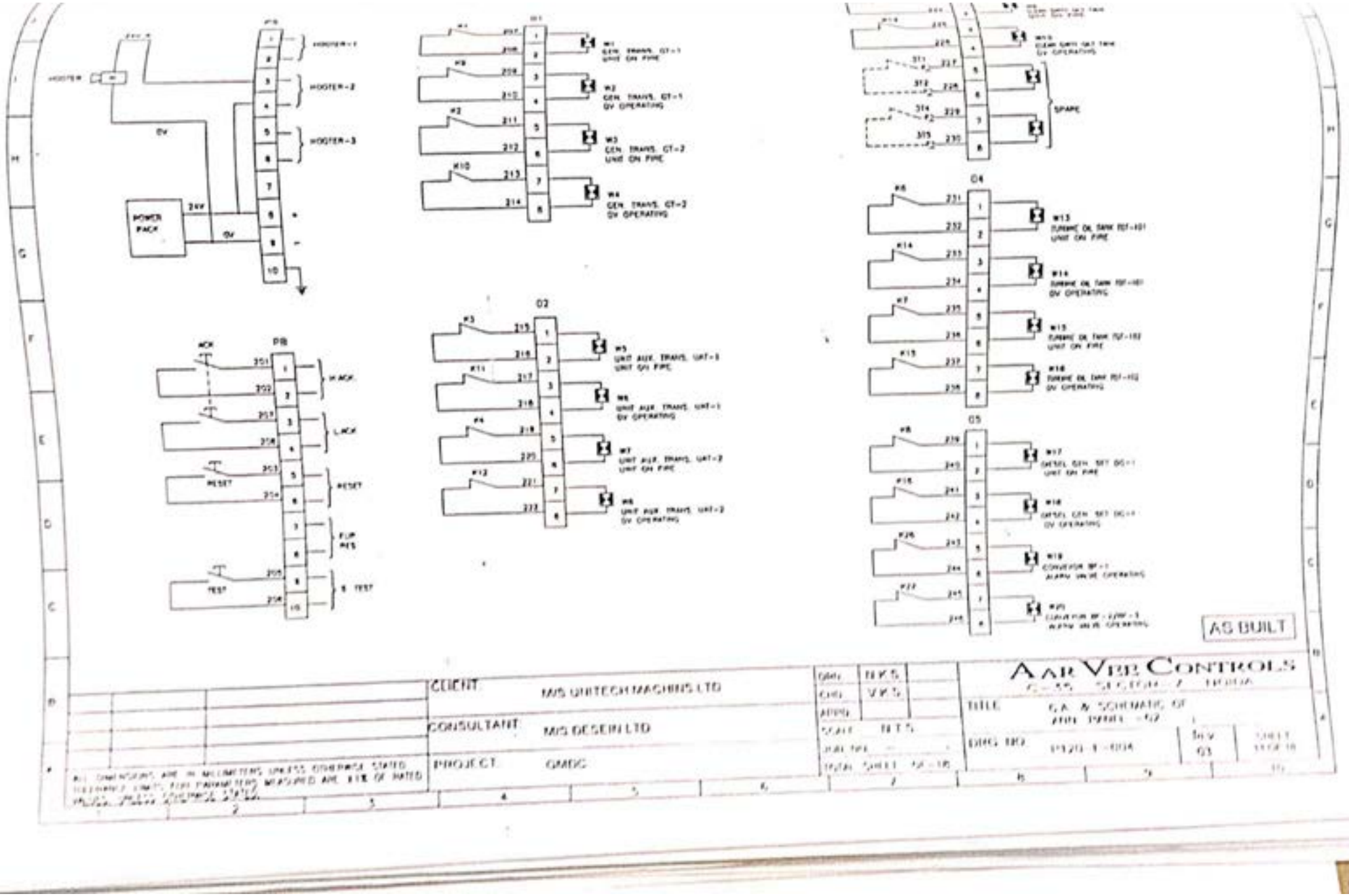
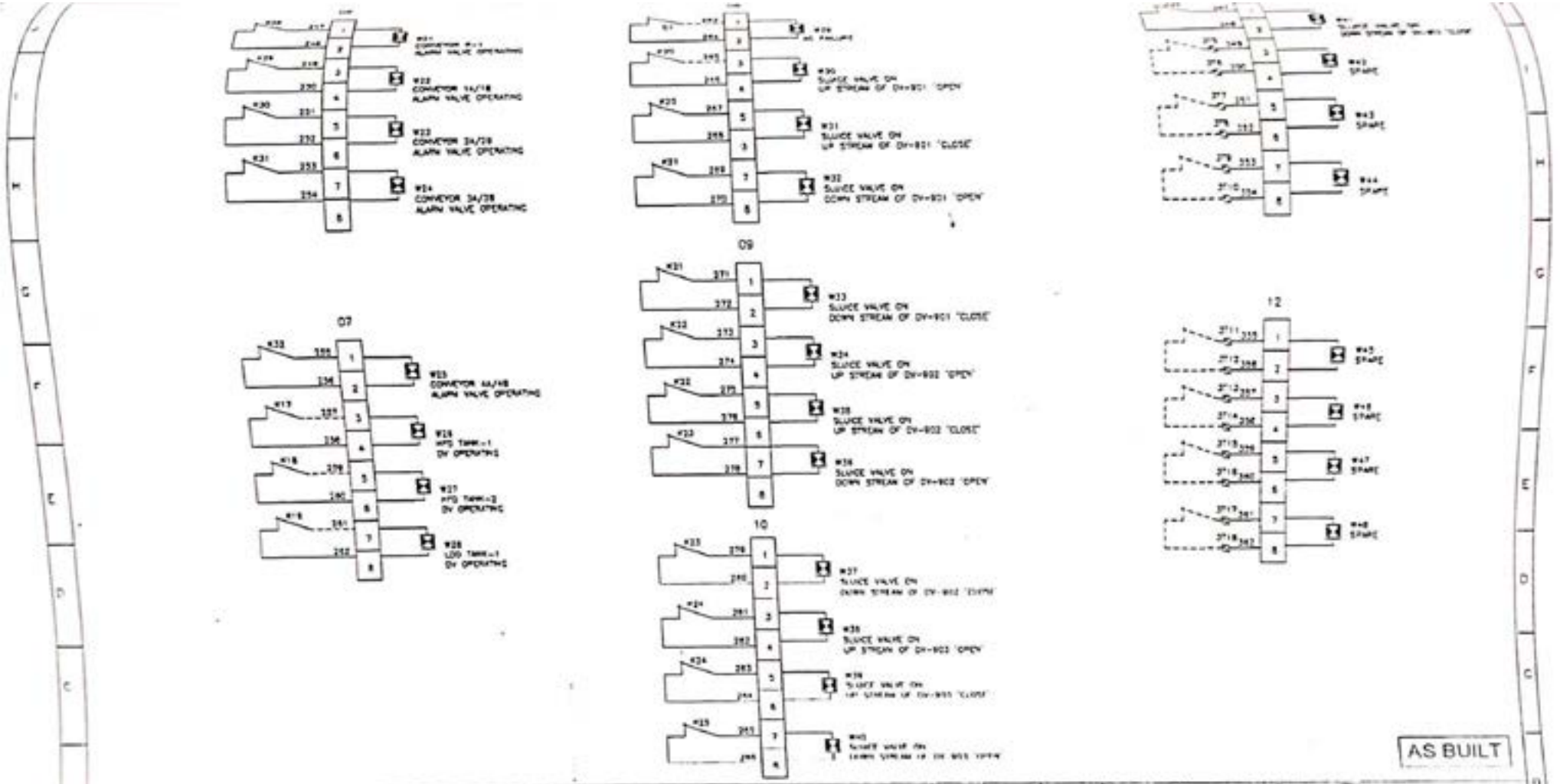
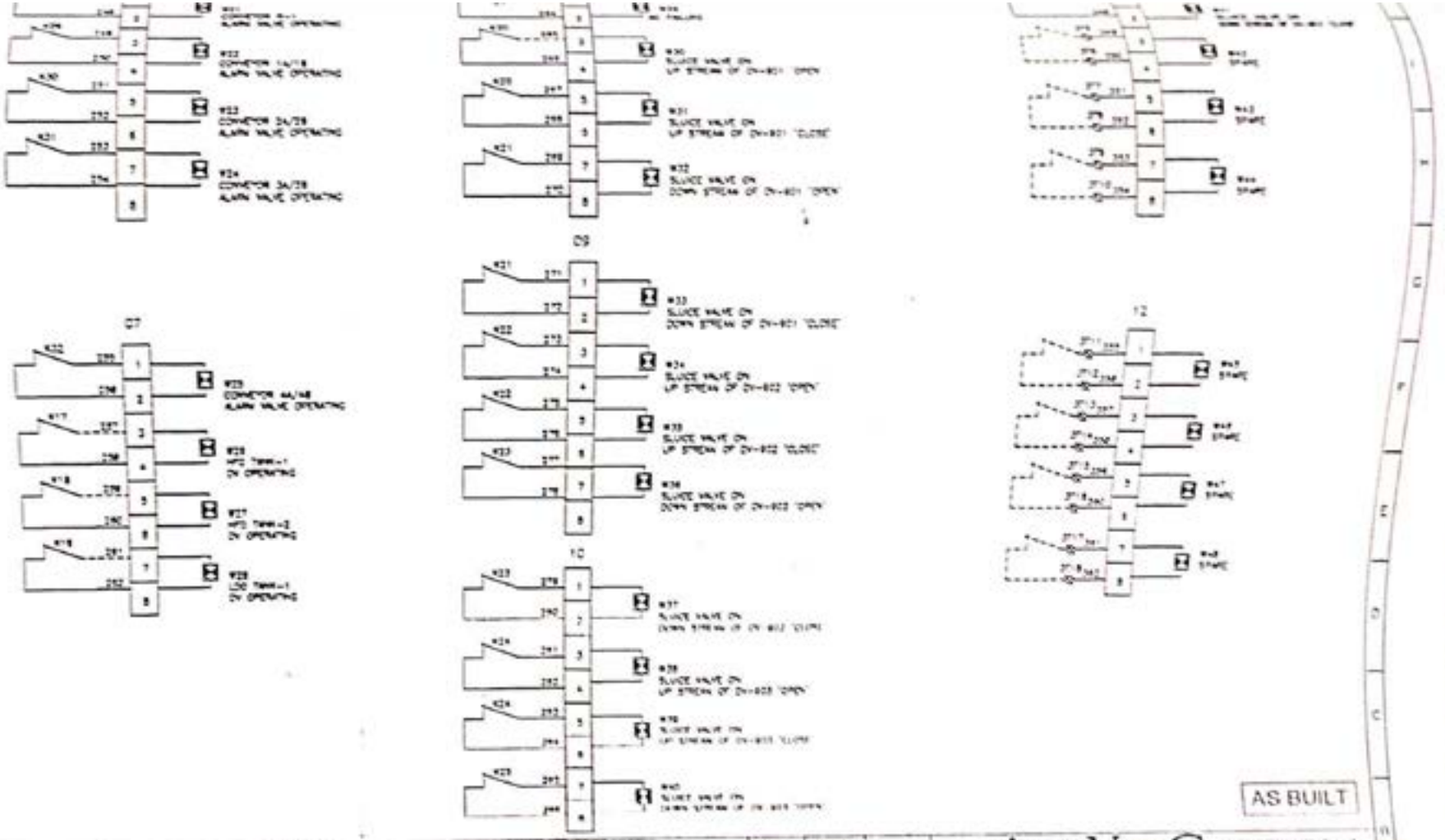

HOOTER
HOOTER-1
HOOTER-2
HOOTER-3
0V
POWER PACK
24V
0V
+
-
PB
ACK
RESET
TEST
W1 GEN. TRANS. GT-1 UNIT ON FIRE
W2 GEN. TRANS. GT-1 0V OPERATING
W3 GEN. TRANS. GT-2 UNIT ON FIRE
W4 GEN. TRANS. GT-2 0V OPERATING
W5 UNIT AUX. TRANS. UAT-1 UNIT ON FIRE
W6 UNIT AUX. TRANS. UAT-1 0V OPERATING
W7 UNIT AUX. TRANS. UAT-2 UNIT ON FIRE
W8 UNIT AUX. TRANS. UAT-2 0V OPERATING
SPARE
W13 TURBINE OIL TANK TOT-101 UNIT ON FIRE
W14 TURBINE OIL TANK TOT-101 0V OPERATING
W15 TURBINE OIL TANK TOT-102 UNIT ON FIRE
W16 TURBINE OIL TANK TOT-102 0V OPERATING
W17 DIESEL GEN. SET DG-1 UNIT ON FIRE
W18 DIESEL GEN. SET DG-1 0V OPERATING
W19 CONVEYOR BF-1 ALARM UNIT OPERATING
AS BUILT
CLIENT M/S UNITECH MACHINS LTD
CONSULTANT M/S DESEIN LTD
PROJECT GMDC
AAR VEE CONTROLS
TITLE G.A. & SCHEMATIC OF
DWG NO
SHEET 1 OF 1



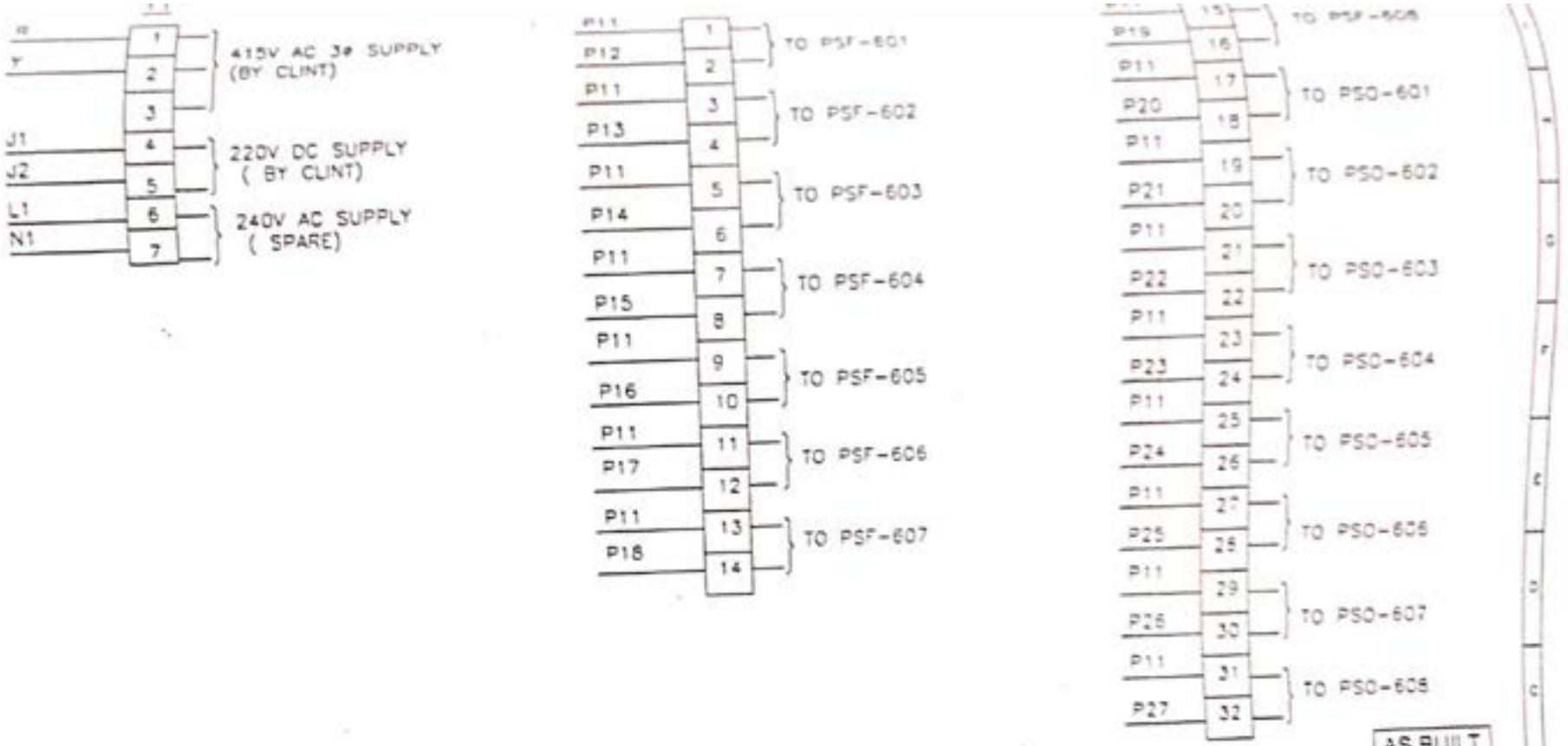
	CLIENT: M/S UNITECH MACHINS LTD	DRN: N.K.S	AAR VEE CONTROLS C-35 SECTOR-7 NOIDA	
		CHD: V.K.S		
	CONSULTANT: M/S DESEIN LTD	APPD:	TITLE: G.A. & SCHEMATIC OF ANN. PANEL 07	
		SCALE: N.T.S		
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED. TOLERANCE LIMITS FOR PARAMETERS MEASURED ARE ±1% OF RATED VALUES, UNLESS OTHERWISE STATED.	PROJECT: GMDC	JOB NO. --	DRG. NO. P120-E-004	REV 03
		TOTAL SHEET 07 OF 18		SHEET 12 OF 18



