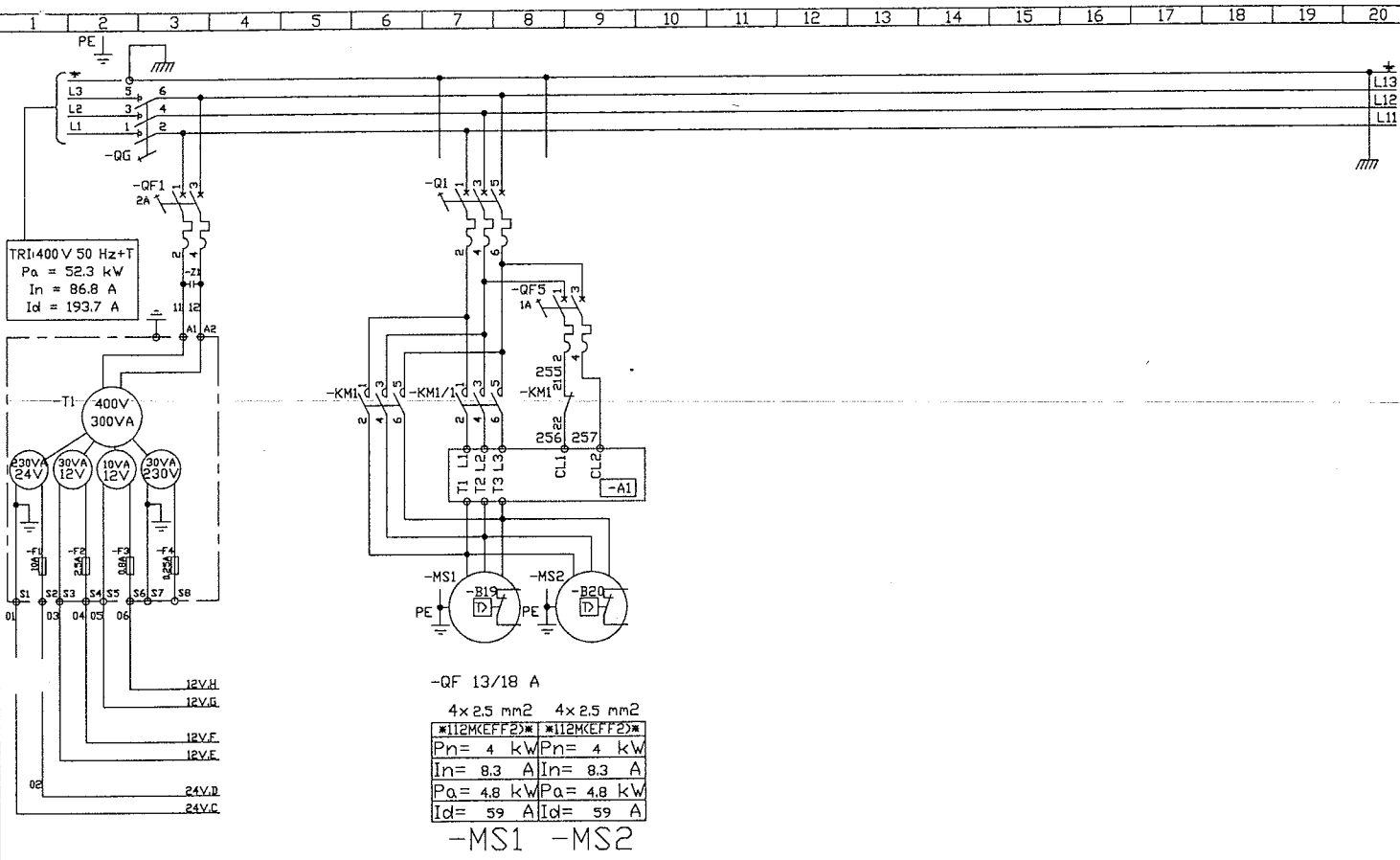


FOLIO	DESIGNATION
0	PAGE DE GARDE TITLE PAGE
01	SCHEMA DE PUISSANCE DIAGRAM OF POWER
02	AUTOMATE CLIMATIC CLIMATIC CONTROLLER
03	ENTREES AUTOMATE CLIMATIC CLIMATIC CONTROLLER INPUT
04	SORTIES AUTOMATE CLIMATIC CLIMATIC CONTROL OUTPUTS
05	DAD \ RS232 \ KP07 DAD \RS232\KP07
06	GAZ GAS
07	RACCORDEMENT CLO8 \GTC CUSTOMER CLO8\GTC
08	BORNIERS \ RACCORDEMENT CLIENT TERMINAL STRIP / CUSTOMER
09	IMPLANTATION COFFRET BOX LAYOUT
10	SCHEMA FRIGORIFIQUE \HYDRAULIQUE COOLING / HYDRAULIC DIAGRAM
11	LEGENDE REPERES KEY
12	LEGENDE REPERES KEY

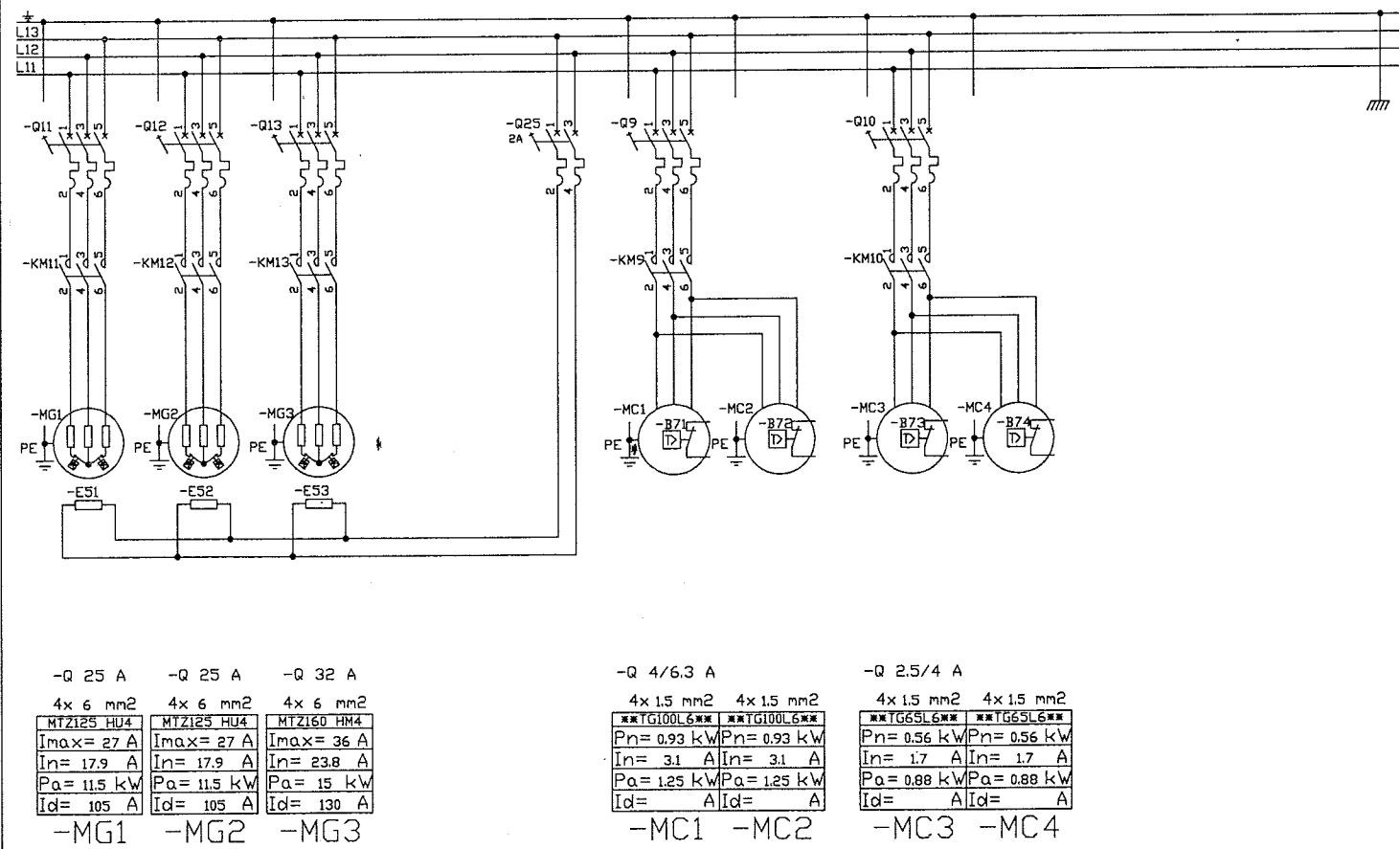
Indice	DATE	NOM	MODIFICATIONS
<u>LENNOX</u> [®]			
KS/ R M MACHINES			
(1) FCK120N2M	Designe: Lanc.	PAGE DE	236001 0/12
LENNOX UK	Date: 07.04.04	GARDE	



