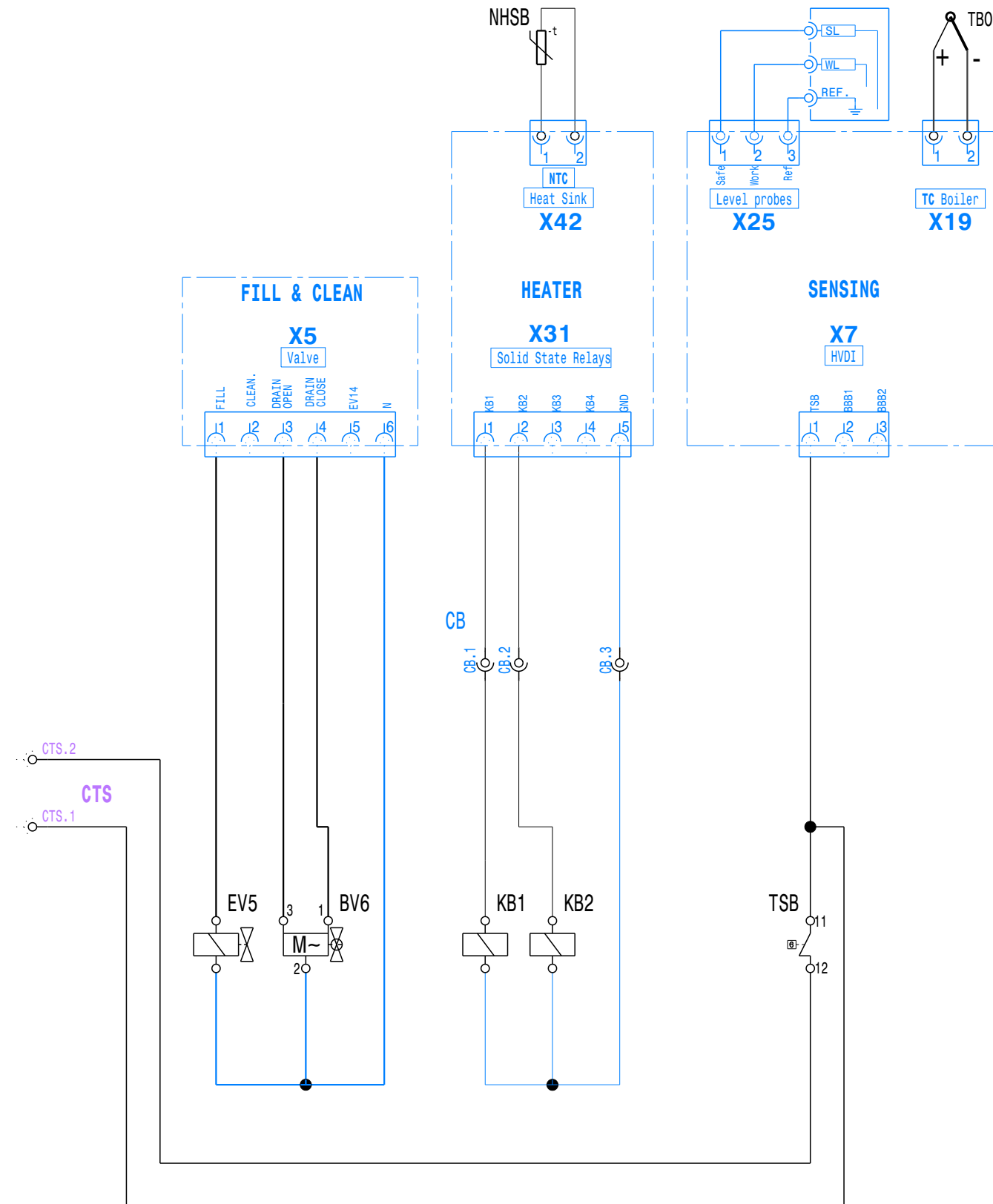
OPTIONS "ELECTRIC"

OPTIONS "ELECTRIC"