AS BUILT

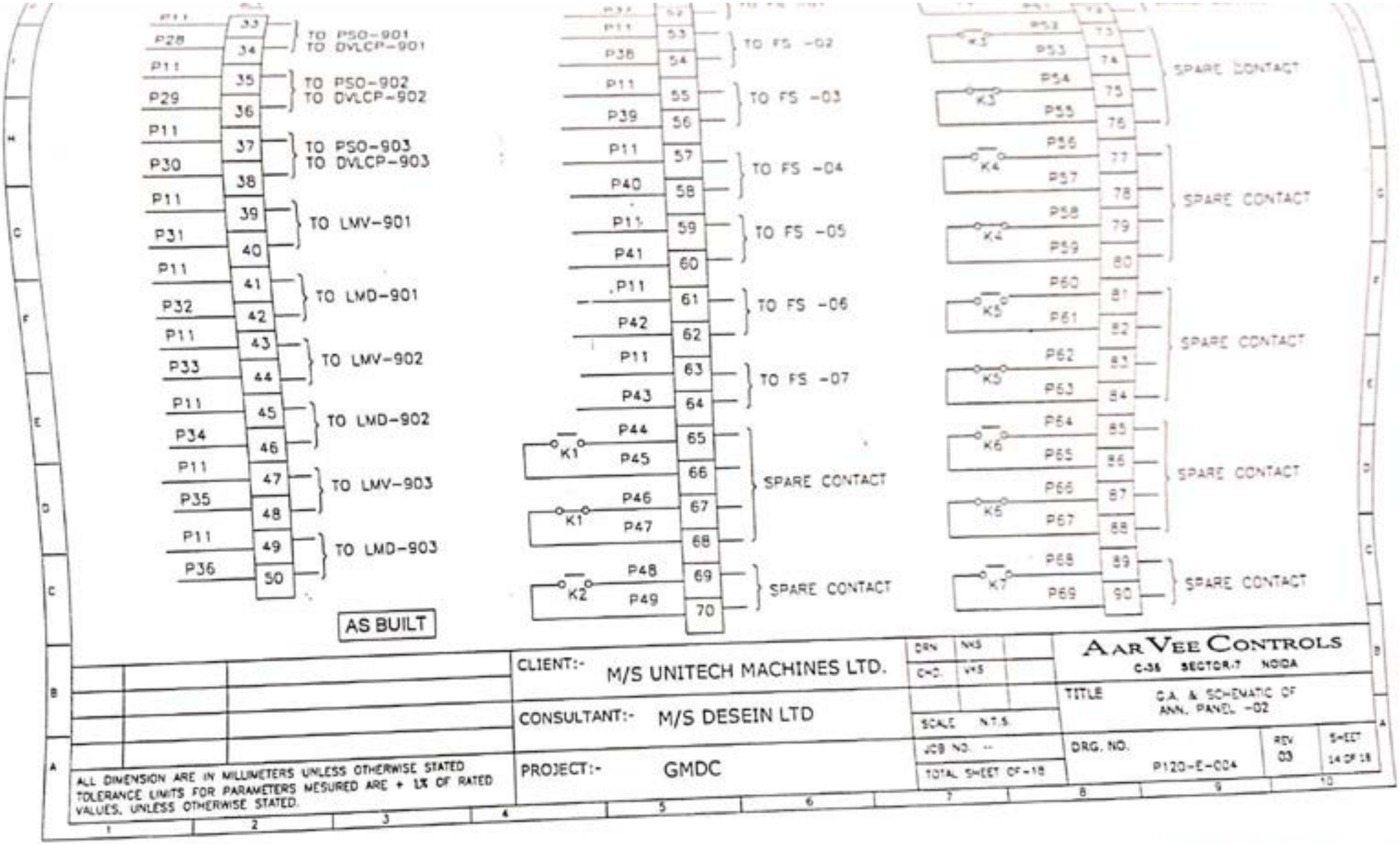
CLIENT: M/S UNITECH MACHINS LTD	DSN	N.K.S.	AAR VEE CONTROLS C-55 SECTOR-7 NOIDA		
	CHD	V.K.S.			
CONSULTANT: M/S DESEIN LTD	APPD		TITLE: G.A. SCHEMATIC OF ANN PANEL D2		
	SCALE	N.T.S.			
PROJECT: GMDC	JOB NO.	--	DRG NO. P120-E-004	REV. 03	SHEET 12 OF 18
	TOTAL SHEET	04 - 18			

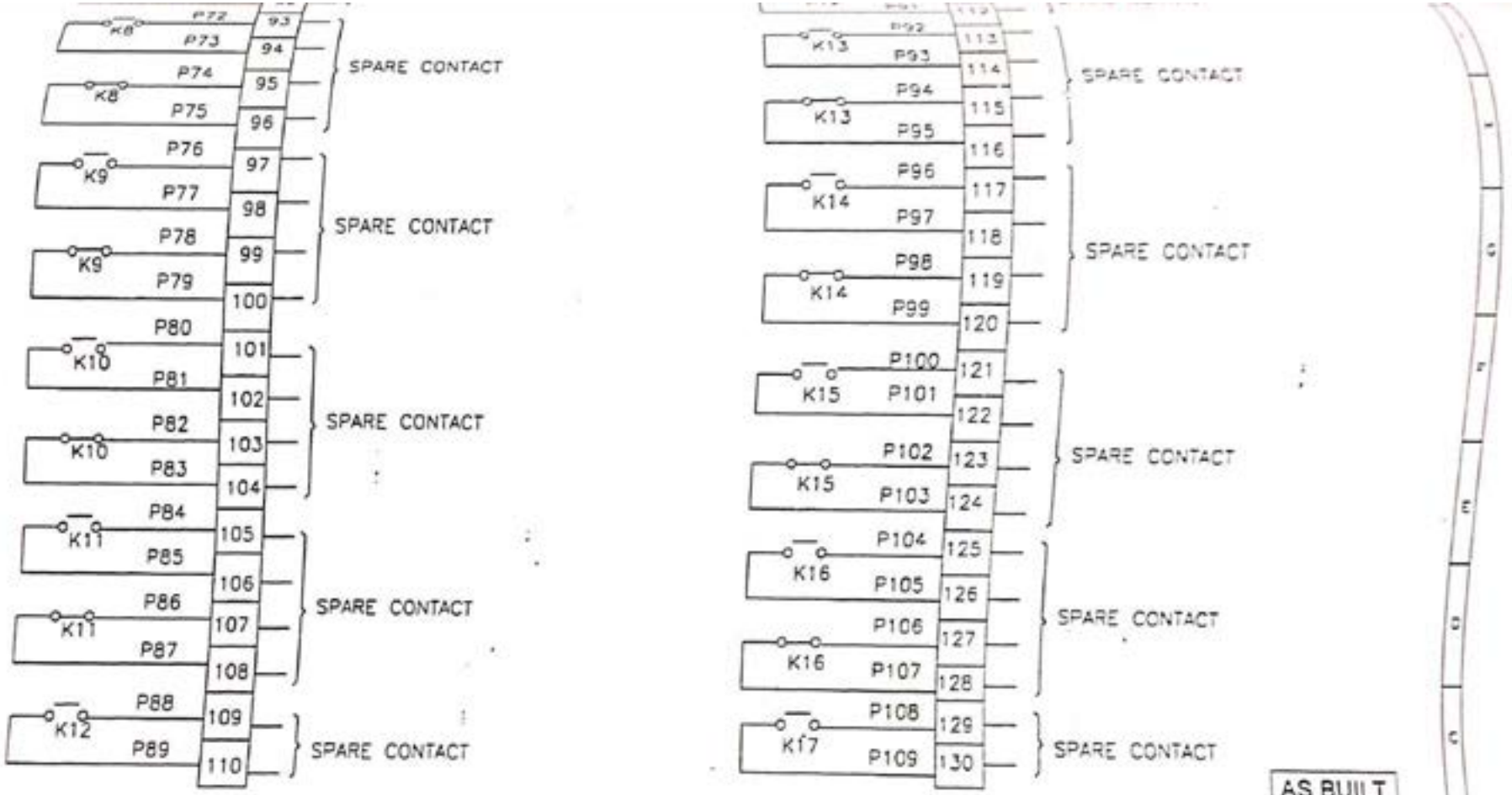
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED. TOLERANCE LIMITS FOR PARAMETERS MEASURED ARE ±1% OF RATED VALUES, UNLESS OTHERWISE STATED.



CLIENT:- M/S UNITECH MACHINES LTD.	DRN. NKS	AARVEE CONTROLS C-35 SECTOR-7 NOIDA	
CONSULTANT:- M/S DESEIN LTD	CHD. VKG	TITLE G.A. & SCHEMATIC OF ANN PANEL -02	
PROJECT:- GMDC	SCALE N.T.S	DRG. NO. P120-E-004	REV. 03
	JOB NO. --		SHEET 13 OF 18
	TOTAL SHEET OF-18		

ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED
TOLERANCE LIMITS FOR PARAMETERS MESURED ARE ± 1% OF RATED VALUES, UNLESS OTHERWISE STATED.

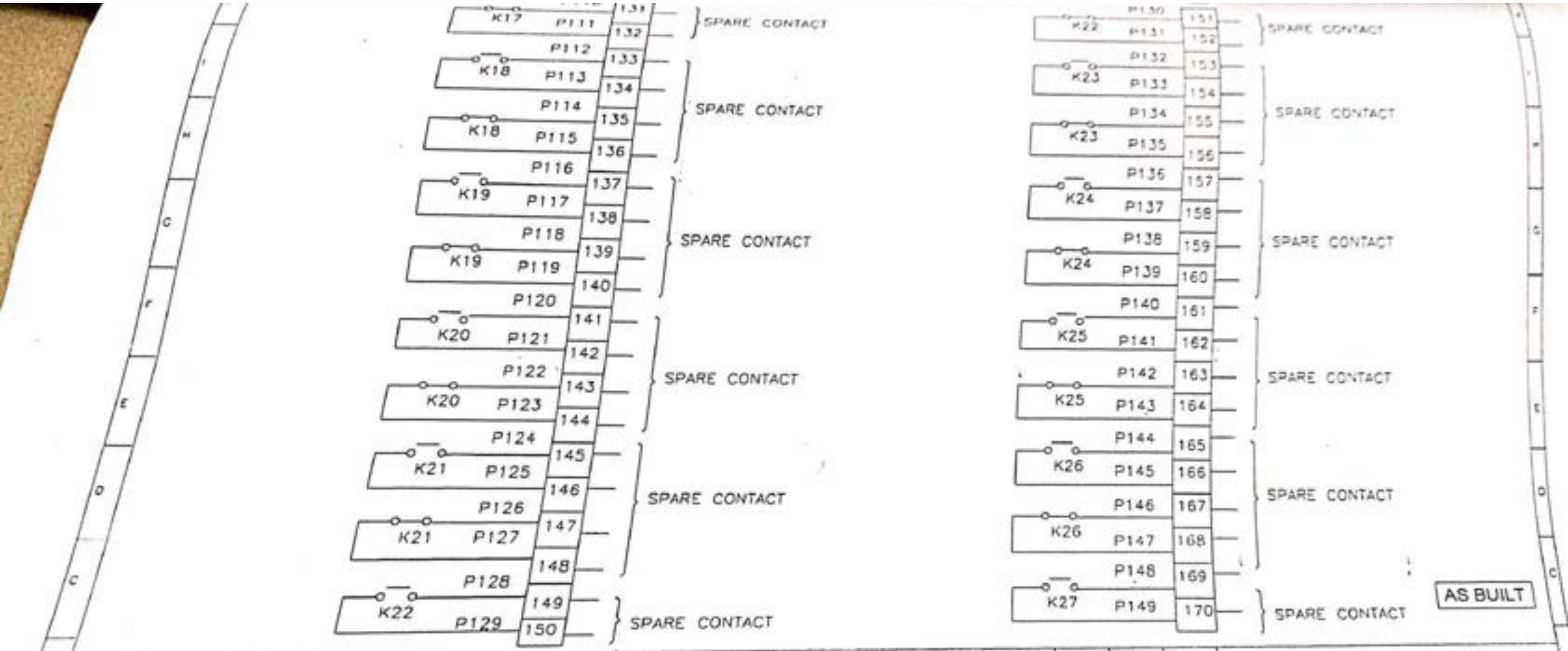

P11 33
P28 34
TO PSO-901
TO DVLCP-901
P11 35
P29 36
TO PSO-902
TO DVLCP-902
P11 37
P30 38
TO PSO-903
TO DVLCP-903
P11 39
P31 40
TO LMV-901
P11 41
P32 42
TO LMD-901
P11 43
P33 44
TO LMV-902
P11 45
P34 46
TO LMD-902
P11 47
P35 48
TO LMV-903
P11 49
P36 50
TO LMD-903
AS BUILT
P11 53
P38 54
TO FS -02
P11 55
P39 56
TO FS -03
P11 57
P40 58
TO FS -04
P11 59
P41 60
TO FS -05
P11 61
P42 62
TO FS -06
P11 63
P43 64
TO FS -07
K1 P44 65
P45 66
SPARE CONTACT
K1 P46 67
P47 68
K2 P48 69
P49 70
SPARE CONTACT
K3 P53 73
P54 74
SPARE CONTACT
K3 P55 75
P56 76
K4 P57 77
P58 78
SPARE CONTACT
K4 P59 79
P60 80
K5 P61 81
P62 82
SPARE CONTACT
K5 P63 83
P64 84
K6 P65 85
P66 86
SPARE CONTACT
K6 P67 87
P68 88
K7 P69 89
90
SPARE CONTACT
CLIENT:- M/S UNITECH MACHINES LTD.
CONSULTANT:- M/S DESEIN LTD
PROJECT:- GMDC
DRN NKS
CHD VKS
SCALE N.T.S.
JOB NO. --
TOTAL SHEET OF -18
AARVEE CONTROLS
C-35 SECTOR-7 NOIDA
TITLE C.A. & SCHEMATIC OF ANN. PANEL -02
DRG. NO. P120-E-004
REV 03
SHEET 14 OF 18
ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED
TOLERANCE LIMITS FOR PARAMETERS MESURED ARE + 1% OF RATED VALUES, UNLESS OTHERWISE STATED.



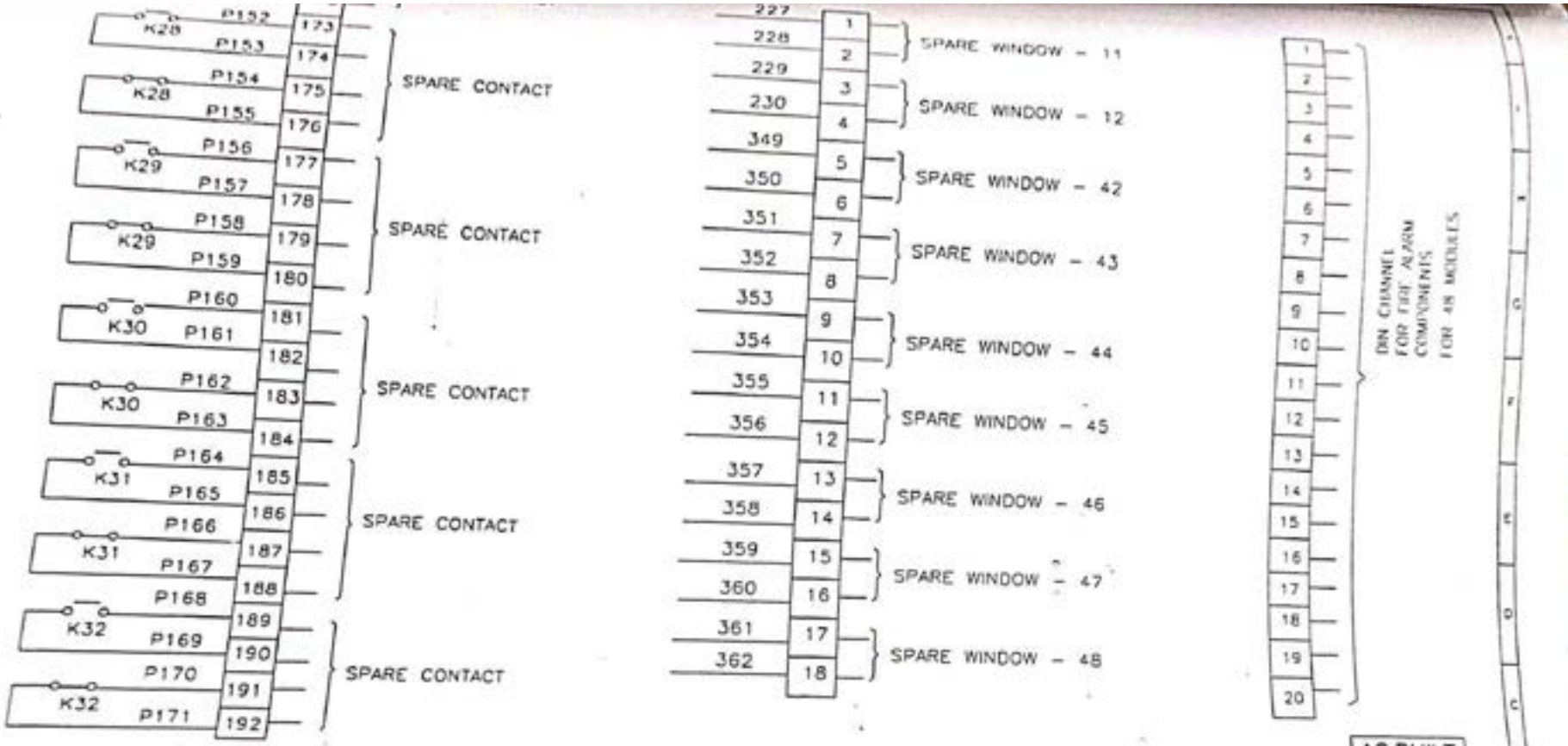
AS BUILT

CLIENT:- M/S UNITECH MACHINES LTD.	DRN. NKS / CHD. VKS	AAR VEE CONTROLS C-35 SECTOR-7 NOIDA	
CONSULTANT:- M/S DESEIN LTD	SCALE N.T.S.	TITLE G.A. & SCHEMATIC OF ANN. PANEL -02	
PROJECT:- GMDC	JOB NO. -- / TOTAL SHEET OF-18	DRG. NO. P120-E-004	REV. 03 / SHEET 15 OF 18

ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED
TOLERANCE LIMITS FOR PARAMETERS MESURED ARE ± 1% OF RATED VALUES. UNLESS OTHERWISE STATED.



	CLIENT:- M/S UNITECH MACHINES LTD.	DSN. / CHD.	AAR VEE CONTROLS C-35 SECTOR-7 NOIDA
	CONSULTANT:- M/S DESEIN LTD	SCALE	TITLE G.A. & SCHEMATIC OF ABB PANEL
ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCE LIMITS FOR PARAMETERS MESURED ARE + 1% OF RATED VALUES, UNLESS OTHERWISE STATED.	PROJECT:- GMDC	JOB NO. --	DRG. NO. REV. 00



CLIENT:- M/S UNITECH MACHINES LTD.