-QF 13/18 A
 4x 2.5 mm² 4x 2.5 mm²

I12MKEFF2	**I12MKEFF2**
Pn = 4 kW/Pn = 4 kW	
In = 8.3 A/In = 8.3 A	
Pa = 4.8 kW/Pa = 4.8 kW	
Id = 59 A/Id = 59 A	

 -MS1 -MS2



-Q 25 A -Q 25 A -Q 32 A
 4x 6 mm² 4x 6 mm² 4x 6 mm²

MTZ125 HU4	MTZ125 HU4	MTZ160 HM4
Imax = 27 A	Imax = 27 A	Imax = 36 A
In = 17.9 A	In = 17.9 A	In = 23.8 A
Pa = 11.5 kW	Pa = 11.5 kW	Pa = 15 kW
Id = 105 A	Id = 105 A	Id = 130 A

 -MG1 -MG2 -MG3

-Q 4/6.3 A -Q 2.5/4 A
 4x 1.5 mm² 4x 1.5 mm²

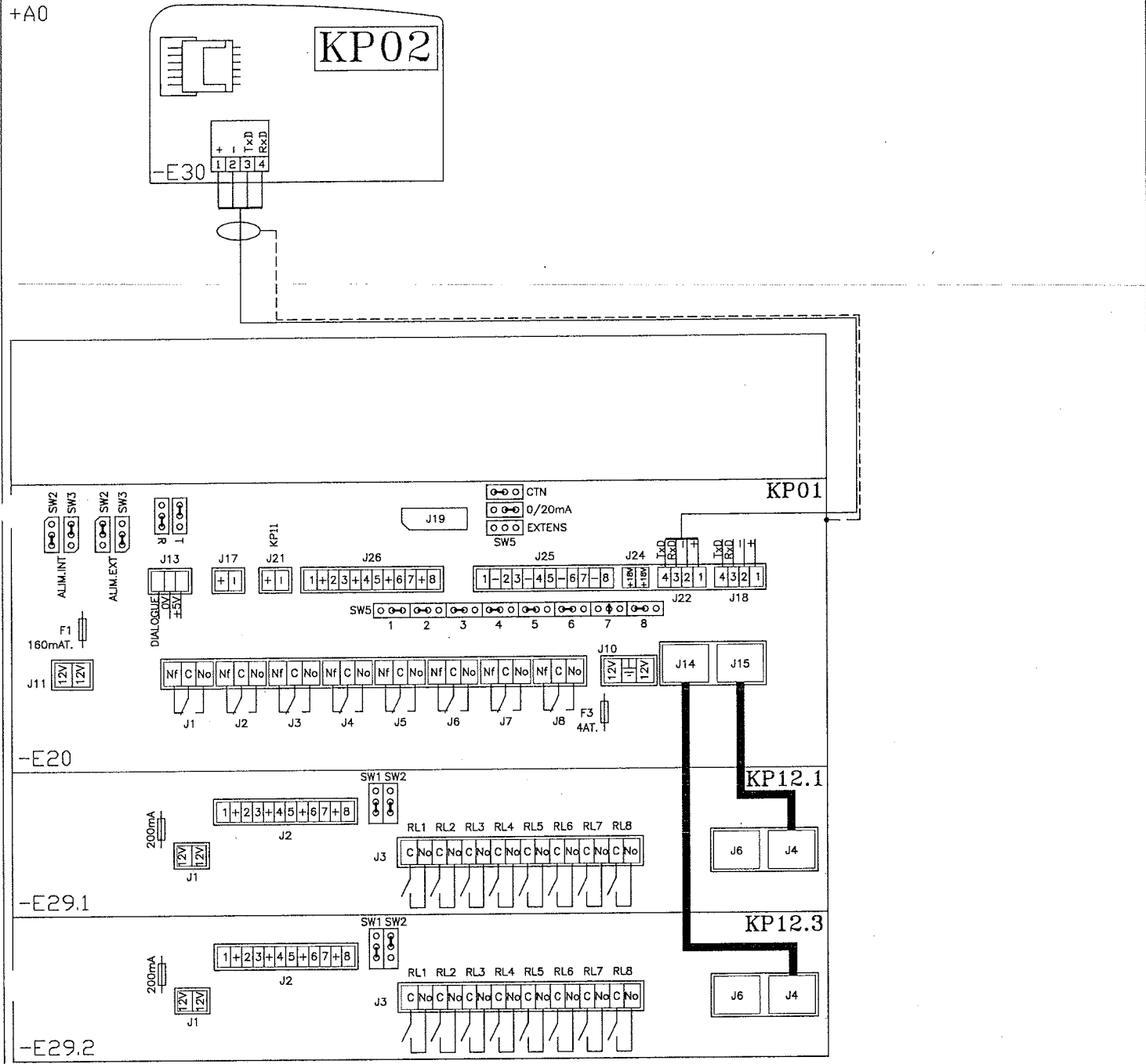
TG100L6	**TG100L6**
Pn = 0.93 kW/Pn = 0.93 kW	
In = 3.1 A/In = 3.1 A	
Pa = 1.25 kW/Pa = 1.25 kW	
Id = A/Id = A	

