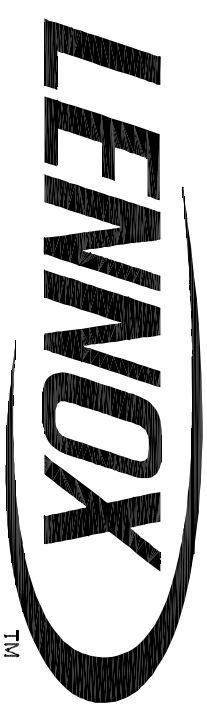


*DOSSIER ELECTRIQUE
ELECTRICAL FILE*

Index / Index	Date	Nom / Name	Modifications



MCC 132 S K LN
LENDX UK

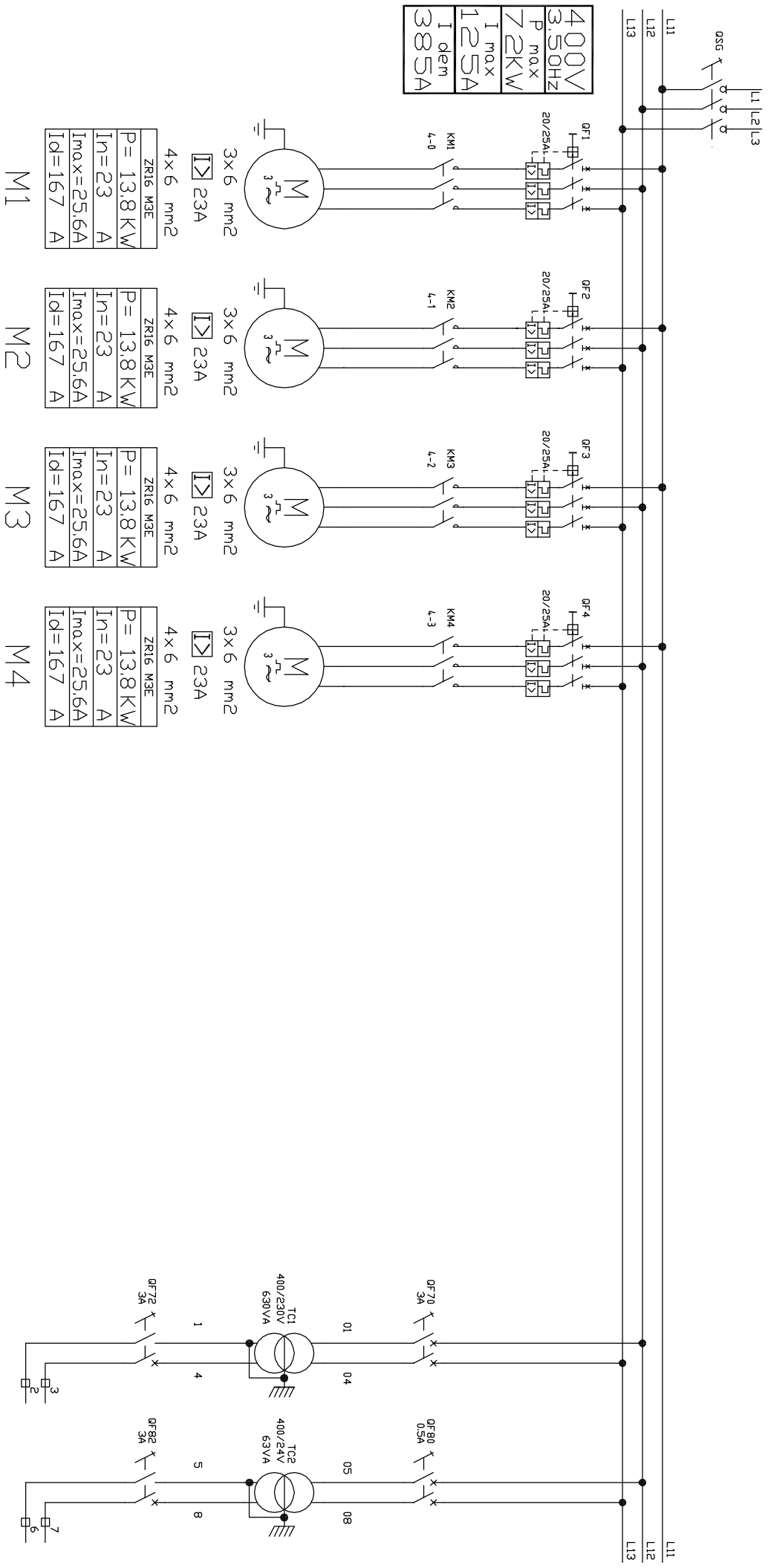
Nom: / Name:
E-R
Date: 23-05-2006

SE132982

0 / 12

0 1 2 3 4 5 6 7 8 9

400V
3.50Hz
P max
7.2KW
I max
12.5A
I dem
38.5A



M1

4x6 mm2
ZR16 M3E
P= 13.8KW
In=23 A
Imax=25.6A
Id=167 A

M2

4x6 mm2
ZR16 M3E
P= 13.8KW
In=23 A
Imax=25.6A
Id=167 A

M3

4x6 mm2
ZR16 M3E
P= 13.8KW
In=23 A
Imax=25.6A
Id=167 A

M4

4x6 mm2
ZR16 M3E
P= 13.8KW
In=23 A
Imax=25.6A
Id=167 A

QF1	NO	NF
	5-0	

QF2	NO	NF
	5-0	

QF3	NO	NF
	5-2	

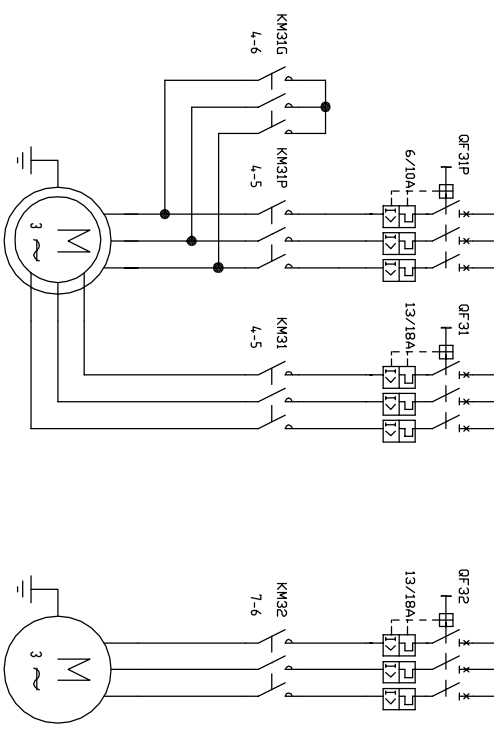
QF4	NO	NF
	5-2	

ATTENTION
 LES COMPRESSEURS
 COPPELAND SONT
 MONTES QU'UN SEUL
 SENS DE ROTATION
 POUR FONCTIONNER

SCHEMA ELECTRIQUE

L11
L12