CONSULTANT:- M/S DESEIN LTD

PROJECT:- GMDC

DRN.	NKS	
CHD.	VKS	
SCALE	N.T.S.	
JOB NO.	--	
TOTAL SHEET OF	18	

AARVEE CONTROLS
C-35 SECTOR/7 NOIDA

TITLE: G.A. & SCHEMATIC OF ANN. PANEL -02

DRG. NO. P120-E-004 | REV. 03 | SHEET 13 OF 18

ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED
TOLERANCE LIMITS FOR PARAMETERS MESURED ARE ± 1% OF RATED VALUES, UNLESS OTHERWISE STATED.

	DESCRIPTION	QTY	MAKE
1	CONTROL TRFR. 415/240-0-110V AC, 3 KVA	1 NO.	ASHOKA
2	MCB		
	25A DP	1 NO.	INDO KOOP
	20A DP	1 NO.	SCHNEIDER (MG)
	16A DP	3 NOS.	SCHNEIDER (MG)
	16A SP	3 NOS.	INDO KOOP
3	AUX. CONTACTOR (2 NO+2NC) 110V AC	32 NOS	SIEMENS
4	POWER CONTACTOR 415V AC 16A	1 NO.	SIEMENS
5	POWER CONTACTOR 220V DC 16A	1 NO.	SIEMENS
6	POWER PACK 240V AC,220V DC /24V DC	1 NO.	ACROT (MEAN WELL)
7	TIMER 0.5-6 MIN. 240V AC	1 NO.	SIEMENS
8	DOOR SWITCH 5 A PUSH TO OFF	1 NO.	
9	THERMOSTATE 30-60° C	1 NO.	ANCO
10	TUBE LIGHT 20W SUPPLY(240V AC)	1 NO.	PHILIPS
11	SPACE HEATER 40 W SUPPLY (240V AC)	1 NO.	
12	SOCKET 5A 3 PIN	1 NO.	ANCHOR
13	HOOTER 24V DC (95X95)	1 NO.	VAISHNO
14	48 WINDOW ANNUNCIATOR 24V DC (MICRO PROCESSOR BASE) WINDOW 75X50 MM WINDOW	1 NO.	PROCON
15	FUSE BASE NSH 20A	3 NOS.	G&S
16	FUSE LINK NS 2A	3 NOS.	G&S
17	NEUTRAL LINK 20A	2 NOS.	FTC
18	INDICATING LIGHT 240V AC RED	1 NO.	VAISHNO
	220V DC RED	1 NO.	VAISHNO
	110V AC RED	1 NO.	VAISHNO
19	PUSH BUTTON (RED,YELLOW & BLACK)	1 NO EACH	VAISHNO
20	FAN 240V AC 50HZ	1 NO.	REXNOLD
21	TERMINAL CST-10	7 NOS	ELEMEX
	CST-2.5	253 NOS	ELEMEX
22	FILTER LOUVER	1 NO.	

AS BUILT

ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED
TOLERANCE LIMITS FOR PARAMETERS MESURED ARE ± 1% OF RATED VALUES. UNLESS OTHERWISE STATED

CLIENT:- M/S UNITECH MACHINES LTD.

CONSULTANT:- M/S DESEIN LTD

PROJECT:- GMDC

DRN.	NKS	
CHD.	VKS	
SCALE	N.T.S.	
JOB NO.	--	
TOTAL SHEET	OF-18	

AARVEE CONTROLS
C-35 SECTOR-7 NOIDA

TITLE G.A. & SCHEMATIC OF APFC PANEL -02

DRG. NO. P120-E-004 | REV. 03 | SHEET 18 OF 18

1	CONTROL TRFR. 415/240-0-110V AC, 3 KVA	1 NO.	ASHOKA
2	MCB		
	25A DP	1 NO	INDO KOOP
	20A DP	1 NO	SCHNEIDER (MG)
	16A DP	3 NOS	SCHNEIDER (MG)
	16A DP	3 NOS	INDO KOOP
3	AUX. CONTACTOR (2 NO+2NC) 110V AC	32 NOS	SIEMENS
4	POWER CONTACTOR 415V AC 16A	1 NO	SIEMENS
5	POWER CONTACTOR 220V DC 16A	1 NO	SIEMENS
6	POWER PACK 240V AC,220V DC /24V DC	1 NO	ADROIT (MEAN WELL)
7	TIMER 0.6-6 MIN 240V AC	1 NO	SIEMENS
8	DOOR SWITCH 5 A PUSH TO OFF	1 NO	
9	THERMOSTATE 30-60° C	1 NO.	ANCO
10	TUBE LIGHT 20W SUPPLY(240V AC)	1 NO	PHILIPS
11	SPACE HEATER 40 W SUPPLY (240V AC)	1 NO	
12	SOCKET 5A 3 PIN	1 NO.	ANCHOR
13	HOOTER 24V DC (96x96)	1 NO	VAISHNO
14	48 WINDOW ANNUNCIATOR 24V DC (MICRO PROCESSOR BASE) WINDOW 75X50 MM WINDOW	1 NO.	PROCON
15	FUSE BASE NSH 20A	3 NOS.	C&S
16	FUSE LINK NS 2A	3 NOS.	C&S
17	NEUTRAL LINK 20A	2 NOS	ETC
18	INDICATING LIGHT 240V AC RED	1 NO	VAISHNO
	220V DC RED	1 NO	VAISHNO
	110V AC RED	1 NO	VAISHNO
19	PUSH BUTTON (RED,YELLOW & BLACK)	1 NO EACH	VAISHNO
20	FAN 240V AC 50HZ	1 NO	REMCOLO
21	TERMINAL CST-10	7 NOS.	ELEMEX
	CST-2.5	253 NOS	ELEMEX
22	FILTER LOUVER	1 NO	

AS BUILT

CLIENT:- M/S UNITECH MACHINES LTD.	DRN	NKS	AAR VIR CONTROLS C-56 SECTOR-7 NOIDA
CONSULTANT:- M/S DESEIN LTD	CHD	VKS	TITLE G.A. & SCHEMATIC OF APFC PANEL -02
PROJECT:- GMDC	SCALE N.T.S		DRG. NO P12G-E-004 REV 03 SHEET 18 OF 18
ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED. TOLERANCE LIMITS FOR PARAMETERS MEASURED ARE ± 1% OF RATED VALUES UNLESS OTHERWISE STATED	JOB NO		
	TOTAL SHEET OF = 18		

AS BUILT

REV.	DATE	DRN.	REVISION
05	12-06-06		AS BUILT
04	29-05-04		AS BUILT
03	08-05-04		FOR APPROVAL
02	14-04-04		FOR APPROVAL
01	30-03-04		FOR INFORMATION/ APPRC

ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHER TOLERANCE LIMITS FOR PARAMETERS MESURED ARE VALUES, UNLESS OTHERWISE STATED.

CLIENT:- M/S UNITECH MACHINES LTD.

CONSULTANT:- DESEIN PVT. LTD.

PROJECT:- AKRIMOTA THERMAL POWER STATION
UNITS # 1 & 2 (2X125 MW)

DRN.	NKS	
CHD.	VKS	
SCALE	N.T.S.	
JOB NO.	--	
TOTAL SHEET	OF	

AARVEE CONTROLS
C-35 SECTOR-7 NOIDA

TITLE GA & SCHEMATIC OF DELUGE VALVE LOCAL CONTROL PANEL

DRG. NO. P120-E-06 | REV. 05 | SHEET 1 OF 6

A-1

1. ALL DIMENSIONS ARE IN MM UNLESS SPECIFIED OTHERWISE.
2. CONTROL SUPPLY - 110V AC, 50Hz
3. DELUGE VALVE LOCAL CONTROL PANEL(DVLCP) SHALL BE FABRICATED OUT OF SHEET STEEL HAVING THICKNESS AS FOLLOWS.

A) ENCLOSURE	2.0 MM CRCA
B) MAIN FRAME	2.0 MM CRCA
C) DOORS	2.0 MM CRCA
C) FRONT/SIDE	2.0 MM CRCA
D) GLAND PLATE	3.0 MM CRCA
E) MOUNTING PLATE	3.0 MM CRCA

4. DVLCP SHALL BE PAINTED USING POWDER COATED PROCESS HAVING PAINT SHADE NO. 631 LIGHT GRAY AS PER IS-5 .
5. DVLCP SHALL BE WALL MOUNTING TYPE AS INDICATED ON THE DRAWINGS .
6. SYNTHETIC RUBBER (EPOM) GASKET SHALL BE PROVIDED TO MAKE PANEL DUST & VERMIN PROOF CONFIRMING TO DEGREE OF PROTECTION IP 55 AS PER IS 13947 .
7. EARTH BOLT OF 6X30 MM BOLT SHALL BE PROVIDED THE BOTH SIDES.
8. NAME PLATE SHALL BE 3 PLY. LAMICOID/ANODISED AL. HAVING WHITE LETTERS ENGRAVED ON BLACK BACK GROUND LETTER SIZE SHALL BE 3 MM MINIMUM .
9. CONTROL WIRING SHALL BE DONE WITH 1.5 MM SQ. 1100 VOLTAGE INSULATION GRADE PVC STRANDED CU. WIRE OF BLACK COLORS .
10. CONTROL TERMINALS SHALL BE CAGE CLAMP TYPE
11. WIRES USED FOR INTERNAL WIRING SHALL BE PROVIDED WITH INSULATING SLEEVE/TAPE AT BOTH END .
12. CABLE ENTRY SHALL BE FROM TOP ONLY.
13. COPPER LUGS, PVC SLEEVES PROVIDED FOR ALL INTERNAL WIRING .
14. ALL HINGED DOOR AND REMOVABLE PARTS WILL BE CONNECTED TO EARTH BUS USING 2.5 mm SQ. FLEXIBLE COPPER GREEN WIRE.
15. CONTROL TERMINALS 20 % SHALL BE PROVIDED EXTRA .

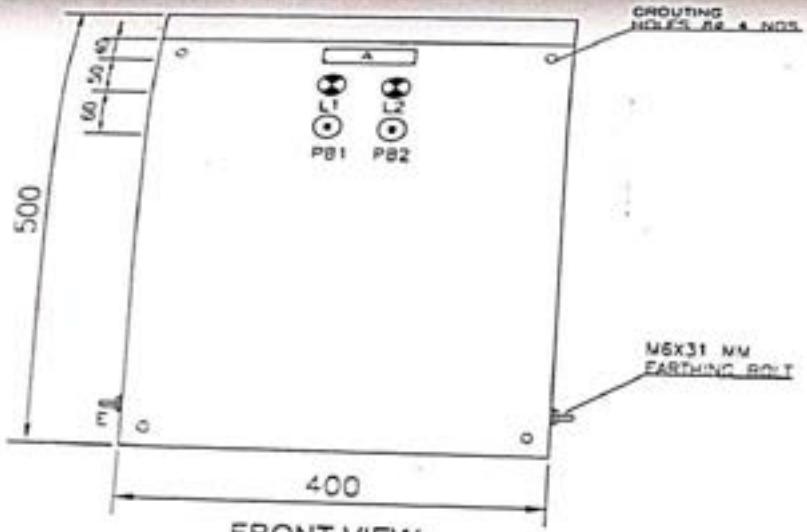
CLIENT:	M/S UNITECH MACHINS LTD	DRN. N.K.S.	AAR VEE CONTROLS C-35 SECTOR-7 NOIDA
		CHD. V.K.S.	
CONSULTANT:	M/S DESEIN LTD	APPD.	TITLE GA & SCHEMATIC OF DELUGE VALVE LOCAL CONTROL PANEL
		SCALE N.T.S.	
PROJECT:	GMDC	JOB NO. --	DRG. NO. P120-E-06 / REV. 05 / SHEET 2 OF 6
		TOTAL SHEET OF	

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED. TOLERANCE LIMITS FOR PARAMETERS MEASURED ARE ±1% OF RATED VALUES, UNLESS OTHERWISE STATED.

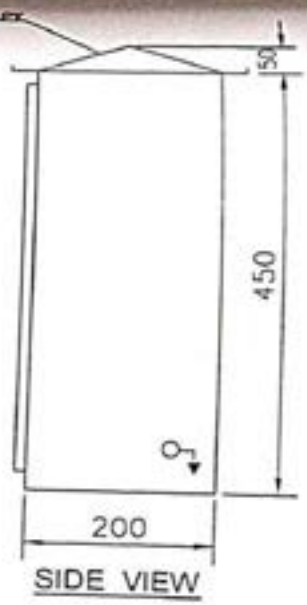
- PUSH BUTTON
- SWITCH/SELECTOR SW.
- TERMINALS AT CONTROL PANEL
- TERMINALS AT EXTERNAL FIELD
- TERMINALS AT MCC
- PUSH BUTTON WITH NO CONTACT
- PUSH BUTTON WITH NC CONTACT
- NO CONTACT
- NC CONTACT
- DS – DOOR SWITCH
- TH – THERMOSTAT
- MCB

- FUSE
- NEUTRAL LINK
- AUXILIARY CONTRACTOR
- TIMER
- H – HOOTER
- ANNUNCIATION WINDOW
- SH – SPACE HEATER
- DIODE
- OMRAN RELAY

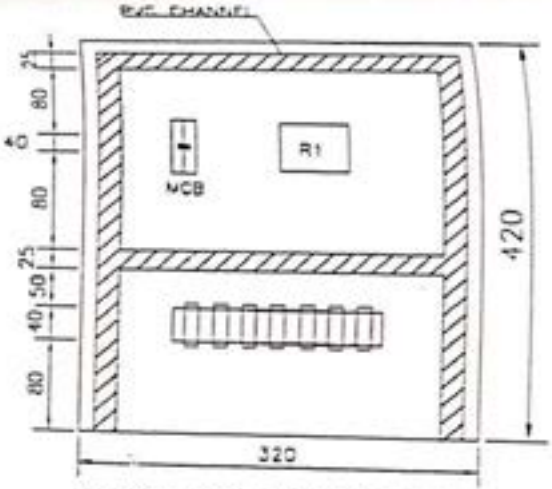
			CLIENT: M/S UNITECH MACHINES LTD		DRN	NKS		AAR VEE CONTROLS	
			CONSULTANT: M/S DESEIN LTD		CHK	VKS		TITLE: GA & SCHEMATIC OF DELUGE VALVE LOCAL CONTROL PANEL	
					APPD				
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED. TOLERANCE LIMITS FOR PARAMETERS MEASURED ARE ±1% OF RATED VALUES UNLESS OTHERWISE STATED.			PROJECT: GMDG		SCALE	N.T.S		DRG NO: 5120-E-06	REV: 00
					JOB NO	–			
					TOTAL SHEET	01			SHEET NO: 1



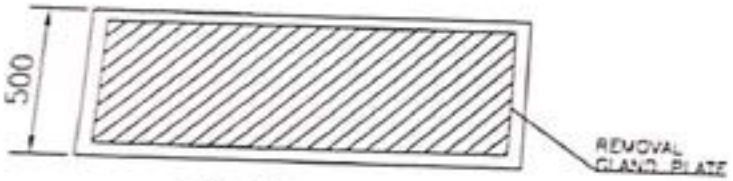
FRONT VIEW



SIDE VIEW



MOUNTING ARRANGEMENT



BOTTOM VIEW

LEGENDS :-

L-1	CLOSE INDICATING LIGHT RED
L-2	OPEN INDICATING LIGHT GREEN
PB-1	START PUSH BUTTON GREEN
PB-2	STOP PUSH BUTTON RED
A -	DELUGE VALVE LOCAL CONTROL PANEL

. DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED
ERANCE LIMITS FOR PARAMETERS MESURED ARE ± 1% OF RATED
LES UNLESS OTHERWISE STATED

CLIENT:- M/S UNITECH MACHINES LTD.

CONSULTANT:- M/S DESEIN LTD

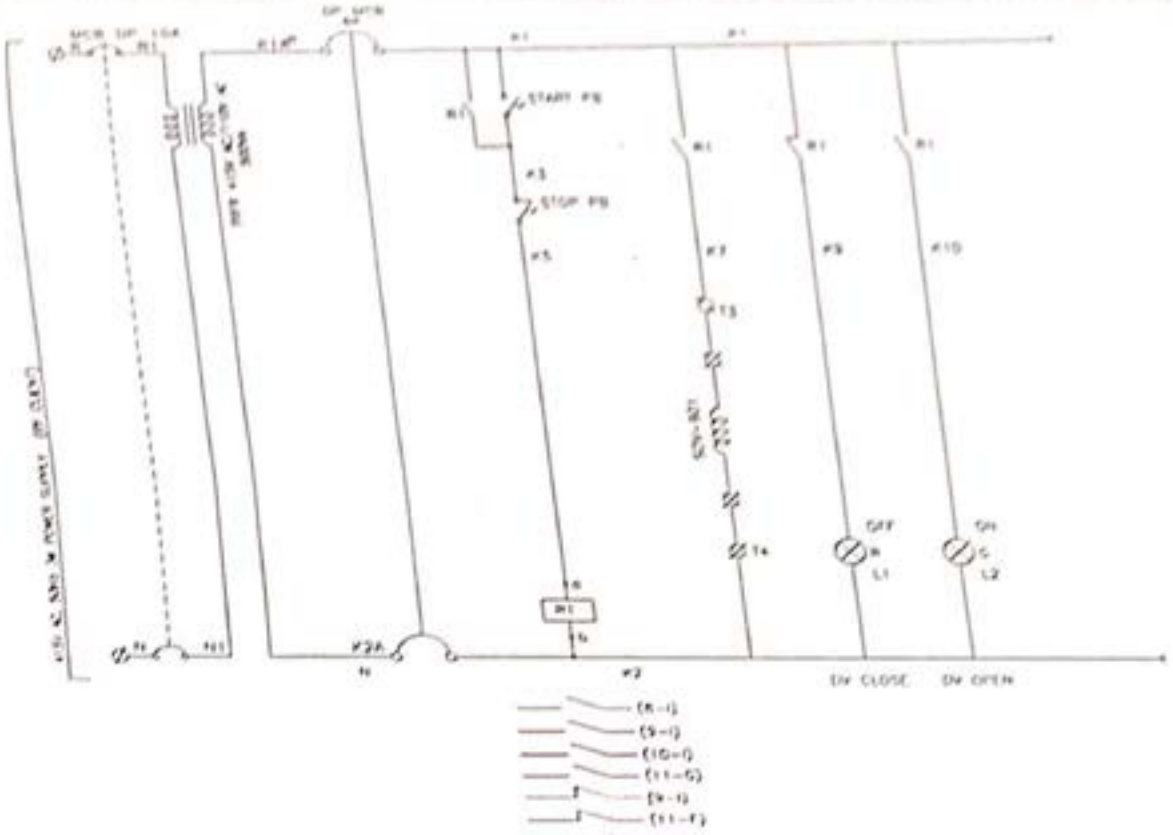
PROJECT:- GMDC

DRN.	NKS	
CHD.	VKS	
SCALE	N.T.S.	
JOB NO.	--	
TOTAL SHEET OF		

AARVEE CONTROLS
C-35 SECTOR-7 NOIDA

TITLE GA & SCHEMATIC OF DELUGE VALVE LOCAL CONTROL PANEL

DRG. NO.	REV.	SHEET
P120-E-06	03	4 OF 5



CLIENT:	M/S UNITECH MACHINES LTD	DRN:	N K S	
CONSULTANT:	M/S DESIGNED LTD	CHD:	V K S	
PROJECT:	GMDC	APPD:		
		SCALE:	N T S	
		DWG NO:		
		TOTAL SHEET:	08	

AAR VEE CONTROLS

TITLE: [illegible]

DWG REF: [illegible]

BILL OF MATERIAL

SR.NO.	DESCRIPTION	QTY	MAKE OF THE COMPONENTS
1	TRFR. 415V/110V AC 500VA	1 NO.	ASHOKA
2	6A DP MCB	1 NO.	INDO KAPP
3	AUX. CONTACTOR 110V AC (4 NO+2 NC)	1 NO.	SIEMENS
4	PUSH BUTTON RED, GREEN	2 NOS.	VASSHNO
5	INDICATING LIGHT RED, GREEN	2 NOS.	VASSHNO
6	CONTROL TERMINALS 2.5 MM SQ.	15 NOS.	ELMAX

CLIENT:- M/S UNITECH MACHINES LTD.

