

A = Approved and valid drawing. Also available as a pdf file.

N = Not approved or not valid drawing.

	DWG No.	Sheet	Rev./ Edition	Date / Rev. Date	Title
	<b>512-</b>				<b>EBL512 .....</b>
A	01		3	06-02-21	COM LOOPS CABLE LENGTH & TECHNICAL SPECIFICATIONS
N	02		2	Deleted 01-10-26	<del>COM LOOP UNITS CURRENT CONS. IN REL. TO CABLE (CONDUCTOR) RESISTANCE / CABLE LENGTH</del>
	03				-
	04				-
	05				-
	06				-
	07				-
	08				-
	09				-
	10				-
A	11	1/3	2	03-02-21	CONTROL UNITS 1548-1550 DIMENSIONS & OVERVIEW, Rectifier 1536+Charger board 1557
A	11	2/3	1	03-02-21	CONTROL UNITS 1548-1550 DIMENSIONS & OVERVIEW, Rectifier 1537+Charger board 1557
A	11	3/3		05-07-05	CONTROL UNITS 1548-1550 DIMENSIONS & OVERVIEW, Rectifier 1537+Charger board 1657
A	12		2	01-03-22	CHARGER BOARD 1557 DIMENSIONS & OVERVIEW
A	13			99-06-02	CONNECTION BOARD 1555 DIMENSIONS & OVERVIEW
A	14			05-07-05	CHARGER BOARD 1657 DIMENSIONS & OVERVIEW
A	15		2	03-02-21	EXPANSION BOARDS 1581 & 1582 / 1587 DIMENSIONS & OVERVIEW
A	16		1	03-02-21	EXPANSION BOARDS 1580 & 1584 DIMENSIONS & OVERVIEW
A	17		1	03-02-21	EXPANSION BOARD 1583 DIMENSIONS & OVERVIEW
	18				-
	19				-
A	20			99-06-18	CONTROL UNITS 1548-1550 INNER DOOR & BATTERY PROTECTION, DIMENSIONS & OVERVIEW
A	21			99-06-02	CONTROL UNITS 1548-1550 INNER DOOR DIMENSIONS & OVERVIEW
A	22		3	08-02-12	MAIN BOARD 1556 DIMENSIONS & OVERVIEW
A	23		1	08-02-12	TLON CONNECTION BOARD 1590 DIMENSIONS & OVERVIEW
A	24		1	08-02-12	PRINTER 1558 DIMENSIONS & OVERVIEW
	25				-
	26				-
	27				-
	28				-
	29				-
	30				-
A	31	1/3	2	03-02-21	CONTROL UNITS 1548-1550 BLOCK DIAGRAM, Rectifier 1536+Charger board 1557
A	31	2/3	1	03-02-21	CONTROL UNITS 1548-1550 BLOCK DIAGRAM, Rectifier 1537+Charger board 1557
A	31	3/3	2	08-12-15	CONTROL UNITS 1548-1550 BLOCK DIAGRAM, Rectifier 1537+Charger board 1657

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	DWG No. <b>512-</b>	Sheet	Rev./ Edition	Date / Rev. Date	Title <b>EBL512 .....</b>
A	32	1/3	1	01-01-16	CONTROL UNITS 1548-1550 POWER SUPPLY CONNECTION DIAGRAM, Rectifier 1536+Charger board 1557
A	32	2/3		01-01-16	CONTROL UNITS 1548-1550 POWER SUPPLY CONNECTION DIAGRAM, Rectifier 1537+Charger board 1557
A	32	3/3	1	08-12-15	CONTROL UNITS 1548-1550 POWER SUPPLY CONNECTION DIAGRAM, Rectifier 1537+Charger board 1657
A	33		3	08-02-12	CONTROL UNITS 1548-1550 INTERNAL CONNECTION DIAGRAM
A	34		3	08-12-15	CONTROL UNITS 1548-1550 EXPANSION BOARDS 1580-1584, CONNECTION DIAGRAM
	35				-
	36				-
	37				-
	38				-
	39				-
	40				-
A	41		2	08-02-12	CONNECTION BOARD 1555 T.B. P1:01-16 COM LOPS 0-3, CONNECTION DIAGRAM
A	42		4	08-02-12	CONNECTION BOARD 1555 T.B. P1:17-28 PROGRAMMABLE OUTPUTS, CONNECTION DIAGRAM
A	43			99-06-03	CONNECTION BOARD 1555 T.B. P1:29-36 PROGRAMMABLE INPUTS, CONNECTION DIAGRAM
A	44			99-06-03	CONNECTION BOARD 1555 T.B. P1:37-50 NOT PROGRAMMABLE OUTPUTS, CONN. DIAGRAM
A	45			03-05-05	ALERT ANNUNCIATION CONTROLLER 1740 CONNECTION DIAGRAM (EXAMPLE)
A	46		6	08-12-15	EXPANSION BOARD 1580 CONNECTION DIAGRAM
A	47	1/2	3	03-03-06	EXPANSION BOARDS 1581 & 1582 CONNECTION DIAGRAM
A	47	2/2	1	03-11-12	EXPANSION BOARDS 1582 & 1587 CONNECTION DIAGRAM
A	48			99-07-01	EXPANSION BOARD 1584 CONNECTION DIAGRAM
A	49		1	08-02-12	SYSTEM VIA TION NETWORK EXAMPLES, CONNECTION DIAGRAM
A	50			00-04-10	EXPANSION BOARD 1583 CONNECTION DIAGRAM
A	51		5	03-03-05	INPUT UNITS ON COM LOOPS (PART 1) CONNECTION DIAGRAM
A	52		3	03-03-05	INPUT UNITS ON COM LOOPS (PART 2) CONNECTION DIAGRAM
A	53		12	08-12-15	INPUT UNITS ON COM LOOPS (PART 3) CONNECTION DIAGRAM
A	54		6	08-02-12	ADDRESSABLE ZONE INTERFACE 2335 & 2226 CONFIGURATIONS & CONNECTION DIAGRAM
A	55		11	12-09-04	IS UNITS FOR HAZARDOUS (Ex) AREAS CONNECTION DIAGRAM
A	56		5	01-08-10	SCREENED COM LOOP & UNIT 2222 CONNECTION DIAGRAM (EXAMPLE)
A	57		5	08-12-15	ADDR. MULTIPURPOSE I/O UNIT 3361 CONNECTION DIAGRAM (EXAMPLES)
	58				-
	59				-
	60				-

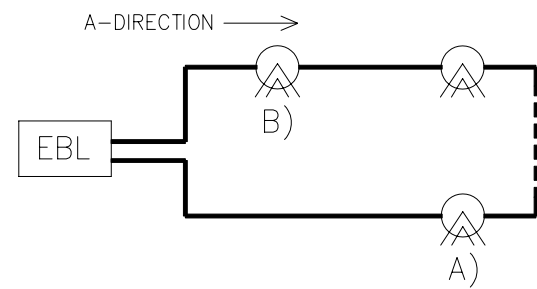
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	DWG No.	Sheet	Rev./ Edition	Date / Rev. Date	Title
	<b>512-</b>				<b>EBL512 .....</b>
A	61		1	01-01-17	OUTPUT UNITS ON COM LOOPS CONNECTION DIAGRAM
A	62		1	01-04-10	DISPLAY UNITS ON COM LOOPS CONNECTION DIAGRAM
A	63		4	12-09-11	OUTPUT UNITS ON COM LOOPS CONNECTION DIAGRAM
	64				-
	65				-
	66				-
	67				-
	68				-
	69				-
	70				-
A	71		1	06-12-29	ADDRESS SETTING DIL-SWITCH COM LOOP ADDRESS SETTINGTABLE
A	72		3	04-10-05	DATA CONVERTER 2292 ("EBL TALK") CONNECTION DIAGRAM
A	73		2	08-12-15	WEB-SERVER 1588 / 1598 CONNECTION DIAGRAM
	74				-
	75				-
	76				-
	77				-
	78				-
	79				-
	80				-
	81				-
	82				-
	83				-
	84				-
	85				-
	86				-
	87				-
	88				-
	89				-
	90				-
N	91			<del>99-06-07</del>	<del>ALERT ANNUNCIATION CONTROLLER 2232 CONNECTON DIAGRAM</del>
	92				-
	93				-
	94				-
	95				-
	96				-
	97				-
	98				-
	99				-

RevNo	Revision note	Date	Signature	Checked
3	MISC. INFORMATION (e.g. CABLE TYPES) UPDATED.	060221	JP	MÖ

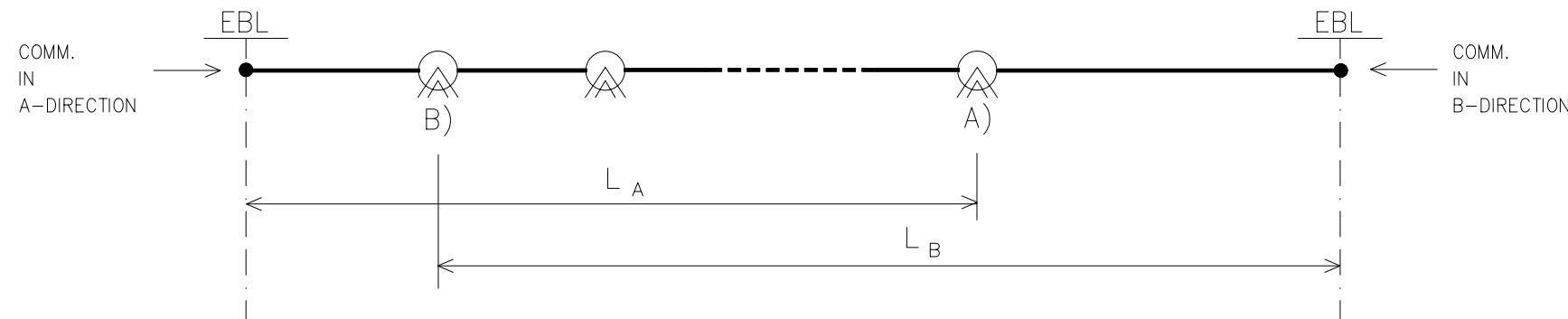
1. COM LOOP,  
NO FEEDER LINE



EXPLANATIONS

- A) LAST UNIT WHEN COMM. IN A-DIRECTION
  - B) LAST UNIT WHEN COMM. IN B-DIRECTION
  - $L_A$  CABLE LENGTH WHEN COMM. IN A-DIRECTION
  - $L_B$  CABLE LENGTH WHEN COMM. IN B-DIRECTION
- THE LONGEST OF  $L_A$  AND  $L_B$  = CABLE LENGTH (L)  
(IN THIS EXAMPLE  $L_B$  IS THE LONGEST)

EQUIVALENT DIAGRAM



CABLE TYPE EXAMPLES

COM LOOP: ELKY 2 x 1mm (0.75mm<sup>2</sup>) (TWISTED PAIR)  
FEEDER LINE: ELKY 10 x 2 x 1mm (TWISTED PAIRS)  
OR THE HALOGEN-FREE & FLAMABLE-PROOF TYPES:  
COM LOOP: ELQYB 2 x 1mm (0.75mm<sup>2</sup>) (TWISTED PAIR)  
FEEDER LINE: ELQYB 10 x 2 x 1mm (TWISTED PAIRS)  
ALL TYPES HAVE THE PAIR CAPACITANCE 50 nF/km AT 800 Hz,  
THE WIRE RESISTANCE 24.5 ohms/km  
AND THE ATTENUATION 0.6 dB/km AT 800 Hz.

THE NUMBER OF UNITS ON THE COM LOOPS

THE UNITS ARE TO BE DISTRIBUTED AS EVEN AS POSSIBLE ON EACH COM LOOP AND BETWEEN THE COM LOOPS 0, 1, 2 AND 3.

MAXIMUM NUMBER OF ADDRESSES (128) ON A COM LOOP ONLY SHOWS THE ADDRESSES POSSIBLE TO USE.

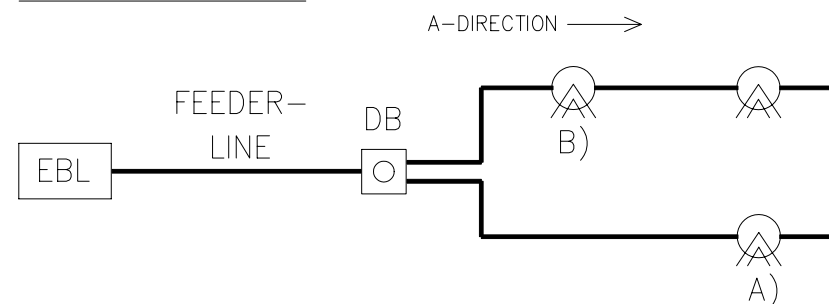
THE CURRENT CONSUMPTION ON EACH COM LOOP VARY DEPENDING ON THE NUMBER & THE TYPE OF UNITS CONNECTED.

EACH UNIT'S CURRENT CONSUMPTION IS TO BE FOUND IN THE EBL512 PLANNING INSTRUCTIONS. (CHAPTER "CURRENT CONSUMPTION")

MAXIMUM CABLE LENGTH (L), i.e. THE CONDUCTOR RESISTANCE IN RELATION TO THE CURRENT CONSUMPTION AND MAXIMUM CURRENT ON EACH COM LOOP: SEE PLANNING INSTRUCTIONS, CHAPTER "COM LOOP CABLE LENGTH".

NOTE! THE NUMBER AND TYPE OF UNITS, CABLE INSTALLATION, EXT. DISTURBANCE, ETC. MIGHT AFFECT THE CABLE RESISTANCE AND CAPACITANCE AND ALSO THE COMMUNICATION. MAX. CURRENT, CABLE LENGTH, NUMBER OF UNITS, ETC. ARE CONSEQUENTLY APPROXIMATE VALUES.

