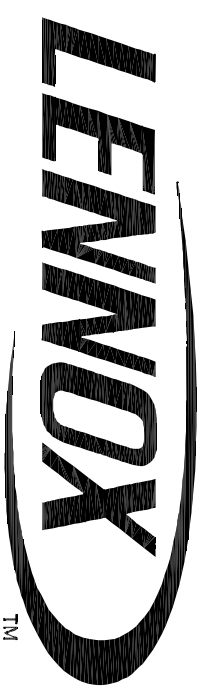


*DOSSIER ELECTRIQUE
ELECTRICAL FILE*



WA 270D K SLN

Num: / Name
CTD
Date: / Date
18/05/2005

SE133084

1/
22

CARACTERISTIQUES MACHINE			
MACHINE CHARACTERISTICS			
400 V	Pmax (kW)	Imax (A)	Idem (A)
	137.00	229.00	490.00
3.50Hz			

**CARACTERISTIQUES MOTEURS
MOTOR CHARACTERISTICS**

REPERE MARKER	DESIGNATION	DESIGNATION	REFERENCE REFERENCE	Pabs. (kW)	Inom. (A)
M1	Compresseur	Compressor motor	ZR310	28.68	46.61
M2	Compresseur	Compressor motor	ZR380	35.24	58.52
M3	Compresseur	Compressor motor	ZR310	28.68	46.61
M4	Compresseur	Compressor motor	ZR380	35.24	58.52
M31	Ventilateur	Fan motor	ZA_680	0.42	0.94
M32	Ventilateur	Fan motor	ZA_680	0.42	0.94
M33	Ventilateur	Fan motor	ZA_680	0.42	0.94
M34	Ventilateur	Fan motor	ZA_680	0.42	0.94
M35	Ventilateur	Fan motor	ZA_680	0.42	0.94
M36	Ventilateur	Fan motor	ZA_680	0.42	0.94
M37	Ventilateur	Fan motor	ZA_680	0.42	0.94
M38	Ventilateur	Fan motor	ZA_680	0.42	0.94
M65	Pompe	Pump	JRL_206-14/4	4	7.5
M66	Pompe	Pump	JRL_206-14/4	4	7.5

NOMENCLATURE ARMOIRE ELECTRIQUE
ELECTRIC PANEL ASSEMBLY BILL OF MATERIAL

REPERE MARKER	DESIGNATION	DESIGNATION	FOURNISSEUR SUPPLIER	REFERENCE REFERENCE
AP1	Carte interface circuit 1	Interface board circuit1	INF-03	
AP2	Carte interface circuit 2	Interface board circuit 2	INF-04	
Dép1	Alimentation peigne	Supply cable assembly	GV1G09	
Dép2	Peigne 1	Cable assembly 1	GV2G445	
Dép3	Peigne 2	Cable assembly 2	GV2G345	
Dép4	Peigne 3	Cable assembly 3	GV2G345	
KM1	Contacteur compresseur M1	Compressor contactor M1	LC1D40B7	
KM2	Contacteur compresseur M2	Compressor contactor M2	LC1D50B7	
KM3	Contacteur compresseur M3	Compressor contactor M3	LC1D40B7	
KM32	Contacteur ventilateur M32	Fan contactor M32	GV2ME06K1B7	
KM33	Contacteur ventilateur M33	Fan contactor M33	GV2ME06K1B7	
KM34	Contacteur ventilateur M34	Fan contactor M34	GV2ME06K1B7	
KM36	Contacteur ventilateur M36	Fan contactor M36	GV2ME06K1B7	
KM37	Contacteur ventilateur M37	Fan contactor M37	GV2ME06K1B7	
KM38	Contacteur ventilateur M38	Fan contactor M38	GV2ME06K1B7	
KM4	Contacteur compresseur M4	Compressor contactor M4	LC1D50B7	
KM65	Contacteur pompe M65	Pump contactor M65	GV2ME14K1B7	
KM66	Contacteur pompe M66	Pump contactor M66	GV2ME14K1B7	
QF1	Disjoncteur compresseur M1	Compressor circuit breaker M1	GV3ME63	
QF2	Disjoncteur compresseur M2	Compressor circuit breaker M2	GV3ME63	
QF3	Disjoncteur compresseur M3	Compressor circuit breaker M3	GV3ME63	
QF31	Disjoncteur ventilateur M31	Fan circuit breaker M31	GV2ME063	
QF35	Disjoncteur ventilateur M35	Fan circuit breaker M35	GV2ME063	
QF4	Disjoncteur ventilateur M4	Compressor circuit breaker M4	GV3ME63	
QF70	Disjoncteur primaire TC1	Primary circuit breaker TC1	GB2DB08	
QF72	Disjoncteur secondaire TC1	Secondary circuit breaker TC1	GB2CD16	
QF73	Disjoncteur secondaire TC1	Secondary circuit breaker TC1	GB2CD16	
QF74	Disjoncteur départ résistances	Fan circuit breaker M38	GV2ME073	
QSG	Interrupteur INS 250A - 3P	Interrupteur INS 250A - 3P_AN	31-106	
QSG	Répartiteur	Terminal block	4033	
QSG	Cde frontale prolongée	Front operated Isolator	31050	
QSG	Cache bornes	Terminal block cover	29324	
QSG	Répartiteur	Terminal block	4155	
TC1	Transformateur contrôlé	Transformer 24V	ABL6TTS63B	

SCHEMA ELECTRIQUE

0	1	2	3	4	5	6	7	8	9
EHI1-->9	Résistance carter Crankcase heater		R	Résistances triphasées 3 phase heater		SP1111-->115	Pressostat HP BP combiné HP LP combined switch		
EHI1-->15	Résistance bouteille Receiver heater		RC	Circuits RC RC circuit		ST11-->15	Thermostat de commande résistances bouteille Receiver control thermostat		
EHI6-->25	Résistance évaporateur Evaporator heater		RT	Sondes ou Capteurs Temperature or pressure sensor		ST16-->25	Thermostat de commande résistances évaporateur Evaporator resistance control thermostat		
EH26-->35	Résistance condenseur Condenser heater		RTTEA	Température d'entrée d'air Air inlet temperature		ST126-->30	Thermostat de commande résistances condenseur Condenser resistance control thermostat		
EH90-->100	Résistances diverses Various heaters		RTTEEG	Température d'entrée d'eau glacée Water inlet temperature		ST56-->65	Thermostat de surchauffe Overheat thermostat		
EH101	Résistance armoire Electrical panel heater		RTTEEG	Température de sortie d'eau glacée Water outlet temperature		ST166-->70	Thermostat de commande ventilateur armoire Electrical panel fan control thermostat		
FR91-->99	Protection moteur compresseur Solid state motor protection		RTTREF	Température de refoulement Discharge temperature		ST71-->75	Thermostat de dégivrage Defrost thermostat		
FU90	Fusibles divers Various fuses		RTTASP	Température d'aspiration Suction temperature		ST76-->85	Thermostat antiigel Antifreeze thermostat		
HA	Signalisation sonore Sound signal		RTTBP	Température d'évaporation Evaporating temperature		ST90-->100	Thermostat divers Various thermostats		
HL01	Voyant défaut général General fault light		SA90.	Interrupteurs divers Various switches		V	Diode Diode		
HL1-->9	Voyant marche compresseur Compressor operating light		SB90.	Boutons poussoirs divers Various push buttons		V0PT	Optocoupleur Optoelectronic coupler		
HL11-->20	Voyant marche ventilateur Fan running light signal		SD1	Contrôleur de débit Flow switch		XB	Barrette sectionnable Isolator link		
HL25-->29	Voyant défaut pompe Pump fault light signal		SL1-->5	Contrôleur de niveau d'eau Water Level controller		XS90	Prise de courant plug		
HL30	Voyant sous tension Voltage ON light signal		SL16-->20	Contrôleur de niveau d'huile Oil level controller		YP1-->5	Détendeur électronique Electronic expansion valve		
HL31-->39	Voyant arrêt contrôle Control shutdown light signal		SP1-->9	Pressostat HP sécurité HP pressure switch		YV1-->5	Electrovanne liquide liquid line solenoid valve		
HL41-->49	Voyant arrêt sécurité Safety shutdown light signal		SP11-->15	Pressostat BP sécurité BP pressure switch		YV6-->15	Electrovanne réduction de puissance compresseur Compressor capacity reduction solenoid valve		
HL51-->60	Voyant défaut ventilateur Fan shutdown light signal		SP16-->25	Pressostat d'huile Oil pressure switch		YV16-->20	Electrovanne injection de liquide Liquid injection solenoid valve		
HL65-->69	Voyant marche pompe Pump operation light		SP26-->30	Pressostat BP antiigel Antifreeze LP pressure switch		YV21-->25	Electrovanne économiseur Economizer solenoid valve		
HL90	Voyant divers Various light signal		SP31-->50	Pressostat HP de commande ventilateur Fan control HP pressure switch		YV26-->35	Electrovanne by-pass compresseur Compressor by-pass solenoid valve		
KA50-->75	Relais divers Various relays		SP51-->55	Pressostat HP de commande résistance bouteille Receiver heater HP pressure switch		YV36-->40	Electrovanne gaz chauds pressostatique Pressure control hot gas solenoid valve		
KM90	Contacteurs divers Various contactors		SP56-->60	Pressostat HP de commande vanne décharge bouteille Discharge valve HP pressure switch		YV41-->45	Electrovanne gaz chauds thermostatique Thermostatic hot gas solenoid valve		
KT90	Relais temporisés divers Various time delayed relays		SP61-->65	Pressostat HP de commande de délestage Overload control HP pressure switch		YV61-->70	Electrovanne inversion de cycle 4 way reversing solenoid valve		
M111	Ventilateur de culasse compresseur Compressor cylinder head fan		SP71-->75	Pressostat de commande by-pass détenteur Expansion valve by-pass control pressure switch		YV71-->75	Electrovanne by-pass détenteur Thermostatic expansion valve by-pass solenoid valve		
P1	Afficheur Display		SP90-->110	Pressostats divers Various pressure switch		YV90	Electrovanne diverses Various solenoid valves		