CONSULTANT:- M/S DESEIN LTD

PROJECT:- GMDC

DRN. NKS

CHD. VKS

SCALE N.T.S.

JOB NO. --

TOTAL SHEET OF

AAR VEE CONTROLS
C-35 SECTOR-7 NOIDA

TITLE - BILL OF MATERIAL OF DVLCP

DRG. NO. P120-E-06

REV. 05

SHEET 5 OF 5

ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCE LIMITS FOR PARAMETERS MESURED ARE ± 1% OF RATED VALUES. UNLESS OTHERWISE STATED.

AS BUILT

CLIENT :- M/S UNITECH MACHINES LTD

CONSULTANT :- DESEIN PVT. LTD.

PROJECT :- BARONICHA THERMAL POWER STATION UNITS # 1 & 2 (2X125 MW)

AAR VEE CONTROLS
C-36 SECTOR-7 NOIDA

TITLE GA & SCHEMATIC OF BOOSTER PUMP CONTROL PA

Ba
67
Pa

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MM UNLESS SPECIFIED OTHERWISE
2. CONTROL SUPPLY - 110V AC, 50Hz
3. BOOSTER PUMP CONTROL PANEL SHALL BE FABRICATED OUT OF SHEET STEEL HAVING THICKNESS AS FOLLOWS

A) ENCLOSURE	2.0 MM CRCA
B) MAIN FRAME	2.0 MM CRCA
C) DOORS	2.0 MM CRCA
C) FRONT/SIDE	2.0 MM CRCA
D) GLAND PLATE	3.0 MM CRCA
E) MOUNTING PLATE	3.0 MM CRCA

4. BOOSTER PUMP CONTROL PANEL SHALL BE PAINTED USING POWDER COATED PROCESS HAVING PAINT SHADE NO. 631 LIGHT GRAY AS PER IS-5.
5. BOOSTER PUMP CONTROL PANEL SHALL BE WALL MOUNTING TYPE AS INDICATED ON THE DRAWINGS .(INDOOR MOUNTING)
6. SYNTHETIC RUBBER (EPOM) GASKET SHALL BE PROVIDED TO MAKE PANEL DUST & VERMIN PROOF CONFIRMING TO DEGREE OF PROTECTION IP 55 AS PER IS 13947
7. EARTH BOLT OF 6X30 MM BOLT SHALL BE PROVIDED THE BOTH SIDES.
8. NAME PLATE SHALL BE 3 PLY. LAMICOID/ANODISED AL. HAVING WHITE LETTERS ENGRAVED ON BLACK BACK GROUND. LETTER SIZE SHALL BE 3 MM MINIMUM.
9. CONTROL WIRING SHALL BE DONE WITH 1.5 MM SQ. 1100 VOLTAGE INSULATION GRADE PVC STRANDED CU. WIRE OF BLACK COLORS.
10. CONTROL TERMINALS SHALL BE CAGE CLAMP TYPE
11. WIRES USED FOR INTERNAL WIRING SHALL BE PROVIDED WITH INSULATING SLEEVE/TAPE AT BOTH END.
12. CABLE ENTRY SHALL BE FROM TOP ONLY.
13. COPPER LUGS, PVC SLEEVES PROVIDED FOR ALL INTERNAL WIRING.
14. ALL HINGED DOOR AND REMOVABLE PARTS WILL BE CONNECTED TO EARTH BUS USING 2.5 mm SQ. FLEXIBLE COPPER GREEN WIRE.
15. CONTROL TERMINALS 20 % SHALL BE PROVIDED EXTRA.

ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED
TOLERANCE LIMITS FOR PARAMETERS MESURED ARE + 1% OF RATED VALUES, UNLESS OTHERWISE STATED.

CLIENT:- M/S UNITECH MACHINES LTD.

CONSULTANT:- M/S DESEIN LTD

PROJECT:- GMDC

DRN	NKS	
CHD.	VKS	
SCALE	N.T.S.	
JOB NO.	--	
TOTAL SHEET	OF	

AAR VEE CONTROLS
C-36 SECTOR-7 NOIDA

TITLE: GA & SCHEMATIC OF BOOSTER PUMP CONTROL PANEL

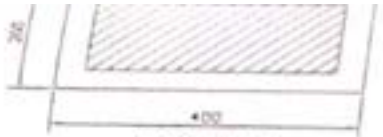
DRG. NO. P120-E-05 | REV. 05 | SHEET 2 OF 6

LEGEND

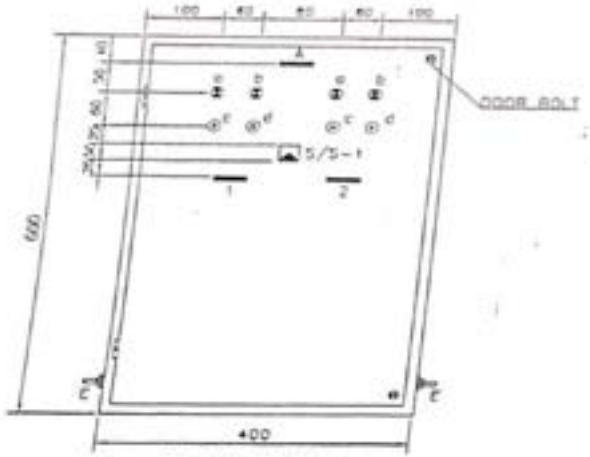
- INDICATING LAMP
- PUSH BUTTON
- SWITCH/SELECTOR SW.
- TERMINALS AT CONTROL PANEL
- TERMINALS AT EXTERNAL FIELD
- TERMINALS AT MCC
- PUSH BUTTON WITH NO CONTACT
- PUSH BUTTON WITH NC CONTACT
- NO CONTACT
- NC CONTACT
- DS – DOOR SWITCH
- TH – THERMOSTAT
- MCB
- SWITCH
- FUSE
- NEUTRAL LINK
- AUXILIARY CONTRACTOR
- TIMER
- H – HOOTER
- ANNUNCIATION WINDOW
- SH – SPACE HEATER
- DIODE
- OMRAN RELAY

CLIENT: M/S UNITECH MACHINS LTD	DRN. N.K.S.	AAR VEE CONTROLS	
	CHD. V.K.S.	C-35 SECTOR-7 NOIDA	
CONSULTANT M/S DESIGNED LTD	APPD.	TITLE [illegible]	
	SCALE N.T.S.		
PROJECT: GMDC	JOB NO. --	DRG NO. P120-E-05	REV 05
	TOTAL SHEET OF		

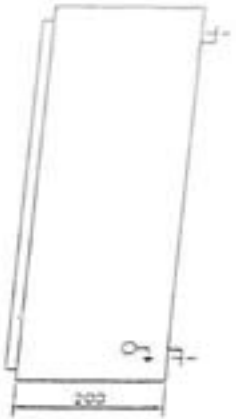
NSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
E LIMITS FOR PARAMETERS MEASURED ARE ±1% OF RATED
NLESS OTHERWISE STATED.



TOP VIEW



FRONT VIEW
(WITH DOOR)



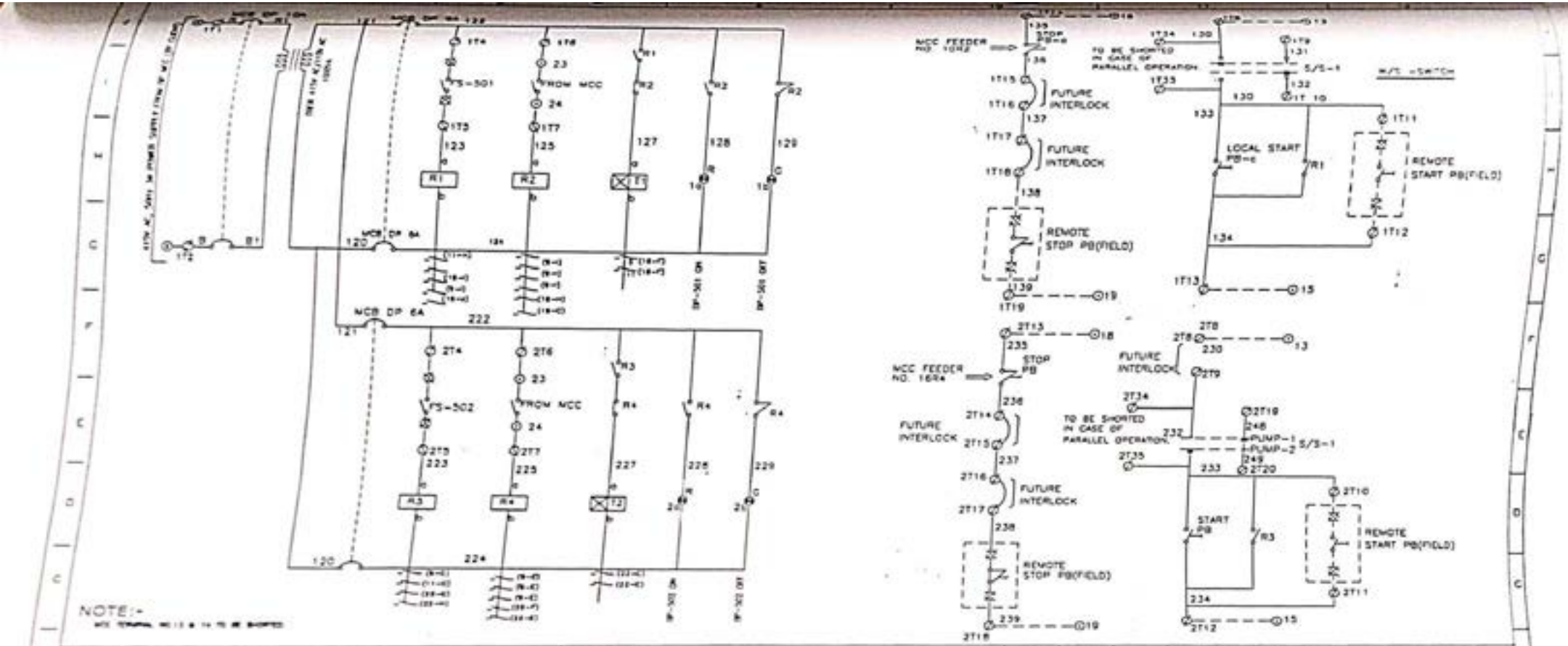
SIDE VIEW

QTY. 1 NO.

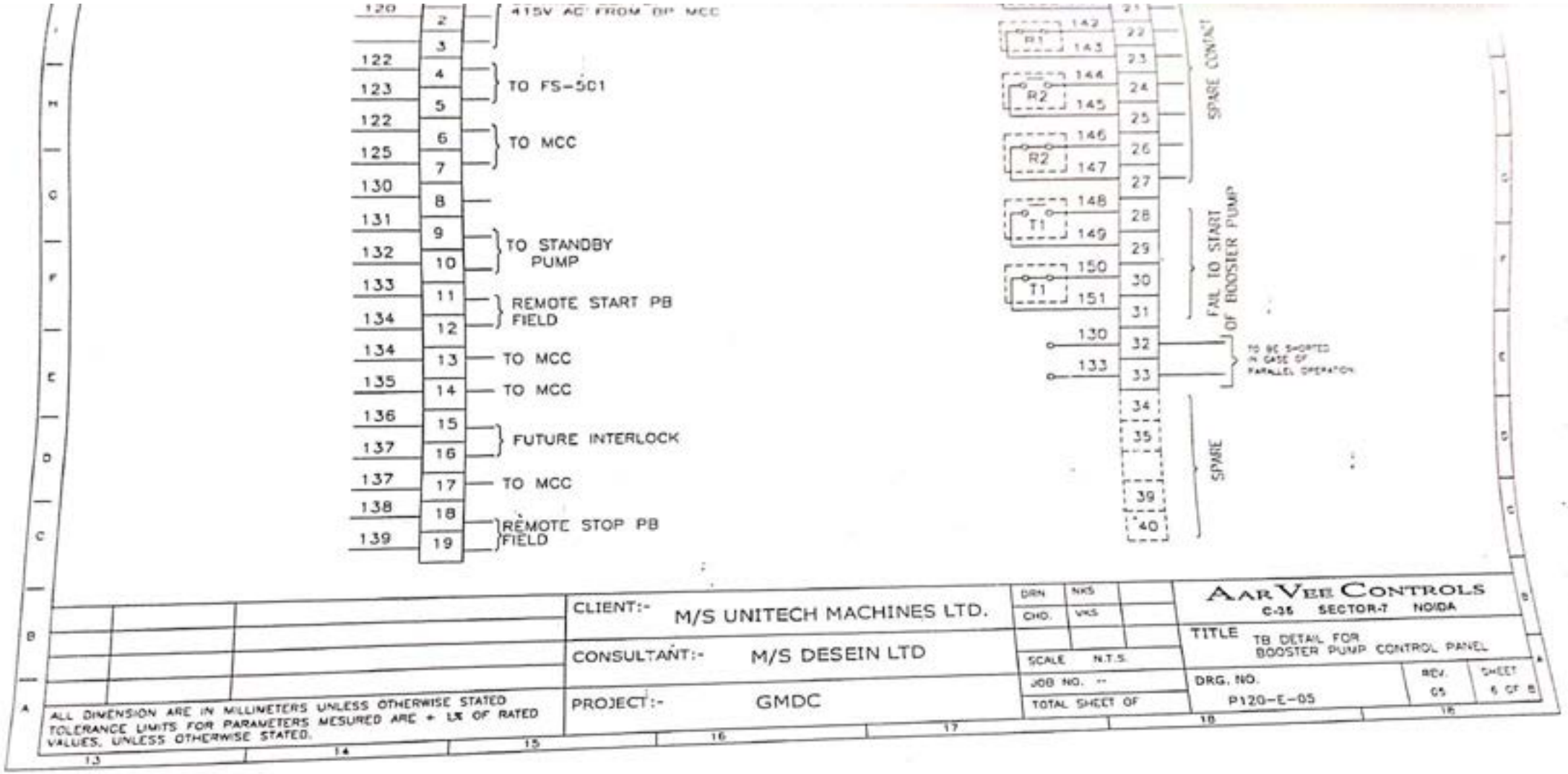
LEGEND :-

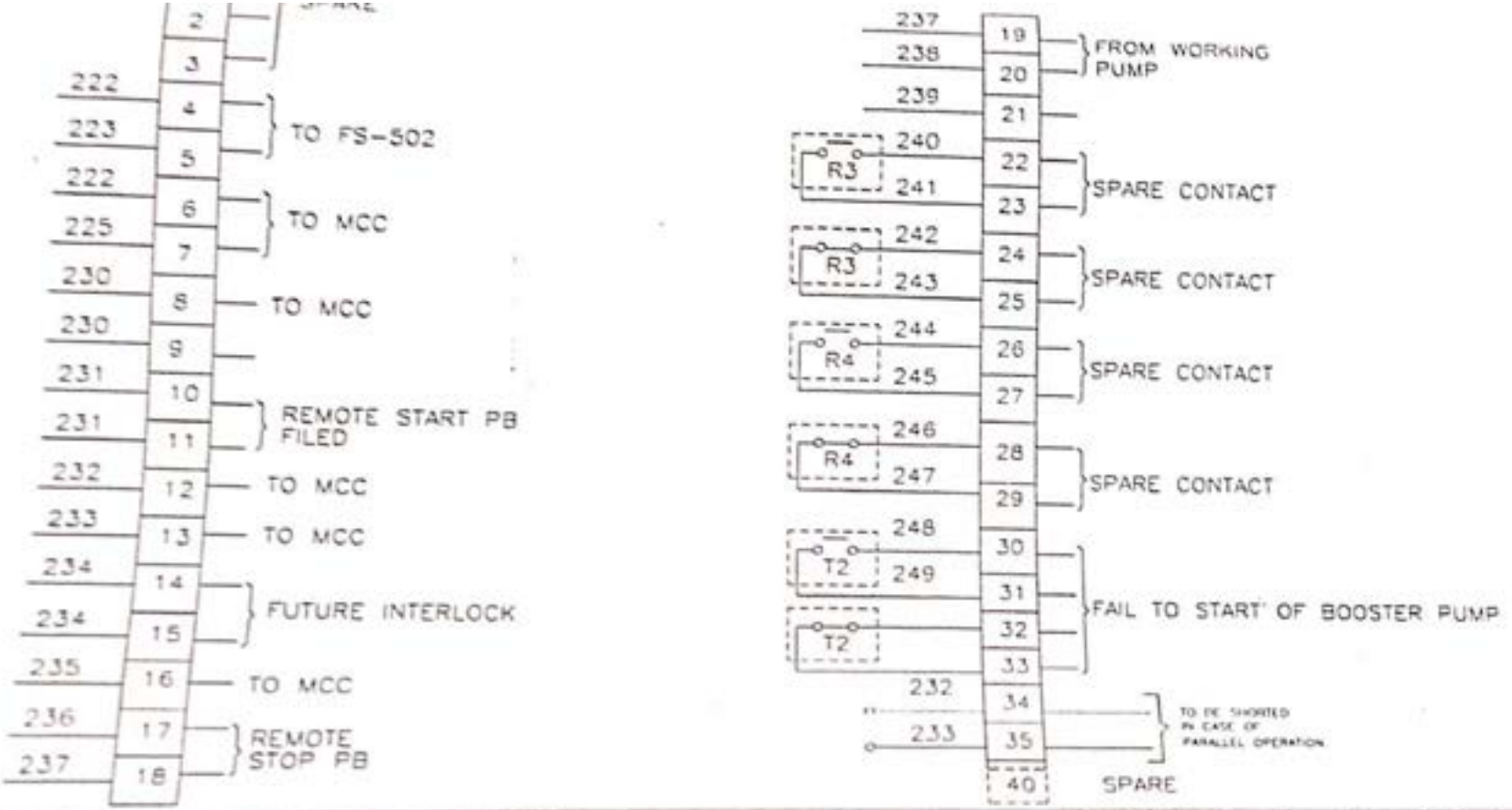
a - ON INDICATING LAMP
b - OFF INDICATING LAMP
c - START PUSH BUTTON
d - STOP PUSH BUTTON
1 - BOOSTER PUMP (BP-501)
2 - BOOSTER PUMP (BP-502)
S/S-1 1- BOOSTER PUMP 501 WORKING
0- OFF
2- BOOSTER PUMP 502 STANDBY
A BOOSTER PUMP CONTROL PANEL