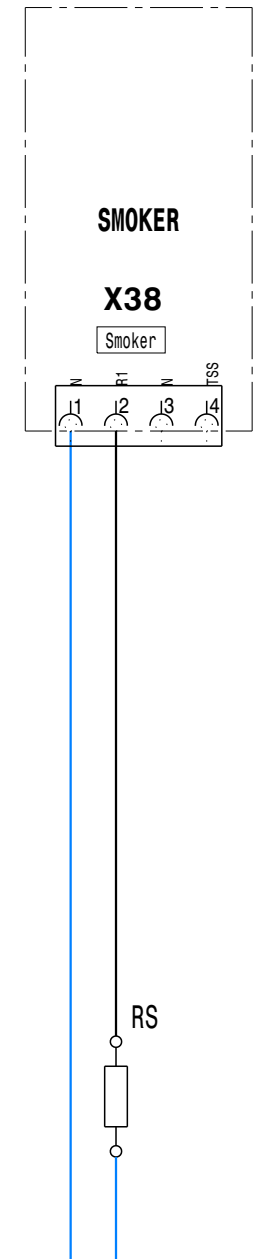
WATER SPRAY



ELECTRIC BOILER (OPTION)	
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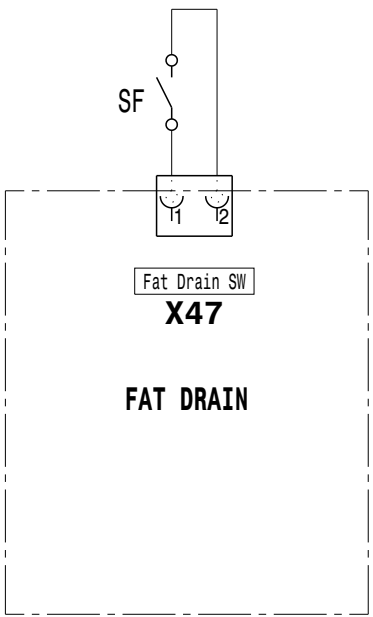


SMOKER

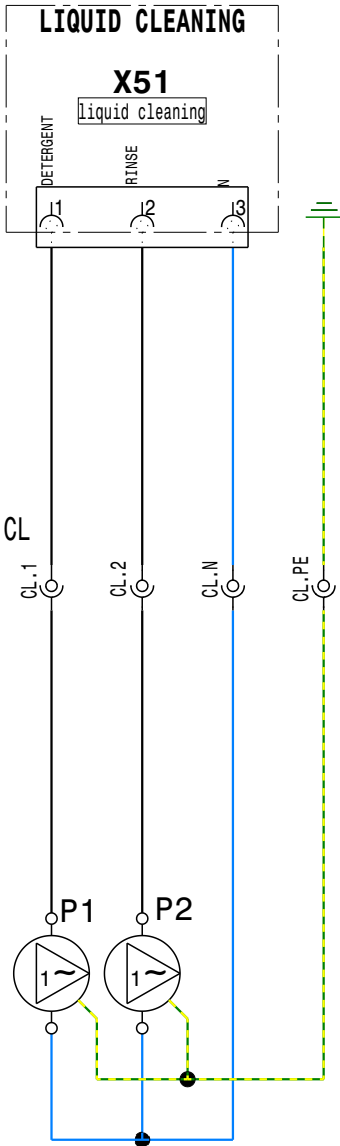


EV4	SPRAY UNIT	-	-	EV5	BOILER FILL SOLENOID VALVE	NHSB	NTC BOILER SSR HEAT SINK	-	-	RS	SMOKER HEATER
-	-	-	-	BV6	BOILER DRAIN BALL VALVE	TSB	BOILER SAFETY THERMOSTAT	-	-	-	-
-	-	-	-	KB1	BOILER SOLID STATE RELAY 1	TBO1	BOILER THERMOCOUPLE	-	-	-	-
-	-	-	-	KB2	BOILER SOLID STATE RELAY 2	-	-	COD 602402F01	ELECTRIC DIAGRAM 6/10 "ELT" 380-480V 3-3N CKM	From S/N :	