2. COM LOOP  
INCL. FEEDER LINE

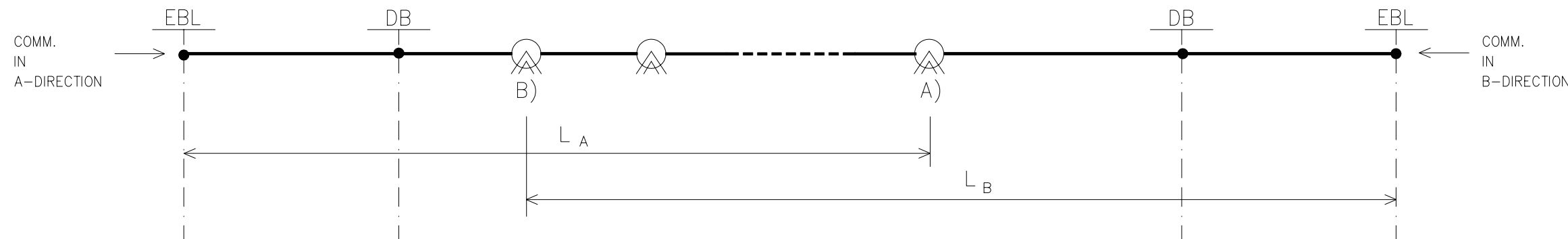


DB = DISTRIBUTION BOX

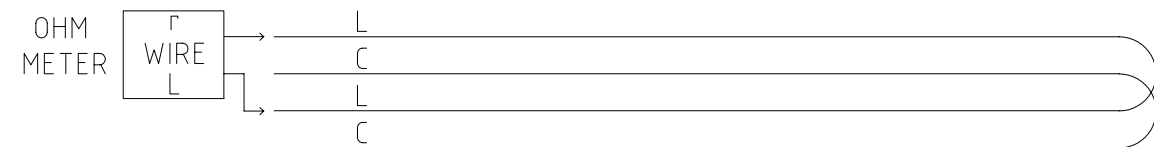
EBL = EBL512

THE LONGEST OF  $L_A$  AND  $L_B$  = CABLE LENGTH (L)  
(IN THIS EXAMPLE  $L_B$  IS THE LONGEST)

EQUIVALENT DIAGRAM



1) THE TOTAL CONDUCTOR RESISTANCE, R (= r WIRE L + r WIRE C) OR THE CABLE LENGTH, MUST NOT EXCEED THE VALUES FOUND IN PLANNING INSTRUCTIONS, CHAPTER "COM LOOP CABLE LENGTH".



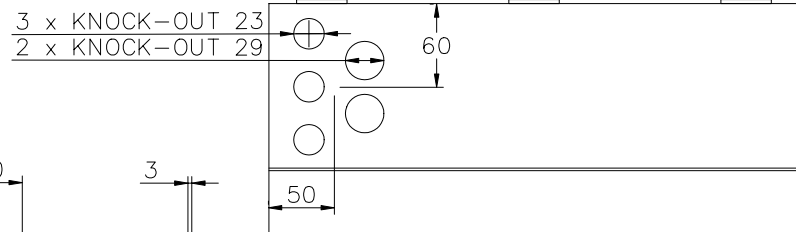
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Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_0113.dwg
Date 1999-06-01		Scale -	
 Panasonic Electric Works Fire & Security Technology Europe AB		EBL512 COM LOOPS CABLE LENGTH & TECHNICAL SPECIFICATIONS	
		DWG No.: 512-01	Edition 3 Sheet 1/1

Original Dwg A3L (420x297mm)

ALL DIMENSIONS IN mm.

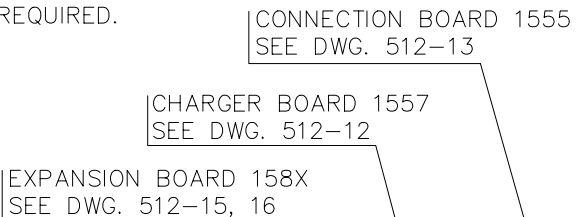
RevNo	Revision note	Date	Signature	Checked
2	EXP. BOARD TYPE NUMBER.	030221	JP	MÖ

TOP VIEW

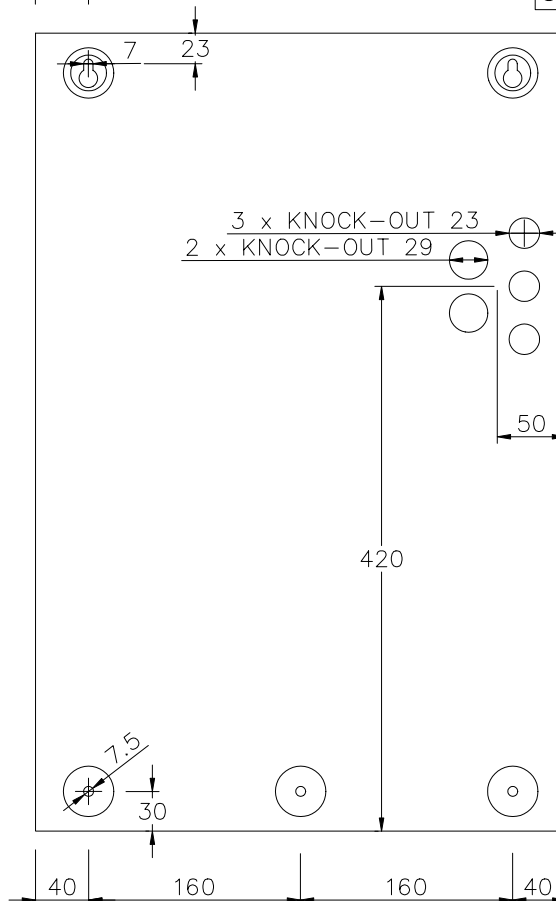


NOTE! THE LOOK VARY, ACCORDING TO TYPE & CONFIGURATION. EXPANSION BOARD(S) ONLY WHEN REQUIRED.

INSIDE VIEW

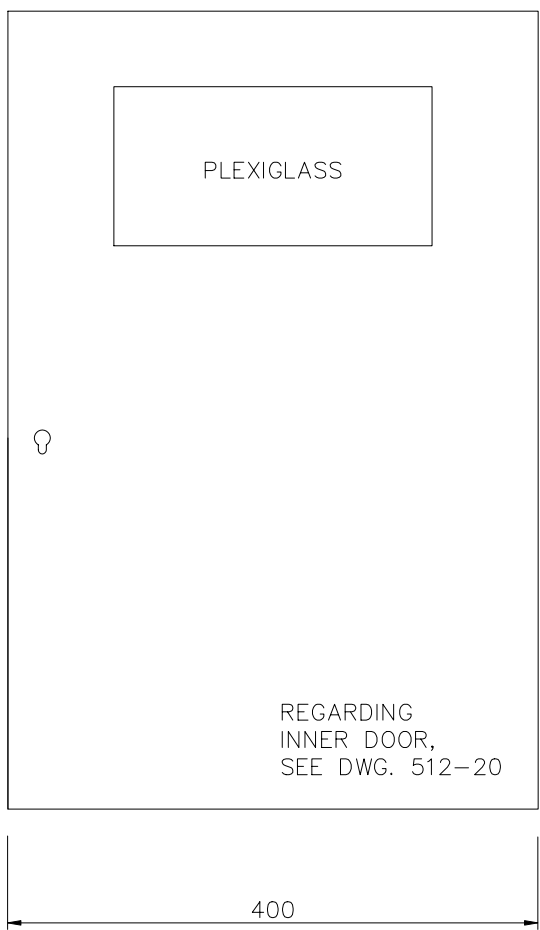
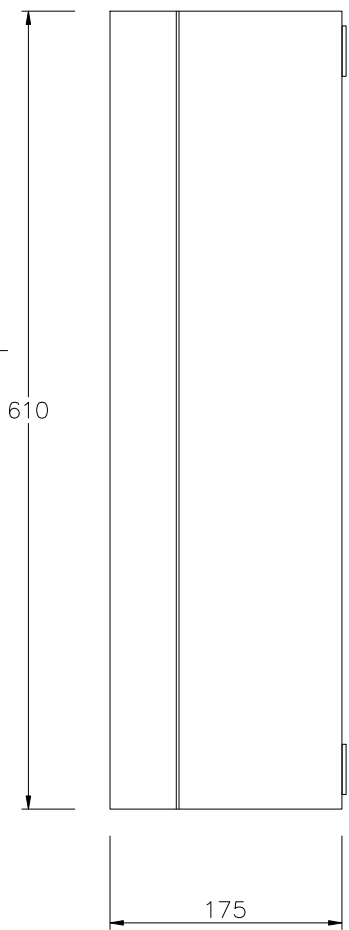


BACKSIDE VIEW



A  
B  
C  
D  
E  
F

A  
B  
C  
D  
E  
F



RIGHT SIDE VIEW

FRONT VIEW (DOOR)

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_112.dwg	Date 1999-06-18	Scale Approx. 1:4
 <b>Panasonic</b> Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 CONTROL UNITS 1548-1550		
			DIMENSIONS & OVERVIEW		
DWG No.: 512-11			Edition 2	Sheet 1/3	

Original Dwg A3L (420x297mm)

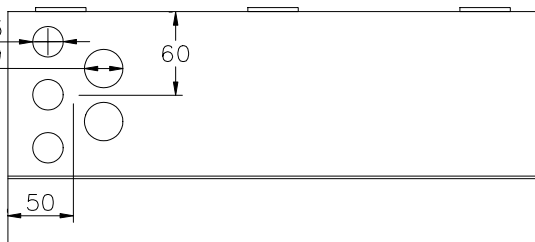
1 2 3 4 5 6 7 8

ALL DIMENSIONS IN mm.

RevNo	Revision note	Date	Signature	Checked
1	EXP. BOARD TYPE NUMBER.	030221	JP	MÖ

TOP VIEW

3 x KNOCK-OUT 23  
2 x KNOCK-OUT 29



NOTE! THE LOOK VARY, ACCORDING TO TYPE & CONFIGURATION. EXPANSION BOARD(S) ONLY WHEN REQUIRED.

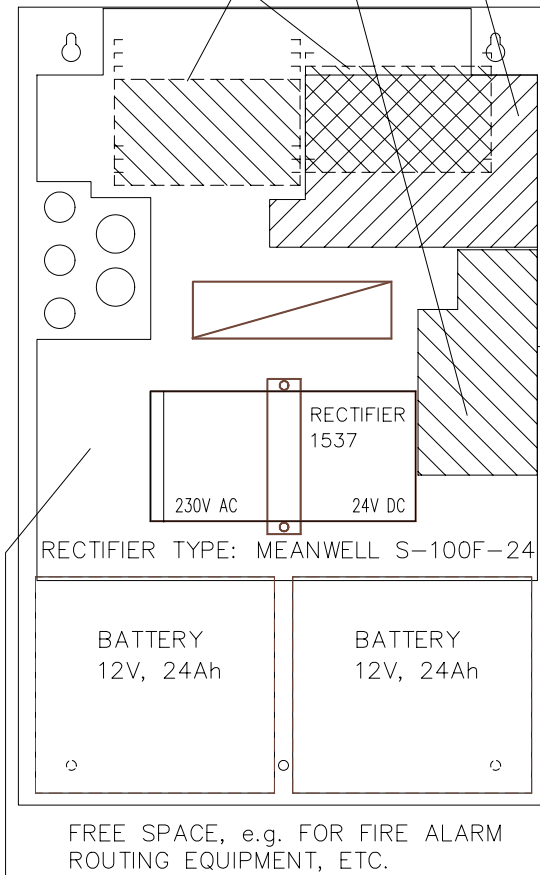
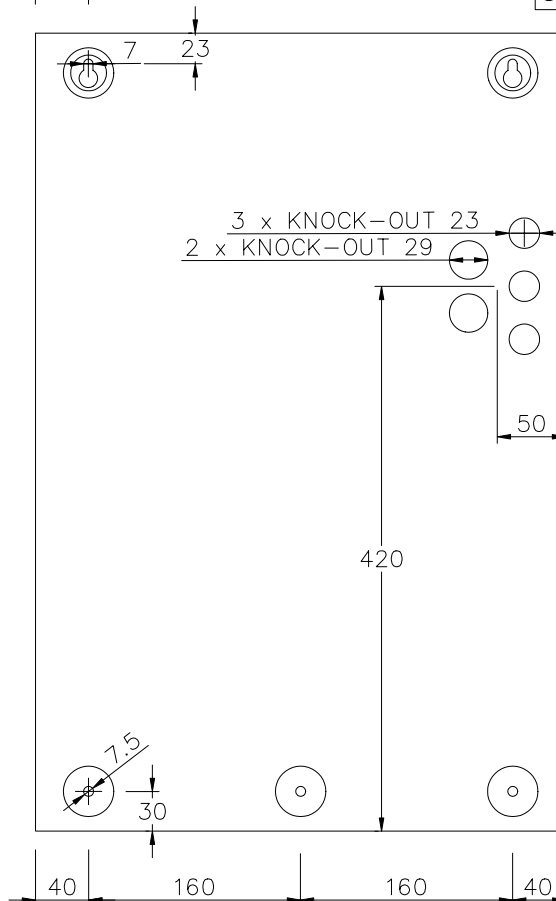
INSIDE VIEW