	CLIENT:- M/S UNITECH MACHINES LTD.	DRN. NKS	AARVEE CONTROLS C-35 SECTOR-7 NOIDA	
	CONSULTANT:- M/S DESEIN LTD	CHD. VKS	TITLE GA & SCHEMATIC OF BOOSTER PUMP CONTROL PANEL	
ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERMISE STATED TOLERANCE LIMITS FOR PARAMETERS MESURED ARE ± 1% OF RATED VALUES, UNLESS OTHERWISE STATED.	PROJECT:- GMDC	SCALE N.T.S. JOB NO. -- TOTAL SHEET 01	DRG. NO. P120-E-05	REV. 05 SHEET 1 OF 1



CLIENT:- M/S UNITECH MACHINES LTD.	DRN. NKS	AAR VEE CONTROLS C-35 SECTOR-7 NOIDA	
CONSULTANT:- M/S DESEIN LTD	CHD. VKS	TITLE SINGLE LINE DIAGRAM FOR BOOSTER PUMP CONTROL PANEL	
	SCALE N.T.S.		
ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCE LIMITS FOR PARAMETERS MESURED ARE ± 1% OF RATED VALUES UNLESS OTHERWISE STATED	PROJECT:- GMDC	JOB NO. --	DRG. NO. P120-E-05 / REV. 05 / SHEET 5 OF 8
		TOTAL SHEET OF	


120
2
3
415V AC FROM DP MCC
122
4
123
5
TO FS-501
122
6
125
7
TO MCC
130
8
131
9
132
10
TO STANDBY PUMP
133
11
134
12
REMOTE START PB FIELD
134
13
TO MCC
135
14
TO MCC
136
15
137
16
FUTURE INTERLOCK
137
17
TO MCC
138
18
139
19
REMOTE STOP PB FIELD
142
R1
143
144
R2
145
146
R2
147
148
T1
149
150
T1
151
21
22
23
24
25
26
27
SPARE CONTACT
28
29
30
31
FAIL TO START OF BOOSTER PUMP
130
32
133
33
TO BE SHORTED IN CASE OF PARALLEL OPERATION
34
35
39
40
SPARE
CLIENT:- M/S UNITECH MACHINES LTD.
CONSULTANT:- M/S DESEIN LTD
PROJECT:- GMDC
DRN NKS
CHD. VKS
SCALE N.T.S.
JOB NO. --
TOTAL SHEET OF
AARVEE CONTROLS
C-35 SECTOR-7 NOIDA
TITLE TB DETAIL FOR BOOSTER PUMP CONTROL PANEL
DRG. NO. P120-E-05
REV. 05
SHEET 5 OF 5
ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED
TOLERANCE LIMITS FOR PARAMETERS MESURED ARE ± 1% OF RATED VALUES, UNLESS OTHERWISE STATED.



	CLIENT:- M/S UNITECH MACHINES LTD.	DRN NKS	AARVEE CONTROLS C-35 SECTOR-1 NOIDA
	CONSULTANT:- M/S DESEIN LTD	CHD VKS	TITLE DETAIL FOR
	PROJECT:- GMDC	SCALE N.T.S JOB NO. TOTAL SHEET OF	DRG NO. P120-E-05 REV 05 SHEET

SR.NO.	DESCRIPTION	QTY	MAKE OF THE COMPONENTS
1	CONTROL TRANSFORMER (415V AC/110V AC, 1000VA)	1 NO.	ASHOKA
2	PUSH BUTTON RED, GREEN	4 NOS.	VASHNO
3	INDICATING LIGHT 110V AC RED, GREEN	4 NOS.	VASHNO
4	6A DP MCB	2 NOS.	INDO KAPP
5	TIMER (110V AC) (0-60 SEC.)	2 NOS.	SIEMENS
6	AUX. CONTACTOR 110V AC (2 NO+2NC)	4 NOS.	SIEMENS
7	TERMINALS	80 NOS.	ELMAX
8	SELECTOR SWITCH 6A 2 POLE 4 WAY	1 NO.	KEY CEE

CLIENT:- M/S UNITECH MACHINES LTD.

CONSULTANT:- M/S DESEIN LTD

PROJECT:- GMDC

DRN. NKS

CHD. VKS

SCALE N.T.S.

JOB NO. --

TOTAL SHEET OF

AAR VEE CONTROLS
C-35 SECTOR-7 NOIDA

TITLE BILL OF MATERIALOF BOOSTER PUMP CONTROL PANEL

DRG. NO. P120-E-05

REV. 05

SHEET 8 OF 8

ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE STATED
TOLERANCE LIMITS FOR PARAMETERS MESURED ARE ± 1% OF RATED VALUES, UNLESS OTHERWISE STATED.

Ltr Salipas

Reference Document VGF:

"Descriptive monograph of A.C. generator enclosure; AKRIMOTA installation."
Ref. ord. ODL 2001-004

First issue

Foglio/project	Descrizione kind of revision	Preparato prepared	Controllato checked	Verificato checked	Approvato approved	Data date
0180		SRÚ	SRÚ		DTE	12.12.01

Commessa no. 0180 | Emittente issued by MET/ECOS | Tipo doc. doc. type | Form. size A4 | Scala scale | Derivato da derived from

ANSALDO
Ansaldo Energia S.p.A.

Titolo title

GENERATOR SOUND PROOF CABIN

AVGF

Via Madonna Superiore, 3 - 63040 MALTIGNANO (AP)
Tel. 0736.30.85.1 Fax 0736.30.85.00

ENGLISH

OBJECT :	DESCRIPTIVE MONOGRAPH of A.C. generator enclosure; AKRIMOTA installation.
WORK ORDER :	ODL 2001-004
REFERENCE :	V.G.F. ANSALDO Dis. n. EANS0001
MATERIALS :	various thickness Fe 430 B sheets; various Fe 430 B structural steels;
WEIGHT :	structure 2500 Kg panels 4500 Kg

INDEX

STEP 9

Assemblage of electrical plant

The system is assembled and tested in yard before packing for expedition: so it is supplied pre-assembled to the structure parts.

Start system assemblage from base transoms no. 39 and 40A.

Connect conduits and flexible sheaths to relative junction boxes following the numeration referred on attached electrical schemes: connect the wires on terminal blocks following wire numeration.

Assemble the ceiling lamps on relative supports which are positioned on enclosure structure and connect.

Grounding

Structure and panel metallic parts are fitted out with connection points for grounding: connect metallic parts with bridges using supplied cable and Ø6mm eyelet terminals.

For general grounding connection use the cable which is fitted out with two Ø16mm eyelet terminals: connect one end to structure leveling bolt and other end to the point that is showed in "generator electrical outline dwg".

Accessories

Connect the flexible pipe of differential pressure switch: follow colours of pre-assembled terminals.

After finished assembly shut the structure recessions with the relative shrouds following the numeration that is printed on them.

After finished the assembly of electrical equipment assure that the fan rotation is right: air must enter into the enclosure.

Assembly of fire fighting system pipe line

Fire fighting system pipe line is supplied with pre-assembled parts to the structure.

Connect the pipe line in the points that are showed in the drawing no. 20004121.O.

Assembly the sprinklers following the printed numeration: fast discharge sprinklers numeration from no. 1 to no. 6 (nozzle drilling cod. 5); slow discharge sprinklers numeration from no. 7 to no. 12 (nozzle drilling cod. 1).

Before to start the plant check the tightening of whole pipe joints and follow the safety indications (point 7).

Hoist assembly on monorails

Assembly the trolley on relative monorails screwing the pivot on the plates till get a right sliding, then block the pivot with the stop dowels.

Hook the hoist to the attachment points on the trolleys.

Painting repairs on structure and panels

Eventual painting repairs after enclosure assembling must be do using the original product APSA Carboline 888: before use mix 100% in volume the product with relative catalyst; to spray paint use 15% max diluent.

AGF
via delle Querce 2 - 83043 BAGNOLI (AV)

Filter maintennance. ENGLISH

The filter cleaning is foreseen for a negative pressure of 50 mm H_2O showed on differential pressure gauge.

For more safety switch off the fan before to disassemble the filters.

To remove the filters take off the fixing screws of the front gratings (ref. dwg. n. EANS0001) and open the gratings like a wing: take away the filters without damage filtering fibres.

For dry dust the filters can be cleaned by shaking, sucking or blowing compressed air counterflow.

For greasy dust dip the filters in a bath of tepid water to which liquid detergent has been added: avoid brushing or twisting the fibres then rinse and let to dry far away heat source.

Reassemble filters taking care of the arrow printed on the filter frame is directed like the air flow.

9) FIRE FIGHTING SYSTEM

The enclosure is outfitted with a CO_2 discharge fire fighting system: the system is to be interfaced to complementary part on site (not in supply).

The supplied parts of the fighting system are manufactured according to requirements of NFPA12 the relative electrical equipment to requirements of CEI 64-2.

built up of:

6 off FENWAL temperature sensors which are situated on C.E. and O.C.E. side;

Terminal box for interfacing to the fire fighting system on site;

1 pipeline of CO_2 fast discharge with two entry (C.E. and O.C.E. sides) outfitted with lockable valves and position microswitches; pipeline is outfitted with connections for pneumatic control of fire damper actuators;

pipeline of CO_2 slow discharge with two entry (C.E. and O.C.E. sides) outfitted with clable valves and position microswitches;

off CO_2 sprinklers for each discharge pipeline which are situated on C.E. and O.C.E. side; off optic-acoustic alarms which are located above the access doors of enclosure;

off break glass bottoms for emergency deactivation of CO_2 discharge which are located ways of access doors.

ines are prearranged to receive the connections to the CO_2 distribution net on site (CO_2 and relative charging are not part of supply).

nd connection type of lockable valves and CO2 discharge:

5.1 FIRE FIGHTING SYSTEM ELECTRICAL BOARD

Fire fighting system electric board is positioned under the shutter on no. 71B panel.
During the assembling provide to fix the electric board supports on the base with Fisher anchors.
Wiring diagram of electrical board is showed in the attachment drawing no. 2000401-1-QE.

5.2 FIRE FIGHTING SYSTEM ELECTRICAL PLANT

Enclosure wires that are relative to fire fighting system, are lead separately from the other ones of enclosure electrical plant.
Electrical conduit and junction boxes lay-out is showed in the attachment drawing no. 2000411-1-LO.

(6) ELECTRICAL EQUIPMENT

Enclosure is fitted out with electrical plant with the following functions:

- normal lighting;
- emergency lighting;
- socket for small users power supply;
- ventilation system power supply and relative control board;
- devices for C.C. emergency supply commutation;
- general electric board to be interface to the site plant;
- grounding plant;

Electrical plant is built according to requirements of CEI standards.
For more details see in the attachments the following documents:

- unipolar wiring diagram dwg. no. 2000403-1-SV;
- enclosure electric board dwg. no. 2000402-1-QE;
- electrical lay-out dwg. no. 2000411-1-LO;

V.G.F.
... Salerno 2 - 60043 MALTIGNANO (AP)

7) SAFETY INSTRUCTIONS AND RESIDUAL RISKS

Enclosure and relative plants are complying with required standards; during the maintenance operations of the plant follow nicely to safety instructions that are imparted to the personnel complying with standards.

Furthermore remember:

- before any maintenance operation into the enclosure assure that CO_2 discharge is prevented closing the valves which are positioned to the respective lines; assure by padlock that it is impossible to open without authorization;
- after maintenance operations and before to start the plant, assure to restore the lines and lock the valves in the open position (except not used valves);

For more versatility CO_2 fast and slow discharge lines can be indifferently connected to C.E. side or O.C.E. side and then they are fitted out with two valves each other (ref. dwg no. EANS0001) : to prevent malfunctions and for more safety, close the inlet ends of not used valves with threaded plugs and lock these valves in close position.

- Use the hoists like indicated in the instructions of constructor (see attachments).

ATTACHMENTS

In the following pages are reported these attachments:

- operating features and instructions of differential pressure gauge for filter control;
- operating features and instructions of differential pressure switch for filter control;
- operating features and instructions of FENWAL detectors of fire fighting system;
- operating features electrical materials;
- operating features and instructions of hoists;
- V.G.F. assembly drawing no. EANS0001 rev.2 tab. 1-2;
- V.G.F. drawing no. 2000401-1-QE sheet 1-2-3-4-5;
- V.G.F. drawing no. 2000402-1-QE sheet 1-2-3-4-5-6-7-8-9-10;
- V.G.F. drawing no. 2000403-1-SV sheet 1-2;
- V.G.F. drawing no. 2000411-1-LO sheet 1-2-3-4;
- ... 2000412-1-LO sheet 1-2-3;

Effective May 199

Series 27100, 28000

...cal DETECT-A-FIRE® Units
...tallation Instructions
...LD

FENWAL

DESCRIPTION

...ECT-A-FIRE® thermal detectors are UL Listed, UL of ...ata available upon request, and FM Approved detec- ...rd release devices used with fire detection systems ...tivate alarms and actuate extinguishing systems. This ...e compensated device combines the best features of ...fixed temperature and rate-of-rise detectors.

...CTRICAL RATING

Model Number	Contact Operation on Temperature Rise	Electrical Rating* (Resistive Only)
27129	Opens (450°F Max.)	5.0 Amps 125 VAC 0.5 Amps 125 VDC
28020**		
27121	Closes	5.0 Amps 125 VAC 0.5 Amps 125 VDC 2.0 Amps 24 VDC 1.0 Amps 48 VDC
28021		

...ght incandescent lamps are considered resistive, their inrush ...s 10 - 15 times their steady current. Do not exceed ratings.

...ATION

...CT-A-FIRE detectors are precision temperature ...t. They must be mounted in an area (normally a ...) so that:

...detector spacing complies with both system ...irements and requirements of the agency having ...jurisdiction.

...thermal air path to the shell is not obstructed.

...per UL, FM, and UL of Canada is shown in ... Distances given are for between units on ...ceilings. Distances from partitions or walls are ...shown. To assure that all spacing requirements ...consult the authority having local jurisdiction.

...TING

...Five units are not position sensitive. Horizontal ...al detectors refer to the most common mounting ...ion for that unit. However, each type can be ...either horizontally or vertically depending on the ...n and installation requirements.

Table 1

°F Setting	°F Tolerance	SPACINGS (in feet)			Color Coding
		(A)	(B)	(C)	
140	+7/-8	50	50	25	Black
160	+7/-8	25	25	25	Black
190	+7/-8	50	50	25	White
210	+7/-8	25	50	25	White
225	+7/-8	25	50	25	White
275	±10	25	50	25	Blue
325	±10	50	50	25	Red
360	±10	25	50	25	Red
450	±15	25	50	25	Green
500	±15	50	50	25	Orange
600	±20	N/A	50	25	Orange
725	±25	N/A	50	25	Orange

Note: *For clean agents and CO_2 suppression systems, ceiling spac ing 20 ft. (6.1 meters) apart unless otherwise specified*

Not all units are suitable for all hazard location applica tions. Refer to Table 2 and markings on the detector fo hazardous location suitability.

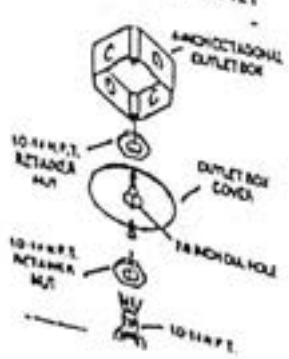
Table 2

Hazardous Location	Model Number	Fitting Required For UL, ULC Listings and FM Approval
Class I*, Groups A, B, C and D; Class II*, Groups E, F and G	27120-22 27121-20 28020-3 28021-5	Mount detector to a suitably-listed fitting in accordance with National Electric Code and/or local authority having jurisdiction.
Class I*, Groups B, C and D; Class II*, Groups E, F and G	27120-0 27121-0 28021-0	

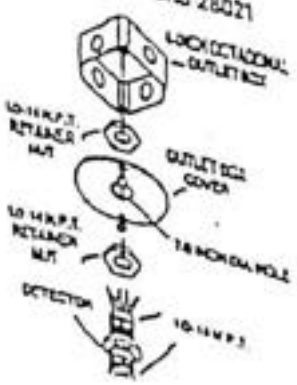
*Division 1 and 2.