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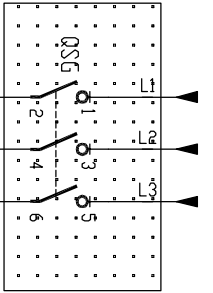
SCHEMA ELECTRIQUE

0	1	2	3	4	5	6	7	8	9
EH1-->9	Crankcase heater		R	3 phase heater		SP111-->115	HP LP combined switch		
EH11-->15	Receiver heater		RC	RC circuit		ST11-->15	Receiver control thermostat		
EH16-->25	Evaporator heater		RT	Temperature or pressure sensor		ST16-->25	Evaporator resistance control thermostat		
EH26-->35	Condenser heater		RTTEA	Air inlet temperature		ST126-->30	Condenser resistance control thermostat		
EH90-->100	Various heaters		RTTEEG	Water inlet temperature		ST56-->65	Overheat thermostat		
EH101	Electrical panel heater		RTTSEG	Water outlet temperature		ST166-->70	Electrical panel fan control thermostat		
FR91-->99	Solid state motor protection		RTTREF	Discharge temperature		ST71-->75	Defrost thermostat		
FU90	Various fuses		RTTASP	Suction temperature		ST76-->85	Antifreeze thermostat		
HA	Sound signal		RTTBP	Evaporating temperature		ST90-->100	Various thermostat		
HL01	General fault light		SA90.	Various switches		V	Diode		
HL1-->9	Compressor operating light		SB90.	Various push buttons		V0PT	Optoelectronic coupler		
HL11-->20	Fan running light signal		SD1	Flow switch		XB	Isolator link		
HL25-->29	Pump fault light signal		SL1-->5	Water level controller		XS90	plug		
HL30	Voltage ON light signal		SL16-->20	Oil level controller		YP1-->5	Electronic expansion valve		
HL31-->39	Control shutdown light signal		SP1-->9	HP pressure switch		YV1-->5	liquid line solenoid valve		
HL41-->49	Safety shutdown light signal		SP11-->15	BP pressure switch		YV6-->15	Compressor capacity reduction solenoid valve		
HL51-->60	Fan shutdown light signal		SP16-->25	Oil pressure switch		YV16-->20	Liquid injection solenoid valve		
HL65-->69	Pump operation light		SP26-->30	Antifreeze LP pressure switch		YV21-->25	Economizer solenoid valve		
HL90	Various light signal		SP31-->50	Fan control HP pressure switch		YV26-->35	Compressor by-pass solenoid valve		
KA50-->75	Various relays		SP51-->55	Receiver heater HP pressure switch		YV36-->40	Pressure control hot gas solenoid valve		
KM90	Various contactors		SP56-->60	Discharge valve HP pressure switch		YV41-->45	Thermostatic hot gas solenoid valve		
KT90	Various time delayed relays		SP61-->65	Overload control HP pressure switch		YV61-->70	4 way reversing solenoid valve		
M111	Compressor cylinder head fan		SP71-->75	Expansion valve by-pass control pressure switch		YV71-->75	Thermostatic expansion valve by-pass solenoid valve		
P1	Display		SP90-->110	Various pressure switch		YV90	Various solenoid valves		