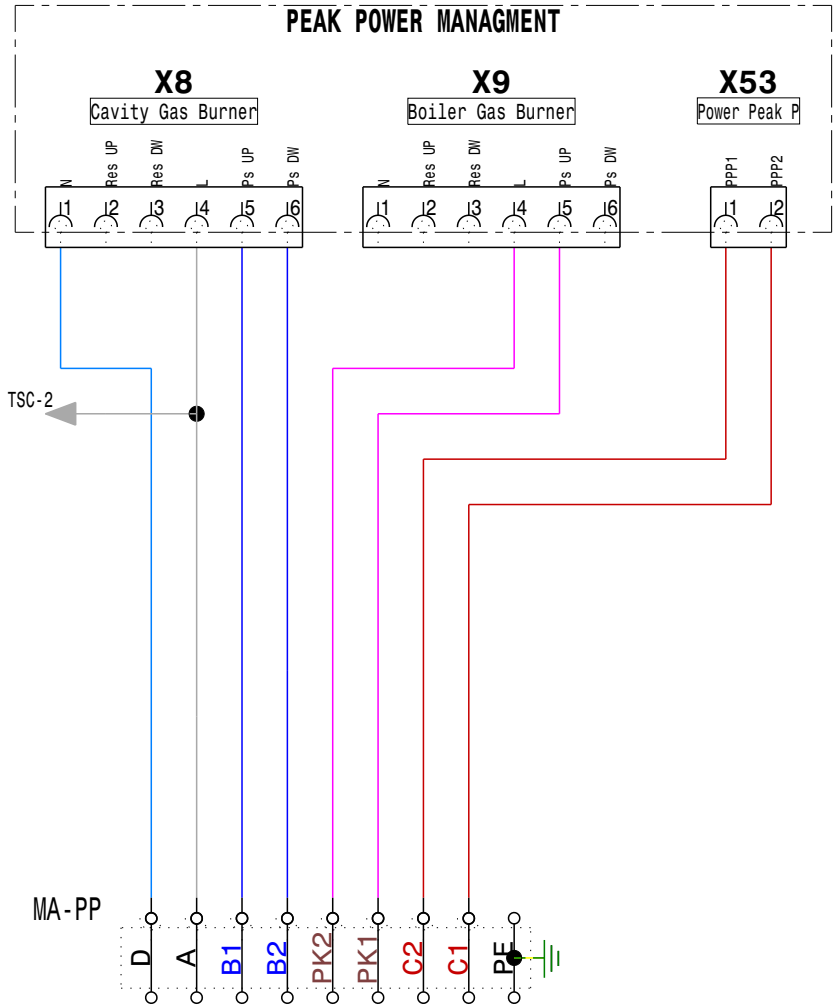
FAT DRAIN SYSTEM



LIQUID CLEANING

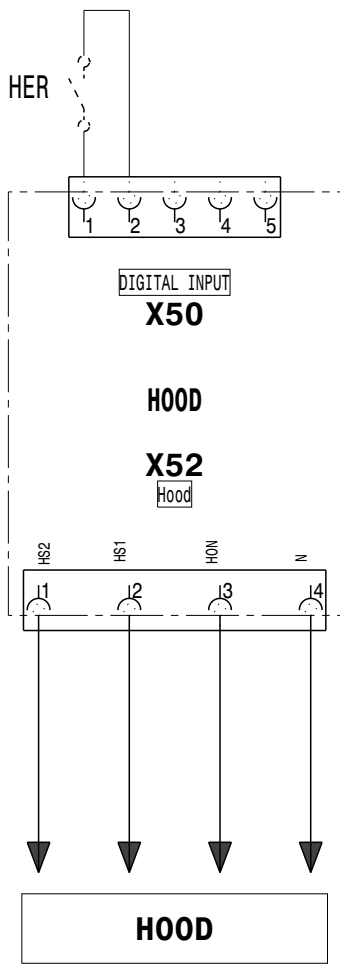


PEAK POWER MANAGMENT

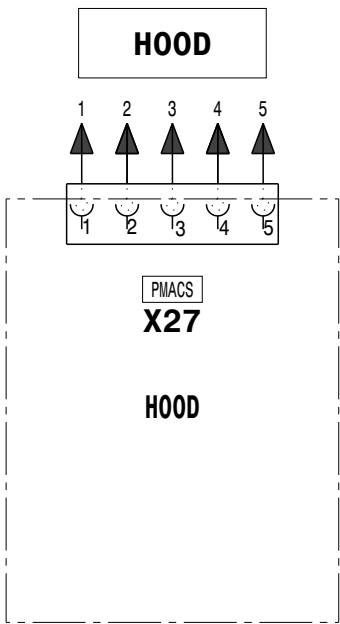


SF	FAT DRAIN SWITCH	-	-	P1	RINSE PUMP	-	-	MA-PP	TERMINAL BLOCK PEAK POWER MANAGEMENT
-	-	-	-	P2	DETERGENT PUMP	-	-	-	-
-	-	-	-	-	-	-	-	COD 602402F01	ELECTRIC DIAGRAM 6/10 "ELT" 380-480V 3-3N CKM