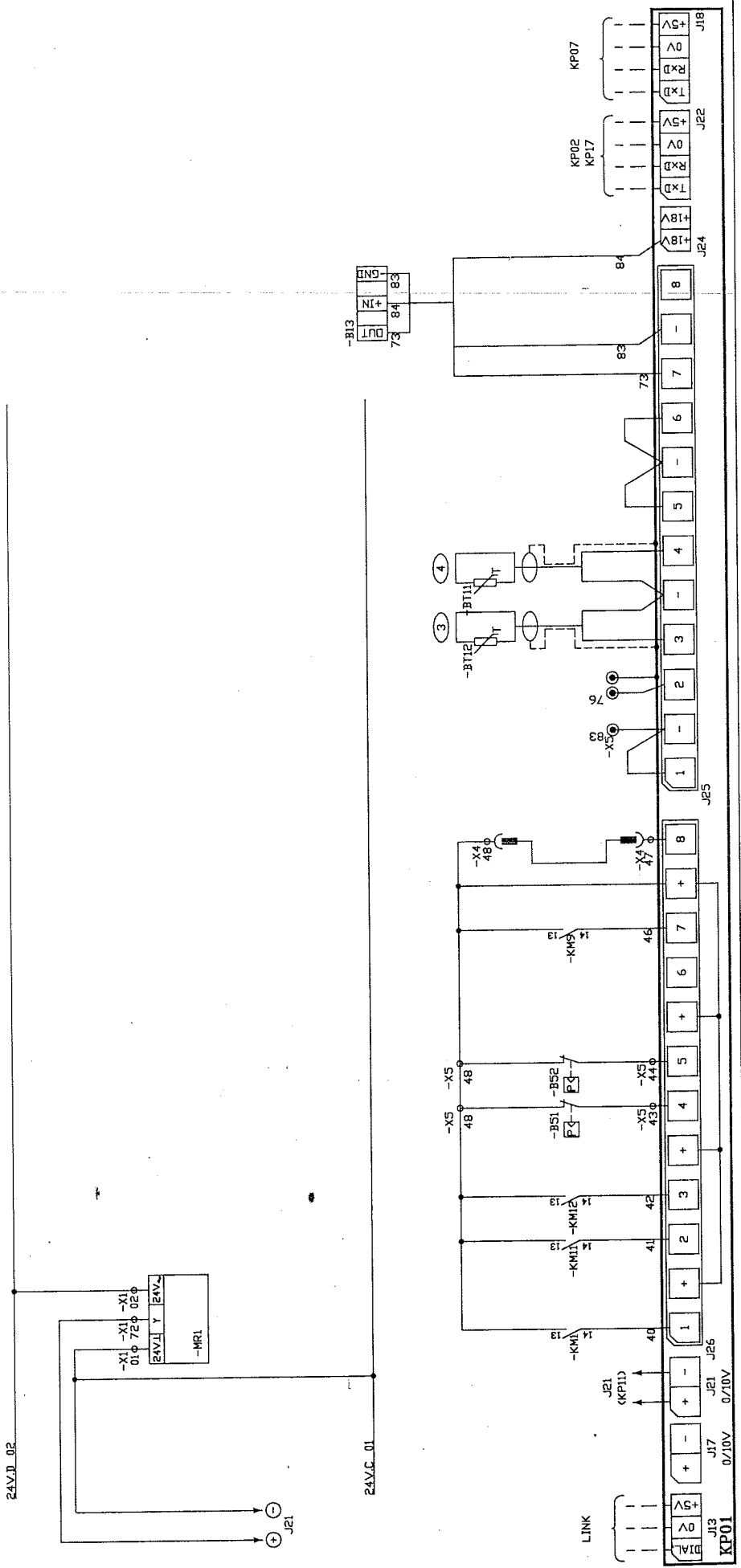
 -MC1 -MC2

-Q 2.5/4 A
 4x 1.5 mm² 4x 1.5 mm²

TG65L6	**TG65L6**
Pn = 0.56 kW/Pn = 0.56 kW	
In = 1.7 A/In = 1.7 A	
Pa = 0.88 kW/Pa = 0.88 kW	
Id = A/Id = A	