SE133084

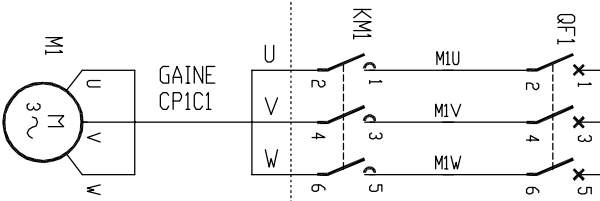
SCHEMA ELECTRIQUE

0 1 2 3 4 5 6 7 8 9

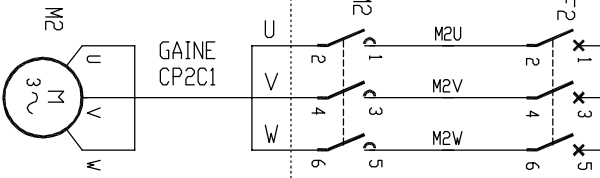


OPTIDN
 INTERUPTEUR GENERAL
 MAINS SWITCH
 OPTIDN

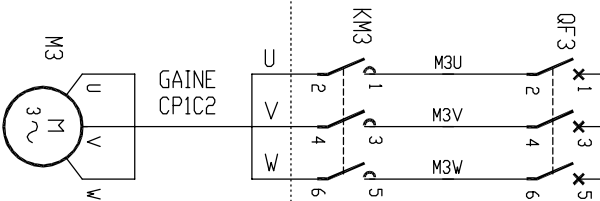
L11
 L12
 L13



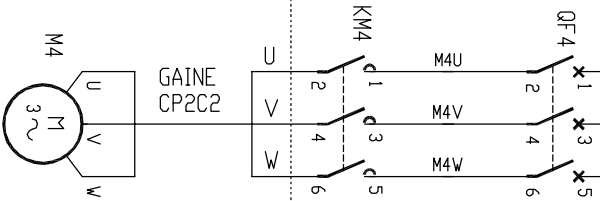
GAINE
 CP1C1



GAINE
 CP2C1

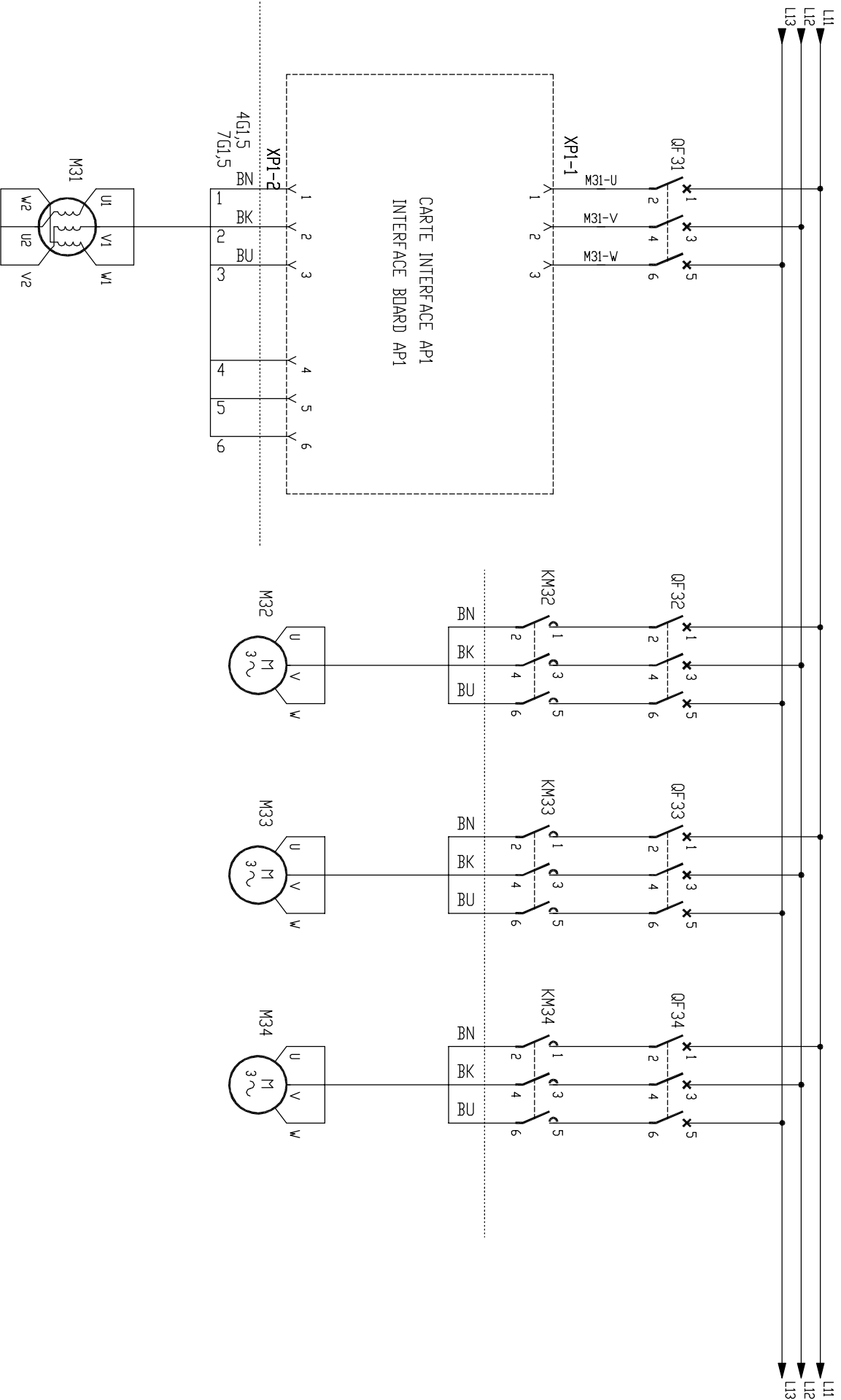


GAINE
 CP1C2

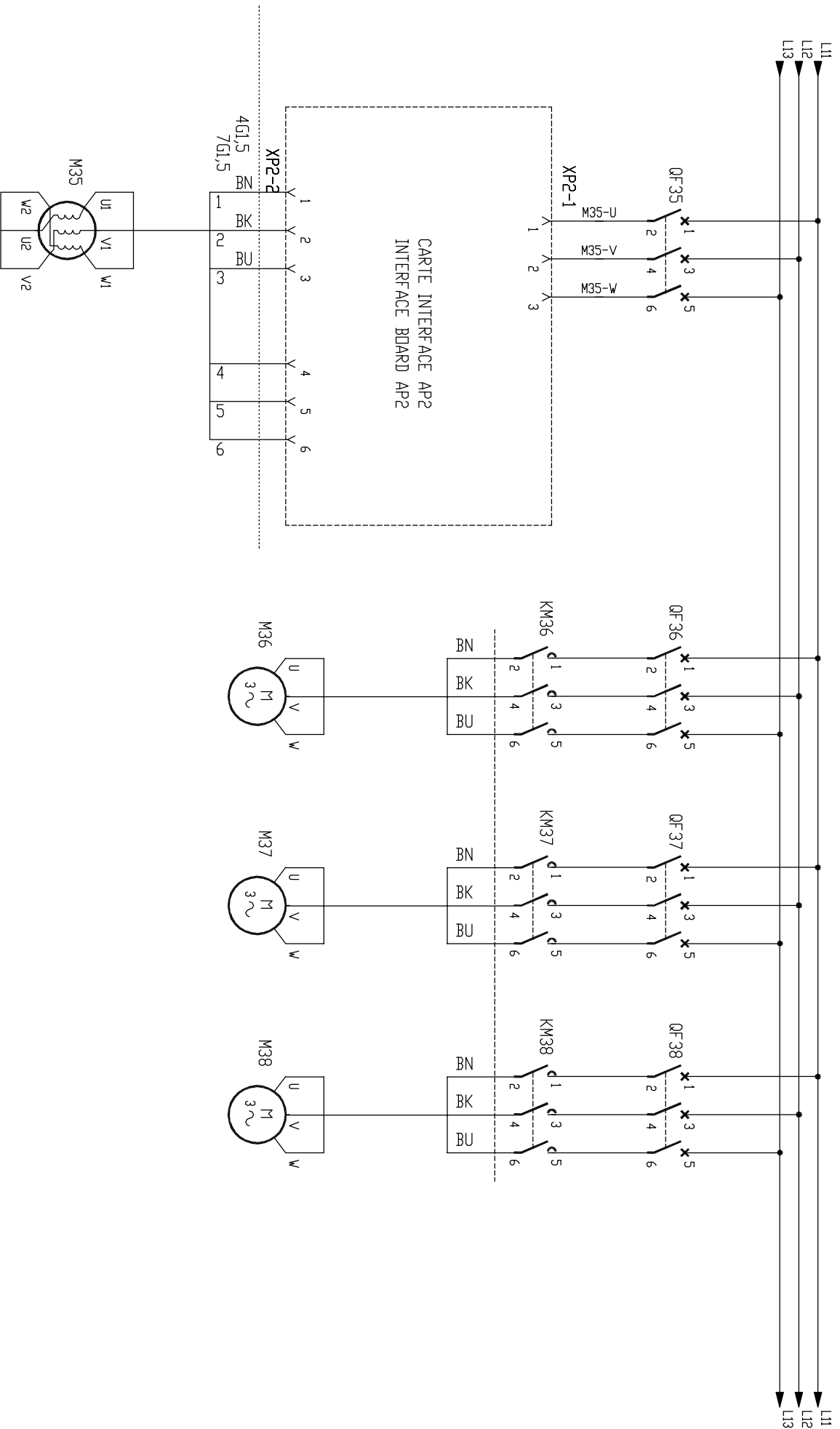


GAINE
 CP2C2

SCHEMA ELECTRIQUE

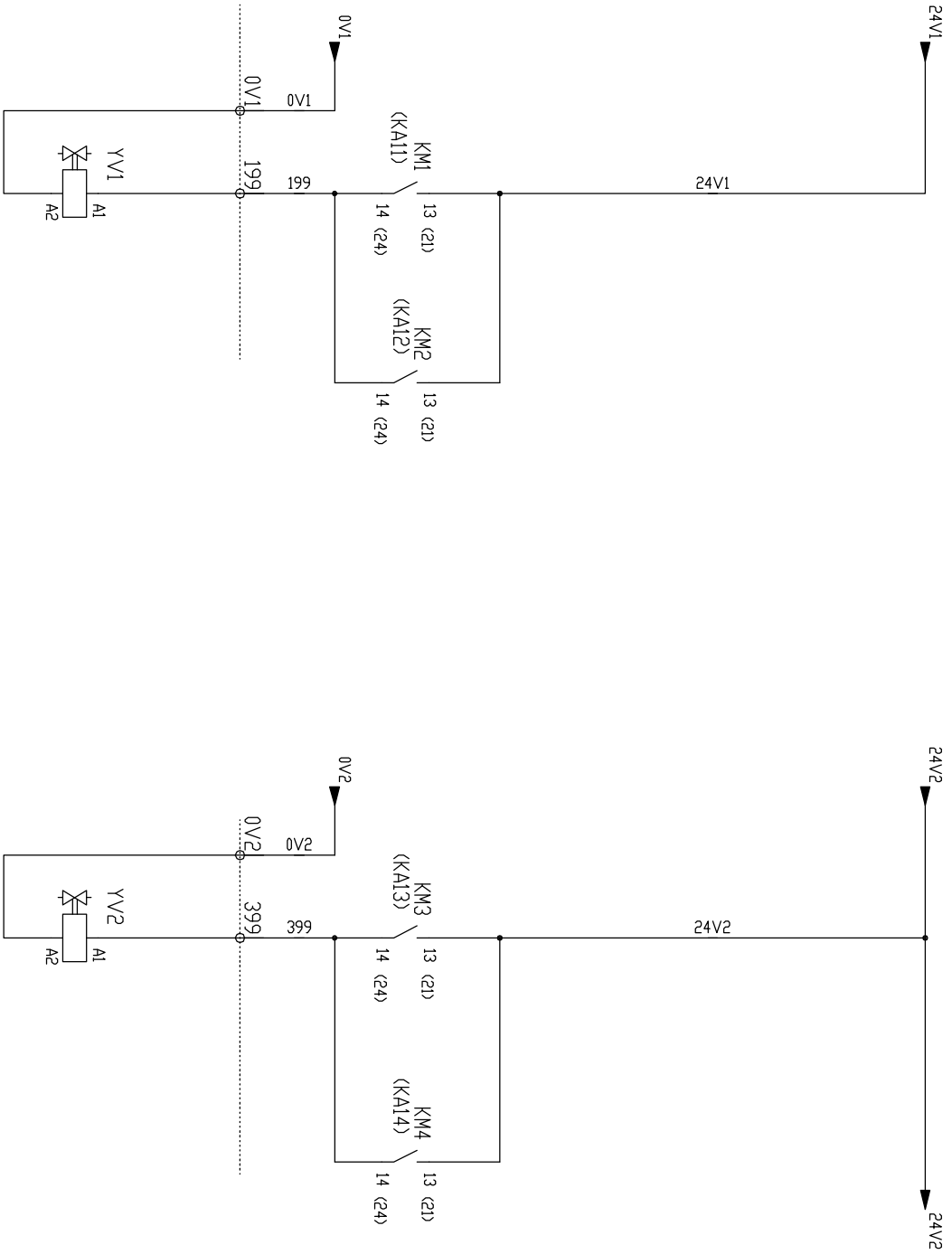