								From S/N :	

EXTRACTION HOOD
CONDENSATION HOOD



ODOURLESS HOOD



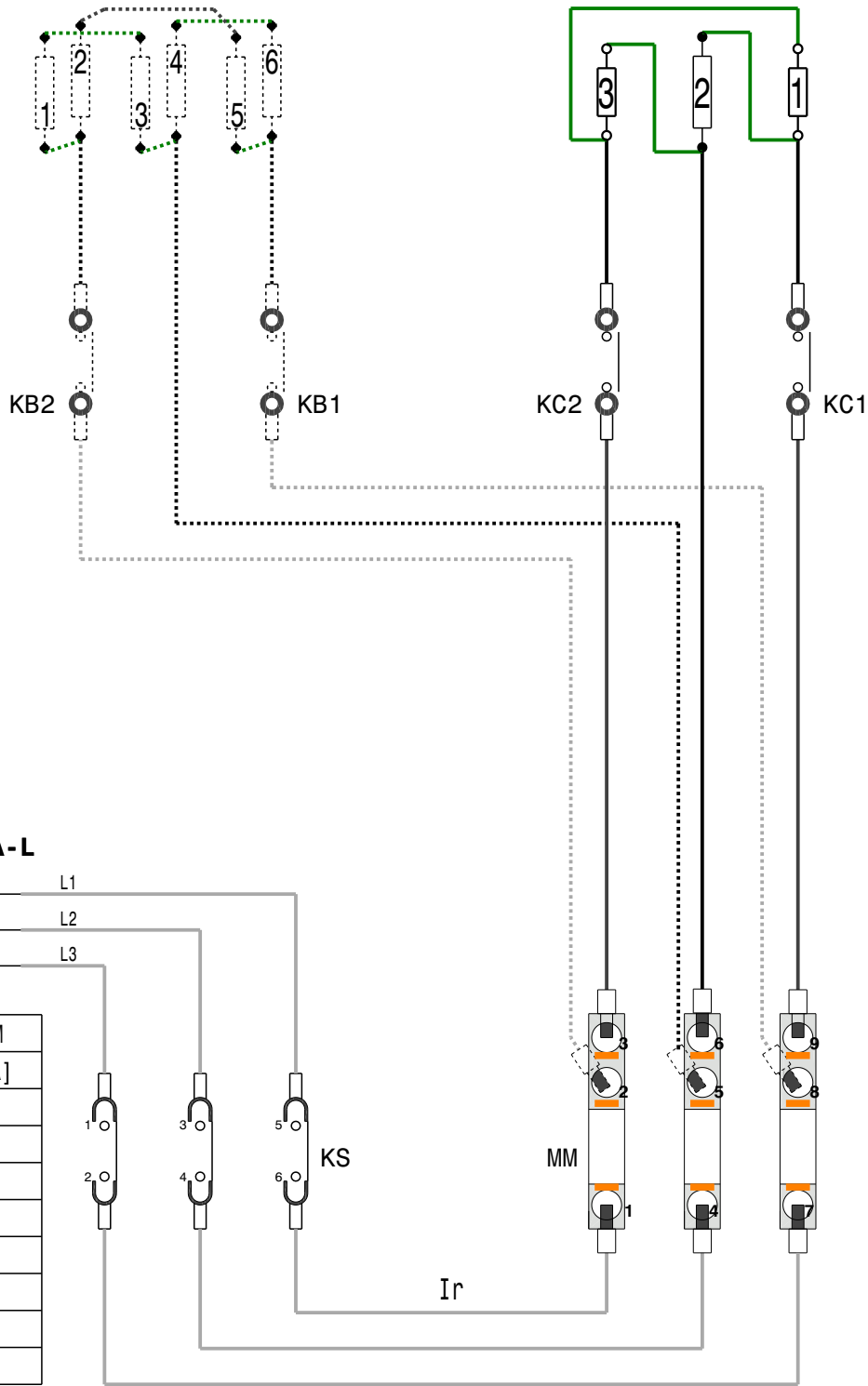
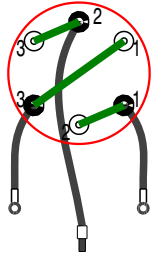
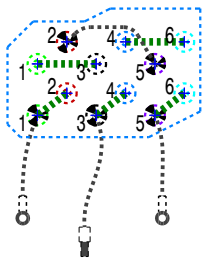
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COD 602402F01 ELECTRIC DIAGRAM 6/10 "ELT" 380-480V 3-3N CKM From S/N :				