 -MC3 -MC4





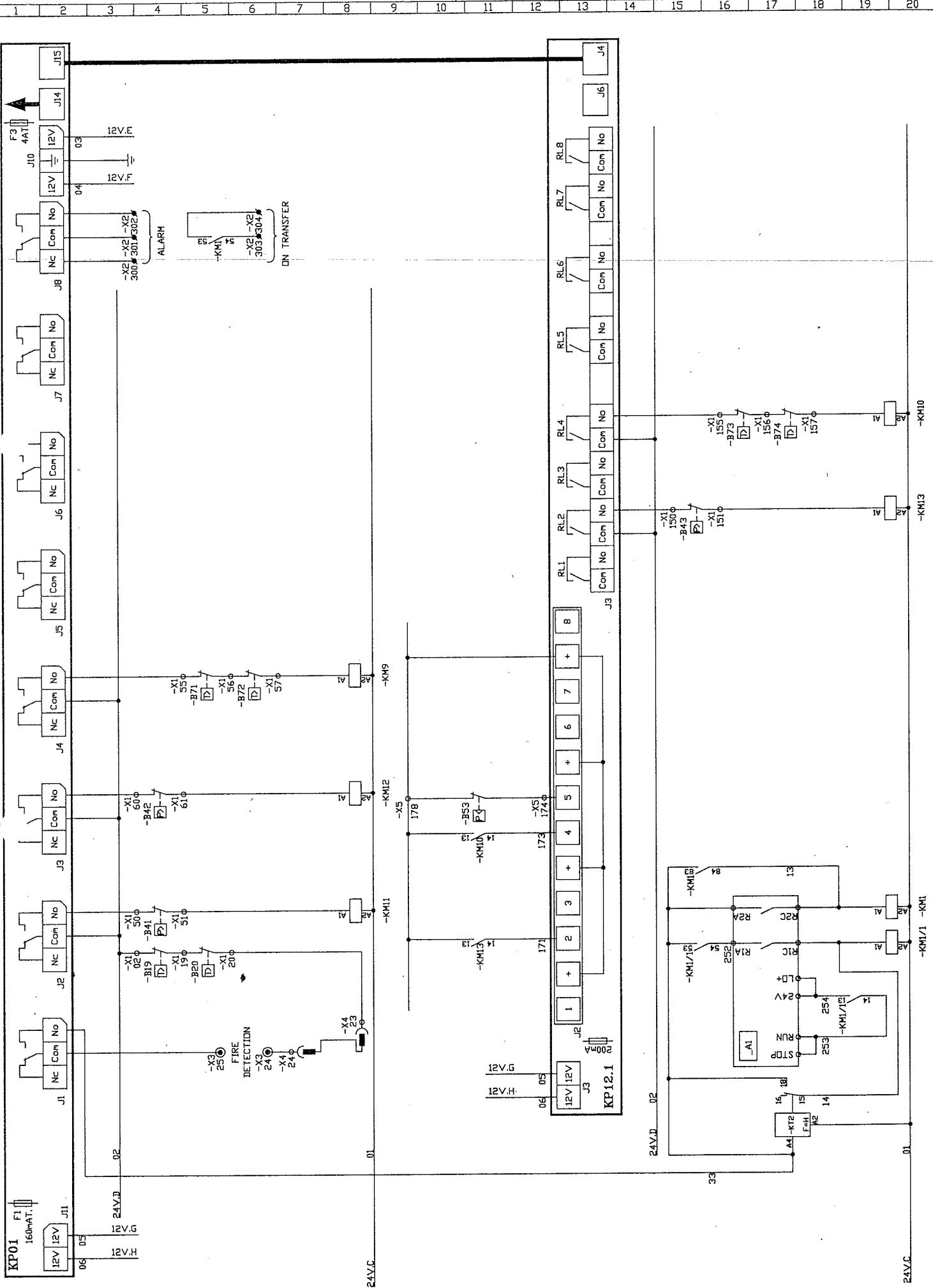
Indice	DATE	NOM	MODIFICATIONS

(1) FCK120N2M
Entrées Automate CLIMATIC
Climatic Controller Input

Dessiné:
Lanc.
Date: 07.04.04

LENNOX
USINE DE LONGVIC

236001 3/12



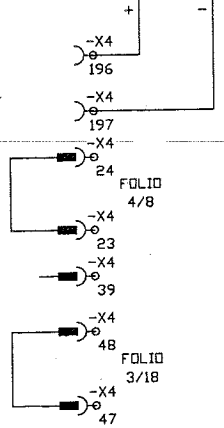
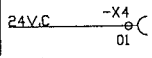
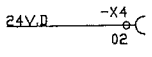
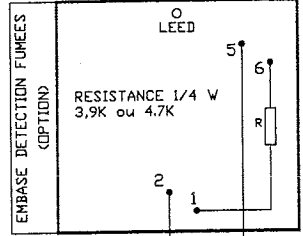
Indice	DATE	NOM	MODIFICATIONS