CONNECTION BOARD 1555  
SEE DWG. 512-13

CHARGER BOARD 1557  
SEE DWG. 512-12

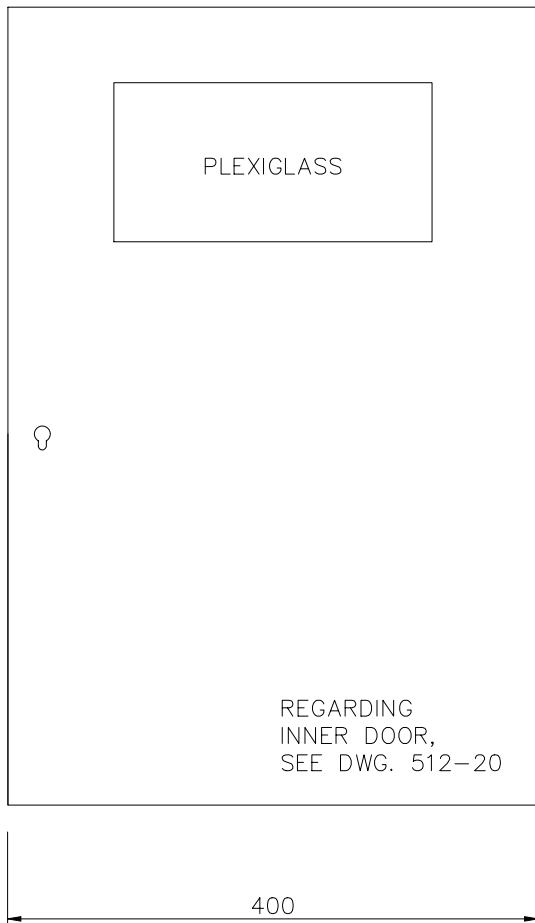
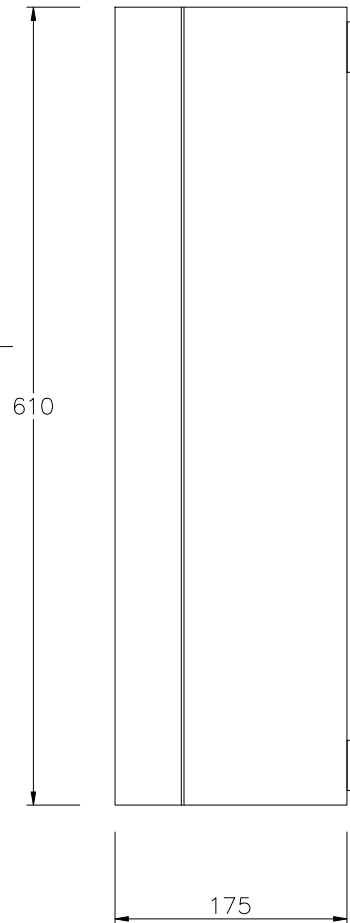
EXPANSION BOARD 158X  
SEE DWG. 512-15, 16

BACKSIDE VIEW



PLEXIGLASS

REGARDING INNER DOOR,  
SEE DWG. 512-20



RIGHT SIDE VIEW

FRONT VIEW (DOOR)

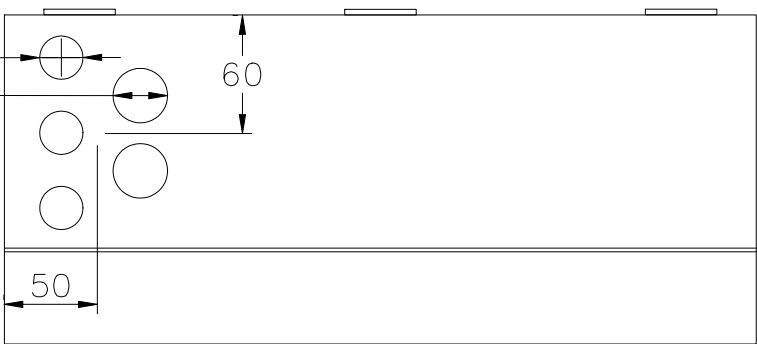
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Designed by JP	Checked by MÖ	Approved by - date RP / 2001-01-16	Filename 512_1121.dwg	Date 2001-01-16	Scale Approx. 1:4
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 CONTROL UNITS 1548-1550 DIMENSIONS & OVERVIEW		
			DWG No.: 512-11	Edition 1	Sheet 2/3

Original Dwg A3L (420x297mm)

ALL DIMENSIONS IN mm.

TOP VIEW

3 x KNOCK-OUT 23  
2 x KNOCK-OUT 29



NOTE! THE LOOK VARY, ACCORDING TO TYPE & CONFIGURATION. EXPANSION BOARD(S) ONLY WHEN REQUIRED.

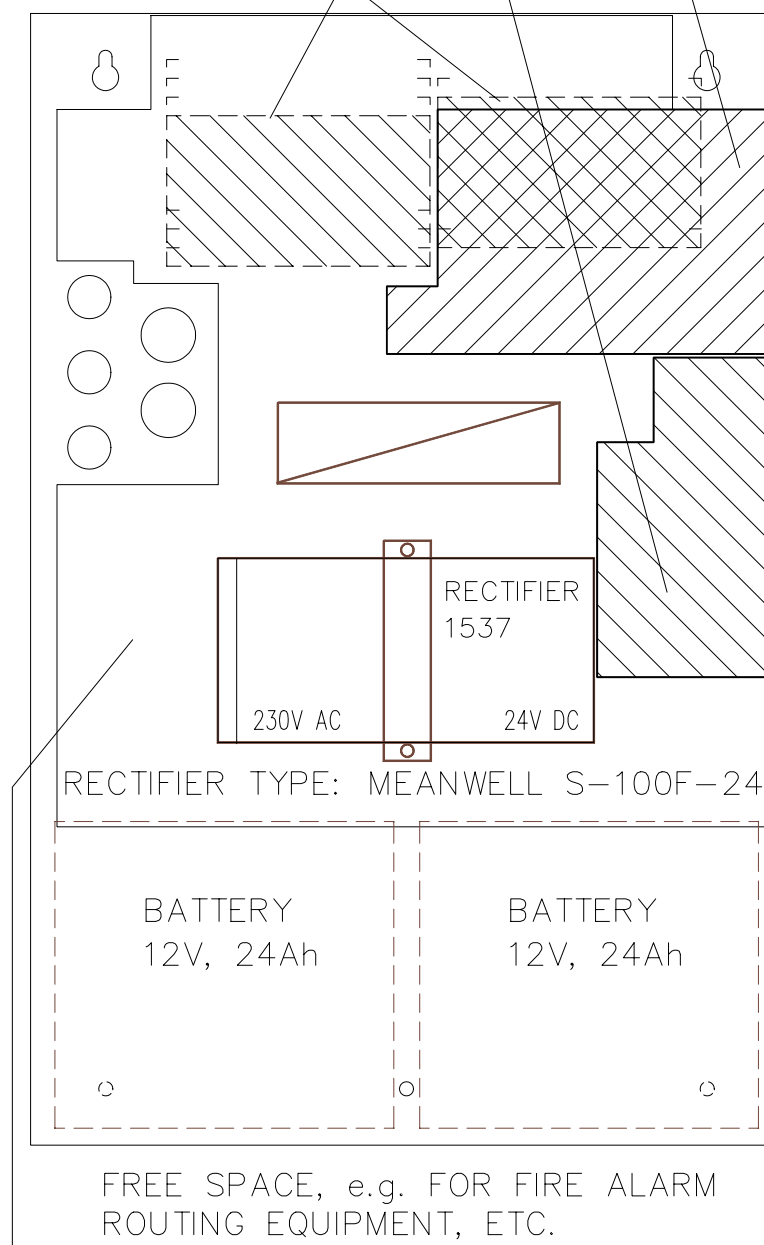
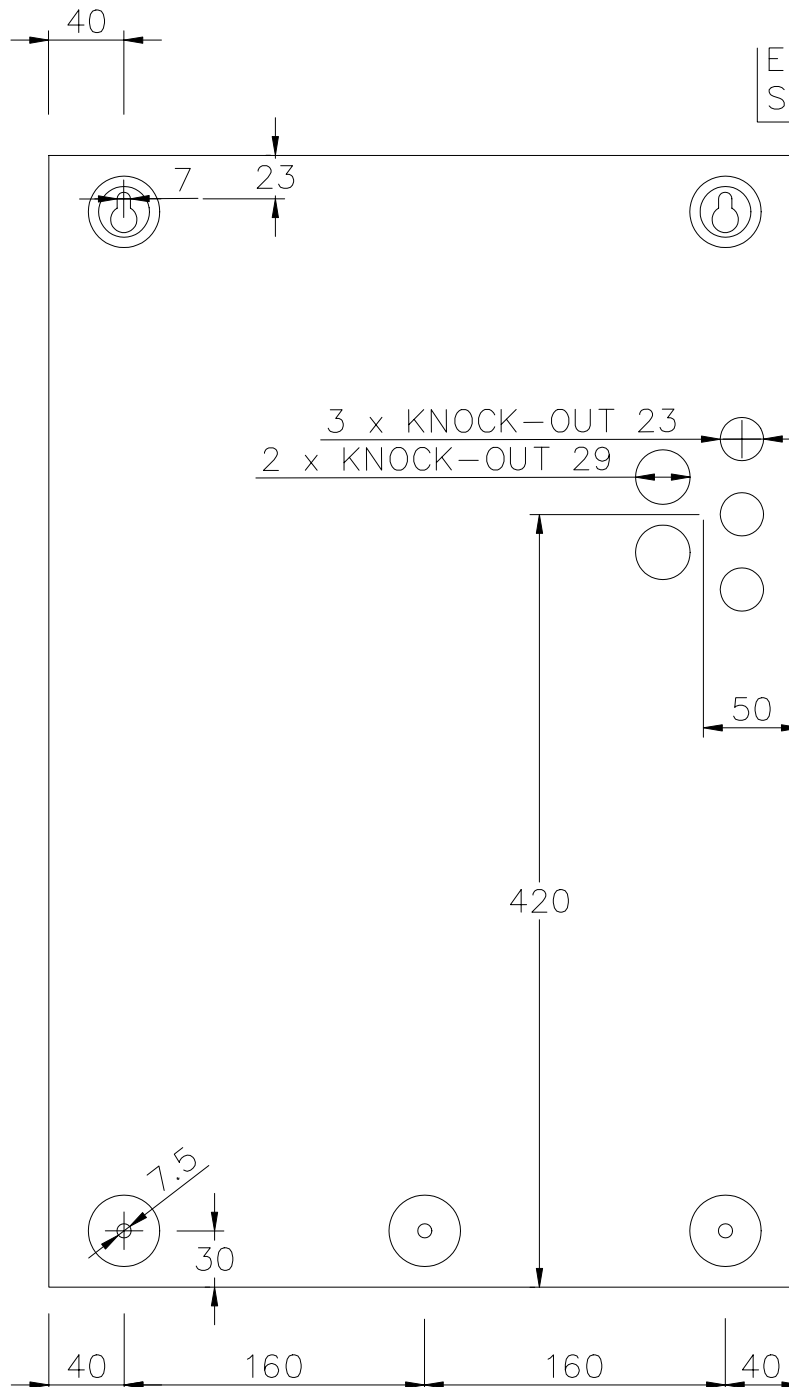
INSIDE VIEW

CONNECTION BOARD 1555  
SEE DWG. 512-13

CHARGER BOARD 1657  
SEE DWG. 512-14

EXPANSION BOARD 158X  
SEE DWG. 512-15, 16

BACKSIDE VIEW



A

B

C

D

E

F

A

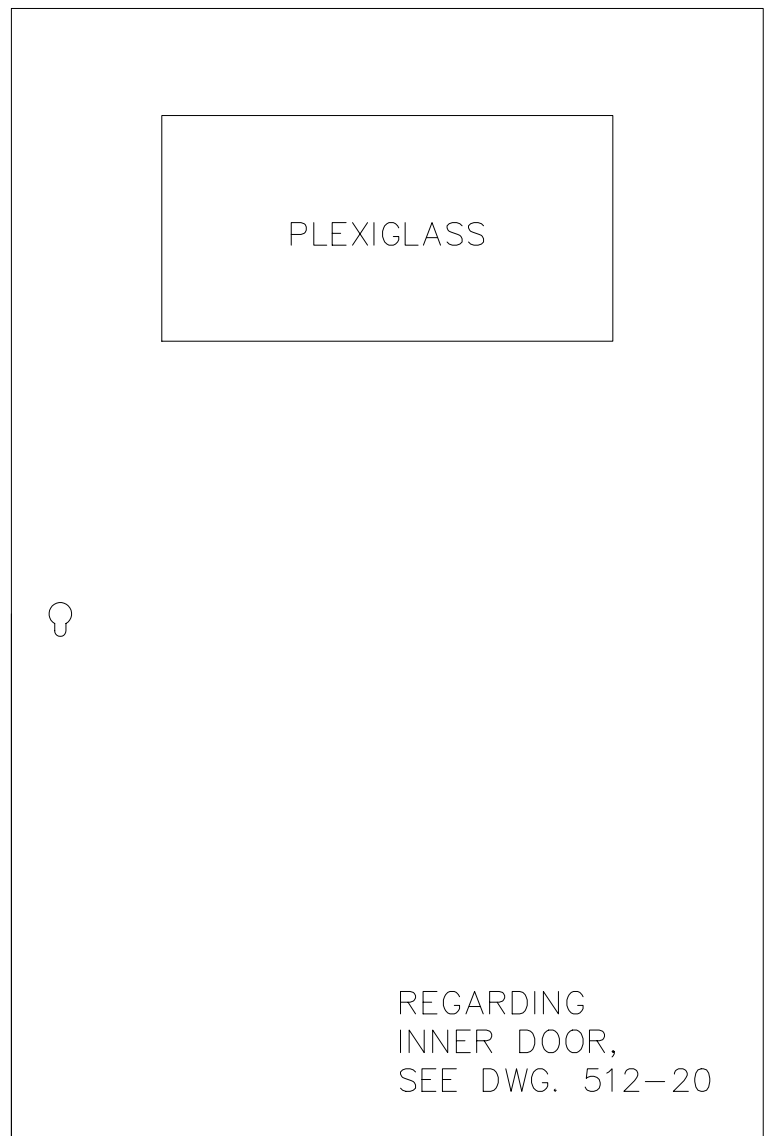
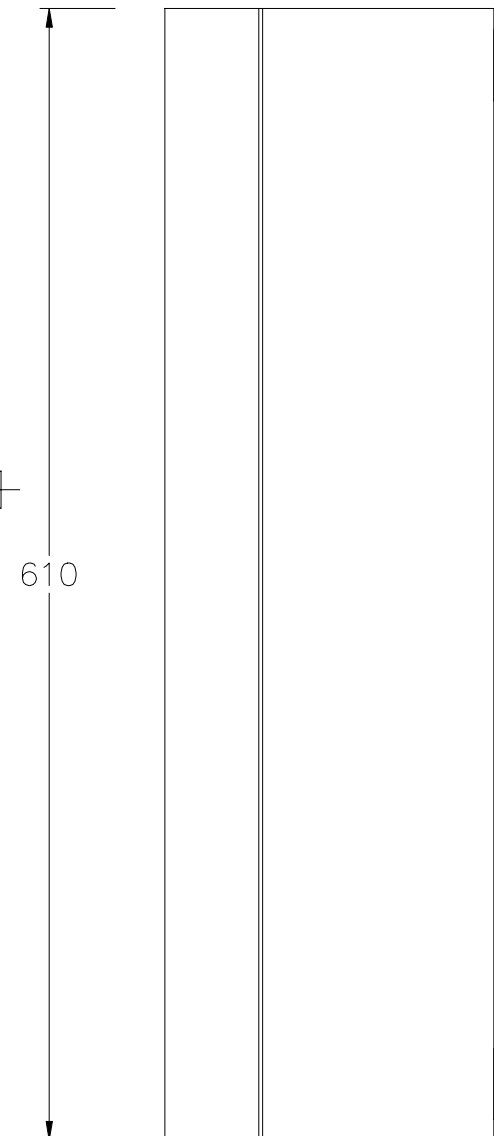
B