ELECTRICAL POWER WIRING

"ELECTRIC"

BOILER

CAVITY



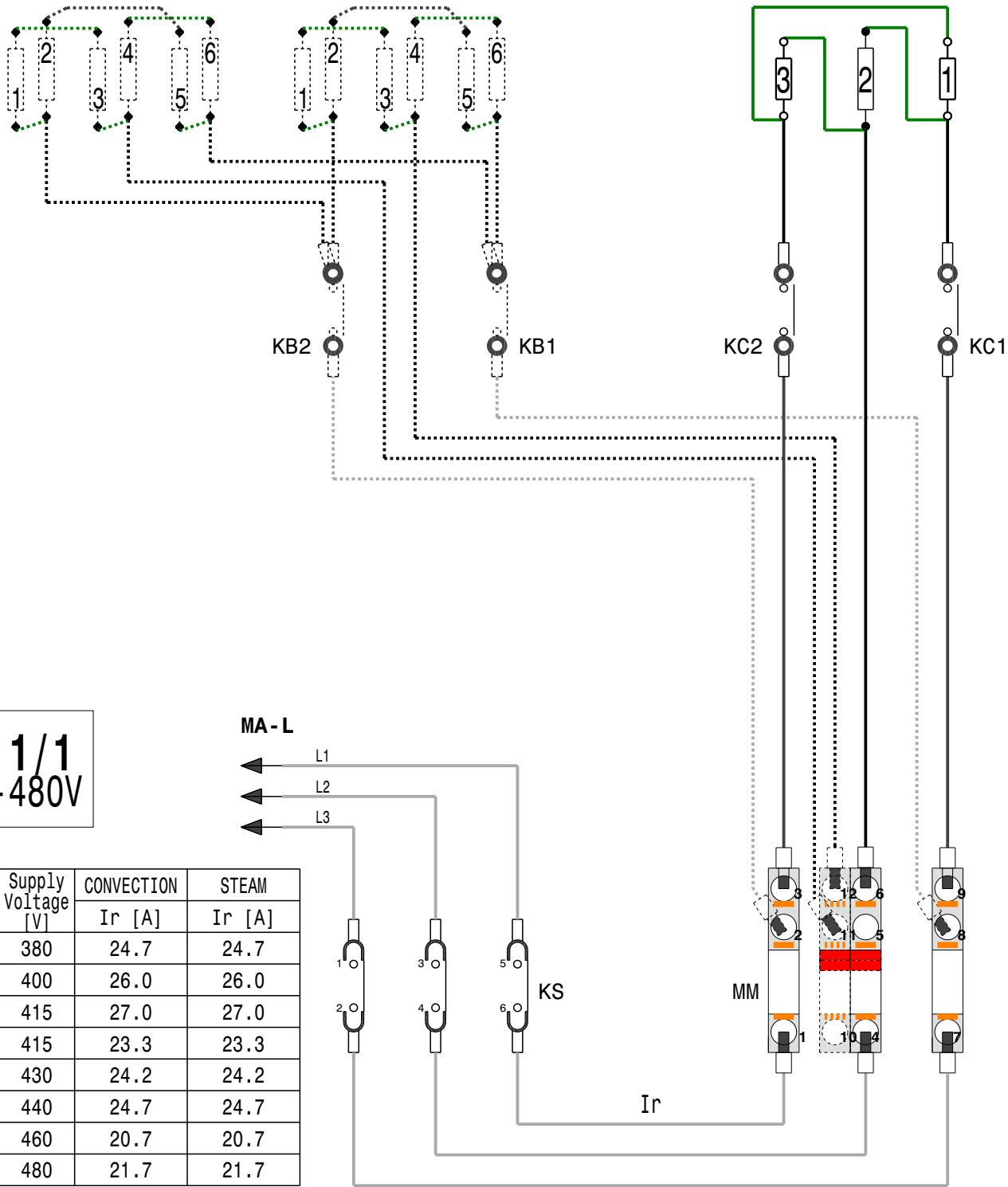
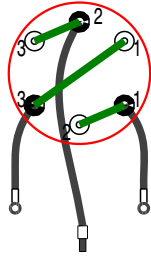
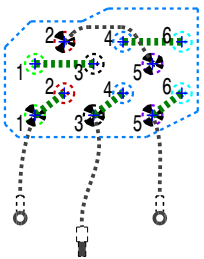
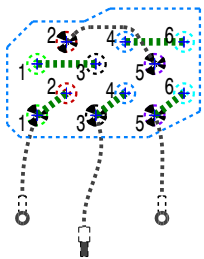
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380-480V