(1) FCK120N2M
Sorties Automate CLIMATIC
Climatic Controller Outputs

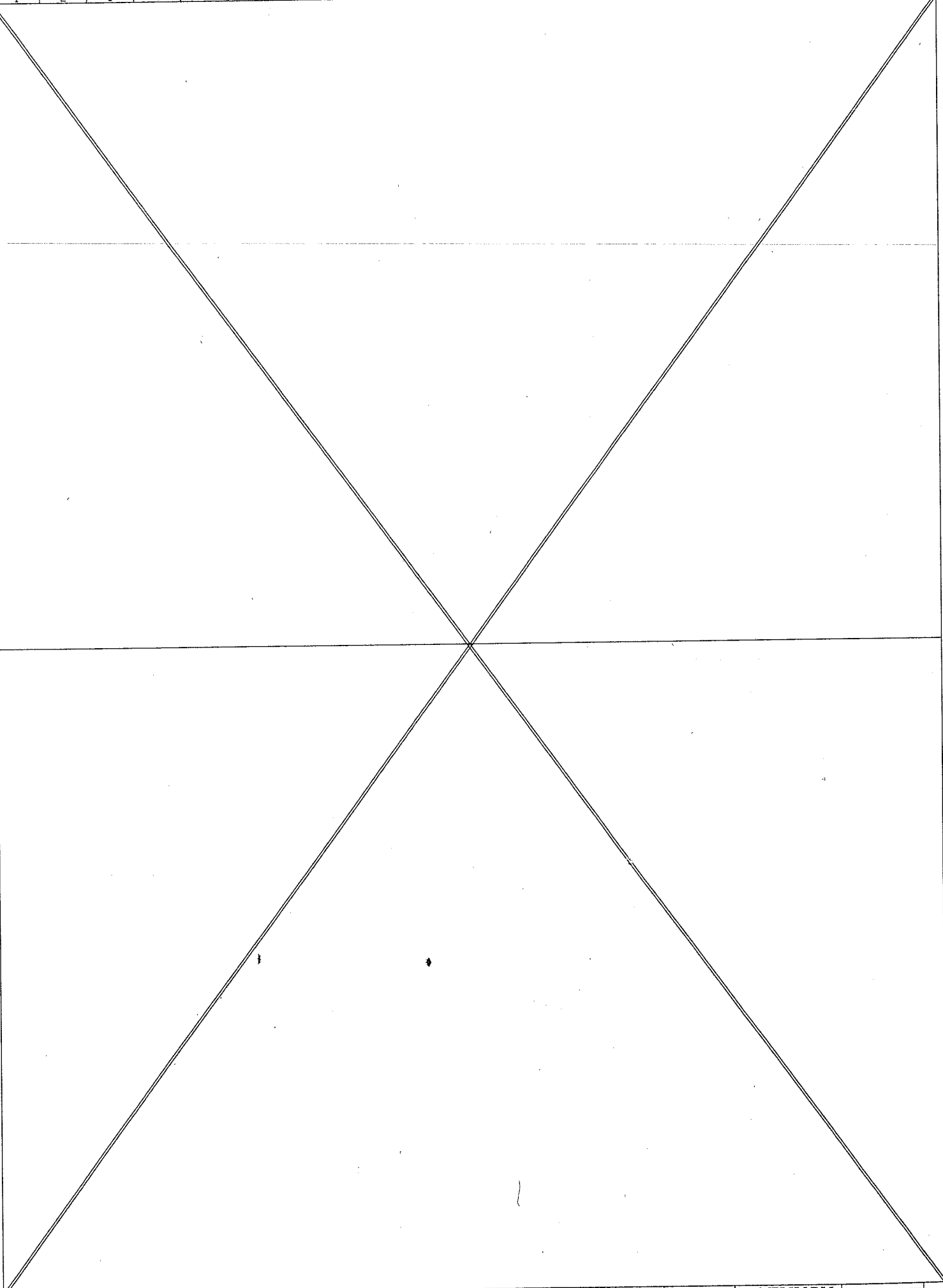
Dessine:
Lanc.
Date: 07.04.04

LENNOX
USINE DE LONGVIC

236001 4/12



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20