C

D

E

F



RIGHT SIDE VIEW

FRONT VIEW (DOOR)

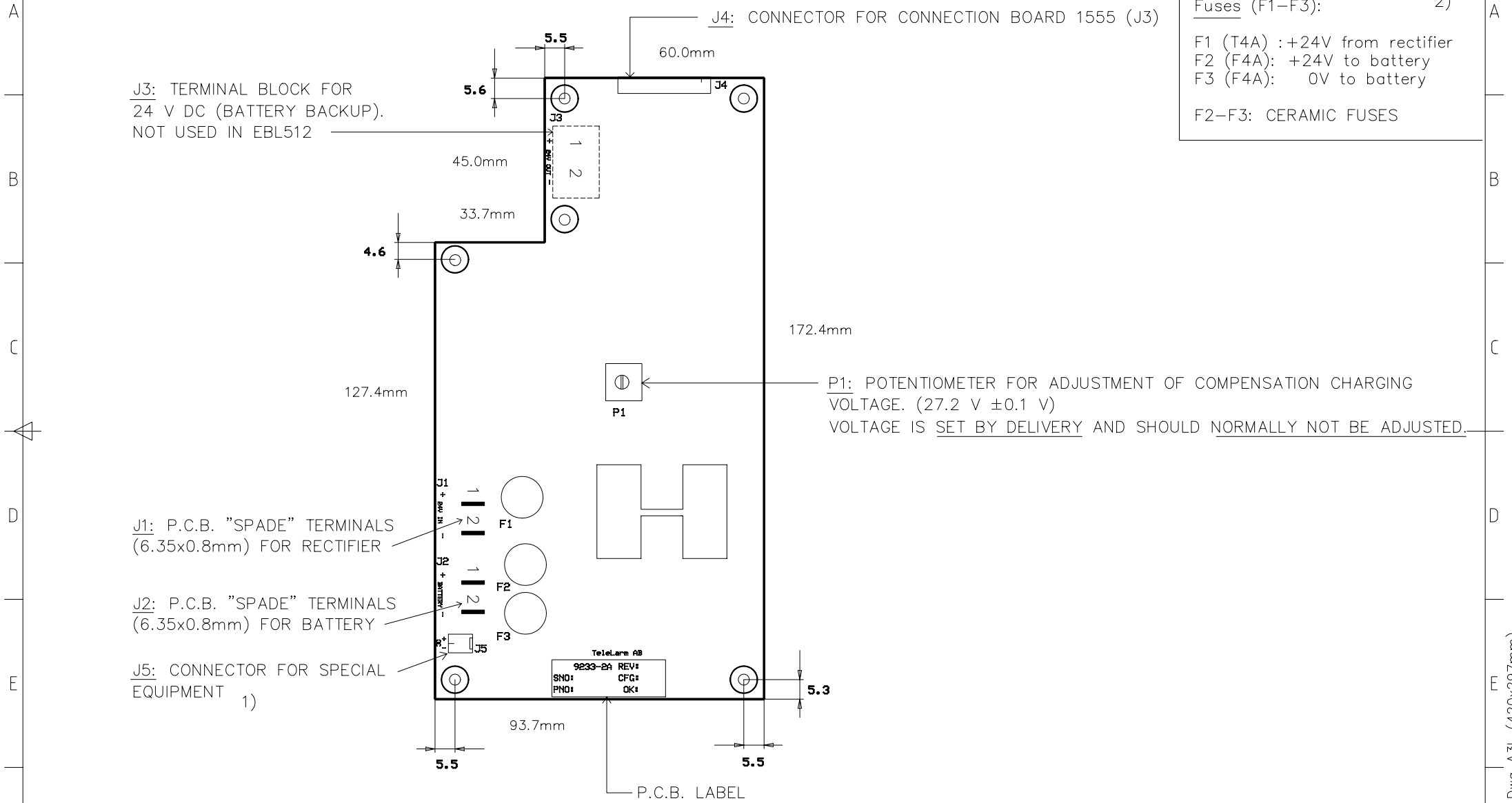
RevNo	Revision note	Date	Signature	Checked

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by JP	Checked by MÖ	Approved by - date RP / 2005-07-05	Filename 512_113_.dwg
Date 2005-07-05		Scale Approx. 1:4	
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 CONTROL UNITS 1548-1550 DIMENSIONS & OVERVIEW
DWG No.: 512-11		Edition 0	Sheet 3/3

Original Dwg A3L (420x297mm)

MOUNTED IN 1548-1550, SEE DWG. 512-11.

RevNo	Revision note	Date	Signature	Checked
2	DOUBLE J5 REMOVED. P1: INFORMATION ADDED.	010322	JP	MÖ



1) ACCORDING TO CONFIGURATION. NORMALLY PROVIDED WITH A LINK (JUMPER).  
 2) 24V IS THE RATED VOLTAGE. THE OPERATING VOLTAGE CAN BE HIGHER/LOWER.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_1212.dwg	Date 1999-06-02	Scale Approx. 1:1
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 CHARGER BOARD 1557 DIMENSIONS & OVERVIEW		
			DWG No.: 512-12		Edition 2

Original Dwg A3L (420x297mm)



Fuses (F1-F8 = 500 mA): 2)

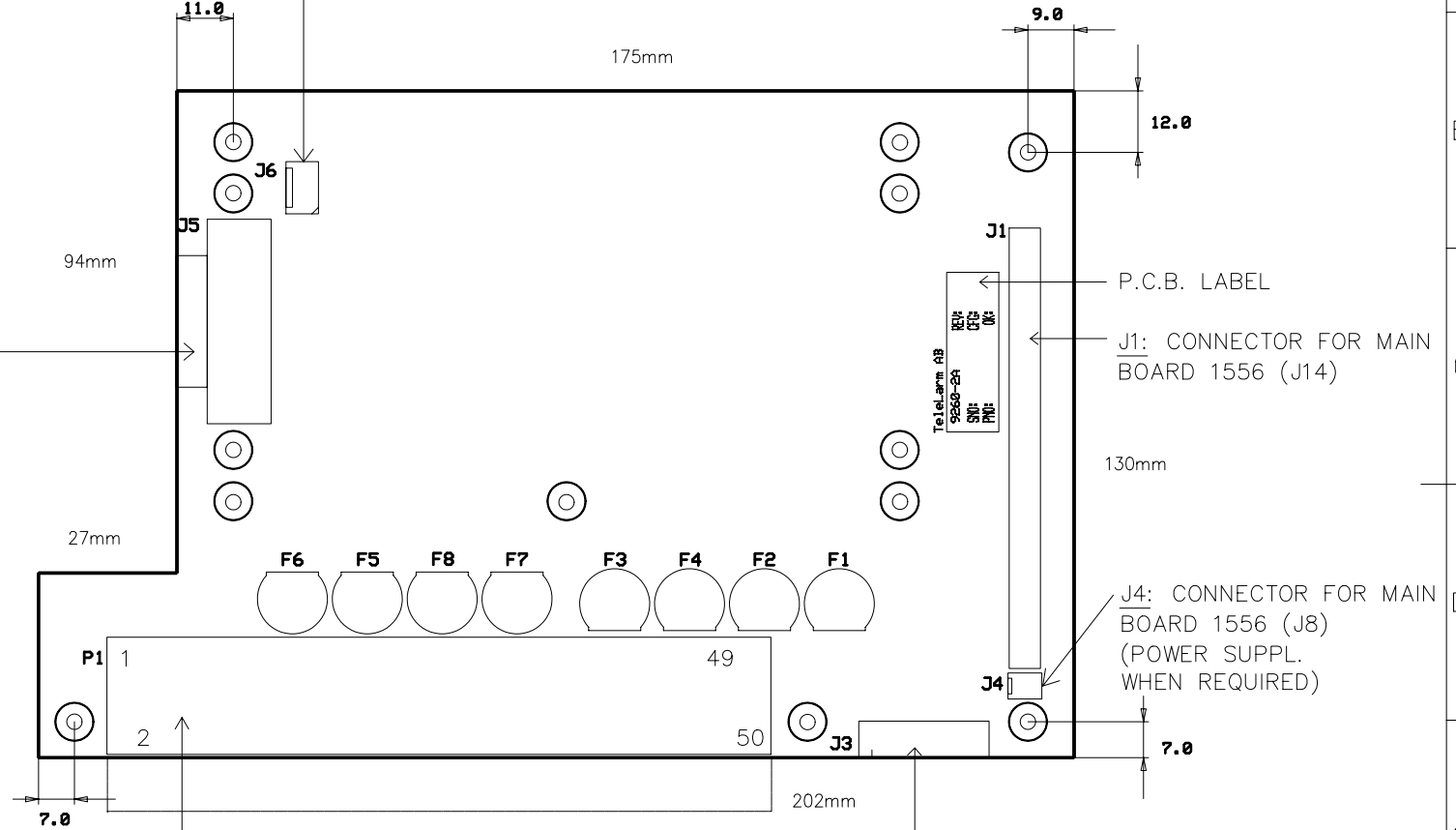
3) {

- F1: +24V to P1:37 (L.S.)
- F2: +24V to P1:21 (S2)
- P1:23 (S3)
- P1:39 (EXT)
- F3 : 0V to P1:38 (L.S.)
- F4 : 0V to P1:22 (S2)
- P1:24 (S3)
- P1:40 (EXT)
- F5 : 0V to P1:18 (S0)
- F6 : +24V to P1:17 (S0)
- F7 : 0V to P1:20 (S1)
- F8 : +24V to P1:19 (S1)

MOUNTED IN 1548-1550,  
SEE DWG. 512-11.

J6: EXTRA POWER SUPPLY FOR EXP. BOARDS 1581/1582.  
(NORMALLY NOT USED IN EBL512)

J5: "D" CONNECTOR FOR  
EXPANSION BOARD (K1)



P1: TERMINAL BLOCK FOR COM LOOPS,  
PROGRAMMABLE OUTPUTS / INPUTS,  
OUTPUTS FOR ROUTING EQUIPM. (ALARM TX),  
24 V DC FOR R.E. / EXT. EQUIPM.  
ALSO FOR TLON (NETWORK) WIRES (IN/OUT) WHEN REQUIRED. <sup>1)</sup>

J4: CONNECTOR FOR MAIN  
BOARD 1556 (J8)  
(POWER SUPPL.  
WHEN REQUIRED)

J3: CONNECTOR FOR  
CHARG. BOARD 1557 (J4)

1) TLON CONNECTION BOARD 1590 IS REQUIRED, SEE DWG. 61-512-22 & -23.  
2) 24V IS THE RATED VOLTAGE. THE OPERATING VOLTAGE CAN BE HIGHER/LOWER.  
3) F1, F2, F3 and F4 ARE ACCORDING TO CONFIG./CONVENTION.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by M0	Approved by - date RP / 1999-12-15	Filename 512_131_.dwg	Date 1999-06-02	Scale Approx: 1:1
 <b>Panasonic</b> Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 CONNECTION BOARD 1555 DIMENSIONS & OVERVIEW		
			DWG No.: 512-13	Edition 0	Sheet 1/1