INSTALLATION

Series 27120 and 27121



Series 28020 and 28021



...enwal recommends that standard 4-inch octagonal outlet ...be used to mount detectors.

...detector to outlet box cover through a 0.875 inch diameter ...ed using two 1/2-14NPT retainer nuts as indicated.

...d system wiring to detector per Figure 3 and applicable ...cal codes.

...y Locations: The DETECT-A-FIRE Units are to be installed ...nded metallic junction boxes only. They are to be secured to ...es using two lock nuts, one on either side of the mounting ...DETECT-A-FIRE Units are not to be installed in non-metallic ...n boxes.

...ous Locations: For Class 1, Division 1 and 2 locations install ...ETECT-A-FIRE Unit in a listed explosion-proof enclosure with ...mum thread engagement of five full turns. No non-conductive ...d is to be placed on the threaded joint of the DETECT-A-...Unit or in the listed explosion-proof enclosure. For Division 2 ...es assure that a protective ground terminal is provided in the ...explosion-proof enclosure when flexible metal conduit is used.

...azardous Outdoor Locations: Mount the DETECT-A-FIRE in ...d NEMA Type 3 outlet box, cover and conduit, with 1/2 - 14 ...reads and a minimum thread engagement of 5 full turns. ...pipe plugs with RTV silicone rubber sealant, a rubber gasket ...d-sealing screws to attach the cover, and PTFE thread seal ...n the DETECT-A-FIRE threads should be appropriate for out ...pplications and in accordance with the National Electric Code ...local authority have jurisdiction.

...exceed a maximum torque without thread lubricant of 20 ...unds (27.1 Newton Meters).

...000 units are similar to Series 27100 units except they have ...4 NPT threads for mounting.

...may be mounted as described above or may be threaded ...-14NPT tapped hole in the vessel wall or threaded into a ...brazed or welded to the vessel wall.

Wiring Requirement

...ng must be capable of withstanding the maximum anticipated ...temperature in the application.

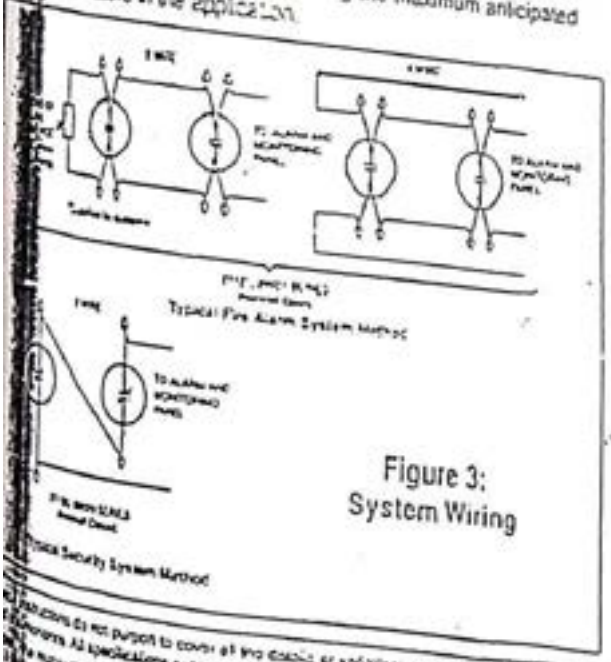


Figure 3:
System Wiring

Figure 4

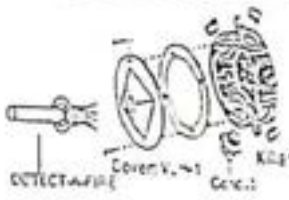


Table 3

Non-Hazardous Outdoor Locations		
Model Number	°F Temperature Settings	Fittings Required for UL Listings and FM Approval
27120-0 27120-22 27121-0 27121-20	140, 190, 225	Mount sensor in a listing suitable for outdoor use, NEMA Type 3 or 4 in accordance with National Electric Code and/or authority having jurisdiction.

FUNCTIONAL TEST

When used with automatic fire extinguishing systems test assembly by ... the initiating/solenoid leads from the panel and connect a 24 VDC ... to initiator terminals in the control unit. Heat the D-A-F units with a ... heat lamp or other convenient source. When the bulb in the sensing ... unit changes state, remove heat source and allow D-A-F unit to cool. ... Reset control unit. Test lamp must change state and stay changed ... after system is reset. Do not reconnect initiating solenoid leads until all ... D-A-F units have cooled below set point as indicated by test lamp. ... When D-A-F units are used in other types of systems, disconnect ... them from the system, connect a 24 VDC lamp and power source in ... series with the D-A-F units and test with heat source as above. Make ... sure that contacts have reset to normal or outdoor points reconnected ... to system circuit.

⚠ WARNINGS

1. In order to function properly, the sensing area of the unit must remain free from paint, grease, oil, etc. Should dust or a build up occur, do not, under any circumstances, attempt to remove it. Replace the unit.
2. Detectors mounted in an area subject to physical abuse or damage, other than above, must be suitably protected without obstructing the thermal airpath to the unit.
3. Do not install the unit where the shell would be physically damaged by sand, grain, rocks, etc.
4. Do not overtorque the unit when installing.
5. Any detector that has been abused or damaged must be replaced.
6. Consult the factory for special precautions necessary for outdoor use or moist environments.

ANY OF THE ABOVE COULD CHANGE THE FACTORY TEMPERATURE SETTING, WHICH MAY RESULT IN PROPERTY DAMAGE AND OR PERSONAL INJURY OR DEATH.

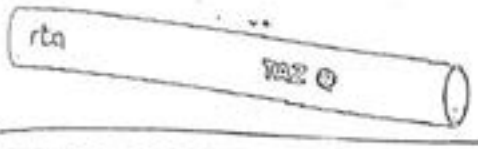
IT IS POSSIBLE FOR A UNIT TO HAVE BEEN ABUSED OR DAMAGED AND NOT DISPLAY ANY OUTWARD INDICATION OF THE DAMAGE. ALL UNITS SHOULD BE TESTED PERIODICALLY IN ACCORDANCE WITH NATIONAL FIRE PROTECTION ASSOCIATION REQUIREMENTS (NFPA) OR THE AGENCY HAVING LOCAL JURISDICTION.

...ations do not purport to cover all the details or variations on the equipment described, nor do they provide for every possible contingency to be met in connection with its ...ation. ...ments. All specifications subject to change without notice. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's ... ...ase matters be referred to KIDDE-FENWAL INC., Ashland, Massachusetts.

tubirigidi, raccordi e accessori

TAZ...
tuborigido di a zincato

(1) Per tutte le misure commerc



ACRONIMI: A / B / C / P /

BARRA DA 3 METRI

Ø tubo mm	16	20	25	32	40
	(1)	(1)	(1)	(1)	(1)
TAZ...	TAZ 16N	TAZ 20	TAZ 25	TAZ 32N	TAZ 40
spessore mm	1	1	1,2	1,2	1,2

BARRA DA 4 METRI

Ø tubo mm	16	20	25	32	40
	(1)	(1)	(1)	(1)	(1)
TAZ...	TAZ 16N/4	TAZ 20/4	TAZ 25/4	TAZ 32N/4	TAZ 40/4
spessore mm	1	1	1,2	1,2	1,2

Lunghezza nominale 3 metri - tolleranza +5 -0 mm) (Lunghezza nominale 4 metri - tolleranza +0 -50 mm)

TAIX
tuborigido di a inossidabile

ACRONIMI: A / B / C / P /

BARRA DA 4 METRI

Ø tubo mm	16	20	25	32	40
TAIX...	TAIX 16N	TAIX 20	TAIX 25	TAIX 32	TAIX 40
spessore mm	1	1	1,2	1,2	1,2

Lunghezza nominale 4 metri - tolleranza +5 -0 mm

raccordi per guidacavi

ACCESSORI

cavetto conduttore per messa a terra

Per fissarlo stringetubo con vite di [illegible]

descrizione	cavetto L.150 mm	cavetto L.300 mm	cacciavite flessibile
cod.	81305	81306	81390
conf. pezzi	50	50	1

pubblicato pag. 220

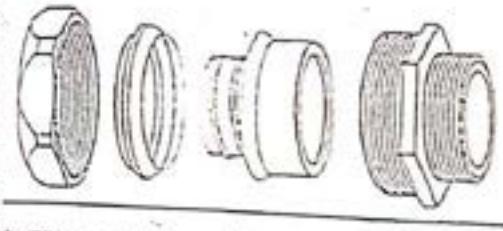
SERIE 2000 METAL

racc. di metallo maschio fisso

IP 65 con guidacavi Pt1 e Pt2

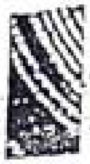
Adatto per guidacavi FP 2000, PZX, LA, FTR, PTR, HF, HFX

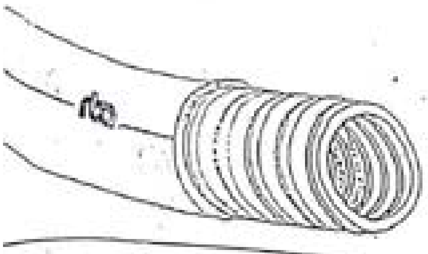
e con anelli adattatori per guidacavi GE-P.V.C. FA 2000, Special



Gas UNI 228	1/4"	3/8"	1/4"	3/8"	3/8"	1/2"	1/2"
Ø ingr. mm	6	6	10	10	12	12	15,5
cod.	82000	82016	82001	82002	82003	82004	82005
conf. pezzi	50	50	50	50	50	50	25
Gas UNI 228	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
Ø ingr. mm	20,5	26,5	34,5	39,5	50,6	63	77
cod.	82006	82007	82008	82009	82010	82011	82012
conf. pezzi	25	10	10	5	4	2	1
Gas UNI 228	4"	5"					
Ø ingr. mm	102	127					
cod.	82013	82014					
conf. pezzi	1	1					
Cavo PG	7	7	9	11	13,5	11	13,5
Ø ingr. mm	8	10	10	10	10	12	12
cod.	82020	82021	82022	82023	82024	82025	82026
conf. pezzi	50	50	50	50	50	50	50
Cavo PG	16	13,5	16	21	29	36	42
Ø ingr. mm	12	15,5	15,5	20,5	26,5	34,5	39,5
cod.	82027	82028	82029	82030	82031	82032	82033
conf. pezzi	50	25	25	25	10	10	5
Cavo PG	48						

guidacavi





PN

A07

acciaio a semplice aggraffatura rivestito di PVC

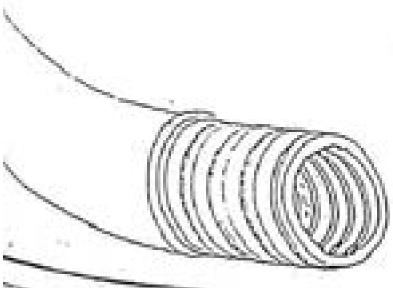
IP65 con raccordi Serie 2000

Disponibilità: A / B / C / P / E

Øi x Øe mm	8x13	10x16	12x18	15,5x21	20,5x27	26,5x34
PN grigio	PN 08	PN 10	PN 12	PN 16	PN 21	PN 27
PN N nero	PN 08 N	PN 10 N	PN 12 N	PN 16 N	PN 21 N	PN 27 N
PN AT• gr.	-	PN 10 AT	PN 12 AT	PN 16 AT	PN 21 AT	PN 27 AT
PN BT• gr.	-	PN 10 BT	PN 12 BT	PN 16 BT	PN 21 BT	PN 27 BT
PN N-RU• ne.	-	-	PN 12 N-RU	PN 16 N-RU	PN 21 N-RU	PN 27 N-RU
confez. rotolo m	50	50	50	50	50	25

Øi x Øe mm	34,5x43	39,5x48	50,5x60
PN grigio	PN 35	PN 40	PN 52
PN N nero	PN 35 N	PN 40 N	PN 52 N
PN AT• gr.	PN 35 AT	PN 40 AT	PN 52 AT
PN BT• gr.	PN 35 BT	PN 40 BT	PN 52 BT
PN N-RU• ne.	PN 35 N-RU	PN 40 N-RU	PN 52 N-RU
confez. rotolo m	25	25	25

• PN AT alta temperatura -10°C +105°C • PN BT bassa temperatura da -30°C +50°C • PN N-RU PVC ancorato UL Recognized



P2 - P2X

A08

acciaio a doppia aggraffatura rivestito di PVC

IP65 con raccordi Serie 2000

Disponibilità: A / B / C / P / E

Øi x Øe mm	10x16	12x18	15,5x21	20,5x27	26,5x34	34,5x43
grigio	P2 10	P2 12	P2 16	P2 21	P2 27	P2 35
N nero	P2 10 N	P2 12 N	P2 16 N	P2 21 N	P2 27 N	P2 35 N
AT • gr	P2 10 AT	P2 12 AT	P2 16 AT	P2 21 AT	P2 27 AT	P2 35 AT
BT • gr	P2 10 BT	P2 12 BT	P2 16 BT	P2 21 BT	P2 27 BT	P2 35 BT
X inox	P2X 10	P2X 12	P2X 16	P2X 21	P2X 27	P2X 35
confez. rotolo m	50	50	50	50	25	25

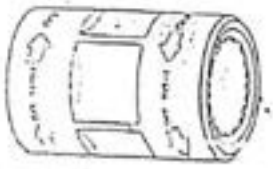
Øi x Øe mm	39,5x48	50,5x60	63x73	77x90	102x115
grigio	P2 40	P2 52	P2 63	P2 77	P2 102
N nero	P2 40 N	P2 52 N	-	-	-
AT • gr	P2 40 AT	P2 52 AT	-	-	-
BT • gr	P2 40 BT	P2 52 BT	-	-	-
X inox	P2X 40	P2X 52	-	-	-
confez. rotolo m	25	25	15	[illegible]	[illegible]

rba

tubi rigidi, raccordi e accessori

SUL TECNO pag. 244

TILOK® tubo/tubo raccordo di metallo a innesto rapido per tubo TAZ/TAIX



DISPONIBILITÀ A / B / C / P / E

Ø tubo mm	16	20	25	32	40	50
TKT..	TKT 16	TKT 20	TKT 25	TKT 32	TKT 40	TKT 50
confez. pezzi	10	10	5	5	3	2

SUL TECNO pag. 244

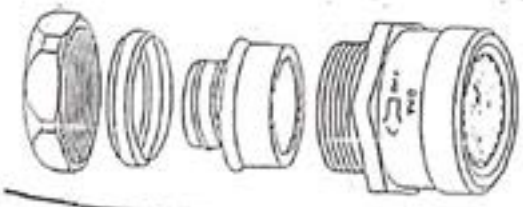
TILOK® maschio raccordo di metallo a innesto rapido per tubo TAZ/TAIX

DISPONIBILITÀ A / B / C / P / E

Ø tubo mm	16	20	25	32	40	50
filetto ISO	M 16x1,5	M 20x1,5	M 25x1,5	M 32x1,5	M 40x1,5	M 50x1,5
TKM..	TKM 16	TKM 20	TKM 25	TKM 32	TKM 40	TKM 50
confez. pezzi	15	10	10	5	5	3

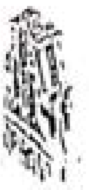
SUL TECNO pag. 245

TILOK® tubo/guaina raccordo di metallo a innesto rapido per tubo TAZ/TAIX

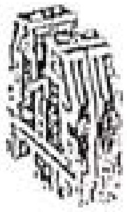


DISPONIBILITÀ A / B / C / P / E

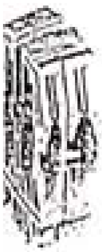
Ø tubo mm	16	16	20	20	25	25	32
guaina Ø int. mm	12	15,5	16,5	20,5	20,5	26,5	26,5
TKG..	TKG 1612	TKG 1616	TKG 2016	TKG 2021	TKG 2521	TKG 2527	TKG 3227
confez. pezzi	15	10	10	10	10	15	15
Ø tubo mm	32	40					
guaina Ø int. mm	34,5	39,5					
TKG..	TKG 3235	TKG 4040					
confez. pezzi	5	5					



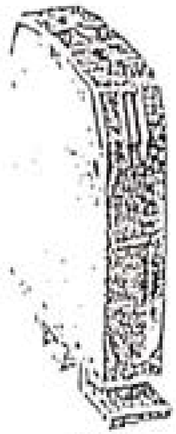
0390 60-0390 61



0390 62+0390 64



0390 66-0390 68



0390 70

Morsetti standard

Omologazioni e marchi nelle ultime pagine del catalogo.