L13

L11
L12
L13



3x 6 mm² 3x 6 mm²
 \square 9A \square 17A

3x 6 mm²
 \square 17A

4x2,5mm² 3x1,5mm² 4x2,5mm²

4x 2,5 mm²

PV	GV
P = 2,5 kW	P = 7,5 kW
In = 7,4 A	In = 15,5 A
Id = A	Id = A

LSI32M1	
P = 7,5 kW	
In = 15,8 A	
Id = 126 A	

M31

M32

QF31P	NOI NF
	8-1

QF31	NOI NF
	8-1

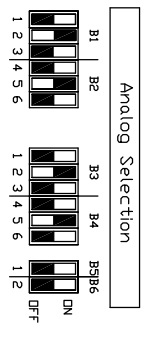
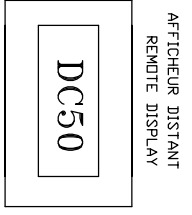
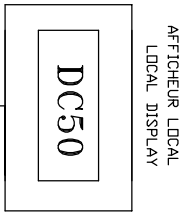
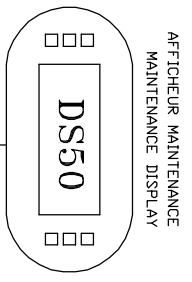
QF32	NOI NF
	7-6 8-2

Indices	DATE	NOM

MODIFICATIONS

SCHEMA ELECTRIQUE

0 1 2 3 4 5 6 7 8 9

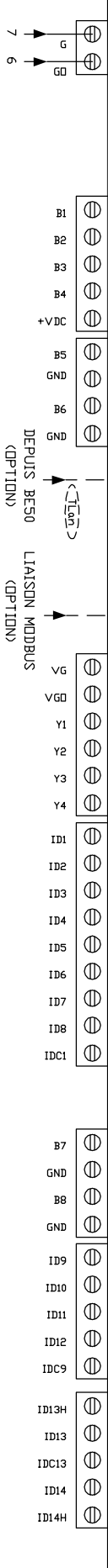
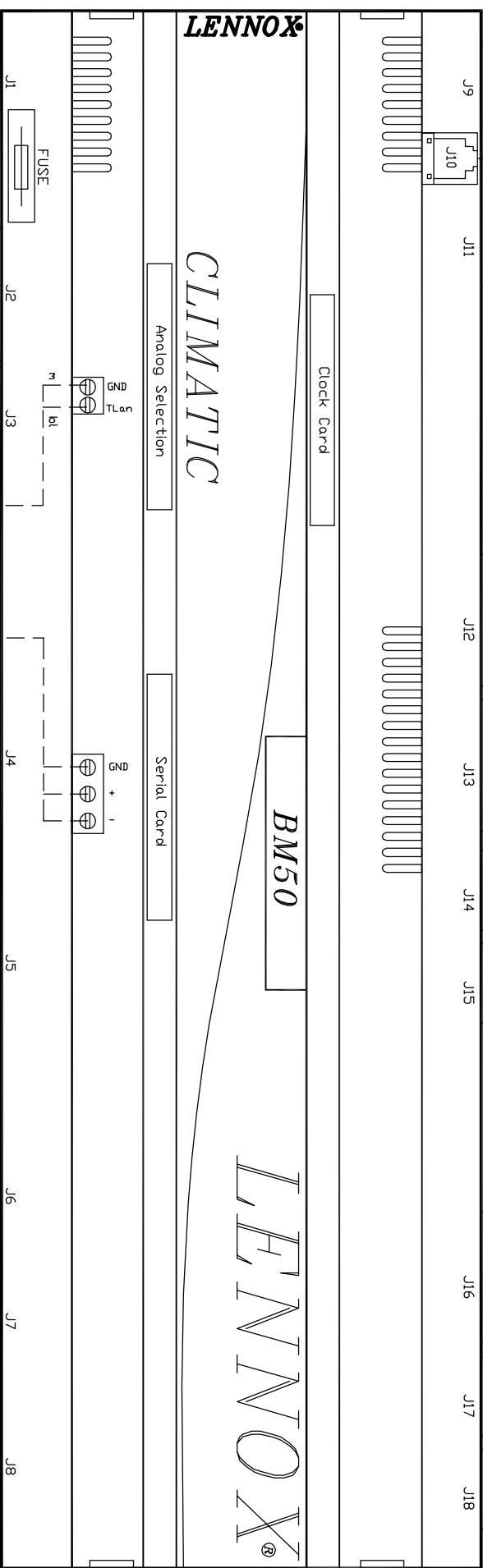
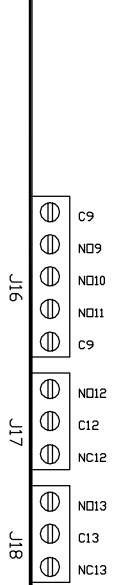
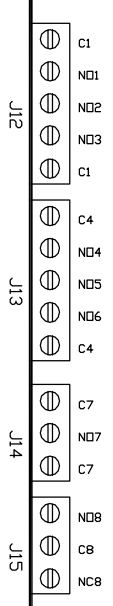
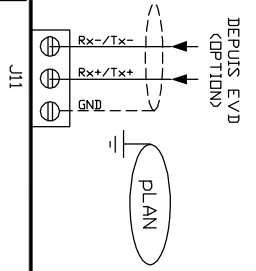
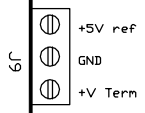