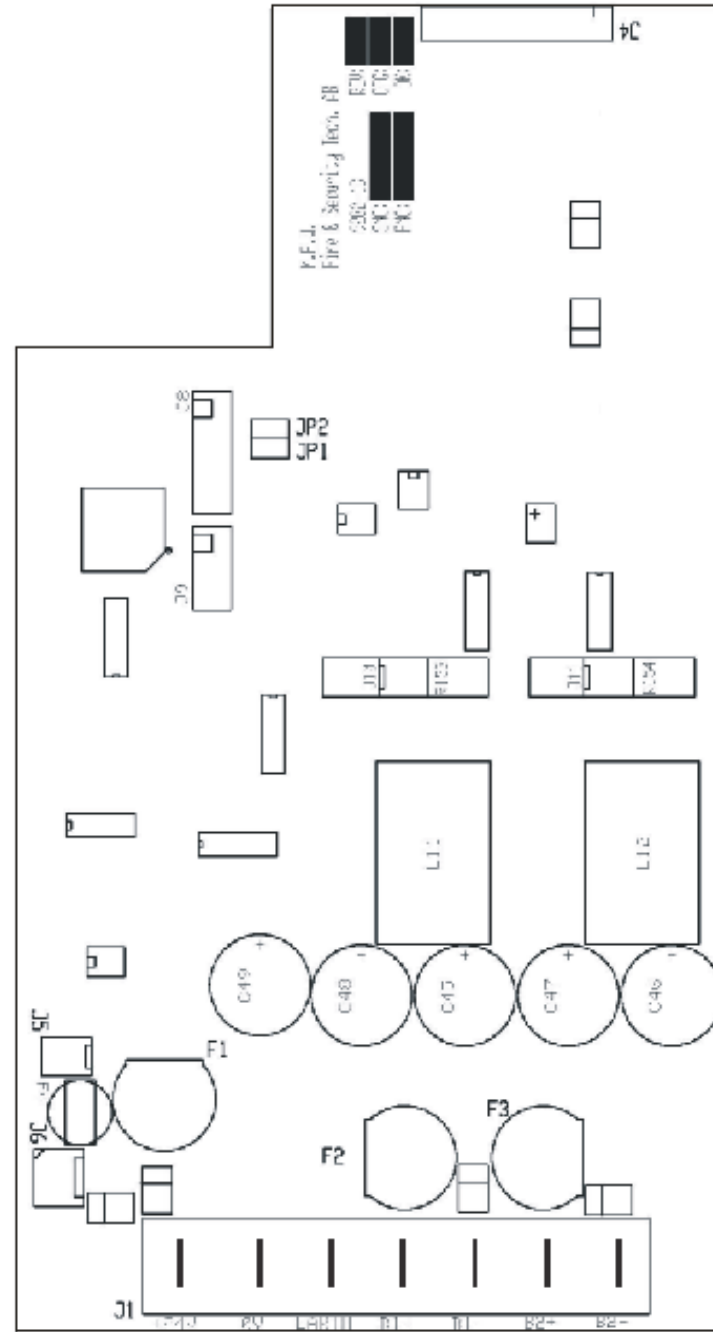
Original Dwg A3L (420x297mm)

MOUNTED IN 1548-1550, SEE DWG. 512-11, SHEET 3.

RevNo	Revision note	Date	Signature	Checked

P.C.B. LABEL

J4: CONNECTOR FOR CONNECTION BOARD 1555 (J3)



JUMPERS:

- JP1: Restart
- JP2: Open=Low current charging mode  
Shunted=high current charging mode

DIMENSIONS: 175 x 93.5mm

Fuses (F1-F3):

- F1 (T5 A): +24V from rectifier
- F2 (T5 A): + to/from battery no. 1
- F3 (T5 A): + to/from battery no. 2

F2-F3: CERAMIC FUSES

J1 (+24V/0V): P.C.B. TAB TERMINALS (6.35x0.8mm) FOR RECTIFIER

J1 (B2+/B2-): TAB TERMINALS (6.35x0.8mm) FOR BATTERY NO. 2

J1 (B1+/B1-): TAB TERMINALS (6.35x0.8mm) FOR BATTERY NO. 1

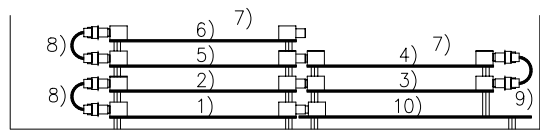
J1 (EARTH): NOT USED/MOUNTED IN EBL512

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by M0	Approved by - date RP / 2005-07-05	Filename 512_141_.dwg	Date 2005-07-05	Scale Approx. 1:1
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 CHARGER BOARD 1657		
			DIMENSIONS & OVERVIEW		
			Sheet 1/1		

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
2	EXP. BOARD 1587 ADDED.	030221	JP	MÖ

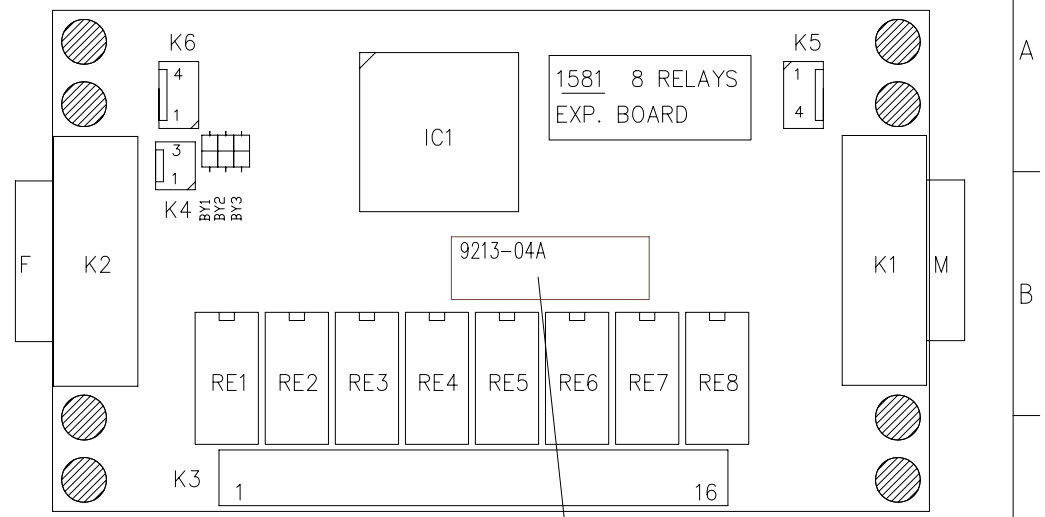
PRINCIPLE FOR MOUNTING OF EXPANSION BOARDS  
IN CONTROL UNITS 1548-1550:



EXPANSION BOARD(S)  
MOUNTED IN 1548-1550, WHEN REQUIRED.  
SEE DWG. 512-11.

FOR MORE INFORMATION, SEE EBL512  
PLANNING INSTRUCTIONS/PROGRAMME

- 1) EXPANSION BOARD No. 1
- 2) EXPANSION BOARD No. 2
- 3) EXPANSION BOARD No. 3
- 4) EXPANSION BOARD No. 4
- 5) EXPANSION BOARD No. 5
- 6) EXPANSION BOARD No. 6
- 7) 1582/1587 BOARDS SHOULD ALWAYS BE "ON TOP" (BECAUSE OF HIGH COMPONENTS).
- 8) CONNECTION CABLE (MALE CONNECTORS) 1585
- 9) CONNECTION CABLE (FEMALE CONNECTORS) 1586
- 10) CONNECTION BOARD 1555

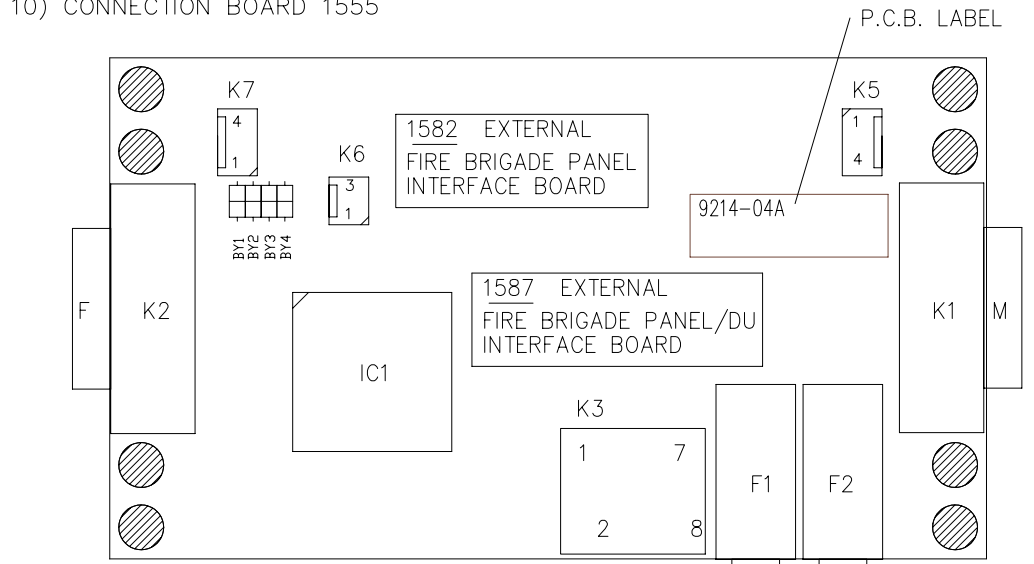


CONNECTORS:  
K3: 8 RELAY OUTPUTS  
K4: SERIAL INTERFACE (TTL LEVEL, NORMALLY NOT USED IN EBL512)  
K5+K6: EXT. POWER SUPPLY (NORMALLY NOT USED IN EBL512)

NOTE!  
DUE TO CONTINUAL DEVELOPMENT & IMPROVEMENT,  
THE BOARD LOOK MAY VARY.

M=MALE 15 WAYS "D" CONN.  
F=FEMALE 15 WAYS "D" CONN.

CONNECTIONS ACCORDING TO DWG 512-47.  
SIZE (L x W): 140 x 80mm



CONNECTORS:  
K3: EXT. FBP(s)

CONNECTORS:  
K6: SERIAL INTERFACE (TTL LEVEL)  
K5+K7: EXT. POWER SUPPLY  
(NORMALLY NOT USED IN EBL512)

SBUS CONNECTORS:  
K1: EXPANSION/CONNECTION BOARD (J5)  
K2: EXPANSION BOARD (K1)  
FUSES:  
F1, F2: 0,5 A; 24 V= (+/-).

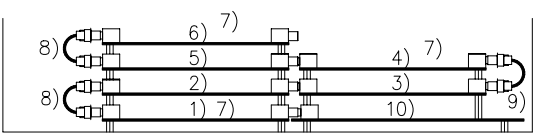
ADDRESS SETTING JUMPERS:  
BY1, BY2 AND BY3 (SEE PLANNING INSTRUCTIONS,  
IC1: CHAPT. EXPANSION BOARDS).  
MICRO PROCESSOR (MC68HC711E9),  
CONFIGURED FOR 1581, 1582 & 1587 RESP.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_1512.dwg	Date 1999-06-03	Scale Approx. 1:1
			EBL512 EXPANSION BOARDS 1581, 1582 & 1587 DIMENSIONS & OVERVIEW		
			DWG No.: 512-15		Edition 2

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
1	EXP. BOARD 1587 INFORMATION ADDED.	030221	JP	MÖ

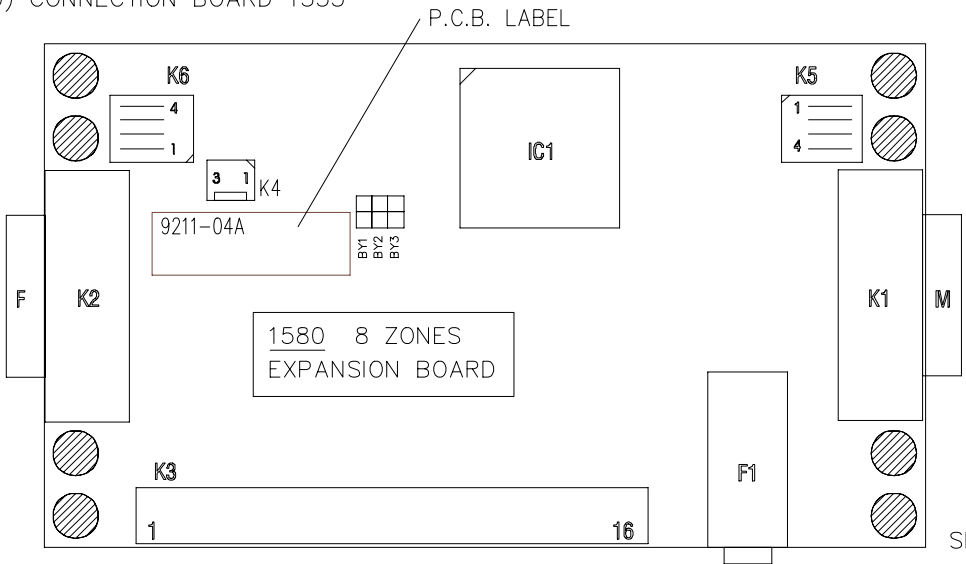
PRINCIPLE FOR MOUNTING OF EXPANSION BOARDS  
IN CONTROL UNITS 1548-1550:



EXPANSION BOARD(S)  
MOUNTED IN 1548-1550, WHEN REQUIRED.  
SEE DWG. 512-11.