Rated Voltage [V]	Supply Voltage [V]	CONVECTION	STEAM
		Ir [A]	Ir [A]
380-415	380	13.7	12.3
	400	14.4	13.0
	415	15.0	13.5
415-440	415	13.0	11.7
	430	13.4	12.1
	440	13.7	12.4
460-480	460	11.5	10.4
	480	12.0	10.8

BOILER DOWN

BOILER UP

CAVITY



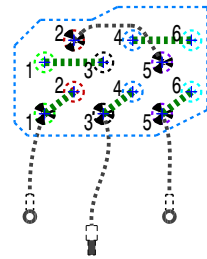
10 1/1
380-480V

Rated Voltage [V]	Supply Voltage [V]	CONVECTION	STEAM
		Ir [A]	Ir [A]
380-415	380	24.7	24.7
	400	26.0	26.0
	415	27.0	27.0
415-440	415	23.3	23.3
	430	24.2	24.2
	440	24.7	24.7
460-480	460	20.7	20.7
	480	21.7	21.7

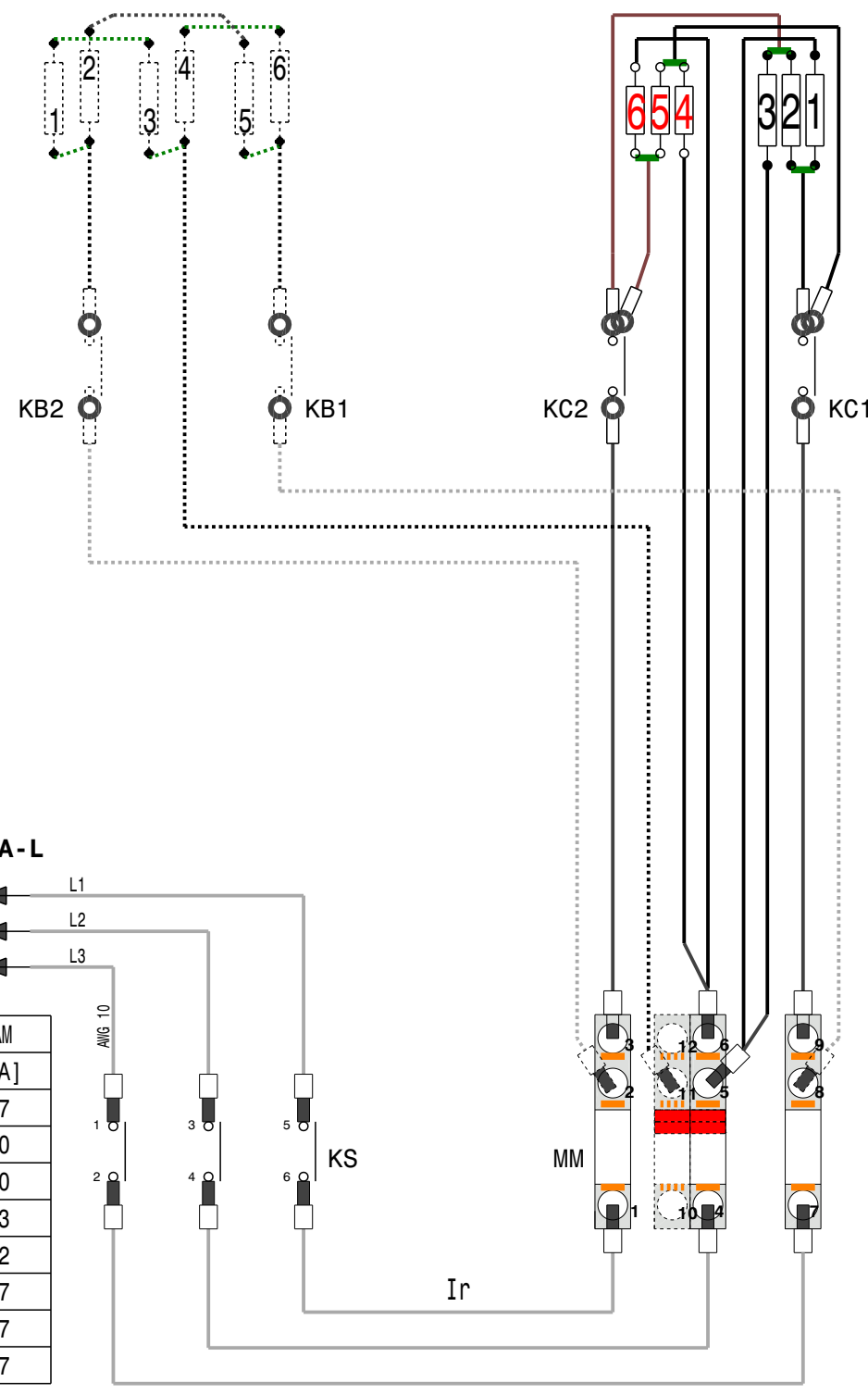
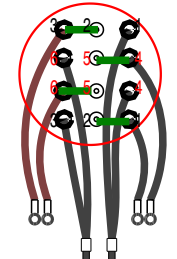
ELECTRICAL POWER WIRING

"ELECTRIC"

BOILER



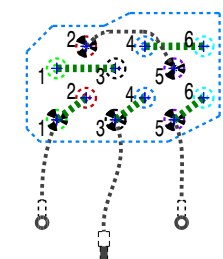
CAVITY



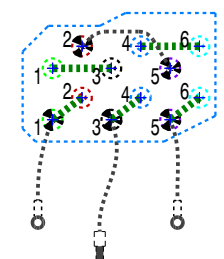
6 2/1
380-480V

Rated Voltage [V]	Supply Voltage [V]	CONVECTION	STEAM
		Ir [A]	Ir [A]
380-415	380	27.4	24.7
	400	28.9	26.0
	415	30.0	27.0
415-440	415	25.9	23.3
	430	26.9	24.2
	440	27.5	24.7
460-480	460	23.1	20.7
	480	24.1	21.7