Input B1-B2-B3-B4

DN	DN	DN	DN	Input
DN	DN	DN	DN	0.1V
DN	DN	DN	DN	NTC
DN	DN	DN	DN	0/20mA
DN	DN	DN	DN	0/5V

Input B5-B6

DN	DN	Input
DN	DN	digital input
DN	DN	NTC



SCHEMA ELECTRIQUE

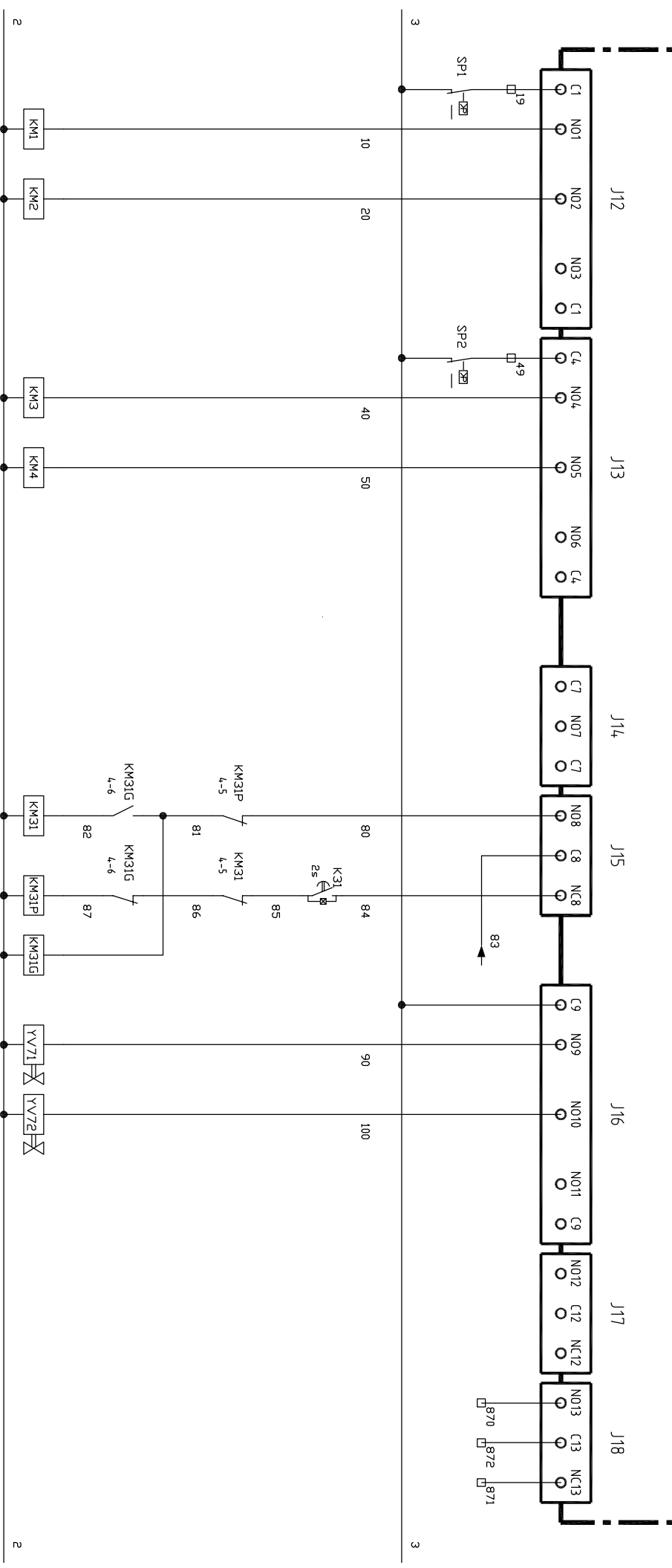
Indices

DATE	NOM	MODIFICATIONS

0 1 2 3 4 5 6 7 8 9

CLIMATIC 50

BM50