- 1) EXPANSION BOARD No. 1
- 2) EXPANSION BOARD No. 2
- 3) EXPANSION BOARD No. 3
- 4) EXPANSION BOARD No. 4
- 5) EXPANSION BOARD No. 5
- 6) EXPANSION BOARD No. 6
- 7) 1582/1587 BOARDS SHOULD ALWAYS BE "ON TOP" (BECAUSE OF HIGH COMPONENTS).
- 8) CONNECTION CABLE (MALE CONNECTORS) 1585
- 9) CONNECTION CABLE (FEMALE CONNECTORS) 1586
- 10) CONNECTION BOARD 1555

FOR MORE INFORMATION, SEE EBL512  
PLANNING INSTRUCTIONS/PROGRAMME

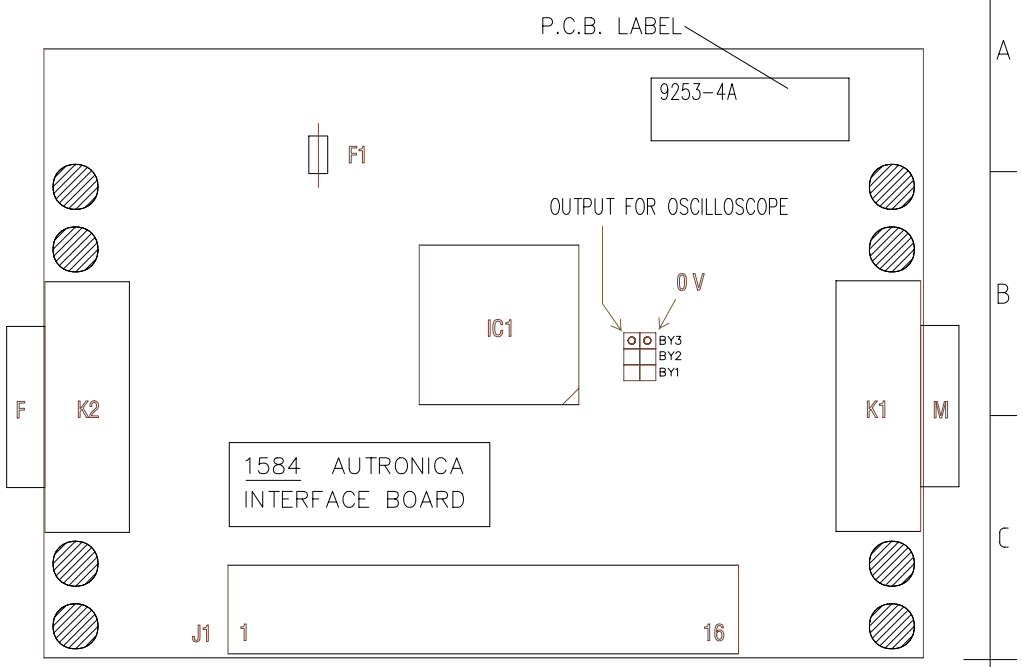


CONNECTORS:  
K3: INPUTS FOR 8 CONVENTIONAL  
DETECTOR ZONES

CONNECTORS:  
K4: SERIAL INTERFACE (TTL LEVEL, NORMALLY NOT USED IN EBL512)  
K5+K6: EXT. POWER SUPPLY  
(NORMALLY NOT USED IN EBL512)

SBUS CONNECTORS:  
K1: EXPANSION/CONNECTION BOARD (J5)  
K2: EXPANSION BOARD (K1)  
FUSES: 1580; F1=500mA  
1584; F1=T1A

ADDRESS SETTING JUMPERS:  
BY1, BY2 AND BY3 (SEE PLANNING INSTRUCTIONS,  
IC1: CHAPT. EXPANSION BOARDS).  
MICRO PROCESSOR (MC68HC711E9),  
CONFIGURED FOR 1580 & 1584 RESP.



CONNECTORS:  
J1: INPUTS FOR 4 BS4 LOOPS

SIZE (L x W): 140 x 97mm

M=MALE 15 WAYS "D" CONN.  
F=FEMALE 15 WAYS "D" CONN.

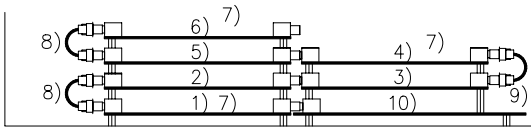
CONNECTIONS ACCORDING TO DWG 512-46 & -48.

NOTE!  
DUE TO CONTINUAL DEVELOPMENT & IMPROVEMENT,  
THE BOARD LOOK MAY VARY.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_1611.dwg	Date 1999-06-24	Scale Approx. 1:1
 Panasonic Electric Works Fire & Security Technology Europe AB		EBL512 EXPANSION BOARDS 1580 & 1584 DIMENSIONS & OVERVIEW			
		DWG No.: 512-16	Edition 1	Sheet 1/1	

Original Dwg A3L (420x297mm)

PRINCIPLE FOR MOUNTING OF EXPANSION BOARDS  
IN CONTROL UNITS 1548-1550:

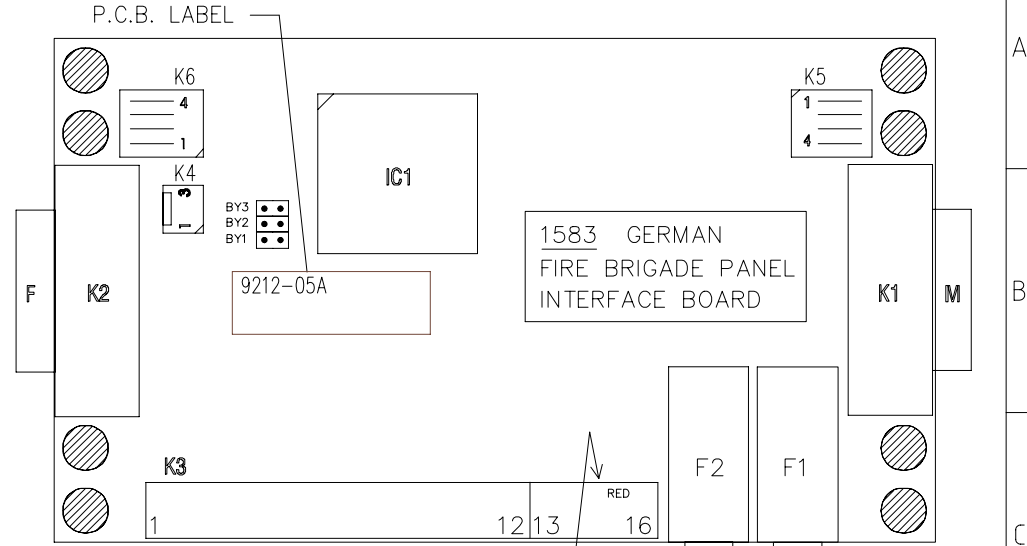


EXPANSION BOARD(S)  
MOUNTED IN 1548-1550, WHEN REQUIRED.  
SEE DWG. 512-11.

FOR MORE INFORMATION, SEE EBL512  
PLANNING INSTRUCTIONS/PROGRAMME

- 1) EXPANSION BOARD No. 1
- 2) EXPANSION BOARD No. 2
- 3) EXPANSION BOARD No. 3
- 4) EXPANSION BOARD No. 4
- 5) EXPANSION BOARD No. 5
- 6) EXPANSION BOARD No. 6
- 7) 1582/1587 BOARDS SHOULD ALWAYS BE "ON TOP" (BECAUSE OF HIGH COMPONENTS).
- 8) CONNECTION CABLE (MALE CONNECTORS) 1585
- 9) CONNECTION CABLE (FEMALE CONNECTORS) 1586
- 10) CONNECTION BOARD 1555

RevNo	Revision note	Date	Signature	Checked
1	EXP. BOARD 1587 INFORMATION ADDED.	030221	JP	MÖ



SIZE (L x W): 140 x 80mm

LÖSCHANLAGE

CONNECTORS:

K3, 1-12: IN- & OUTPUTS FOR GERMAN FBP (FEUERWEHR-BEDIENFELD)

K3, 13-16: IN- & OUTPUT FOR GERMAN EXTINGUISHING EQUIPMENT  
(VdS STANDARD-SCHNITTSTELLE "LÖSCHEN")

K5+K6: EXT. POWER SUPPLY (NORMALLY NOT USED IN EBL512)

M=MALE 15 WAYS "D" CONN.

F=FEMALE 15 WAYS "D" CONN.

CONNECTIONS ACCORDING TO DWG 512-50

NOTE!

DUE TO CONTINUAL DEVELOPMENT & IMPROVEMENT,  
THE BOARD LOOK MAY VARY.

SBUS CONNECTORS:

K1: EXPANSION/CONNECTION BOARD (J5)

K2: EXPANSION BOARD (K1)

FUSES: 1583; F1=F2=500mA

ADDRESS SETTING JUMPERS (NOT USED ON 1583):

BY1, BY2 AND BY3 (SEE PLANNING INSTRUCTIONS, CHAPTER  
"EXPANSION BOARDS").

IC1:  
MICROPROCESSOR (MC68HC711E9),  
CONFIGURED FOR 1583.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 2000-04-10	Filename 512_1711.dwg	Date 2000-04-10	Scale Approx. 1:1
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 EXPANSION BOARD 1583 DIMENSIONS & OVERVIEW		
			DWG No.: 512-17		Edition 1

ALL DIMENSIONS IN mm.

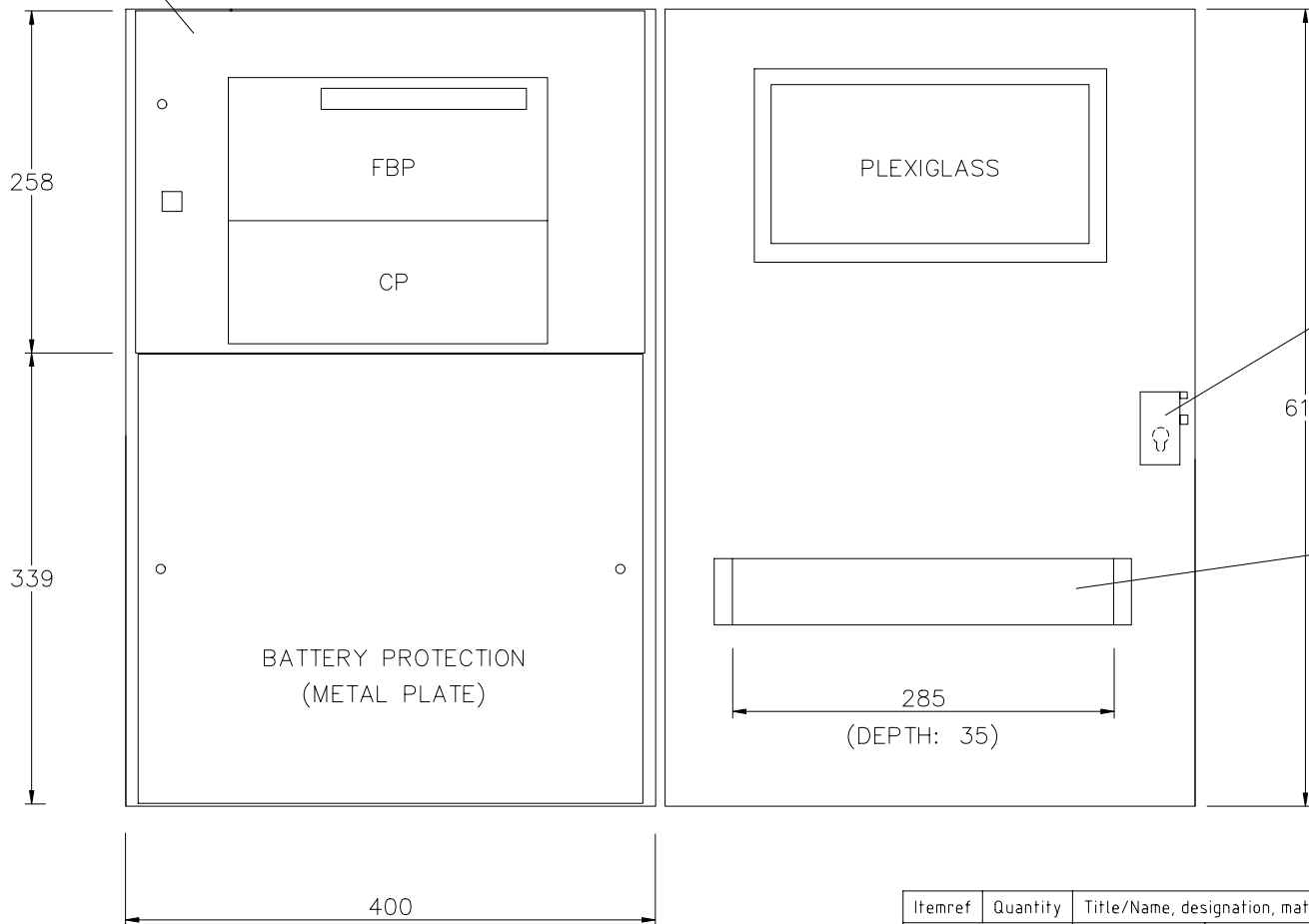
RevNo	Revision note	Date	Signature	Checked
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NOTE! THE LOOK VARY, ACCORDING TO TYPE & CONFIGURATION.

INNER DOOR  
SEE DWG. 512-21

FRONT VIEW (OPEN DOOR)

DOOR (BACKSIDE VIEW)



Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by M0	Approved by - date RP / 1999-12-15	Filename 512_201_.dwg	Date 1999-06-18	Scale Approx. 1:4	
 <b>Panasonic</b> Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 CONTROL UNITS 1548-1550 INNER DOOR & BATTERY PROTECTION, DIMENSIONS & OVERVIEW			
			DWG No.: 512-20		Edition 0	Sheet 1/1

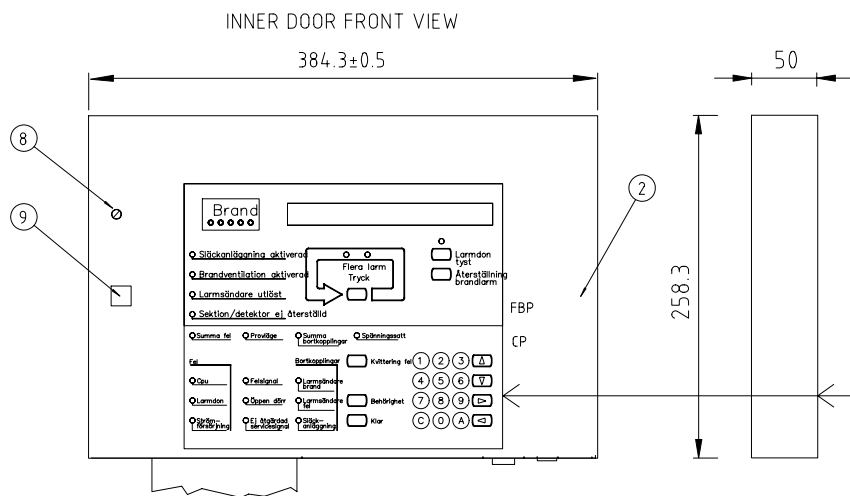
Original Dwg A3L (420x297mm)

NOTE! THE LOOK VARY, ACCORDING TO TYPE & CONFIGURATION.