Per guida asimmetrica EN 50 035 ⊔, e simmetrica EN 50022 ⊔ prof. 7,5 mm e 15 mm.
Materiale isolante: poliammide
Temperatura d'impiego da -30 a +100°C

1 collegamento

Articoli	Nominale	Capacità (mm²) cavo rigido	Capacità (mm²) cavo flessibile	Passo (mm)
390 60	2,5	da 0,25 a 4	da 0,25 a 2,5	5
390 61	4	da 0,25 a 6	da 0,25 a 4	6
390 62	6	da 0,5 a 10	da 0,5 a 6	8
390 64	10	da 1,5 a 16	da 2,5 a 10	10
390 66	16	da 1,5 a 25	da 4 a 16	12
390 68	35	da 2,5 a 50	da 4 a 35	15
390 70	70	da 25 a 95	da 16 a 70	22

Accessori da pag. 138

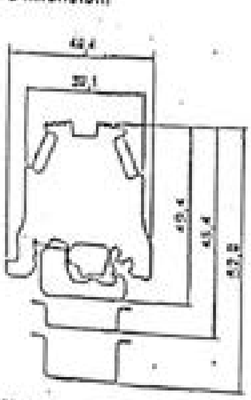
Viking 3
morsetti

Caratteristiche

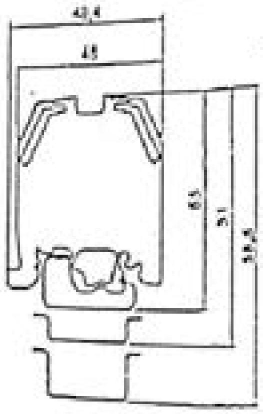
Articoli	Tensione (V) IEC	Tensione (V) CSA	Tensione (V) UL	Corrente (A) IEC	Corrente (A) CSA	Corrente (A) UL	Sezione IEC (mm²)	Sezione CSA (AWG)	Sezione UL (AWG)
0390 60	800	600	600	24	20	20	2,5	12	12
0390 61	800	600	600	32	25	30	4	10	10
0390 62	800	600	600	41	35	55	6	8	8
0390 64	800	600	600	57	50	70	10	6	6
0390 66	800	600	600	76	70	80	16	4	4
0390 68	800	600	600	125	90	125	25	0	0
0390 70	1000	600	600	192	150	175	70	000	000

CSA n° 22-2, n°158
IEC 60 947.7.1, CEI EN 60 947.7.1
Sicurezza aumentata EEXe
UL 1059

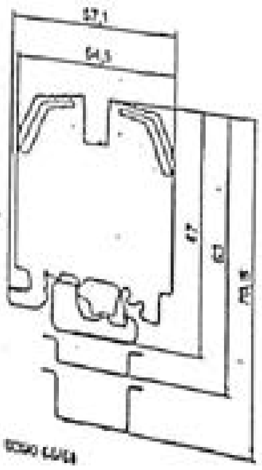
Dimensioni



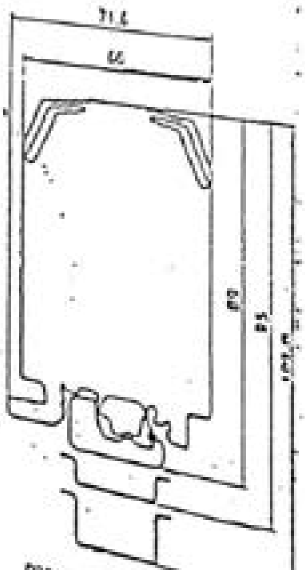
0390 60/61



0390 62/64



0390 66/68



0390 70

CABINATO ALTERNATORE: QUADRO ANTINCENDIO

ALTERNATOR ENCLOSURE: FIRE FIGHTING SYSTEM ELECTRIC BOARD

PROGETTO/PROJECT: IMPIANTO DI AKRIMOTA / AKRIMOTA PLANT

1	REVISIONE GENERALE	
0	EMISSIONE	14.01.00

VGF s.r.l.

Cliente /Customer: ANSALDO s.p.a.

2001-004

QUADRO ELETTRICO ANTINCENDIO
FIRE FIGHTING SYSTEM ELECTRIC BOARD

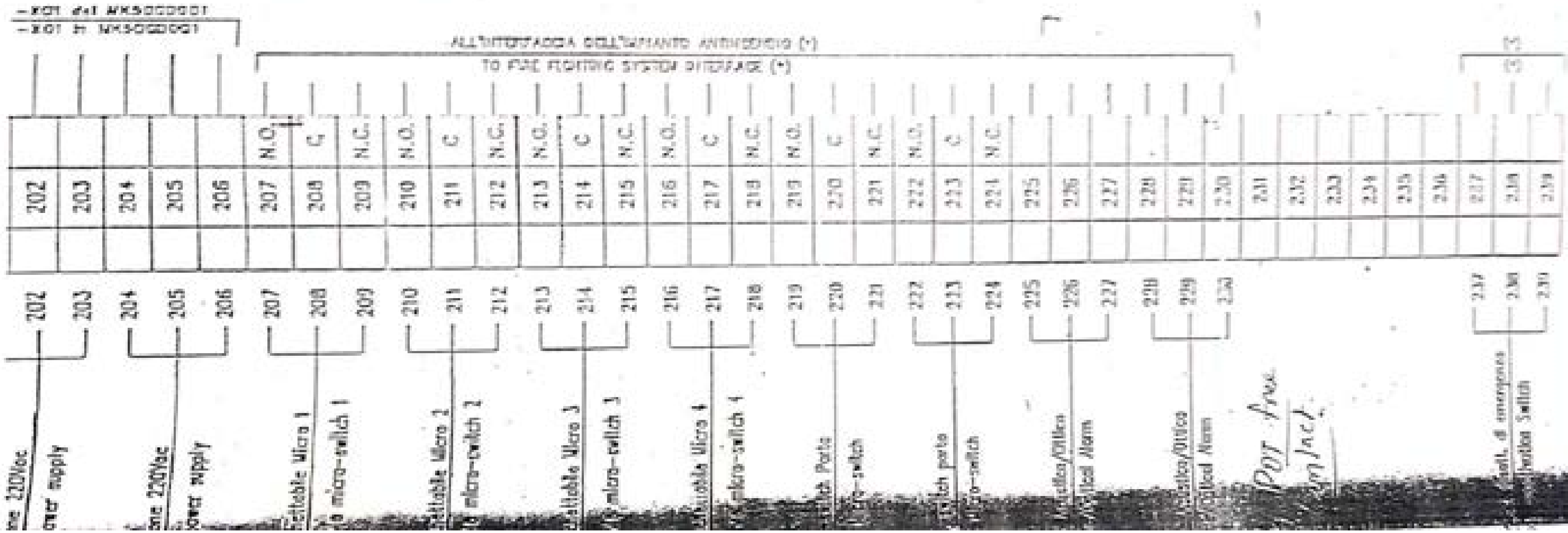
Formato/Size: A4

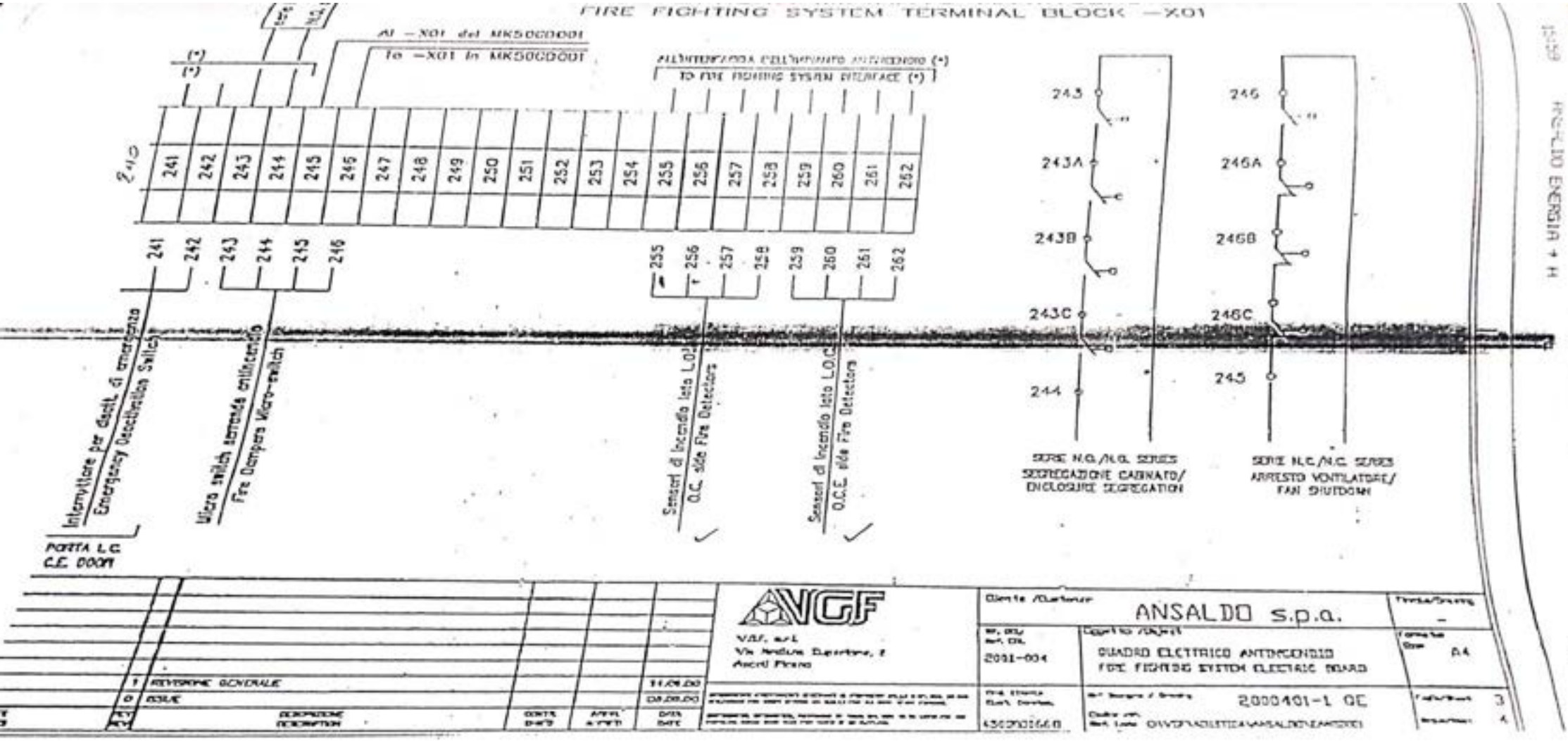
2000401-1 OE

Foglio/Sheet 1

2

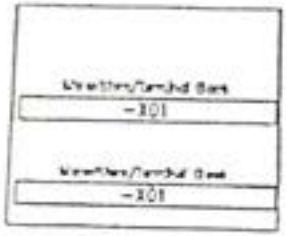
'RSETTIERA IMPIANTO ANTINCENDIO -X01
: FIGHTING SYSTEM TERMINAL BLOCK -X01




FIRE FIGHTING SYSTEM TERMINAL BLOCK -X01
Al -X01 del MK50GD001
To -X01 in MK50GD00T
TO FIRE FIGHTING SYSTEM INTERFACE (*)
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
243
243A
243B
243C
244
246
246A
246B
246C
245
Interruttore per distt. di emergenza
Emergency Deactivation Switch
Vibro switch sensore antincendio
Fire Damper Micro-switch
Sensori di incendio lato L.C.
O.C. side Fire Detectors
Sensori di incendio lato L.C.
O.C.E. side Fire Detectors
PORTA L.C.
C.E. DOOR
SERIE N.O./N.C. SERIES
SEGREGAZIONE CABINATO/
ENCLOSURE SEGREGATION
SERIE N.C./N.C. SERIES
ARRESTO VENTILATORE/
FAN SHUTDOWN
AVGF
VAF, s.r.l.
Via Andrea Doria, 1
Ascoli Piceno
ANSALDO s.p.a.
2001-004
QUADRO ELETTRICO ANTINCENDIO
FIRE FIGHTING SYSTEM ELECTRIC BOARD
2000401-1 QE
1 REVISIONE GENERALE
0 EMISSIONE

CASSA PER MORSETTIERA
DIN 300x300x200

TERMINAL BOARD BOX
DIN 300x300x200



1	MODIFICHE GENERALI			14/05/01
0	PRIMA EMISSIONE			07/11/00
REV.	DESCRIZIONE	DISEGNATO	APPROVATO	DATA

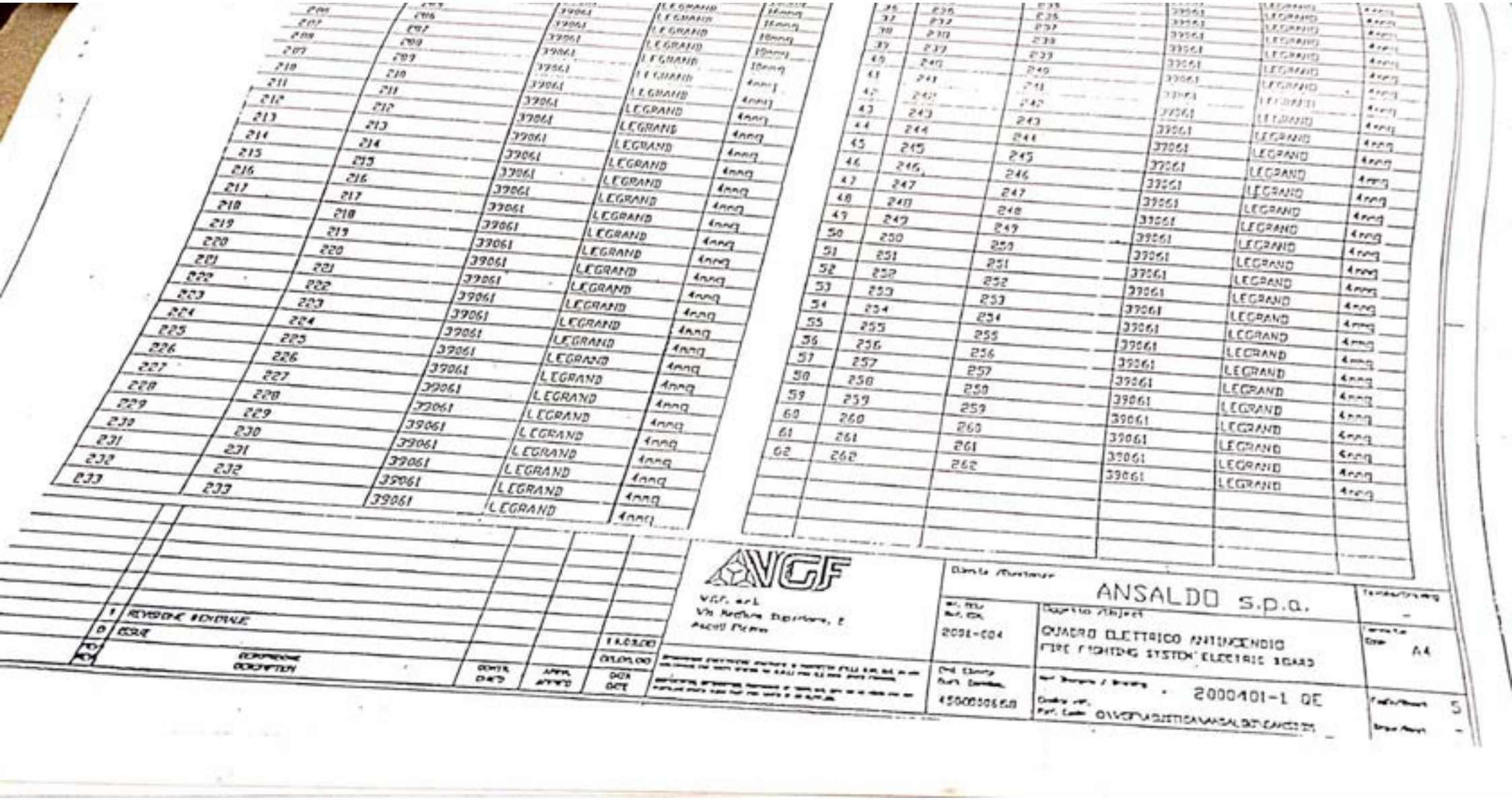
ANSALDO s.p.a.

2001-024

QUADRO ELETTRICO ANTINCENDIO
FIRE FIGHTING SYSTEM ELECTRIC BOARD

2000401-1 QE

A4


AVGF
ANSALDO s.p.a.
QUADRO ELETTRICO ANTINCENDIO
FIRE FIGHTING SYSTEM ELECTRIC BOARD
2000401-1 QE

CABINATO ALTERNATORE:
LAY-OUT TUBAZIONE ANTINCENDIO

ALTERNATOR ENCLOSURE:
FIRE FIGHTING SYSTEM PIPING LAY-OUT

PROGETTO/PROJECT: IMPIANTO DI AKRIMOTA / AKRIMOTA PLANT

1	REVISIONE GENERALE			14.09.00		
0	EMISSIONE			04.08.00		
REV	DESCRIZIONE / REMARKS	CONTR. / CHKD	APPR. / APPVD	DATA / DATE		

VGF
VGF s.r.l.
Via Stefano Siniscalco, 1
Ascoli Piceno

Client / Customer: ANSALDO s.p.a.