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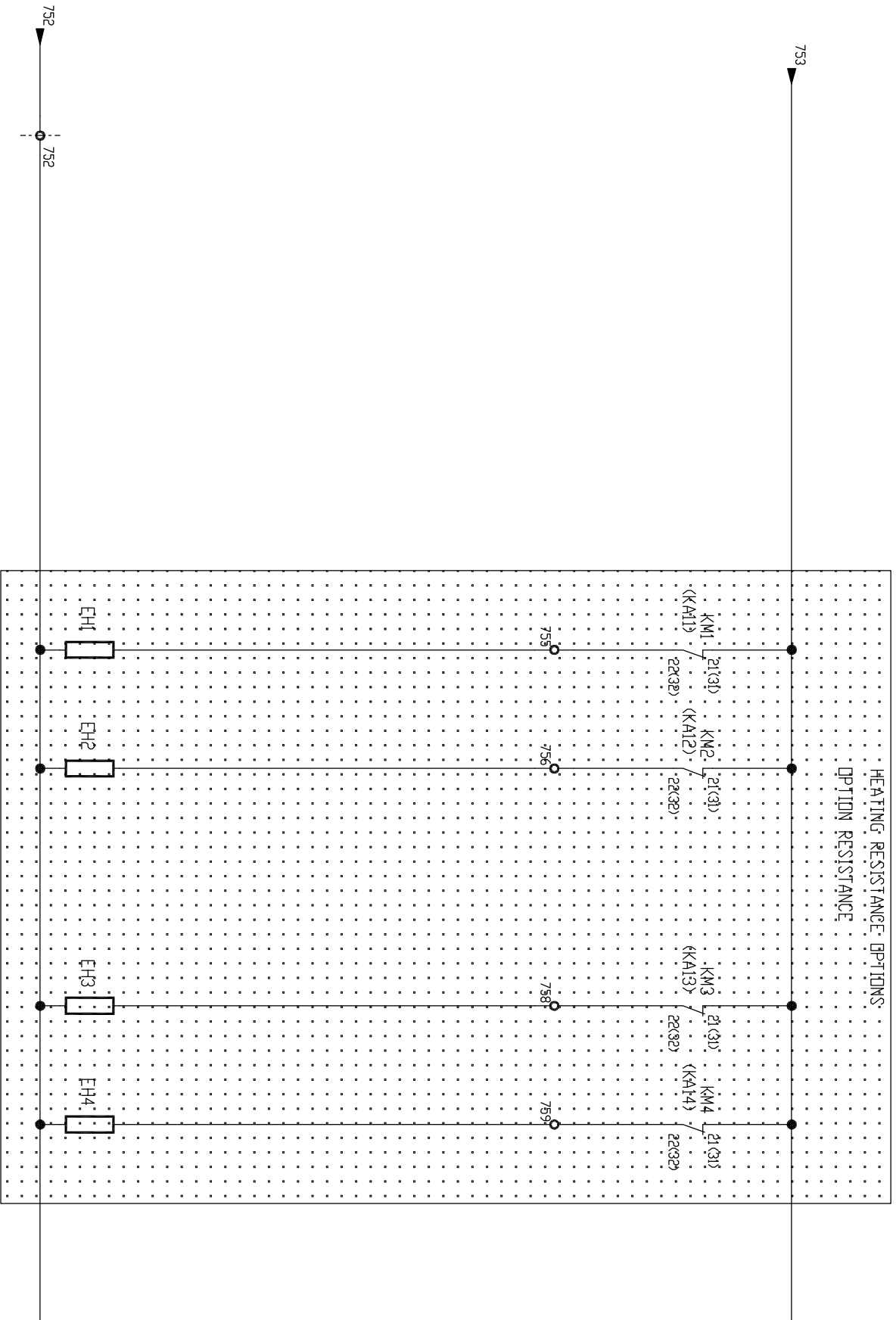
SCHEMA ELECTRIQUE

IF: SOFTSTARTER OPTION (H4) : KM1 → KA11
 SI: DEM. ELEC. OPTION (H4) : KM2 → KA12
 KM3 → KA13
 KM4 → KA14

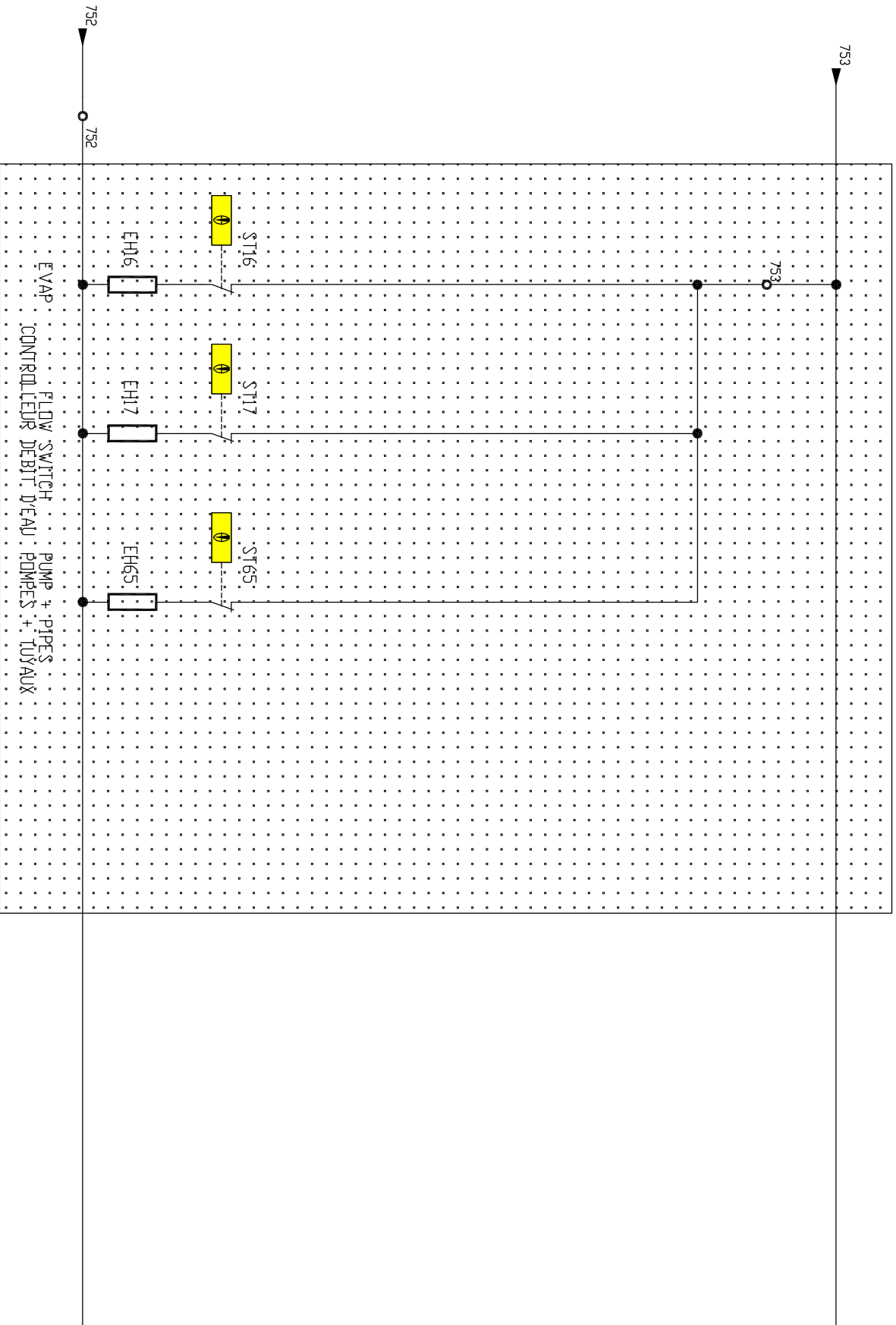


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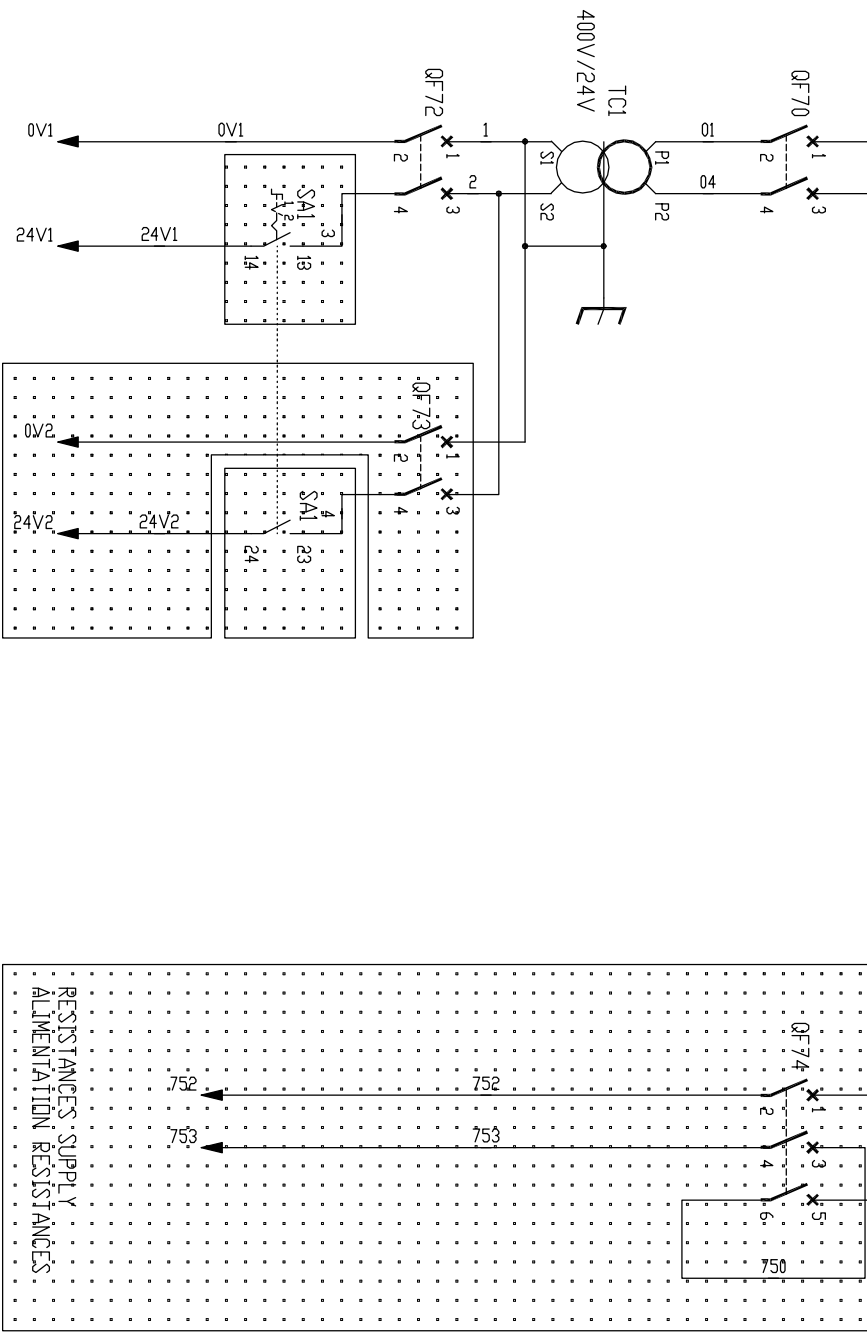
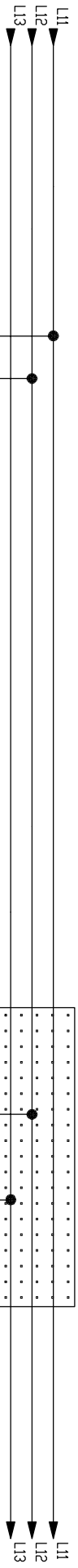
HF · SOFTSTARTER · OPTION · LH4 · KM1 → · KA11 · KM3 → · KA13 · . . .
 SI · DEM · ELEC · OPTION · CH4 · . . . KM2 → · KA12 · KM4 → · KA14 · . . .