RevNo	Revision note	Date	Signature	Checked
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- 2. Inner door (metal)
- 2b. Mounting plate on the back of the inner door
- 8. Door locking screw.
- 9. Type 1559 only: "Paper feed" button.  
Type 1558 only: Blanking cap.

NOTE! POS. 9 ACCORDING TO CONFIGURATION.



TYPE 1548 & 1549 ONLY AND ACCORDING TO CONFIGURATION.

ON THE INNER DOOR FRONT IS A FRONT ADHESIVE SITUATED:  
FIRE BRIGADE PANEL (FBP) & CONTROL PANEL (CP)  
(NOTE! SWEDISH FRONT ADHESIVE IS SHOWN IN THE FIGURE)

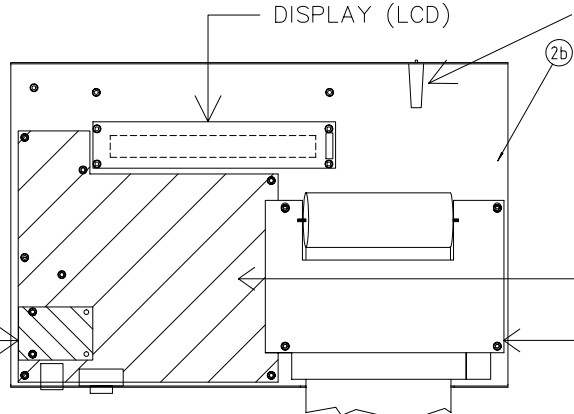
TYPE 1550.

INNER DOOR ONLY.

INNER DOOR BACKSIDE VIEW

TYPE 1548 & 1549 ONLY.  
DISPLAY (LCD)

TYPE 1548 & 1549 ONLY.  
DOOR SWITCH



MAIN BOARD 1556. SEE ALSO DWG. 512-22.

TYPE 1549 ONLY.

PRINTER 1558

SEE ALSO DWG. 512-24.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by M0	Approved by - date RP / 1999-12-15	Filename 512_211_.dwg	Date 1999-06-02	Scale Approx. 1:4
			EBL512 CONTROL UNITS 1548-1550 INNER DOOR DIMENSIONS & OVERVIEW		
			DWG No.: 512-21	Edition 0	Sheet 1/1

Original Dwg A3L (420x297mm)

MOUNTED ON THE INNER DOOR BACKSIDE,  
SEE DWG. 512-21.

RevNo	Revision note	Date	Signature	Checked
3	P1 ADDED. PL. --> OP. INSTR.	080212	JP	MÖ

A

B

C

D

E

F

A

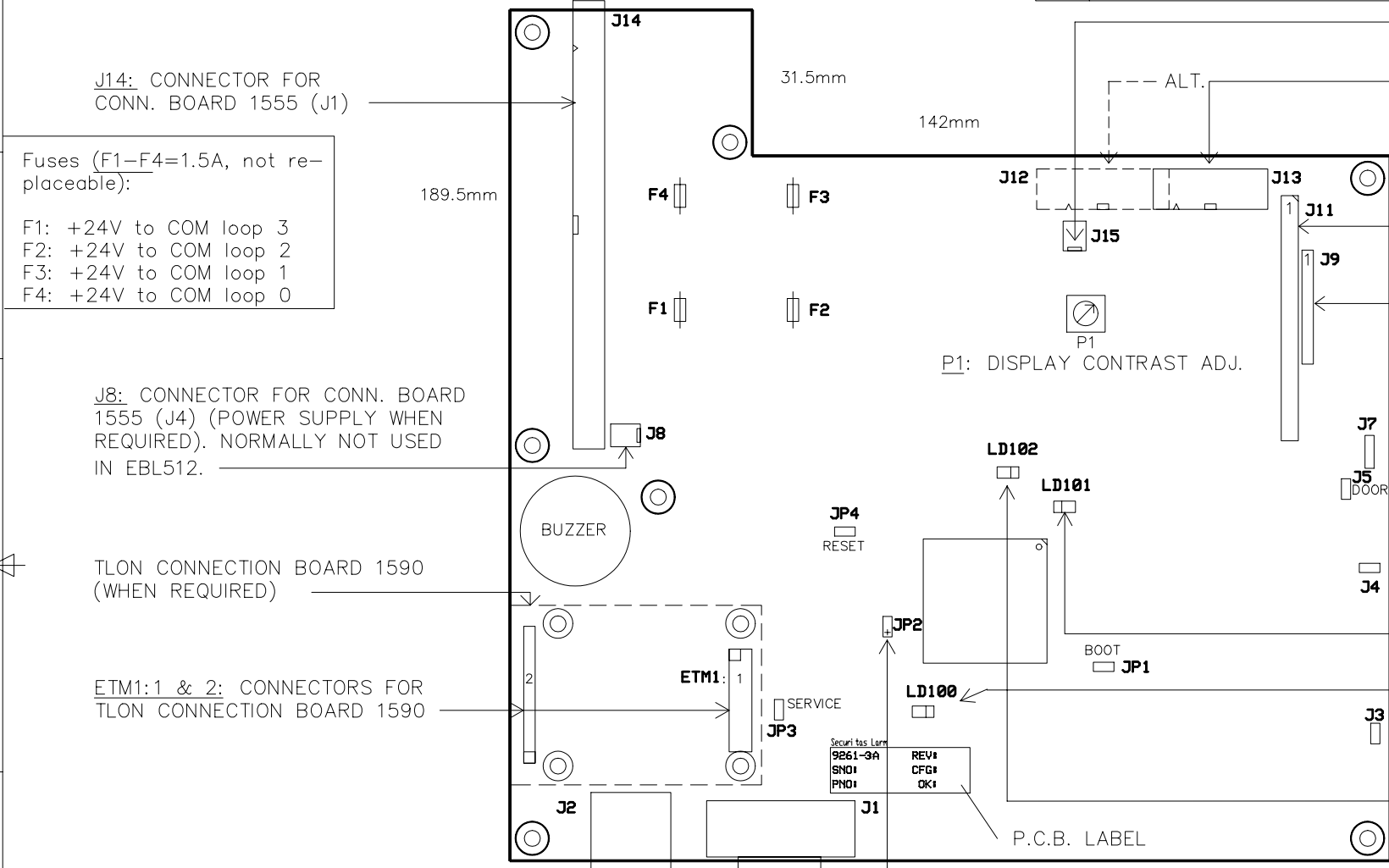
B

C

D

E

F



J15: CONNECTOR FOR DISPLAY BACKLIGHT (LCD FOR FBP / CP)  
 J13: CONNECTOR FOR DISPLAY (LCD FOR FBP / CP)  
 NOTE! J13 (NORMALLY) OR J12 ACCORDING TO CONFIGURATION.

J11: CONNECTOR (21 WAY) FOR THE FRONT ADHESIVE (FBP / CP)  
 J9: CONNECTOR (11 WAY) FOR THE FRONT ADHESIVE (FBP / CP) ONLY PINS 1-10 ARE USED!  
 158mm

J7: CONNECTOR FOR PRINTER 1558 (K3)  
 J5: CONNECTOR FOR OPEN DOOR SWITCH.

J4: CONNECTOR FOR PRINTER 1558 (K1)

LD101: LED, INDICATING FLASH MEMORY PROGRAMMING. 1)

LD100: LED, IND. TLON NETWORK COMMUNICATION. (TX / RX)

J3: CONNECTOR FOR PRINTER 1558 (K6)

LD102: LED IND. WATCHDOG FAULT (NORMALLY NOT LIT).

1) WHEN DOWNLOADING:  
 SITE SPECIFIC DATA (SSD), SW (SYSTEM PROGRAMME), EBL512 SETTINGS OR CONNECTING THE CONTROL UNIT TO A TLON NETWORK.

J14: CONNECTOR FOR CONN. BOARD 1555 (J1)

Fuses (F1-F4=1.5A, not replaceable):  
 F1: +24V to COM loop 3  
 F2: +24V to COM loop 2  
 F3: +24V to COM loop 1  
 F4: +24V to COM loop 0

J8: CONNECTOR FOR CONN. BOARD 1555 (J4) (POWER SUPPLY WHEN REQUIRED). NORMALLY NOT USED IN EBL512.

TLON CONNECTION BOARD 1590 (WHEN REQUIRED)

ETM1:1 & 2: CONNECTORS FOR TLON CONNECTION BOARD 1590

J2: MODULAR CONNECTOR (RJ45) FOR PC (FOR TLON CONFIGURATION; TLON MANAGER)

J1: "D" CONNECTOR (M) FOR PC WHEN PROGRAMMING (DOWNLOADING)/BACKUP OF SITE SPECIFIC DATA, SW DOWNLOADING, i.e. WHEN USING WIN512

**Jumpers:**

JP1: BOOT = Used when downloading software (SW) (i.e. the system programme) and EBL512 settings.

JP2: Oscilloscope connector.

JP3: SERVICE = Used when configuring the TLON network.

JP4: RESET = Used to reset/restart the system programme (SW).

JP2: TRIGGER PULSE WHEN:  
 • COMMUNICATION ERROR FROM COM LOOP UNIT(S) OCCURS.  
 • POLLING A SPECIFIC COM LOOP UNIT.  
 SEE ALSO OPERATING INSTR. (MENU H5/A8)

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_2213.dwg Date 1999-06-02 Scale Approx. 1:1



EBL512 MAIN BOARD 1556 DIMENSIONS & OVERVIEW	
DWG No.: 512-22	Edition 3 Sheet 1/1

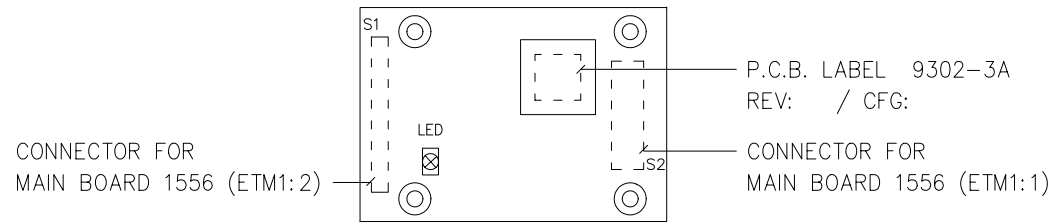
Original Dwg A3L (420x297mm)



RevNo	Revision note	Date	Signature	Checked
1	INFO REVISED & ADDED. NEW P.C.B.	080212	JP	MÖ

TLON CONNECTION BOARD 1590 (TLON FTT-10)

MOUNTED ON THE MAIN BOARD 1556, WHEN REQUIRED.<sup>1)</sup>  
SEE DWG. 512-22



THE BOARD IS SHOWN AS  
IT IS MOUNTED ON THE  
MAIN BOARD 1556

LED

- FLASHING (1s/1s) = NODE NOT CONFIGURED.
- FLASHING A COUPLE OF TIMES AT STARTUP, THEN CONT. OFF. (NORMAL STATE)
- CONT. ON = HW FAULT.

SIZE (L x W): 59 x 43 mm

CONNECTIONS, SE DWG. 512-44 & -49.

1) TWO OR MORE EBL512 CONTROL UNITS IN ONE SYSTEM.

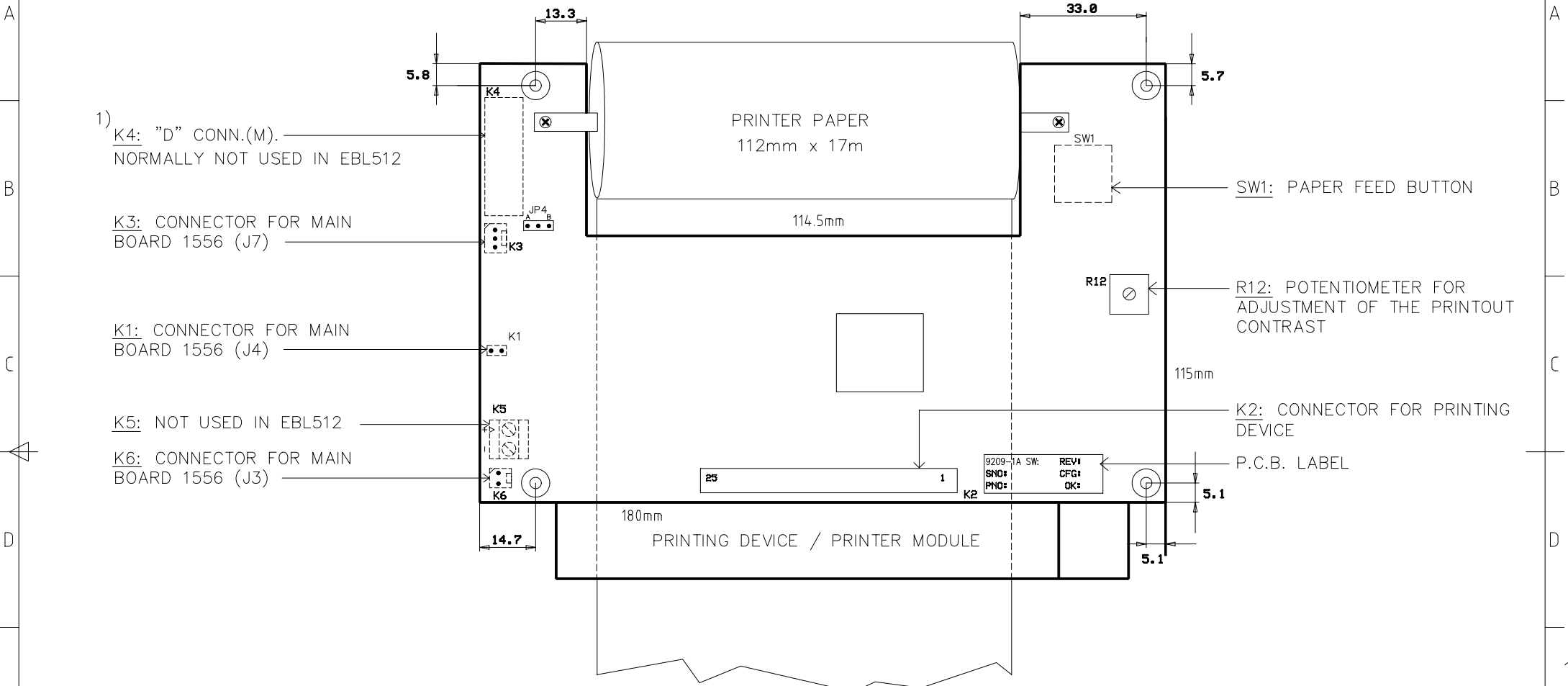
NODE = UNIT, COMMUNICATING WITH OTHER UNITS (NODES) VIA A TLON NETWORK.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_2311.dwg	Date 1999-06-02	Scale Approx. 1:1	
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 TLON CONNECTION BOARD 1590 DIMENSIONS & OVERVIEW			
			DWG No.: 512-23		Edition 1	Sheet 1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
1	INFO REVISED/ADDED. NEW P.C.B.	080212	JP	MÖ

MOUNTED ON THE INNER DOOR BACKSIDE, SEE DWG 512-21.