S.LOG



KM1	
NO	NF
8-0	8-5
5-1	
1-1	
1-1	
1-1	

KM2	
NO	NF
8-0	8-6
1-2	
1-2	
1-2	
5-1	

KM3	
NO	NF
5-2	8-6
1-3	
1-3	
1-3	
1-3	
8-1	

KM4	
NO	NF
1-4	8-6
1-4	
1-4	
5-2	
8-1	

KM31	
NO	NF
2-3	4-5
2-3	
2-3	

KM31P	
NO	NF
2-2	4-5
2-2	
2-2	

KM31G	
NO	NF
2-1	4-5
2-1	
4-5	

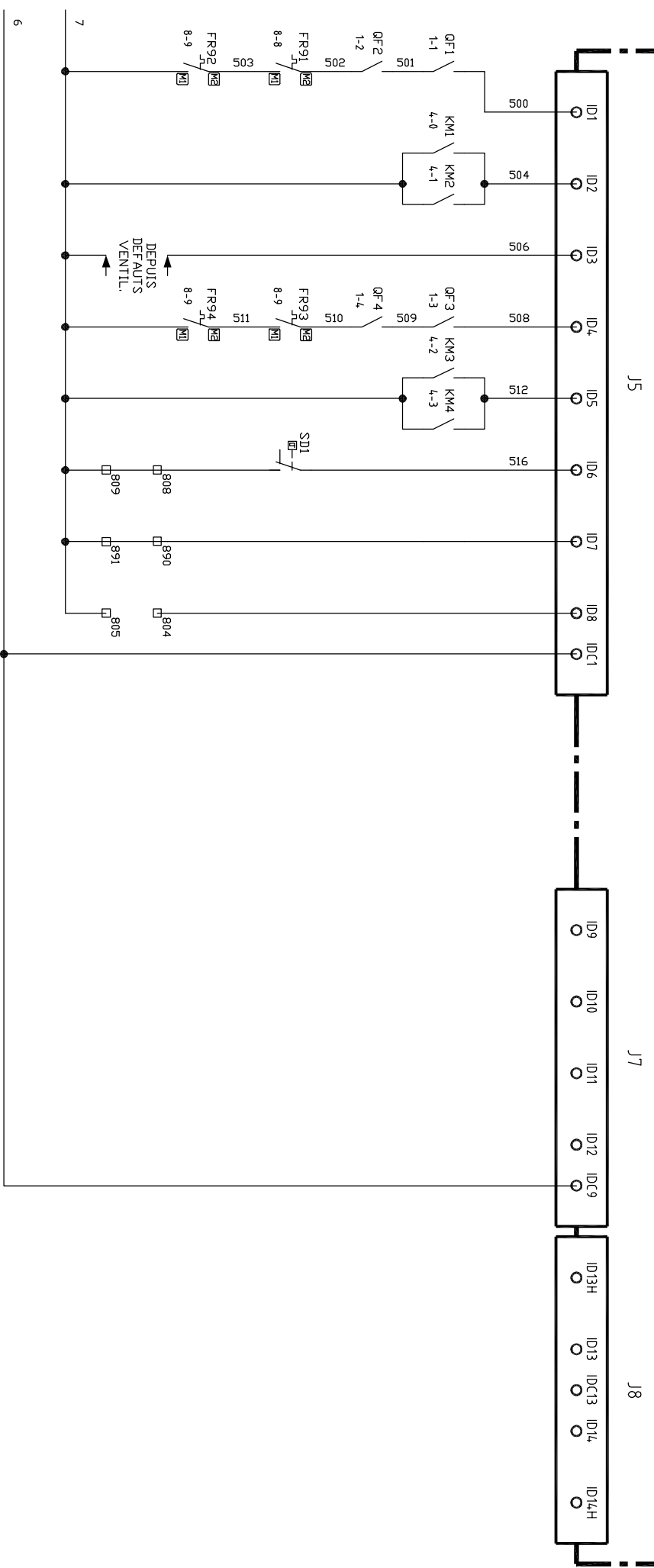