SCHEMA ELECTRIQUE



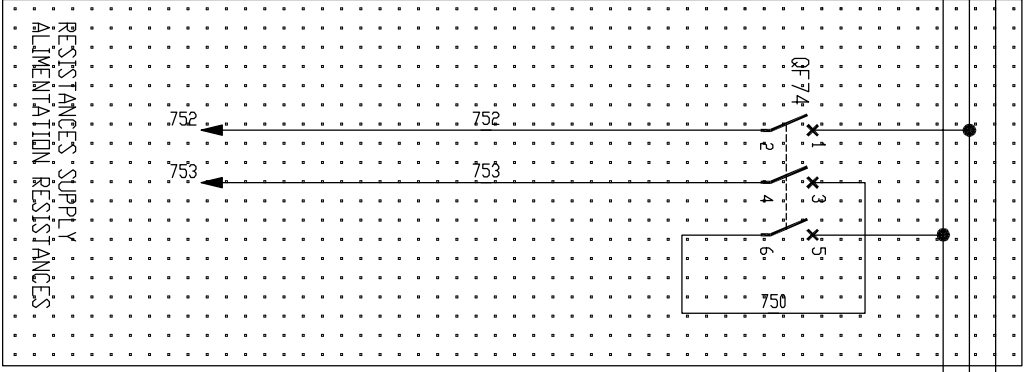
SCHEMA ELECTRIQUE



IF ND OPTIION
 MAINS SWITCH
 SAI DOOR MOUNTED
 SI PAS OPTIION
 INTERRUPTEUR AG
 SAI SUR PORTE

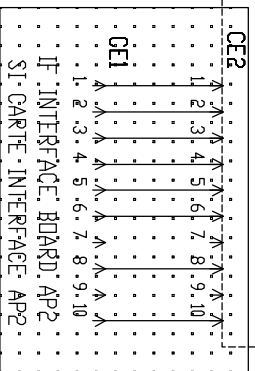
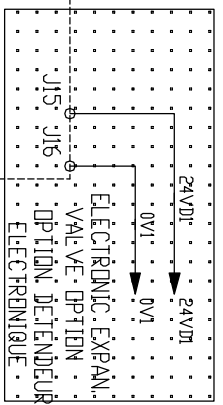
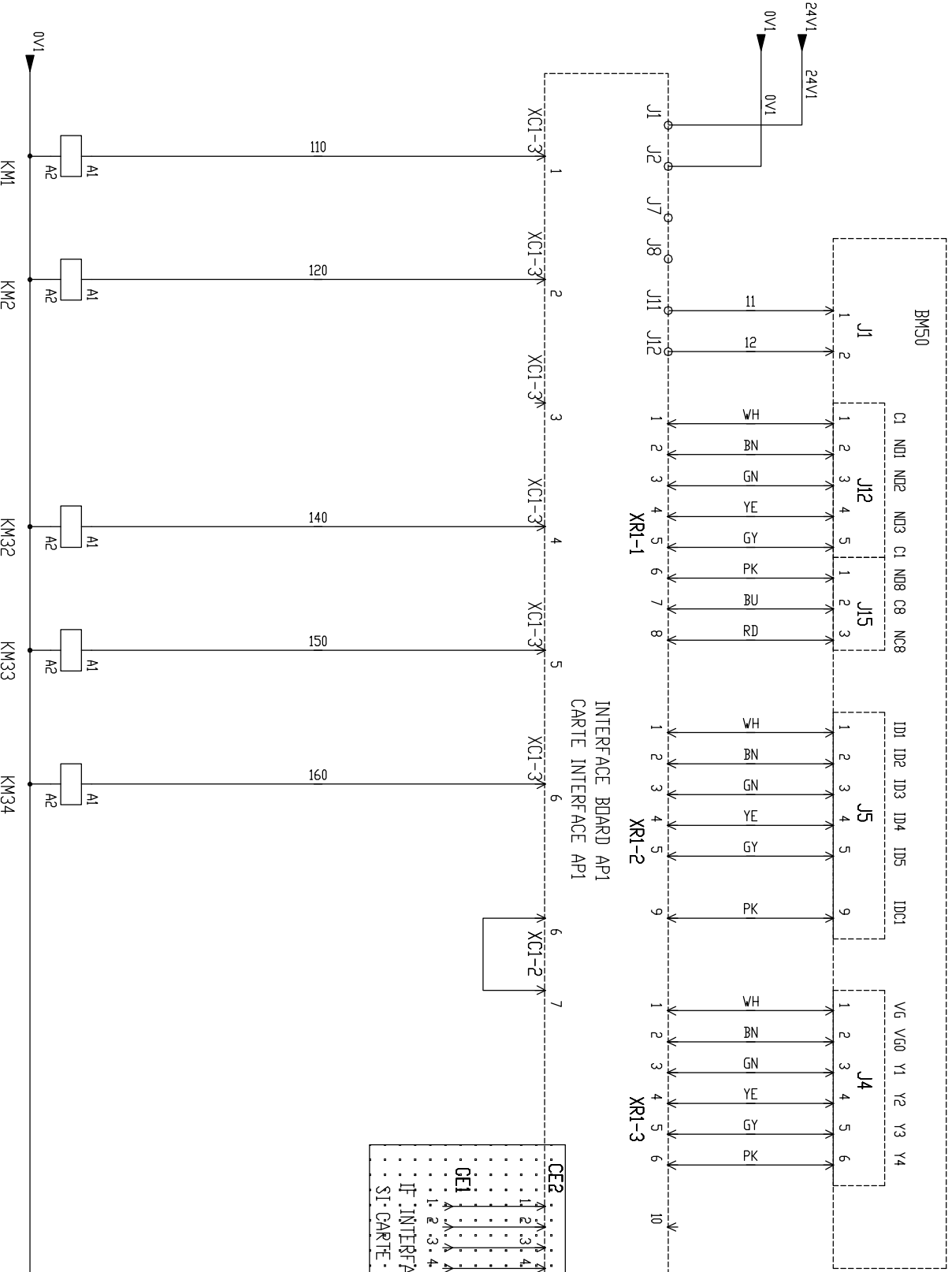
SI POWER
 TRANSFD >250 VA
 SI PUISSANCE
 TRANSFD >250 VA