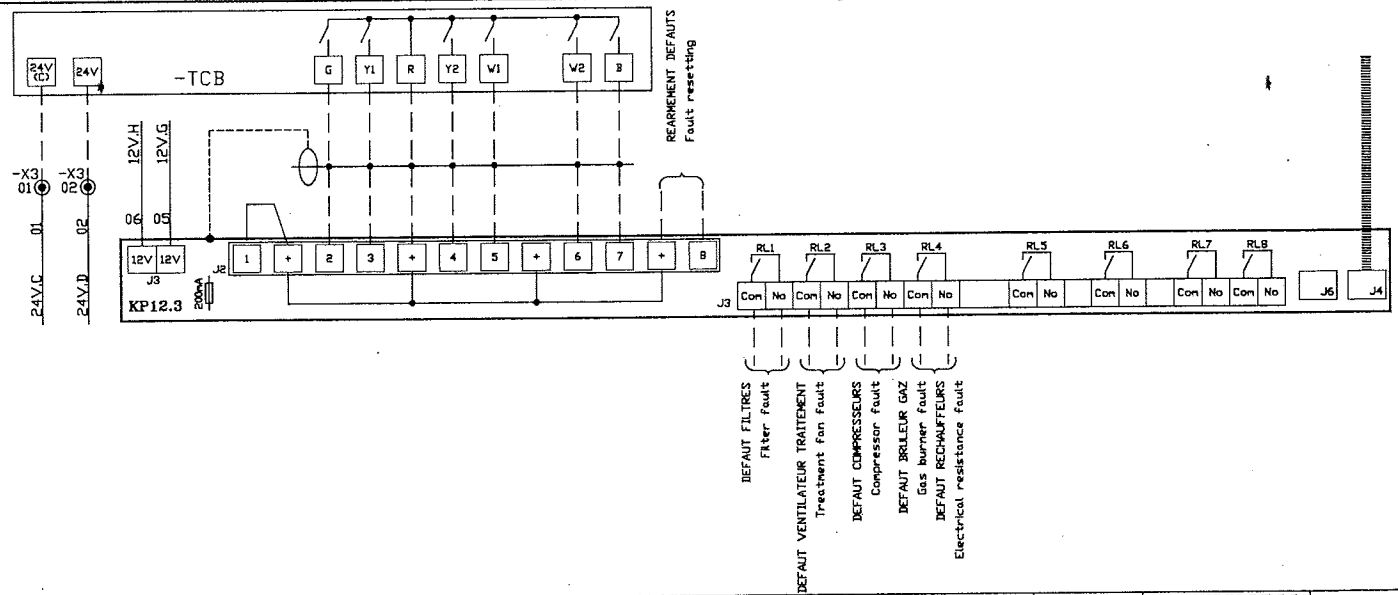
Indice	DATE	NOM	MODIFICATIONS

(1) FCK120N2M
Gaz
GAS

Dessine:
Lanc.
Date: 07.04.04



236001 6/12
USINE DE LONGVIC



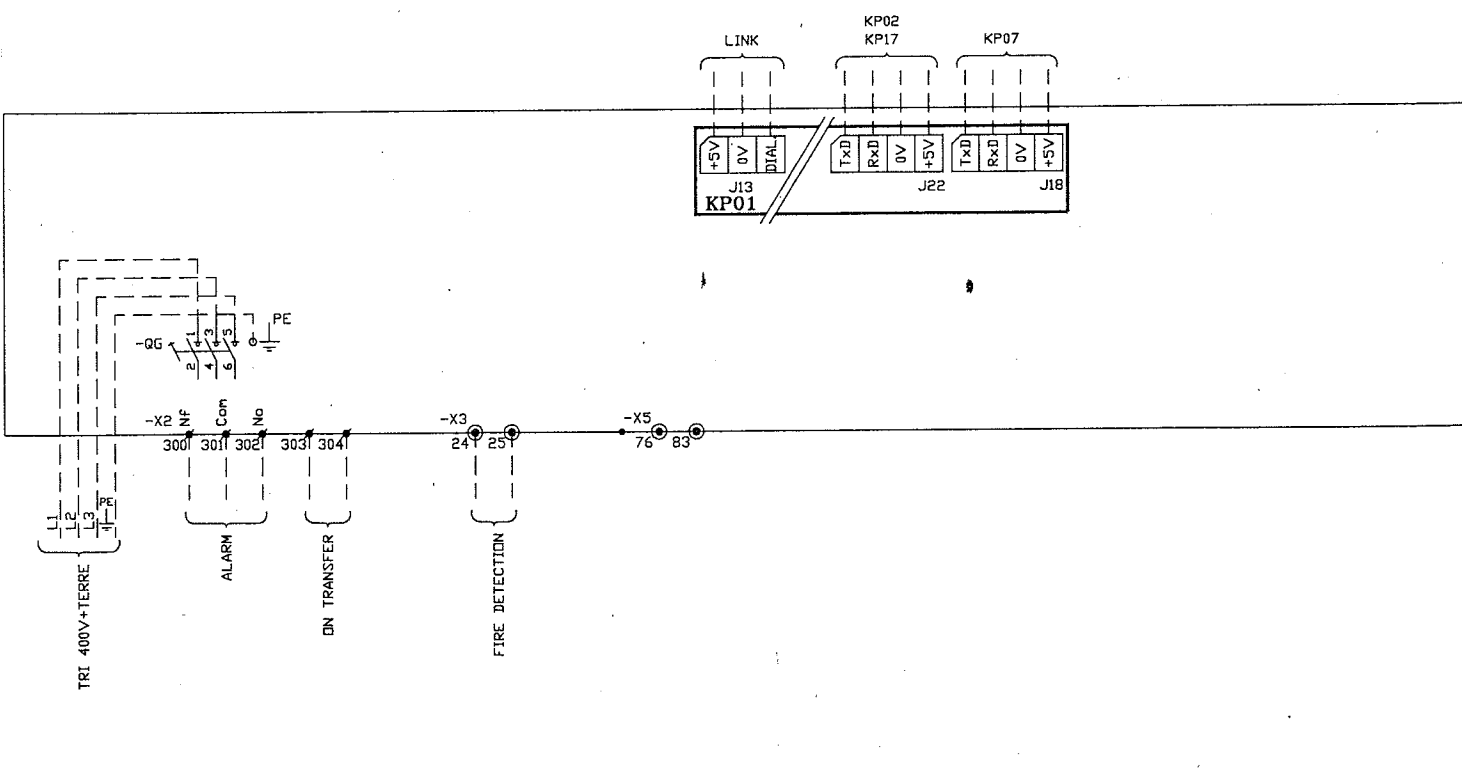
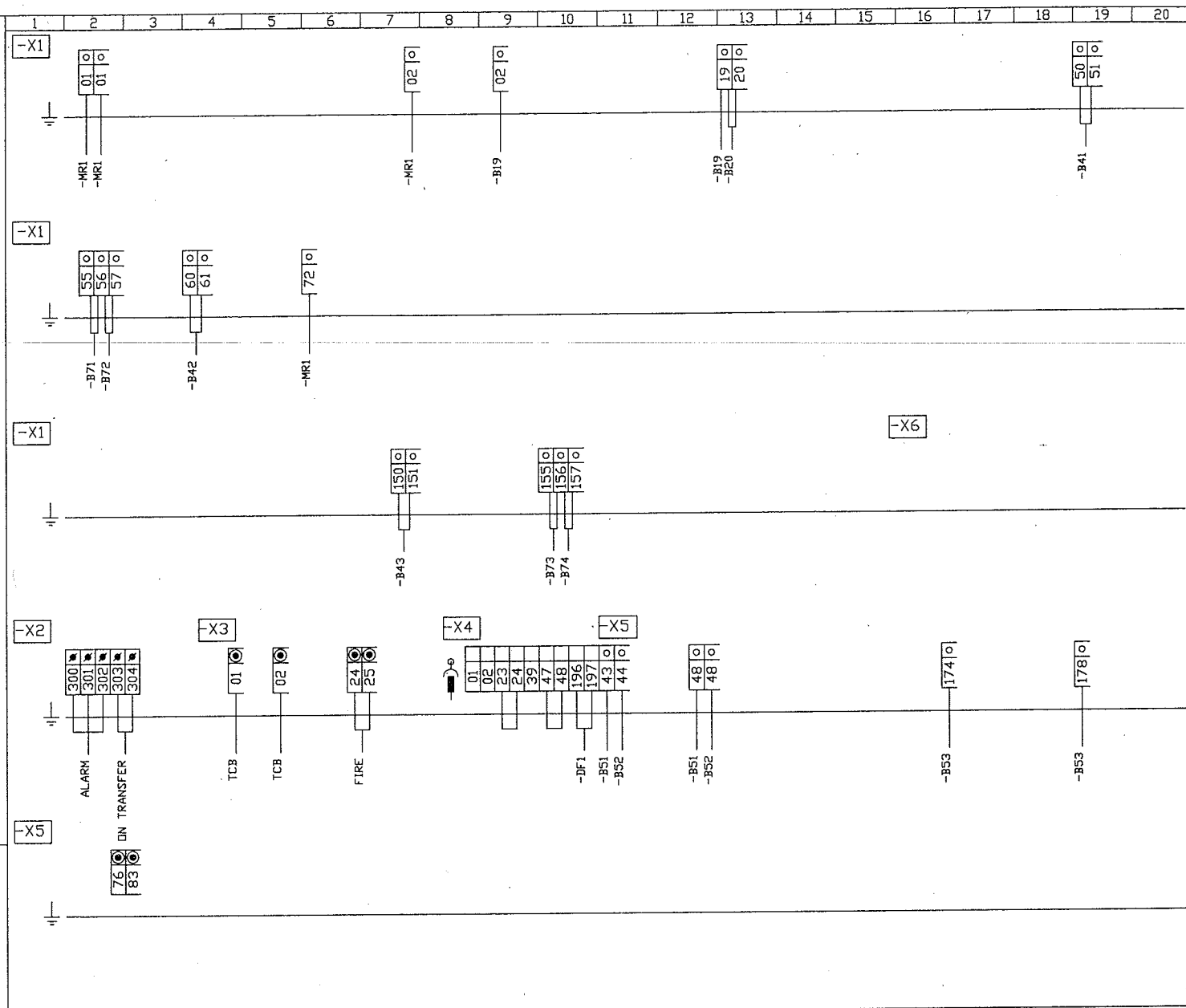
Indice	DATE	NOM	MODIFICATIONS