Indices	DATE	NOM	MODIFICATIONS

SCHEMA ELECTRIQUE

0 1 2 3 4 5 6 7 8 9

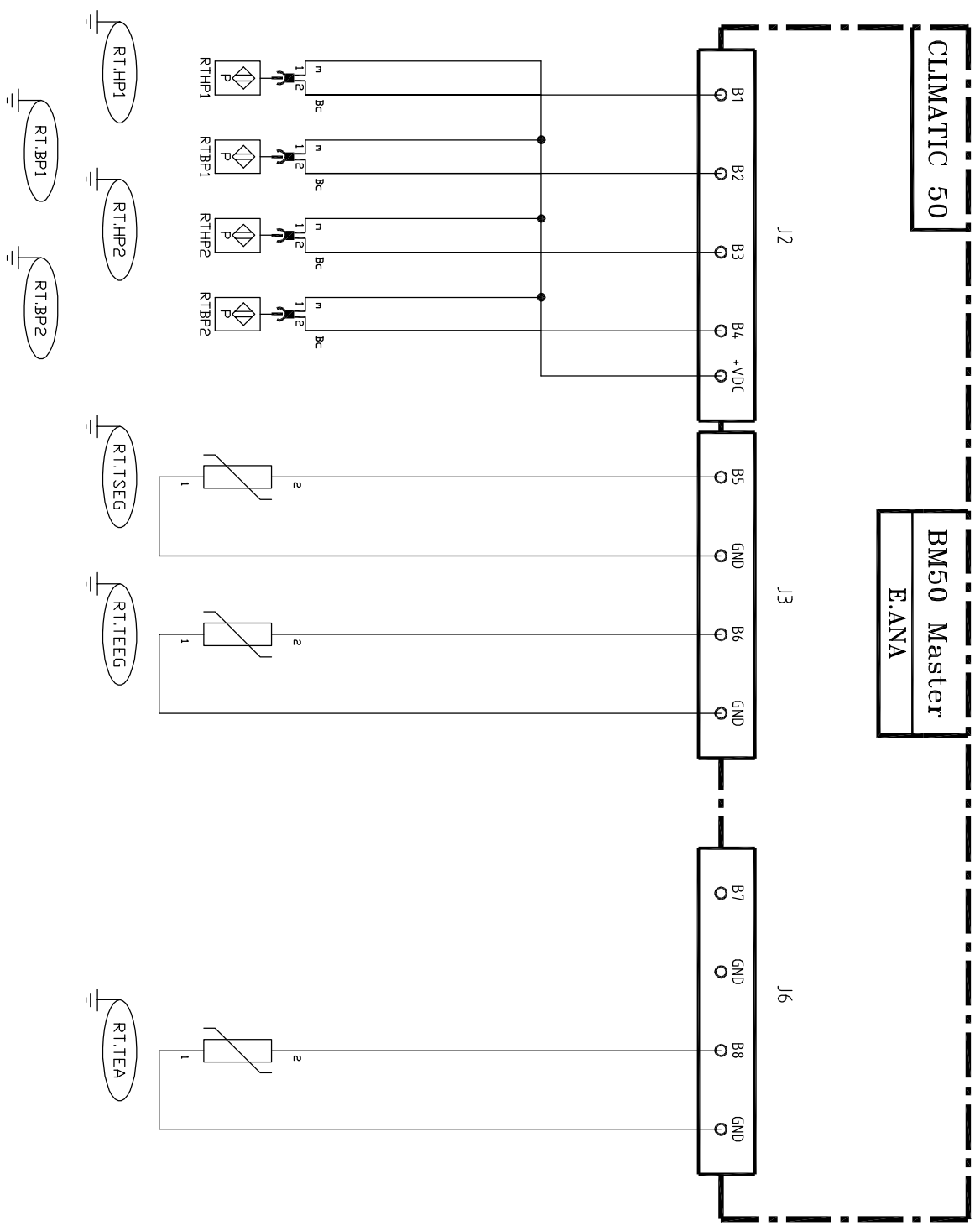
CLIMATIC 50

BM50 MASTER
E.LOG



Indices	DATE	NOM	MODIFICATIONS

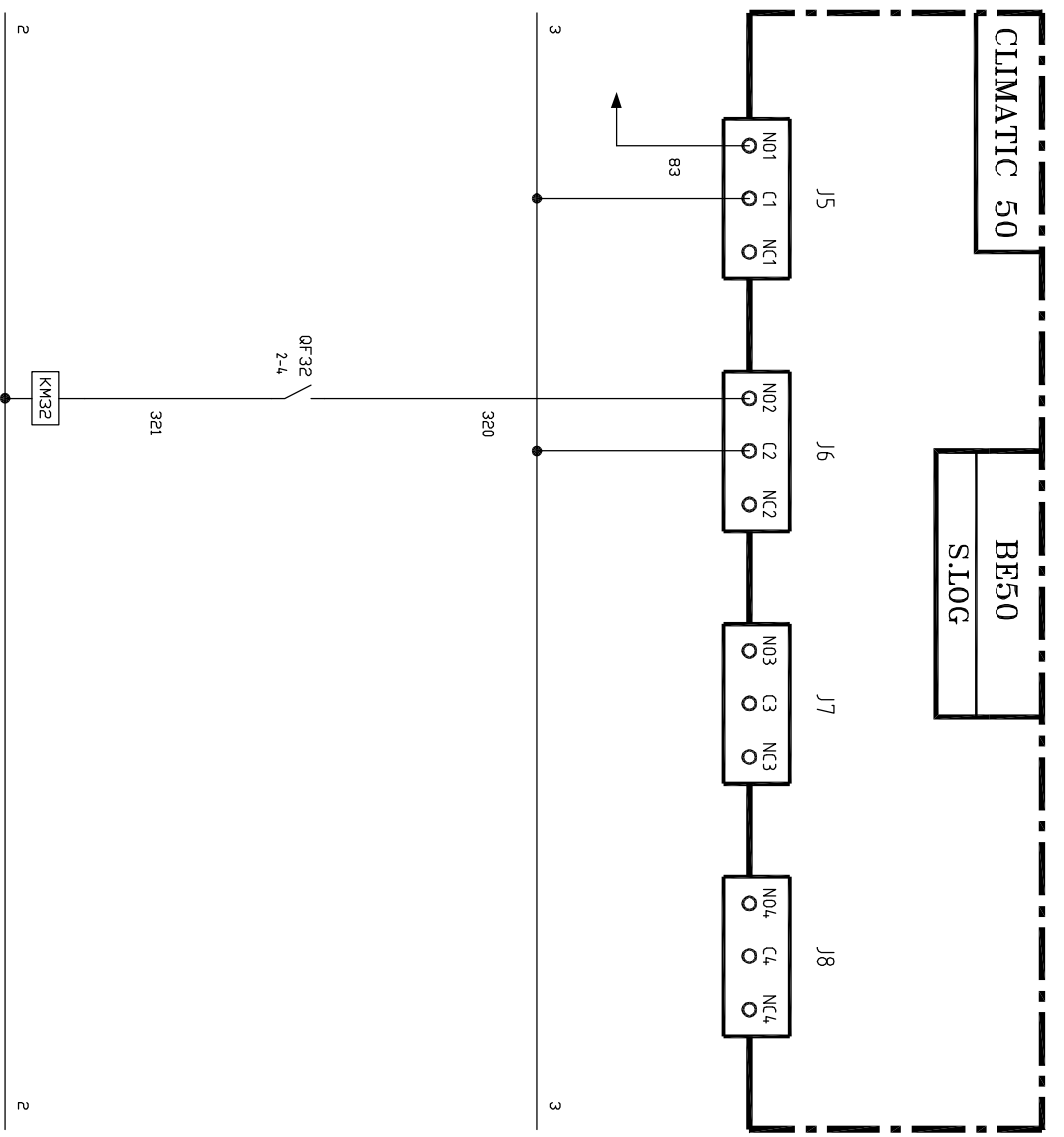
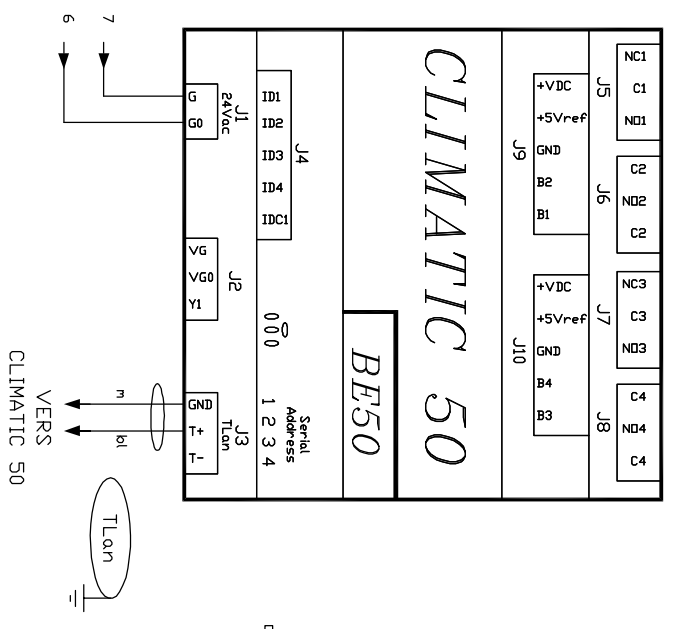
SCHEMA ELECTRIQUE