CONTROL POWER SUPPLY
 ALIMENTATION CONTROL



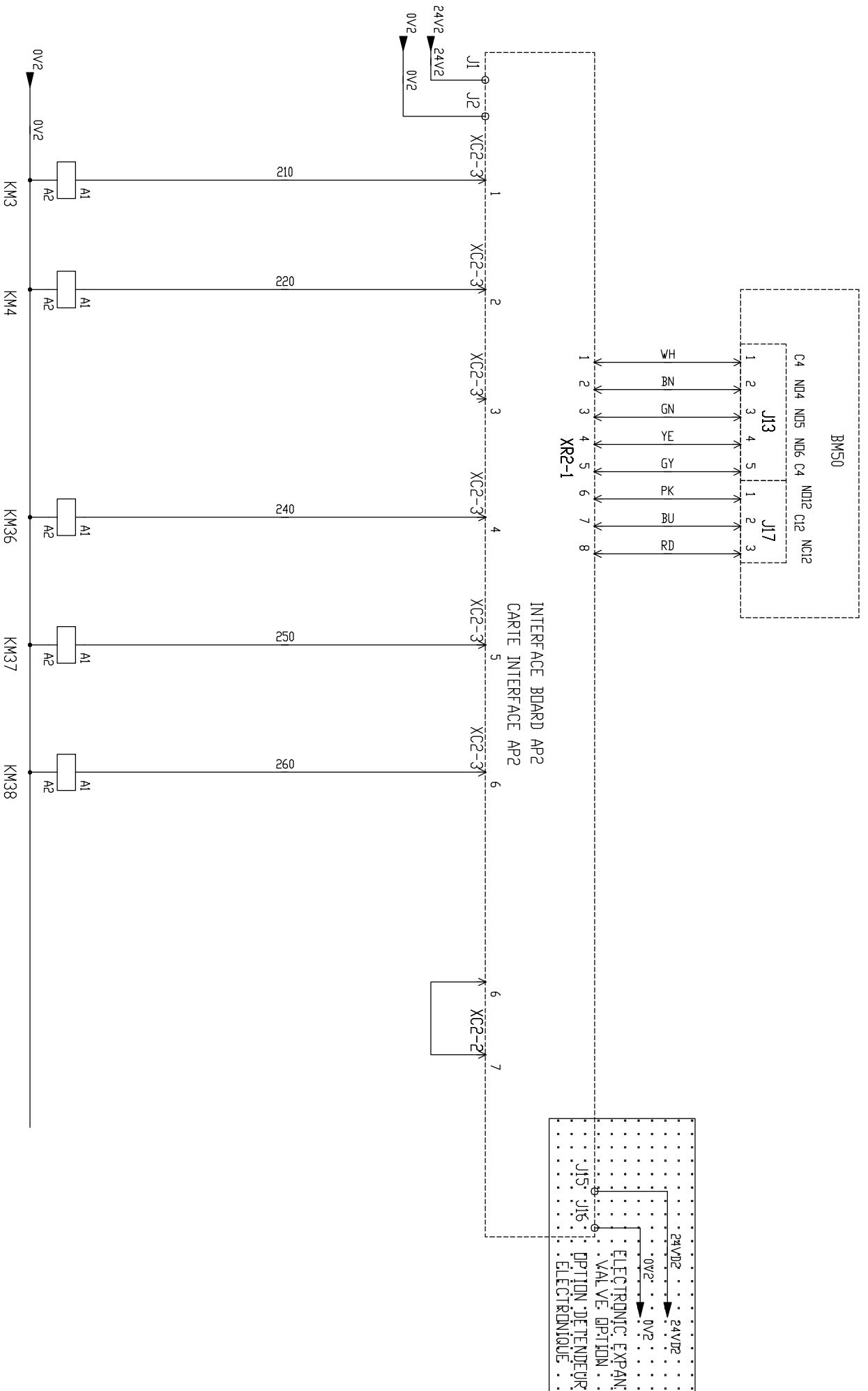
SCHEMA ELECTRIQUE

IF: SOFTSTARTER OPTIION LH4 KM1 --> KA11
 Si option démarreur LH4 : KM2 --> KA12



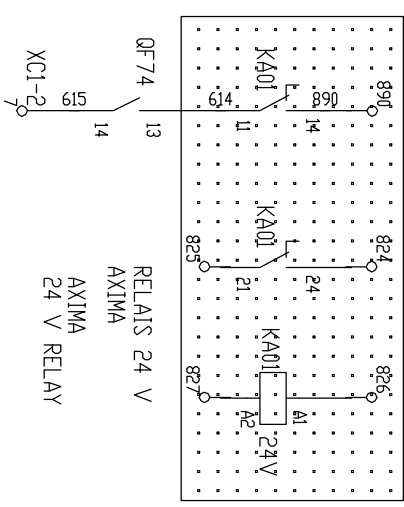
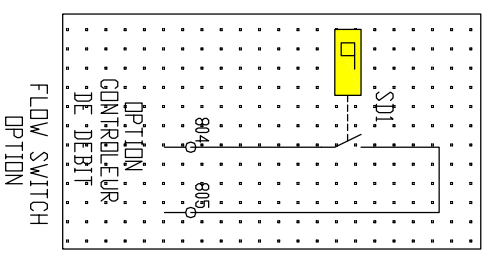
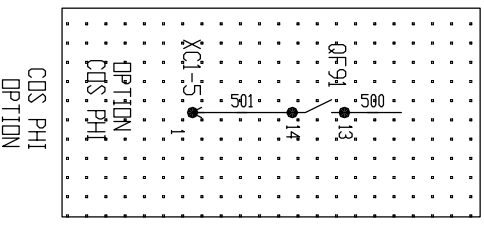
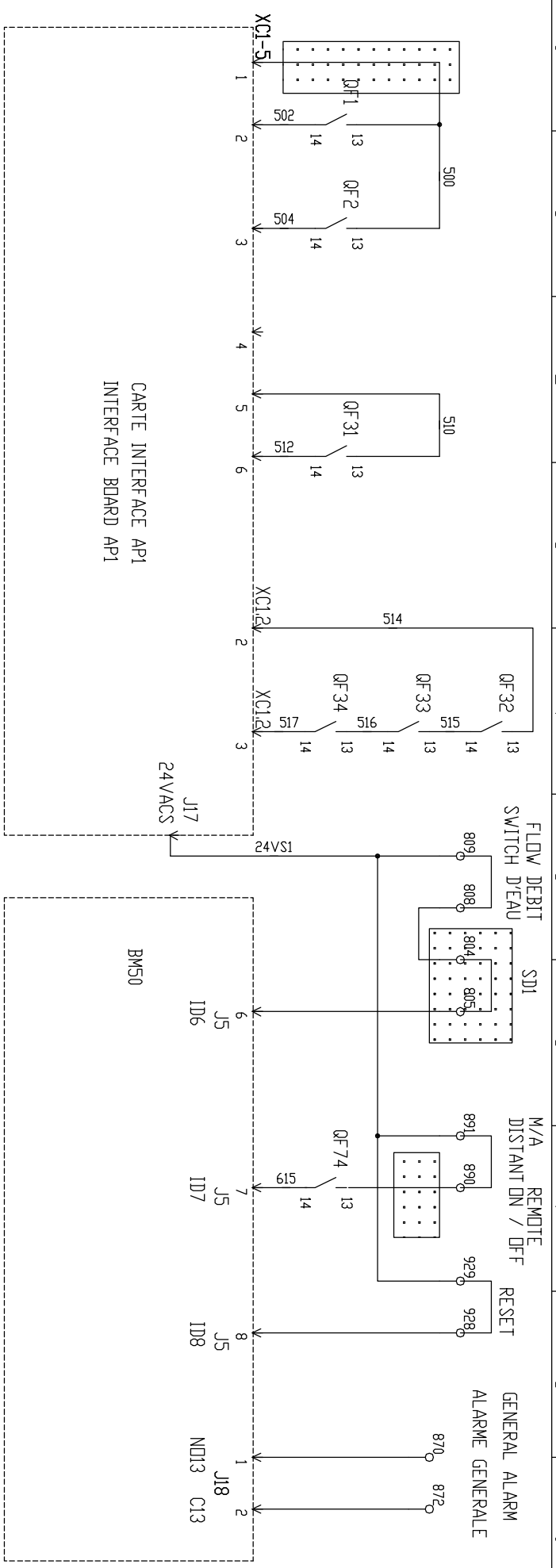
SCHEMA ELECTRIQUE

-IF SOFTSTARTER OPTION LH4: KM3 -> KA13
 -Si option démarreur LH4: KM4 -> KA14

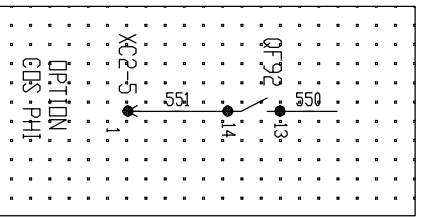
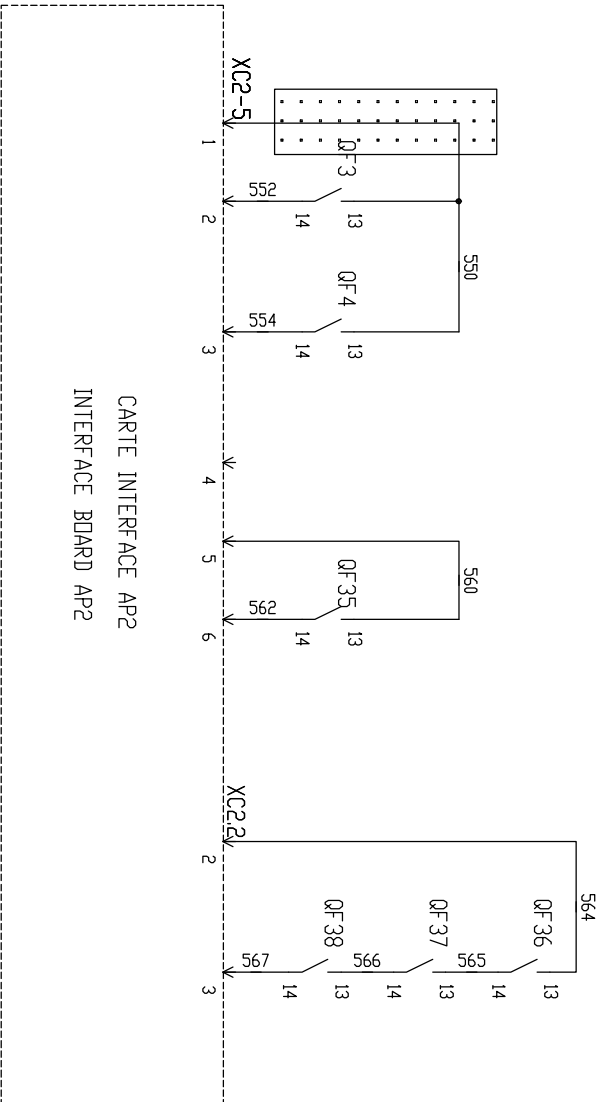