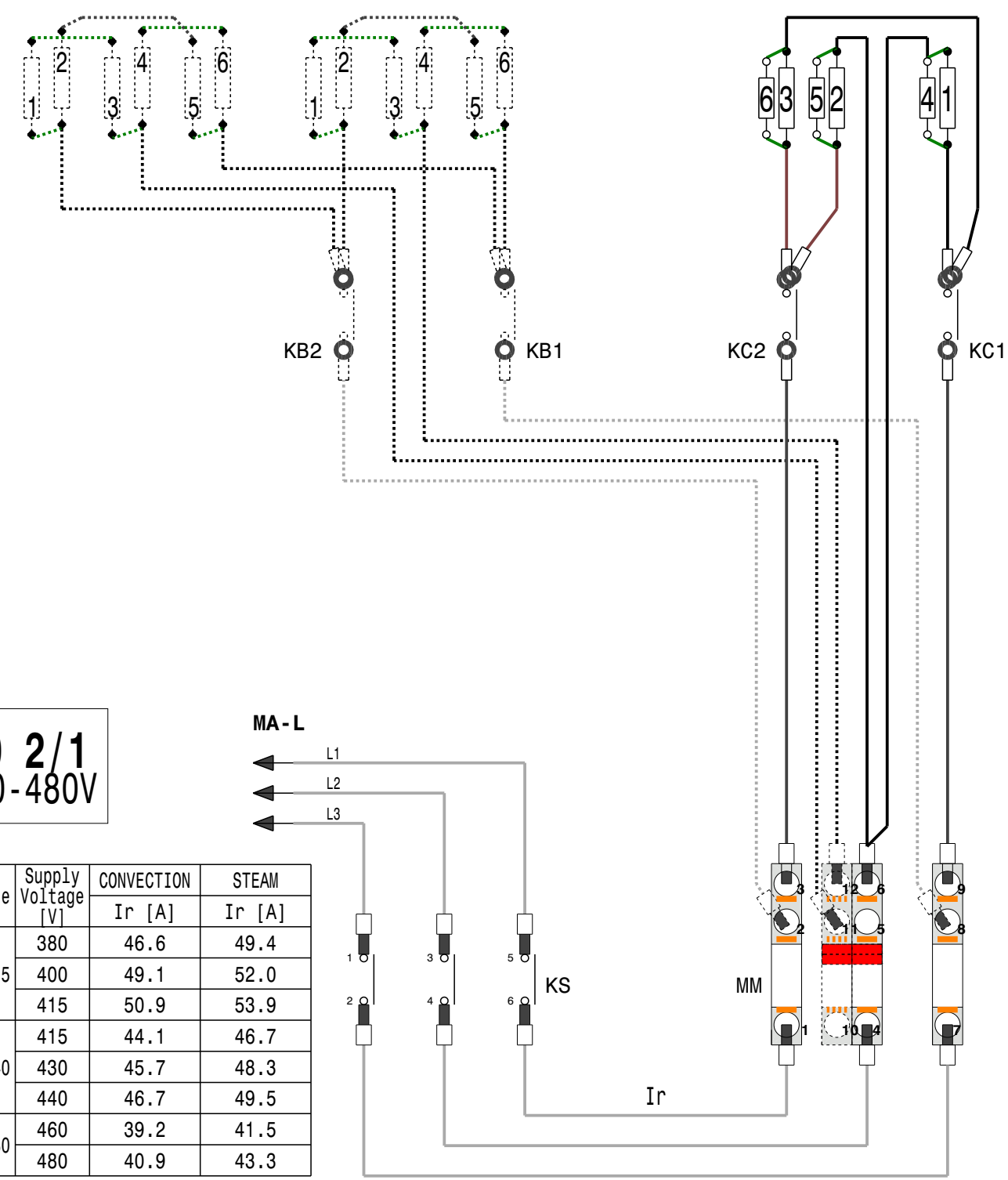
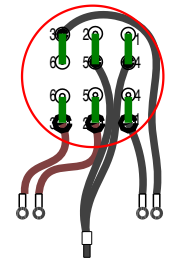
BOILER DOWN



BOILER UP



CAVITY



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380-480V

Rated Voltage [V]	Supply Voltage [V]	CONVECTION	STEAM
		Ir [A]	Ir [A]
380-415	380	46.6	49.4
	400	49.1	52.0
	415	50.9	53.9
415-440	415	44.1	46.7
	430	45.7	48.3
	440	46.7	49.5
460-480	460	39.2	41.5
	480	40.9	43.3