Indices	
DATE	
NOM	

MODIFICATIONS

SCHEMA ELECTRIQUE



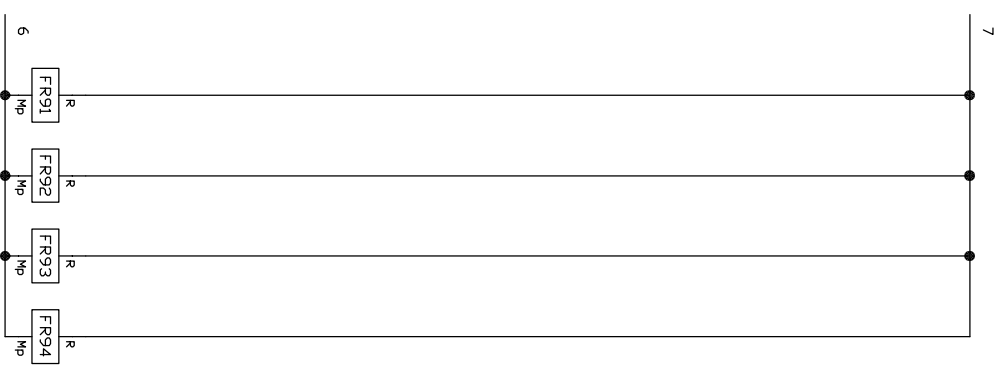
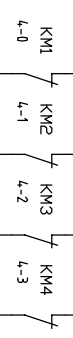
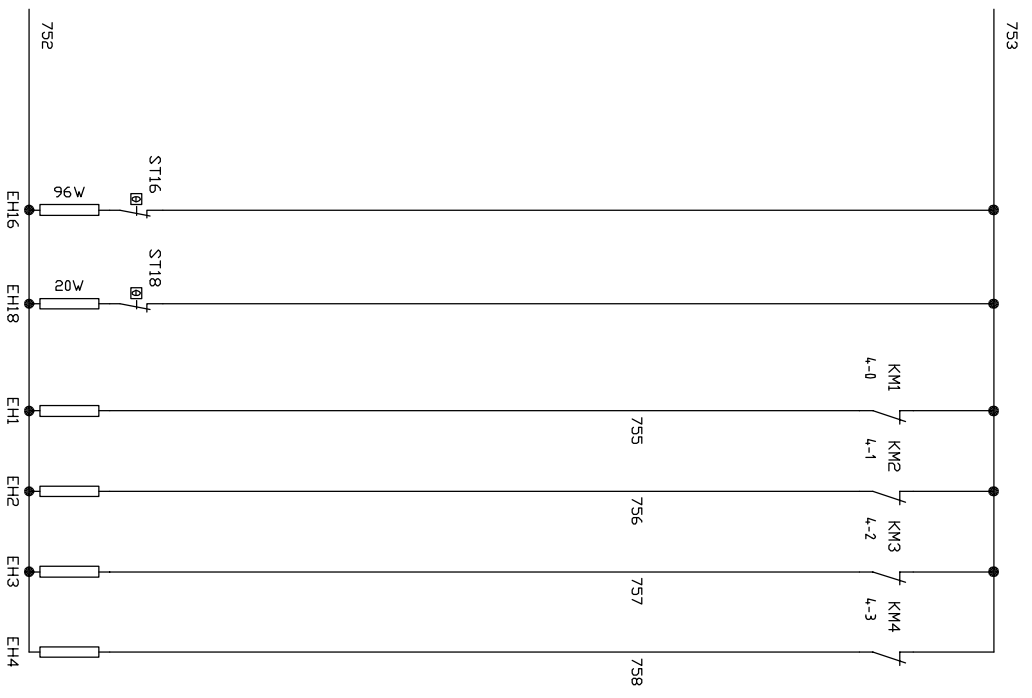
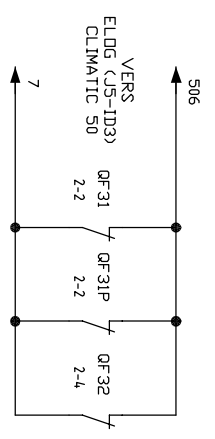
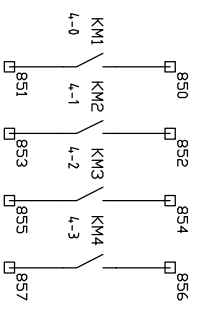
KM32	
NO	NF
2-4	
2-4	
2-4	
2-4	
2-4	
2-4	
2-4	
2-4	

SCHEMA ELECTRIQUE

Indices	DATE	NOM

MODIFICATIONS

0 1 2 3 4 5 6 7 8 9



FR91	NO	INF	FR92	NO	INF	FR93	NO	INF	FR94	NO	INF
5-0			5-0			5-2			5-2		

SCHEMA ELECTRIQUE

0 1 2 3 4 5 6 7 8 9

ALIMENTATION
GENERALE
GENERAL
SUPPLY

(OPTION) NEUTRE	N
PHASE 1	L1
PHASE 2	L2
PHASE 3	L3
TERRE	PE

NEUTRAL
PHASE 1
PHASE 2
PHASE 3
EARTH

FAULTS RESET NC=RESET	RESET DES DEFAUTS NF=RESET	804 805
CUSTOMER 'S WATER FLOW OF EVAPORATOR	DEBIT EVAPORATEUR CLIENT (CONTACT SEC)	808 809
REMOTE CONTACT FOR COMPRESSOR 1	REPORT CONTACT SEC DE MARCHE COMPRESSEUR 1	850 851
REMOTE CONTACT FOR COMPRESSOR 2	REPORT CONTACT SEC DE MARCHE COMPRESSEUR 2	852 853
REMOTE CONTACT FOR COMPRESSOR 3	REPORT CONTACT SEC DE MARCHE COMPRESSEUR 3	854 855
REMOTE CONTACT FOR COMPRESSOR 4	REPORT CONTACT SEC DE MARCHE COMPRESSEUR 4	856 857
REMOTE CONTACT NORMALLY OPEN REMOTE CONTACT NORMALLY CLOSED GENERAL FAILURE UNIT	REPORT CONTACT SEC N.O REPORT CONTACT SEC N.F DE DEFAUT GENERAL GROUPE	870 871 872
REMOTE ON/OFF FOR THE UNIT	MARCHE/ARRET A DISTANCE GROUPE (CONTACT SEC)	890 891