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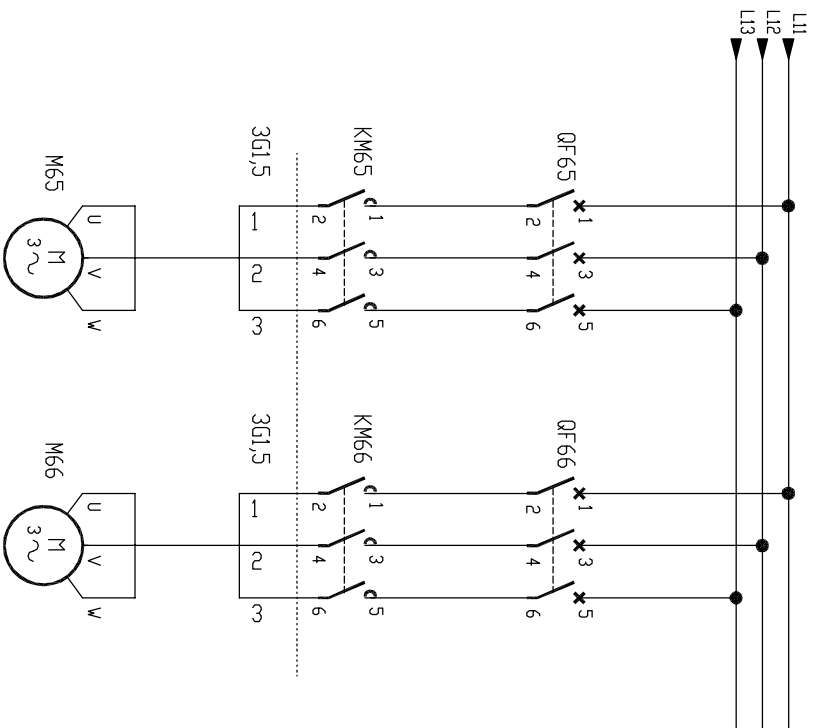
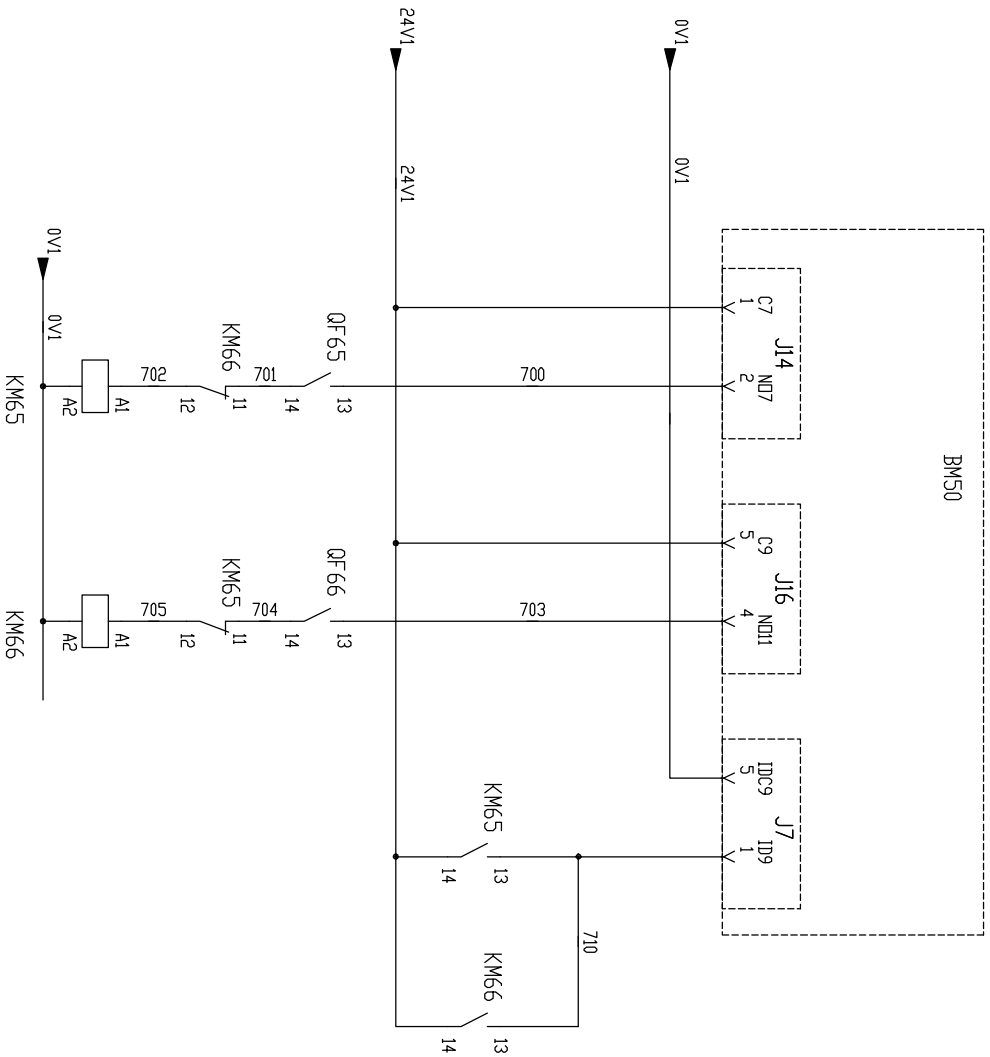
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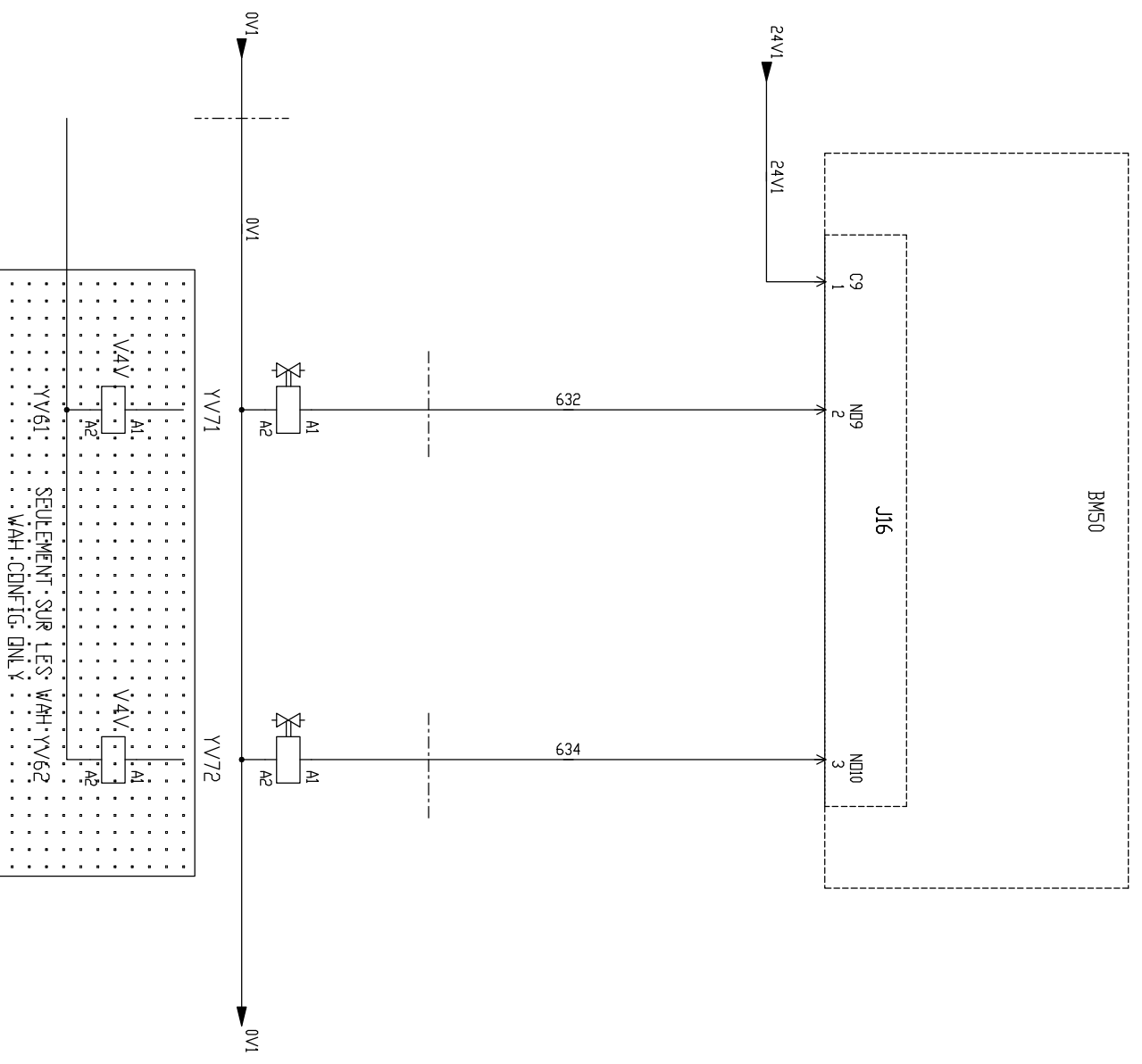
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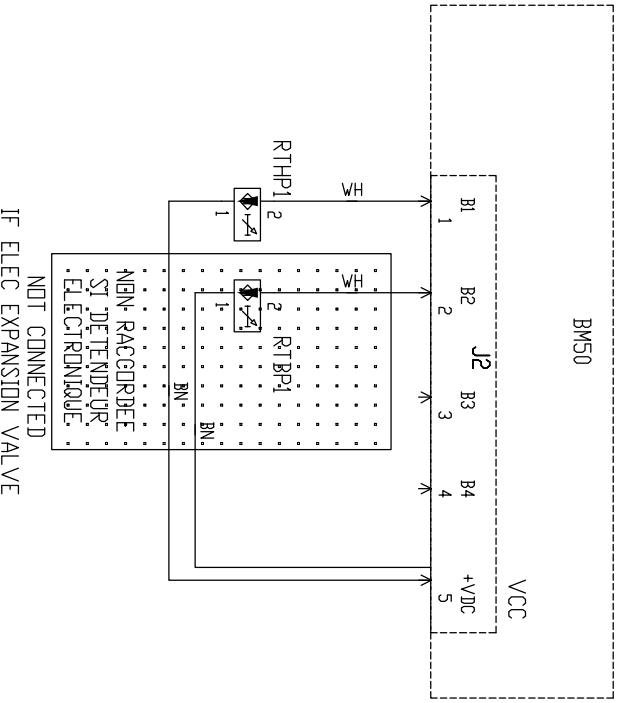
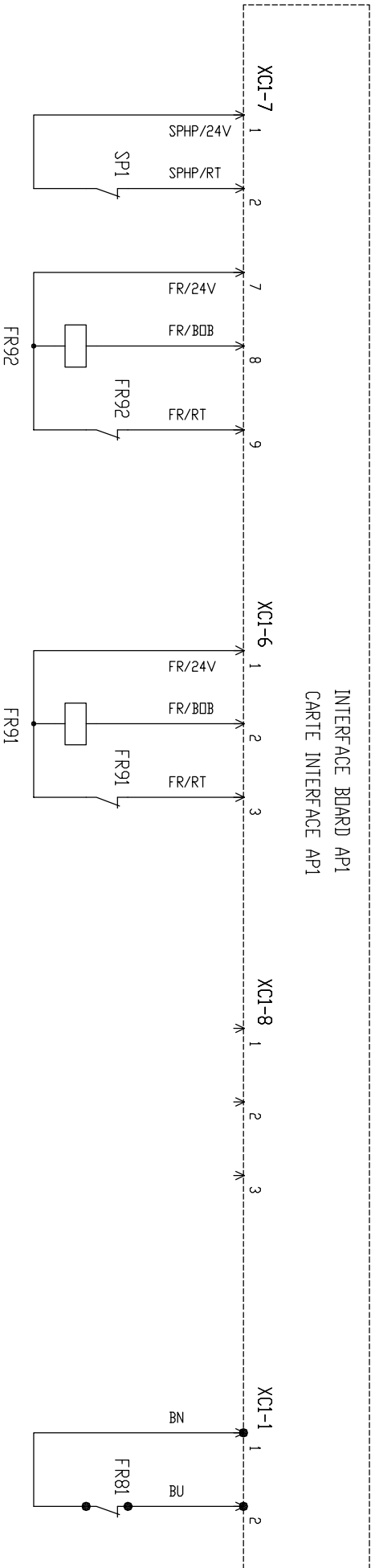
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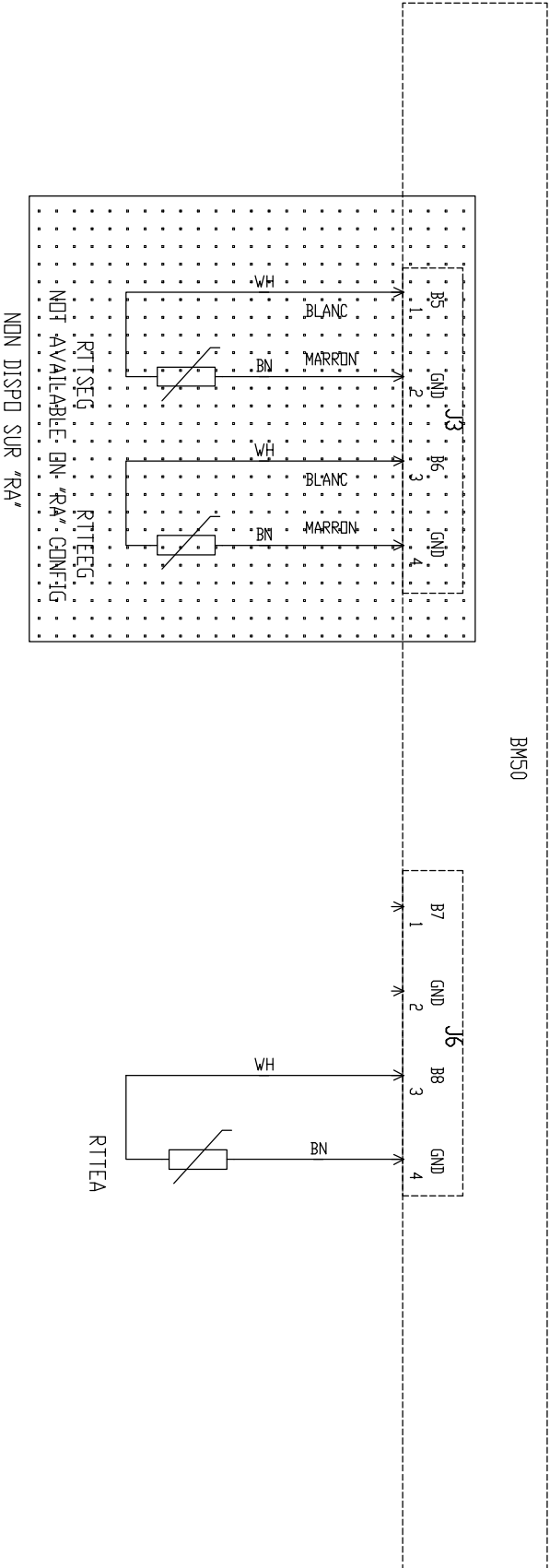
SCHEMA ELECTRIQUE