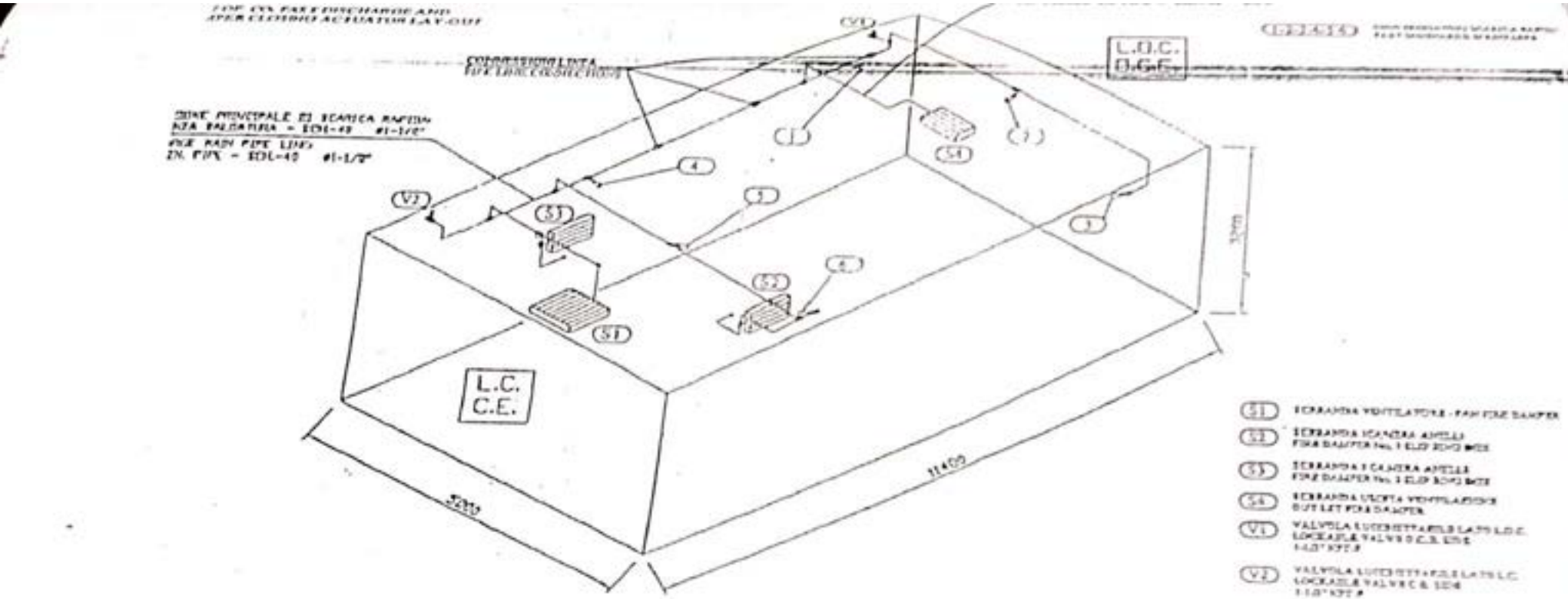
Commessa / Subject: LAY-OUT TUBAZIONE ANTINCENDIO
FIRE FIGHTING SYSTEM PIPING LAY-OUT

2001-004

Formato / Size: A4

Disegno / Drawing: 2000412-1-LO

Foglio / Sheet 1
Fogli / Sheets 2



SD1 SCHIANDA VENTILATORE - FAN FIRE DAMPER

SD2 SCHIANDA USCITA CANERA APPELLI
FIRE DAMPER No. 1 ELEP ECHO WEST

SD3 SCHIANDA 1 CAMERA APPELLI
FIRE DAMPER No. 1 ELEP ECHO WEST

SD4 SCHIANDA USCITA VENTILAZIONE
OUT LET FIRE DAMPER

V1 VALVOLA LUCCHETTATA APERTA LATO L.O.C.
LOCKABLE VALVE O.C.S. SIDE

V2 VALVOLA LUCCHETTATA APERTA LATO L.C.
LOCKABLE VALVE C.S. SIDE

REV	DESCRIZIONE DESCRIPTION	DATA DATE	APPR. APPD.	DATA DATE
1	REVISIONE GENERALE			14.04.00
0	EMISSIONE			09.03.00

VCF s.r.l.
Via Nazionale Superiore, 9
Arcisate (Varese)

Cliente / Customer: ANSALDO s.p.a.

Commessa / Job: 2001-034

Oggetto / Subject: LAY-OUT TUBAZIONE ANTINCENDIO
FIRE FIGHTING SYSTEM PIPING LAY-OUT

Disegno / Drawing: 2000412-1-LO

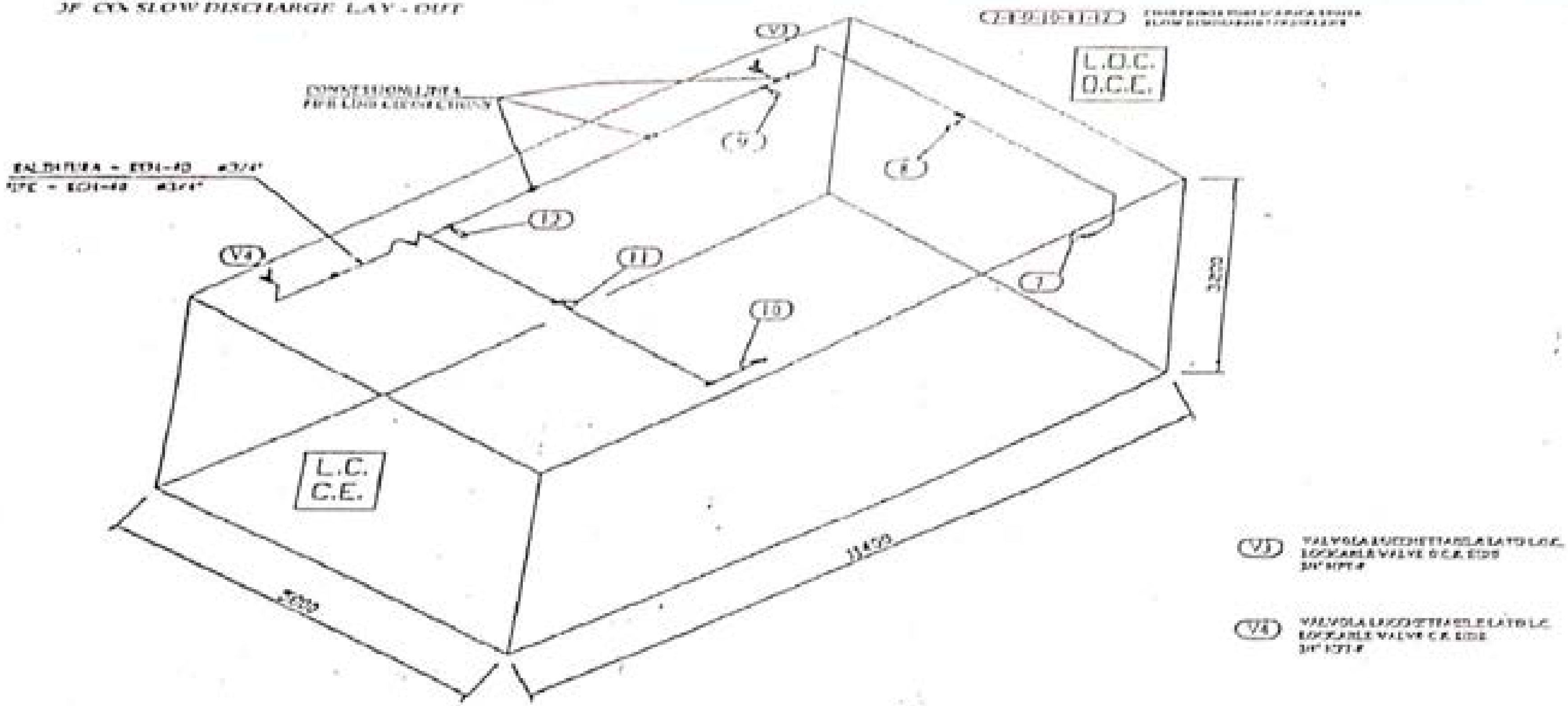
Foglio / Sheet: 1

Formato / Size: A4

Foglio / Sheet: 2

Foglio / Sheet: 3

LINEA DI SCARICA LENTA CO2
2F CO2 SLOW DISCHARGE LAY-OUT



1	REVISIONE GENERALE			14.06.03
0	ECALE			05.05.03
REV	DESCRIZIONE DESCRIPTION	CONTR. CHECKED	APPR. APPROVED	DATA DATE

VGF s.r.l.
Via ... Ascoli Piceno

Cliente /Customer: ANSALDO s.p.a.

Tavola/Drawing: 2

2001-054

Soggetto /Subject:
LAY-OUT TUBAZIONI ANTINCENDIO
FIRE FIGHTING SYSTEM PIPING LAY-OUT

Formato: A4

2000412-3-LD

Foglio/Sheet: 3

CABINATO ALTERNATORE:
LAY-OUT ELETTRICO

ALTERNATOR ENCLOSURE:
ELECTRICAL LAY-OUT

PROGETTO/PROJECT: IMPIANTO DI AKRIMOTA / AKRIMOTA PLANT

1	REVISIONE GENERALE				14.05.00
0	EMISSIONE				08.04.00
REV.	DESCRIZIONE / DESCRIPTION	CONTR. / CHK'D	APPR. / APPR'D	DATA / DATE	

VGF, s.r.l.
Via Madonna Incoronata, 8
Ascoli Piceno

Cliente / Customer: ANSALDO s.p.a.

Commessa / Job: 2001-004

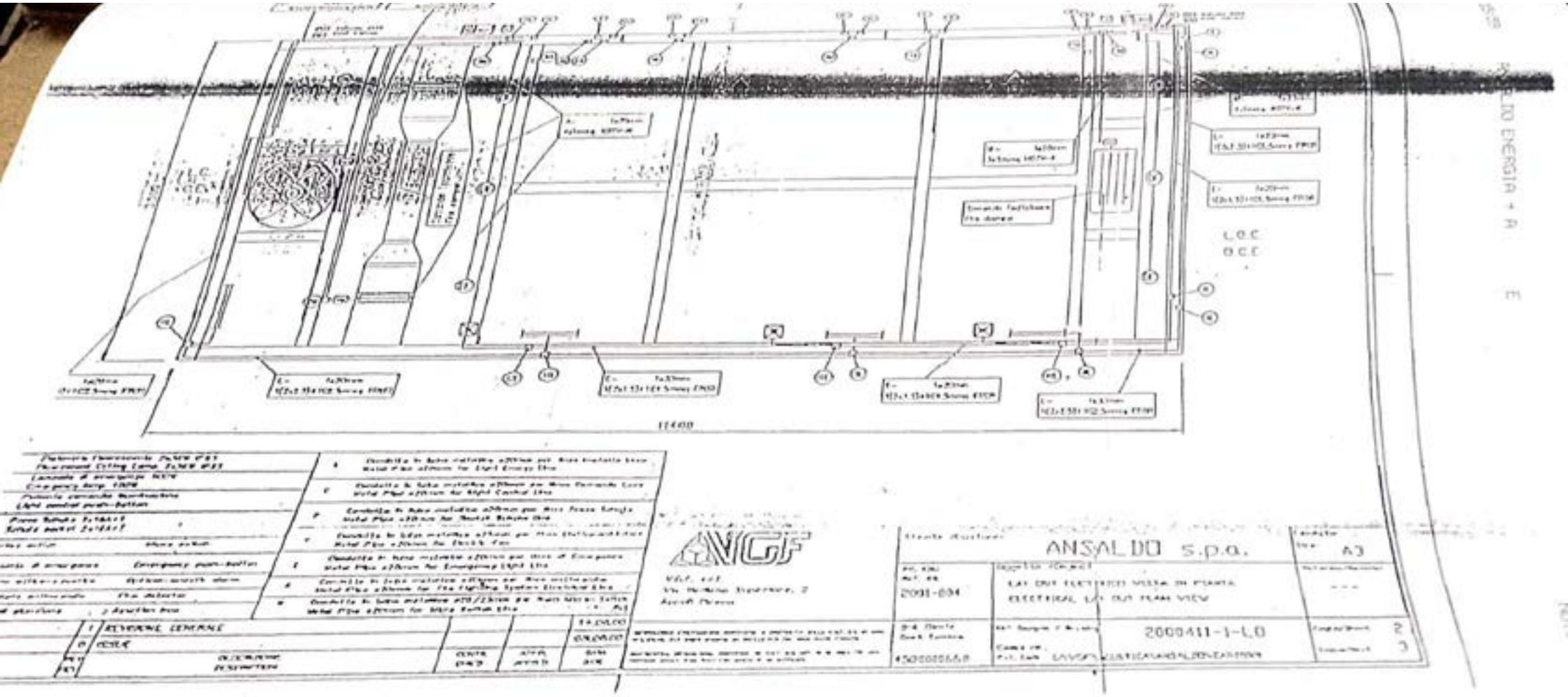
Oggetto / Subject: LAY OUT ELETTRICO / ELECTRICAL LAY OUT

Disegno n° / Drawing n°: 2000411-1-LO

Formato / Size: A3

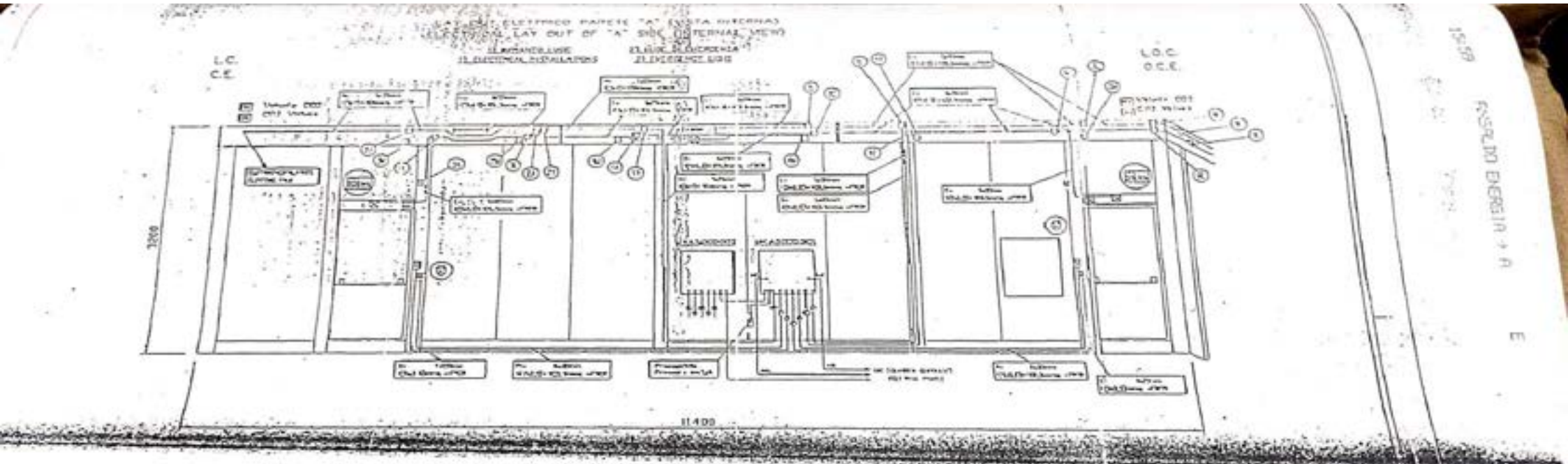
Foglio / Sheet: 1

Fogli / Sheets: 2



ANSALDO S.p.A.

2008411-1-LO



	1	REVISIONE GENERALE			14.06.00
	0	EMISSIONE			08.05.00
NOTE NOTES	REV. REV.	DESCRIZIONE DESCRIPTION	CONTR. CHKD	APPR. APPVD	DATA DATE

V.G.F. s.r.l.
Via Indiana Superiore, 2
Ascoli Piceno

Cliente / Customer: ANSALDO S.p.A.

Commessa / Job no.: 2001-004

Oggetto / Object: LAY OUT ELETTRICO CASSONETTI - PARETE "A"
ENCLOSURE ELECTRICAL LAY OUT - SIDE "A"

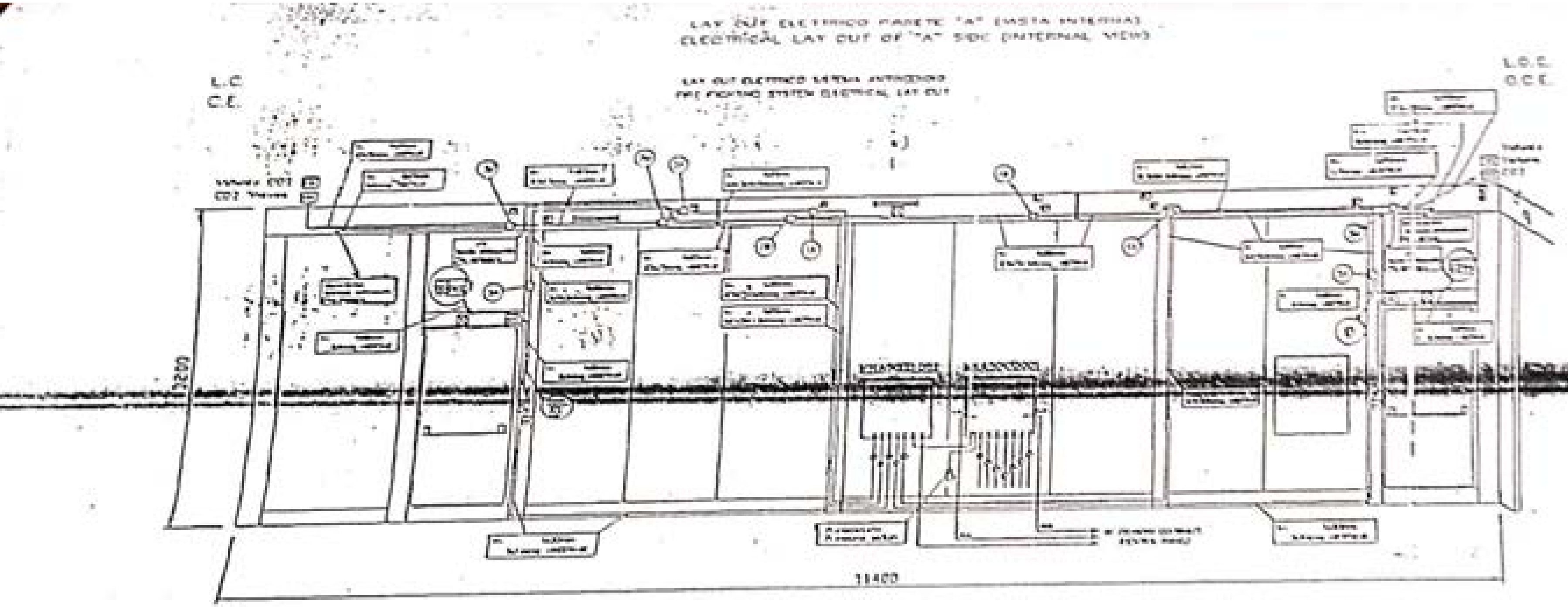
Ord. Cliente / Cust. Purchase Order: 4500011660

Nr. Disegno / Drawing No.: 2000411-1-LO

Formato / Size: A3

Foglio / Sheet: 3

Scala / Scale: A



ANSALDO S.p.A.	A3
NGF	N.G.F. srl
2001-084	LAY OUT ELETTRICO SISTEMA ANTINCENDIO / FIRE FIGHTING SYSTEM ELECTRICAL LAY OUT / PARETE "A" - SIDE "A"
2000411-1-LO	

Fire Hydrant System:

Panel-2

Start Air comp. AC 401

PSL:401 : 2T-13 - R7
-14

Stop Air comp. AC 401

PSH:401 : 2T-15 - R8
-16

H/L line SOV-402

Open: PSL:402 : 2T-5 - R3
-6

Close: PSH:402 : 2T-9 - R5
-10

R RELEASE VALVE SOV.401

Open: PSH: 403 : 2T-11 - R6
12

Close: PSL : 403 : 2T-7 - R4
-8