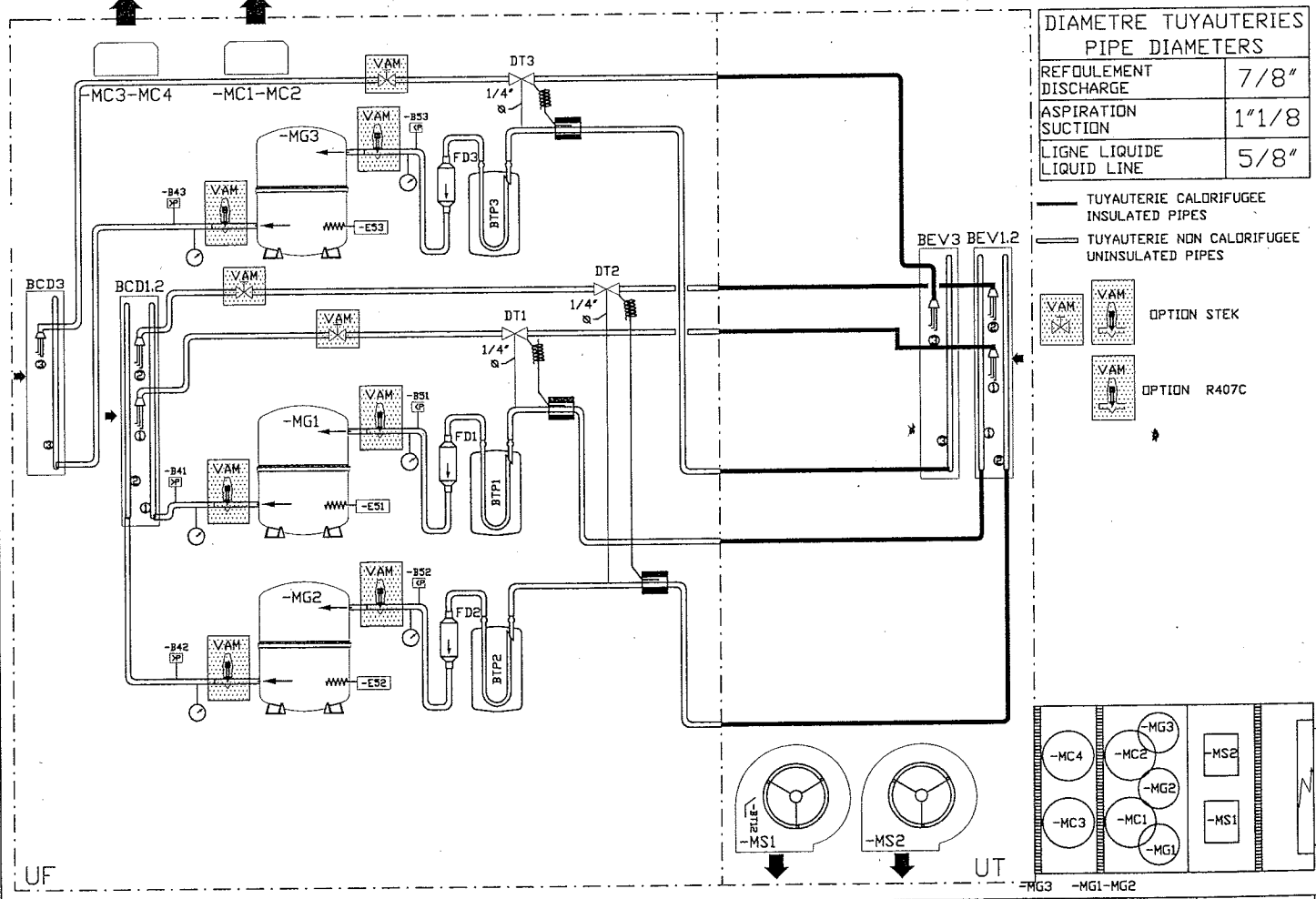
(1) FCK120N2M
 CL06_GTC \ Raccordement client
 Customer CL06\GTC

Dessine: Lanc.
 Date: 07.04.04

LENNOX
 USINE DE LONGVIC

236001 7/12

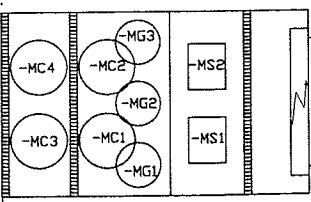




DIAMETRE TUYAUTERIES PIPE DIAMETERS	
REFOULEMENT DISCHARGE	7/8"
ASPIRATION SUCTION	1 1/8"
LIGNE LIQUIDE LIQUID LINE	5/8"