Indices	A
DATE	02-12-05
NOM	Y-D
MODIFICATIONS	SUPPRESSION BORNES 948-949 ALIM SECURITE

SCHEMA ELECTRIQUE

	0	1	2	3	4	5	6	7	8	9
A1->9	Horloge de degivrage Defrost timer			FU90	Fusible divers Various fuse			KA01	Relais auxiliaire d'alarme (sauf SULZER) Alarm auxiliary relay (except Sulzer)	
AP4	Carte de permutation Sequence switch card		FV	Relais seuil tension Voltage level relay			KA02	Relais auxiliaire M/A à distance (24 V ou autre) Remote Start/Stop auxiliary relay (24V or else)		
C	Condensateur Capacitor		HA	Signalisation sonore Sound signal			KA1->9	Relais chaîne de securite compresseur ou circuit Compressor or circuit safety line relay		
D1	Relais anti-court cycle Anti-short cycle relay		HL01	Voyant défaut general General fault lamp			KA10->12	Relais Marche / Arrêt ON / OFF relay		
EH1->10	Resistance carter Crankcase heater		HL1->9	Voyant marche compresseur Compressor operating lamp			KA15	Relais pump down au demarrage Pump down relay		
EH11->15	Resistance bouteille Receiver heater		HL11->20	Voyant marche ventilateur Fan operating lamp			KA31->34	Relais marche forcee vanne liquide Solenoid liquid valve forced operation relay		
EH16->25	Resistance evapora-teur Evaporator heater		HL25->29	Voyant défaut pompe Pump fault lamp			KA40	Presence tension On line relay		
EH26->35	Resistance condenseur Condenser heater		HL30	Voyant sous tension Power On lamp			KA41->49	Relais renvoi défaut compresseur Remote compressor fault relay		
EH65->70	Resistance pompe Pump heater		HL31->39	Voyant arrêt contrôle Control thermostat stop lamp			KA50->75	Relais divers Various relay		
EH90->100	Resistance diverse Various heater		HL41->49	Voyant arrêt securite Safety stop lamp			KA76	Relais thermostat antigel Antifreeze thermostat relay		
EH101	Resistance armoire Electrical panel heater		HL51->60	Voyant défaut ventilateur Fan fault lamp			KA80	Relais contrôleur de debit Flow switch relay		
EL	Eclairage Lighting		HL65->69	Voyant marche pompe Pump operation lamp			KA91->99	Relais protection interne compresseur Solid-state motor protection relay		
FA	Relais seuil de courant Current limit relay		HL90	Voyant divers Various lamp			KM1->24	Contacteur compresseur Compressor contactor		
FR1->19	Relais thermique compresseur Compressor motor thermal overload contactor		K1->9	Inter temporise demarrage compresseur Compressor start timer			KM31->64	Contacteur ventilateur Fan contactor		
FR31->64	Relais thermique ventilateur Fan motor thermal overload contactor		K15->22	Inter temporise pump down au demarrage Pump down timer			KM65->85	Contacteur pompe Pump contactor		
FR65->70	Relais thermique pompe Pump motor thermal overload contactor		K31->34	Inter temporise passage ventilation GV / PV Fan HS / LS permutation timer			KM90	Contacteur divers Various contactor		
FR80->90	Relais thermique divers Various motor protector		K41->49	Inter temporise renvoi défaut compresseur Remote compressor fault timer			KT1->9	Relais temporise demarrage compresseur Compressor start time delayed relay		
FR91->99	Protection moteur compresseur Solid-state motor protector		K61->65	Inter temporise by-pass pressostat B.P. L.P. pressostat by-pass timer			KT11->14	Relais temporise decalage demarrages compresseurs Time delayed relay for compressor start gap		
FU1->50	Fusible moteur Motor fuse		K71->75	Inter temporise vanne by pass detendeur Expansion valve by-pass timer			KT15	Relais temporise arrêt groupe "type laiterie" Unit stop time delayed relay (dairy industry)		
FU60->69	Fusible contrôle Control fuse		K80	Inter temporise défaut debit Flow switch timer			KT21->24	Relais temporise coupure BP LP cut off time delayed relay		
FU70->78	Fusible protection transformateur Transformer protection fuse		K90	Inter temporise divers Various timers			KT37	Relais cliignoteur Cliignoteur relay		