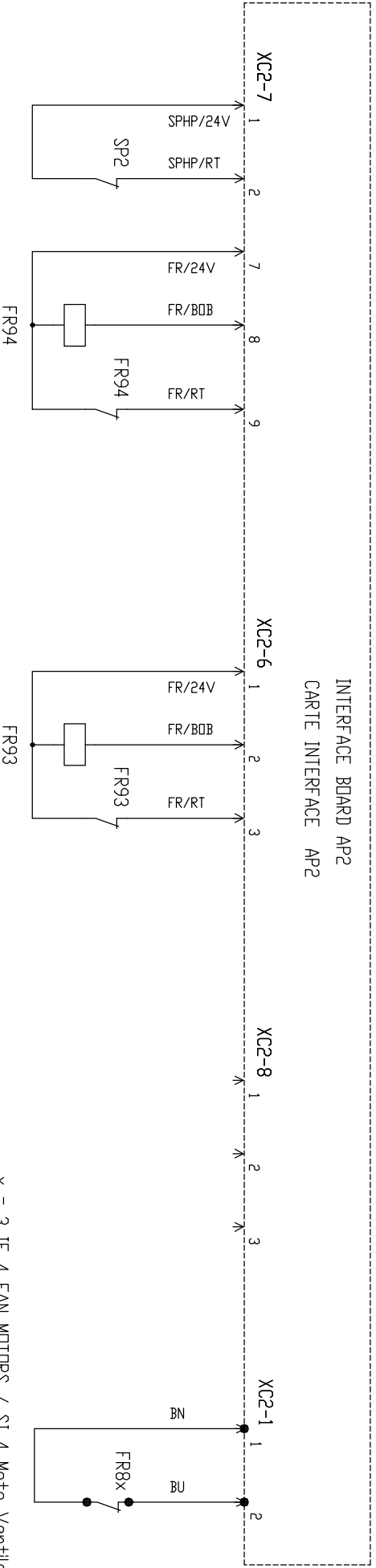
SCHEMA ELECTRIQUE



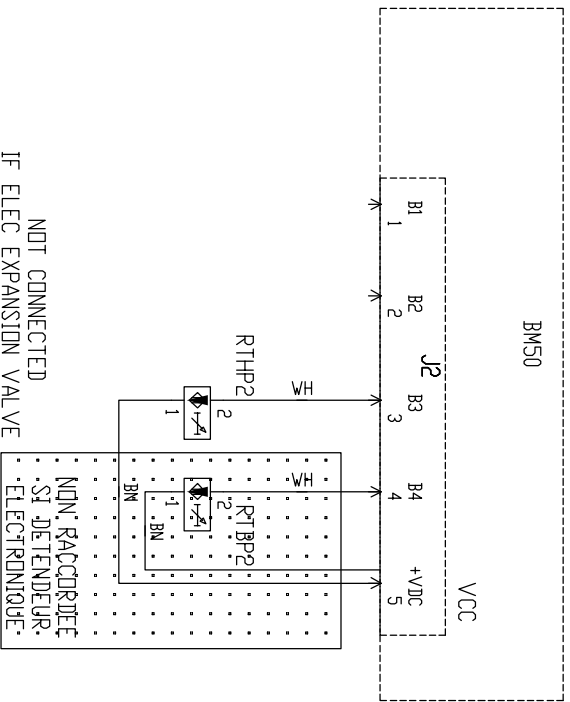
SCHEMA ELECTRIQUE



SCHEMA ELECTRIQUE



INTERFACE BOARD AP2
CARTI INTERFACE AP2



x = 3 IF 4 FAN MOTORS / SI 4 Moto Ventilateurs
x = 4 IF 6 FAN MOTORS / SI 6 Moto Ventilateurs

NOT CONNECTED
IF ELEC EXPANSION VALVE

NON RACCORDARE
SI DETECTOR
ELECTRONIQUE

SCHEMA ELECTRIQUE