— TUYAUTERIE CALORIFUGEE
 INSULATED PIPES
 — TUYAUTERIE NON CALORIFUGEE
 UNINSULATED PIPES

VAM OPTION STEK
 VAM OPTION R407C



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
+A0	CLIMATIC CONTROLLER										-KA1-KA2	RELAY								
+A1+A2	CONDENSATION GROUP 1 / CONDENSATION GROUP 2										-KA3	SMOKE FAULT RELAY								
+A3+A4	CONDENSER 1 / CONDENSER 2										-KA4	PV/GV RELAY								
-A1											-KA9	EXTERNAL TEMPERATURE RELAY +5°C								
-B1	EXTERNAL AIR THERMOSTAT										-KE1-KE2	HEATER -E1-E2 CONTACTER								
-B2	SMOKE DETECTION HEAD										-KE3	HEATER -E3 CONTACTER								
-B3	RC CIRCUIT										-KE4	VAPOUR HUMIDIFIER -E4 CONTACTER								
-B4-B5	GAS MANIFOLD IONISATION PROBE										-KM1-KM2	BLOWER FAN MOTOR -MS1-MS2 CONTACTER								
-B6-B7	GAS MANIFOLD IGNITION ELECTRODE										-KM3	BLOWER FAN MOTOR LOW SPEED CONTACTER								
											-KM4	STAR COUPLING CONTACTER								
											-KM5-KM6	EXTRACTION FAN MOTOR -ME1-ME2 CONTACTER								
-B11	WATER FLOW RATE CONTROLLER										-KM7	EXTRACTION FAN MOTOR LOW SPEED CONTACTER								
-B13	CLOGGED AIR FILTER PRESSURE SWITCH / AIR FLOW RATE										-KM8	STAR COUPLING CONTACTER								
-B14	HOT WATER BATTERY ANTIFREEZE THERMOSTAT										-KM9-KM10	CONDENSER 1 / CONDENSER 2 FAN MOTOR CONTACTER								
-B15	HOT WATER BATTERY ANTIFREEZE THERMOSTAT										-KM11-KM12	COMPRESSOR -MG1-MG2 CONTACTER								
-B16	FIRE THERMOSTAT										-KM13-KM14	COMPRESSOR -MG3-MG4 CONTACTER								
-B17-B18	GAS MANIFOLD MINIMUM GAS PRESSURE SWITCH										-KM15	CONDENSER 2 FAN MOTOR CONTACTER								
-B19-B20	BLOWER FAN MOTOR -MS1-MS2 STOP THERME										-KM20	CIRCULATION PUMP -MP1 CONTACTER								
-B21-B22	GAS MANIFOLD SMOKE EXTRACTION AIR PRESSURE SWITCH										-KM21-KM22	GAS MANIFOLD 1-GAS MANIFOLD 2 CONTACTER								
-B23-B24	EXTRACTION FAN MOTOR -ME1-ME2 STOP THERME																			
-B25-B26	ELECTRIC BATTERY -E1-E2 SAFETY KLIXON										-KM91-KM101	LOW AMBIENT CONTACTER								
-B27	ELECTRIC BATTERY -E3 SAFETY KLIXON										KP06	JBUS								
-B28	CIRCULATION PUMP -MP1 MOTOR STOP THERME										-KT1.2	TIMING RELAY								
											-MC1.2	CONDENSER -MC1-MC2 FAN MOTOR								
											-MC3.4	CONDENSER -MC3-MC4 FAN MOTOR								
-B29-B30	GAS MANIFOLD AIR FLOW RATE SAFETY KLIXON										-ME1-ME2	EXTRACTION FAN MOTOR -ME1-ME2								
-B31	WATER LEAK DETECTOR										-ME3-ME4	EXTRACTION FAN MOTOR -ME3-ME4								
-B32-B33	GAS MANIFOLD FLASHBACK SAFETY KLIXON										-MG1-MG2	COMPRESSOR -MG1-MG2								
-B41-B42	COMPRESSOR -MG1-MG2 HIGH PRESSURE SAFETY SWITCH										-MG3-MG4	COMPRESSOR -MG3-MG4								
-B43-B44	COMPRESSOR -MG3-MG4 HIGH PRESSURE SAFETY SWITCH										-MP1	CIRCULATION PUMP MOTOR								
-B45-B46	GAS MANIFOLD 1 / GAS MANIFOLD 2 REGULATION KLIXON										-MR1	ECONOMISER DAMPER MOTOR								
-B51-B52	COMPRESSOR -MG1-MG2 LOW PRESSURE SAFETY SWITCH										-MR2	BLOWER DAMPER MOTOR								
-B53-B54	COMPRESSOR -MG3-MG4 LOW PRESSURE SAFETY SWITCH										-MR3	NEW AIR DAMPER MOTOR								
-B61-B62	COMPRESSOR -MG1-MG2 HIGH PRESSURE CONTROL SWITCH										-MR4	EXTRACTION DAMPER MOTOR								
-B63-B64	COMPRESSOR -MG3-MG4 HIGH PRESSURE CONTROL SWITCH										-MR5	RECYCLED AIR DAMPER MOTOR								
J71-B72	CONDENSER -MC1-MC2 FAN MOTOR STOP THERME										-MR6									
-B73-B74	CONDENSER -MC3-MC4 FAN MOTOR STOP THERME										-MS1-MS2	BLOWER FAN MOTOR -MS1-MS2								
-B81-B82	SCROLL COMPRESSOR -MG1-MG2 PROTECTION MODULE										-Q1-Q2	BLOWER FAN MOTOR -MS1-MS2 PROTECTION								
-B83-B84	SCROLL COMPRESSOR -MG3-MG4 PROTECTION MODULE										-Q5-Q6	EXTRACTION FAN MOTOR -ME1-ME2 PROTECTION								
-B91-B92	PRESSURE SWITCH 4/20mA COMPRESSOR -MG1-MG2										-Q9	CONDENSER -MC1-MC2 FAN MOTOR PROTECTION								
-B93-B94	PRESSURE SWITCH 4/20mA COMPRESSOR -MG3-MG4										-Q10	CONDENSER -MC3-MC4 FAN MOTOR PROTECTION								
											-Q11-Q12	COMPRESSOR -MG1-MG2 PROTECTION								
											-Q13-Q14	COMPRESSOR -MG3-MG4 PROTECTION								
BCD	CONDENSER BATTERY										-Q15	CONDENSER -MC2 FAN MOTOR PROTECTION								
BEC	HOT WATER BATTERY										-Q20	CIRCULATION PUMP -MP1 PROTECTION								
BEG	CHILLED WATER BATTERY																			
BEV	EVAPORATOR BATTERY										-Q25	HOUSING RESISTANCE PROTECTION								
											-QCC	QUICK-RELEASE COUPLING								
-BG10	HYGIENE PROBE										-QF1	PRIMARY CIRCUIT PROTECTION -T1								
-BH10	REGULATION HYGROMETRY PROBE										-QF2	PRIMARY CIRCUIT PROTECTION -T3								
-BH11	EXTERNAL HYGROMETRY PROBE										-QF3	SECONDARY CIRCUIT PROTECTION -T3								
-BT10	REGULATION TEMPERATURE PROBE										-QG	MAIN SWITCH								
-BT11	EXTERNAL TEMPERATURE PROBE										-QG1-QG2	CONDENSER 1 / CONDENSER 2 MAIN SWITCH								
-BT12	BLOWER TEMPERATURE PROBE										-QE1-QE2	HEATER -E1-E2 PROTECTION								
-BT13	COLD WATER TEMPERATURE PROBE										-QE3	HEATER -E3 PROTECTION								
-BT14	CONDENSER 1 SPEED REGULATION TEMPERATURE PROBE										-QE4	VAPOUR HUMIDIFIER -E4 PROTECTION								
-BT15	CONDENSER 2 SPEED REGULATION TEMPERATURE PROBE										-RL	LIQUID RESERVOIR								
-BT16	HEAT EXCHANGER WATER OUTLET ANTIFREEZE PROBE																			
-BT17	MIXTURE PROBE										-SAT	CHECK VALVE								
-BT21-BT22	COMPRESSOR 1-2 ANTIFROST TEMPERATURE PROBE										-SA1	HUMIDIFIER -E4 ON/OFF SWITCH								
-BT23-BT24	COMPRESSOR 3-4 ANTIFROST TEMPERATURE PROBE										-SA2	HUMIDIFIER -E4 DRAIN SWITCH								
-BT25	FREE TEMPERATURE										-SBI	EMERGENCY STOP								
-BT91-BT92	DEFROST TEMPERATURE SENSOR COMPRESSOR 1-2																			
-BT93-BT94	DEFROST TEMPERATURE SENSOR COMPRESSOR 3-4																			
BTP1-2	COMPRESSOR -MG1-MG2 ACCUMULATOR										-T1	CONTROL CIRCUIT TRANSFORMER 400V/24V/12V/12V/230V								
BTP3-4	COMPRESSOR -MG3-MG4 ACCUMULATOR										-T3	BURNER POWER SUPPLY TRANSFORMER 400 / 230V								
											-TCB	CONTROL THERMOSTAT								
CH	THERMOSTATIC HOLDER																			
EH	HORIZONTAL WATER HEAT EXCHANGER										-TI4	HUMIDIFIER -E4 CURRENT TRANSFORMER								
EEV	VERTICAL WATER HEAT EXCHANGER										UF	COOLING UNIT								
-E1-E2	HEATER -E1-E2										UT	AIR TREATMENT UNIT								
-E3	HEATER -E3										UI	INTERFACE								
-E4	VAPOUR HUMIDIFIER -E4										VAM	MANUAL CHECK VALVE								
-E7-E8	ANTIFREEZE HEATER CORDS HOT WATER BATTERY										VL	LIQUID INDICATOR								
-E9-E10	ANTIFREEZE HEATER CORDS										VRM	MANUAL CONTROL VALVE								
-E11	SMOKE DETECTOR PRINTED CIRCUIT										-V1	ELECTRIC BATTERY STATIC CONTACTER								
-E12	HUMIDIFIER -E4 LEVEL SOLENOID VALVE										-V2	ELECTRIC BATTERY STATIC CONTACTER								
-E13	WATER LEAK ELECTRODE										V2VP	PRESSURE SWITCHED 2-WAY VALVE								
-E14	BURNER CONTROL BOX										V3VP	PRESSURE SWITCHED 3-WAY VALVE								
-E15	VAPOUR HUMIDIFIER -E4 PRINTED CIRCUIT																			
-E16	PRINTED CIRCUIT 0/10V VAPOUR HUMIDIFIER -E4										-Y1	GAS MANIFOLD N1 RESET ELECTROMAGNET								
-E20	CPU CARD KP01										-Y2	GAS MANIFOLD N2 RESET ELECTROMAGNET								
											-YR	HUMIDIFIER -E4 FILLING SOLENOID VALVE								
											-YV	HUMIDIFIER -E4 DRAIN SOLENOID VALVE								
-E23	ANALOG OUTPUT CARD KP04.1										-YV1	CHILLED WATER 3-WAY VALVE								
-E24	ANALOG OUTPUT CARD KP04.2										-YV2	HOT WATER 3-WAY VALVE								
											-YV11-YV12	COMPRESSOR -MG1-MG2 CYCLE REVERSAL VALVE								
											-YV13-YV14	COMPRESSOR -MG3-MG4 CYCLE REVERSAL VALVE								
-E28	INPUT CARD 4/20mA KP05.1										-YV31-YV32	BURNER GAS SOLENOID VALVE								
-E29.1.2	INPUT OUTPUT CARD KP12										-YV41-YV42	GAS MANIFOLD SAFETY SOLENOID VALVE								
-E30	CONSOLE KP02										-YV51-YV52	GAS MANIFOLD MAIN SOLENOID VALVE								
-E31	CONSOLE KP17										-YV61	COMPRESSOR -MG1 HOT GAS INJECTION SOLENOID VALVE								
-E32	INTERFACE										-YV71-YV72	COMPRESSOR -MG1-MG2 LIQUID SOLENOID VALVE								
-E51-E52	COMPRESSOR -MG1-MG2 HOUSING RESISTANCE																			
-E53-E54	COMPRESSOR -MG3-MG4 HOUSING RESISTANCE										-Z*	CAPACITY RESISTANCE CIRCUIT								
FCO	WATER CIRCUIT FILTER																			
FD	DEHUMIDIFIER FILTER																			
FDB	BOTTLE DEHUMIDIFIER FILTER																			
FDW	DOUBLE FLOW DEHUMIDIFIER FILTER																			
-F1	SECONDARY CIRCUIT -T1 230VA / 24V PROTECTION FUSE																			
-F2	SECONDARY CIRCUIT -T1 30VA / 12V PROTECTION FUSE																			
-F3	SECONDARY CIRCUIT -T1 10VA / 12V PROTECTION FUSE																			
-F4	SECONDARY CIRCUIT -T1 30VA / 230V PROTECTION FUSE																			
-KA31-KA32	GAS BURNER FAULT RELAY																			
-KA41-KA42	GAS BURNER FAULT RELAY																			

SCREENED CABLE MARK
-FIL 0.5mm²

LINKS TO BE MADE BY INSTALLER

-X4 o SMOKE DETECTION TERMINAL STRIP o MAIN TERMINAL STRIP
-X5 o AUXILIARY TERMINAL STRIP -X2 o } TERMINAL STRIP/CUSTOMER CONNECTION
-X3 o }

CAUTION: ALL THE CONTACTORS AND COILS CONTACTED ON SITE HAVING A CLIMATIC OUTPUT MUST BE FITTED WITH A RC CIRCUIT

(1) FCK120N2M
Légende Repères
Key

Dessiné: Lenc.
Date: 07.04.04

LENNOX
USINE DE LONGVIC

236001

12 / 12