	0	1	2	3	4	5	6	7	8	9
KT41->49	Relais temporis�e renvoi defaut Remote fault time delayed relay		QF70->89	Disjoncteur protection circuit commande Control circuit protection circuit breaker			SA11	Interrupcteur local/distance Local/remote switch		
KT90	Relais temporis�e divers Various time delayed relay		QF90	Disjoncteur divers Various circuit breaker		SA12->16	Interrupcteur marche pompe Pump on/off switch			
M1->9	Compresseur Compressor motor		QS1->30	Porte fusible compresseur Compressor fuse breaker		SA17	Permutateur compresseur Compressor permutation switch			
M11->M15	Anti-court cycle Anti-short cycle		QS31->64	Porte fusible ventilateur Fan fuse breaker		SA18-19	Permutateur pompe Pump permutation switch			
M31->64	Ventilateur Fan motor		QS65->69	Porte fusible pompe Pump fuse breaker		SA20	Permutateur �te/hiver Summer/winter switch			
M65->70	Pompe Pump		QS90	Porte fusible divers Various fuse breaker		SA21	Permutateur M/A Klaxon Horn switch ON/OFF			
M90->100	Moteur divers Various motors		QSG	Interrupcteur general Main power interrupter		SA90	Interrupcteur divers Various switches			
M101-102	Ventilateur d'armoire Electrical panel fan		L	ouSectionneur general orMain power switch		SB1	Bouton poussoir hors tension Off line push button			
M111->109	Ventilateur de culasse compresseur Compressor cylinder head fan			ouDisjoncteur general orMain power circuit breaker		SB2	Bouton poussoir sous tension On line push button			
LCHILLER	Regulateur Regulator		R	Resistance triphasee 3 phase heater		SB3->6	Bouton poussoir marche Start push button			
	Module supplementaire (CP2) Extra regulator module (CP2)		RC	Circuit RC RC circuit		SB7->9	Bouton poussoir arr�t Stop push button			
AP31-32 (RV1-2)	Relais de commande ventilateur monophas� Command relay for single phase fan motor		RT	Sonde ou capteur Temperature or pressure sensor		SB10	Bouton poussoir arr�t d'urgence Emergency stop push button			
	Module de base (CP1) Basic module (CP1)		RTTEA	Temperature d'entree d'air Air inlet temperature		SB11	Bouton poussoir arr�t klaxon Horn stop push button			
P1	Afficheur D27 ouPC905 D27 or PC905 display		RTTEEG	Temperature d'entree d'eau glaciee Cold water inlet temperature		SB12	Bouton poussoir test lampe Lamp test push button			
PA	Amp�rem�tre Ammeter		RTTSEG	Temperature de sortie d'eau glaciee Cold water outlet temperature		SB16->24	Bouton poussoir rearmement huile Oil pressostat reset push button			
PJ	Wattm�tre (compteur d'energie) Wattmeter		RTTREF	Temperature de refroidissement Discharge temperature		SB25->29	Bouton poussoir arr�t pompe Pump stop push button			
PT1->9	Compteur horaire Hour meter		RTTASP	Temperature d'aspiration Suction temperature		SB41	Bouton poussoir effacement défaut Fault reset push button			
PV	Voltm�tre Voltmeter		RTTBP	Temperature d'evaporation Evaporating temperature		SB65->69	Bouton poussoir marche pompe Start pump push button			
QF1->14	Disjoncteur compresseur Compressor circuit breaker		RV1	Variateur de vitesse Speed regulator		SB76->80	Bouton poussoir rearmement antifigel Antifreeze reset push button			
QF31->64	Disjoncteur ventilateur Fan circuit breaker		SA1->5	Interrupcteur sous tension On-off switch		SB90	Bouton poussoir divers Various push button			
QF65->69	Disjoncteur pompe Pump circuit breaker		SA6->10	Interrupcteur marche circuit Circuit start switch		SD1	Contr�le de debit Flow switch			

SCHEMA ELECTRIQUE

	0	1	2	3	4	5	6	7	8	9
SL1->5	Contrôleur de niveau d'eau Water level controller			ST36->40	Thermostat depart d'eau Water outlet thermostat			YV36->40	Electrovanne gaz chauds pressostatique Pressostatic hot gas solenoid valve	
SL16->20	Contrôleur de niveau d'huile Oil level controller			ST41->45	Thermostat retour d'eau Water inler thermostat			YV41->45	Electrovanne gaz chauds thermostatique Thermostatic hot gas solenoid valve	
SP1->9	Pressostat HP HP pressostat			ST46->55	Thermostat d'huile Oil thermostat			YV46->50	Electrovanne décharge bouteille Receiver by-pass valve	
SP1->15	Pressostat BP LP pressostat			ST56->64	Thermostat de surchauffe Overheat thermostat			YV51->55	Electrovanne aspiration Suction solenoid valve	
SP16->25	Pressostat d'huile Oil pressostat			ST71->75	Thermostat de degivrage Defrosting thermostat			YV56->60	Electrovanne by pass condenseur (ete/hiver) Condenser by-pass solenoid valve (winter/summer)	
SP26->30	Pressostat BP antigel Antifreeze pressostat			ST76->85	Thermostat antigel Antifreeze thermostat			YV61->70	Electrovanne inversion cycle Reverse cycle solenoid valve	
SP31->50	Pressostat HP de commande ventilateur Fan control HP pressostat			ST90->100	Thermostat divers Various thermostat			YV71->75	Electrovanne by pass détendeur Expansion valve by-pass solenoid valve	
SP51->55	Pressostat HP de commande resistance bouteille Receiver heater control pressostat			ST101...	Thermostat resistance et ventilateur d'airnoire Electrical panel fan and heater control thermostat			YV90...	Electrovanne diverse Various solenoid valve	
SP56->60	Pressostat HP de commande vanne decharge bouteille Discharge valve control pressostat			T1...	Transformateur CLIMATIC CLIMATIC transformer					
SP61->65	Pressostat HP de commande delestage Overload control pressostat			TA...	Transformateur d'intensite Current transformer					
SP66->70	Pressostat HP de commande degivrage Defrosting pressostat			TC1...	Transformateur Transformer					
SP71->75	Pressostat de commande by-pass détendeur Expansion valve by-pass control pressostat			V...	Diode Diode					
SP90->110	Pressostat divers Various pressostat			V0PT...	Optocoupleur Optoelectronic coupler					
SP111->115	Pressostat HP/BP combine HP/LP pressostat			XB...	Barette sectionnable Isolator link					
SQ1...	Contact de porte Door contact			XS90...	Prise de courant Plug					
SR91...	Contrôleur de phase Phase controller			YP1...	Détendeur électronique Electronic expansion valve					
ST1->5	Thermostat de contrôle Control thermostat			YV1->5	Electrovanne liquide Liquid solenoid valve					
ST11->15	Thermostat de commande resistance bouteille Receiver heater control thermostat			YV6->15	Electrovanne reduction de puissance compresseur Compressor capacity control valve					
ST16->25	Thermostat de commande resistance evapourateur Evaporator heater control thermostat			YV16->20	Electrovanne injection de liquide Liquid injection solenoid valve					
ST26->30	Thermostat de commande resistance condenseur Condenser heater control thermostat			YV21->25	Electrovanne economiseur Economizer solenoid valve					
ST31->35	Thermostat de commande ventilateur Fan control thermostat			YV26->35	Electrovanne by-pass compresseur Compressor by-pass solenoid valve					

SCHEMA ELECTRIQUE