1) K4: "D" CONN.(M).  
NORMALLY NOT USED IN EBL512

K3: CONNECTOR FOR MAIN  
BOARD 1556 (J7)

K1: CONNECTOR FOR MAIN  
BOARD 1556 (J4)

K5: NOT USED IN EBL512

K6: CONNECTOR FOR MAIN  
BOARD 1556 (J3)

SW1: PAPER FEED BUTTON

R12: POTENTIOMETER FOR  
ADJUSTMENT OF THE PRINTOUT  
CONTRAST

K2: CONNECTOR FOR PRINTING  
DEVICE

P.C.B. LABEL

NOTE! THE LOOK VARY, ACCORDING TO CONFIGURATION.

PRINTER 1558 IS FACTORY MOUNTED IN CONTROL UNIT 1549.  
PRINTER 1558 IS AN OPTION FOR CONTROL UNIT 1548.

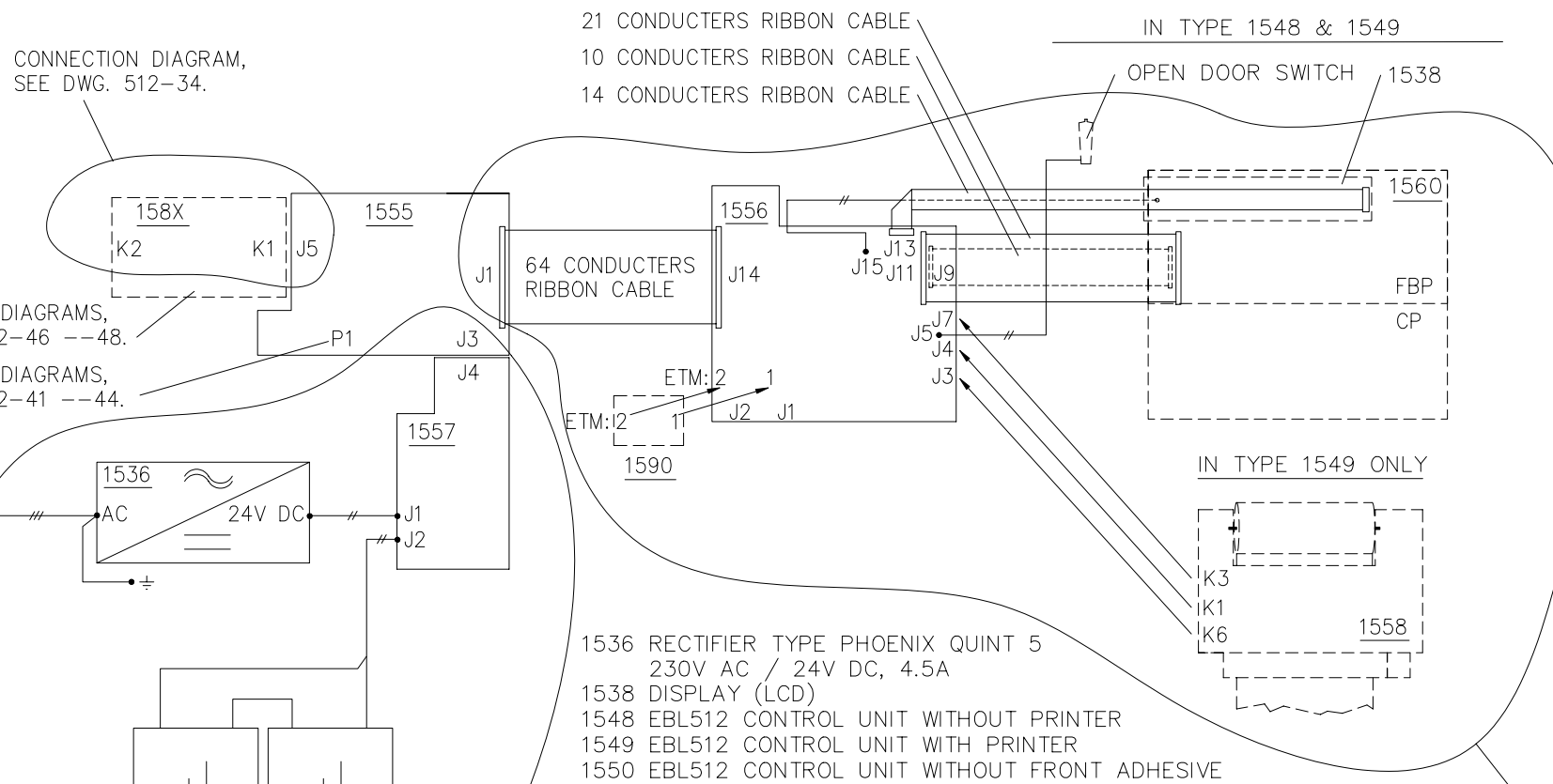
1) WHEN 1558 IS CONN. VIA K4 (INSTEAD OF K3),  
JUMPER JP4 SHALL BE SHUNTED IN POS. "B".

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_2411.dwg	Date 1999-06-03	Scale Approx. 1:1
			EBL512 PRINTER 1558 DIMENSIONS & OVERVIEW		
			DWG No.: 512-24		Edition 1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
2	EXP. BOARD 1587 ADDED.	030221	JP	MÖ

INSIDE THE HOUSING      IN THE INNER DOOR



CONNECTION DIAGRAM, SEE DWG. 512-34.

CONNECTION DIAGRAMS, SEE DWG. 512-46 --48.

CONNECTION DIAGRAMS, SEE DWG. 512-41 --44.

MAINS 230V AC

BATTERY, 2x12V, NORMALLY 24 Ah

CONNECTION DIAGRAM, SEE DWG. 512-32, SHEET 1.

21 CONDUCTORS RIBBON CABLE  
10 CONDUCTORS RIBBON CABLE  
14 CONDUCTORS RIBBON CABLE

IN TYPE 1548 & 1549

OPEN DOOR SWITCH 1538

ETM:2 11 1  
1590

IN TYPE 1549 ONLY

CONNECTION DIAGRAM, SEE DWG. 512-33.

- 1536 RECTIFIER TYPE PHOENIX QUINT 5  
230V AC / 24V DC, 4.5A
- 1538 DISPLAY (LCD)
- 1548 EBL512 CONTROL UNIT WITHOUT PRINTER
- 1549 EBL512 CONTROL UNIT WITH PRINTER
- 1550 EBL512 CONTROL UNIT WITHOUT FRONT ADHESIVE
- 1555 CONNECTION BOARD
- 1556 MAIN BOARD
- 1557 CHARGER BOARD
- 1) 1558 PRINTER
- 1560 FRONT ADHESIVE; FIRE BRIGADE PANEL (FBP) & CONTROL PANEL (CP)
- 2) 1580 8 ZONES EXPANSION BOARD
- 2) 1581 8 RELAYS EXPANSION BOARD
- 2) 1582 EXTERNAL FIRE BRIGADE PANEL INTERFACE BOARD
- 2) 1584 AUTRONICA INTERFACE BOARD
- 2) 1587 EXTERNAL FIRE BRIGADE PANEL/DU INTERFACE BOARD
- 3) 1590 TION CONNECTION BOARD

- 1) OPTION IN 1548.
- 2) OPTION WHEN REQUIRED.
- 3) OPTION WHEN REQUIRED (i.e. INCL. IN 1550).

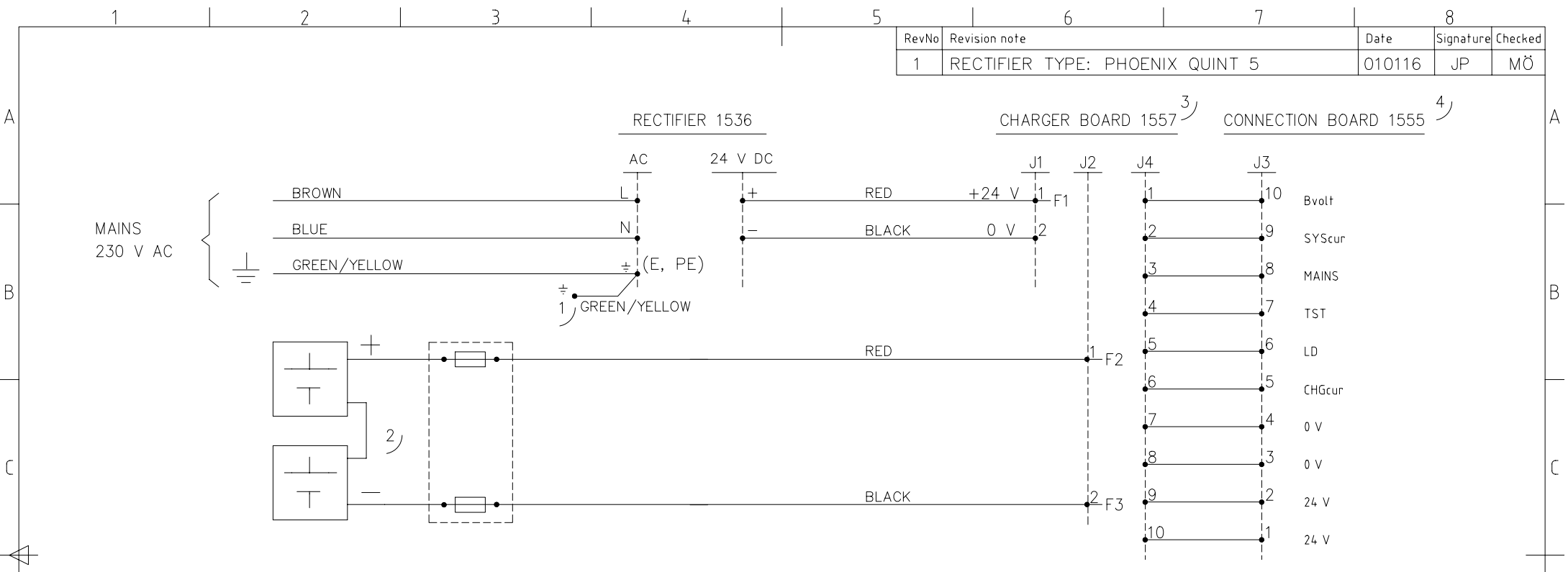
Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_3112.dwg	Date 1999-07-02	Scale Approx. 1:4
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 CONTROL UNITS 1548-1550 BLOCK DIAGRAM		
			DWG No.: 512-31		Edition 2

Original Dwg A3L (420x297mm)





RevNo	Revision note	Date	Signature	Checked
1	RECTIFIER TYPE: PHOENIX QUINT 5	010116	JP	MÖ



1) ESD PROTECTION IS TO BE CONNECTED TO THIS POINT.

2) BATTERIES (VARTA ACCU CF TYPE 12 - 24)  
SEALED LEAD-ACID 2 x 12 V, 24 Ah  
PLACED IN THE CONTROL UNIT. CABLES 2.5 mm<sup>2</sup>.

NOTE!

WHEN BATTERIES WITH LARGER CAPACITY ARE REQUIRED, THESE HAVE TO BE PLACED OUTSIDE THE CONTROL UNIT.  
EXT. BATTERY FUSES MIGHT BE REQUIRED.  
CABLE FOR BATTERIES <--> FUSES: MIN. 6 mm<sup>2</sup>.  
CABLE FOR EBL512 <--> FUSES: MIN. 4 mm<sup>2</sup>.

3) CHARGER BOARD 1557, SEE DWG. 512-12.

4) CONNECTION BOARD 1555, SEE DWG. 512-13.

FUSES (ON THE CHARG. BOARD 1557) 3)

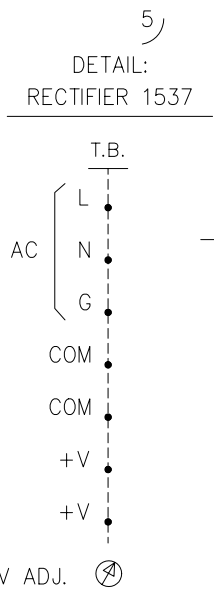
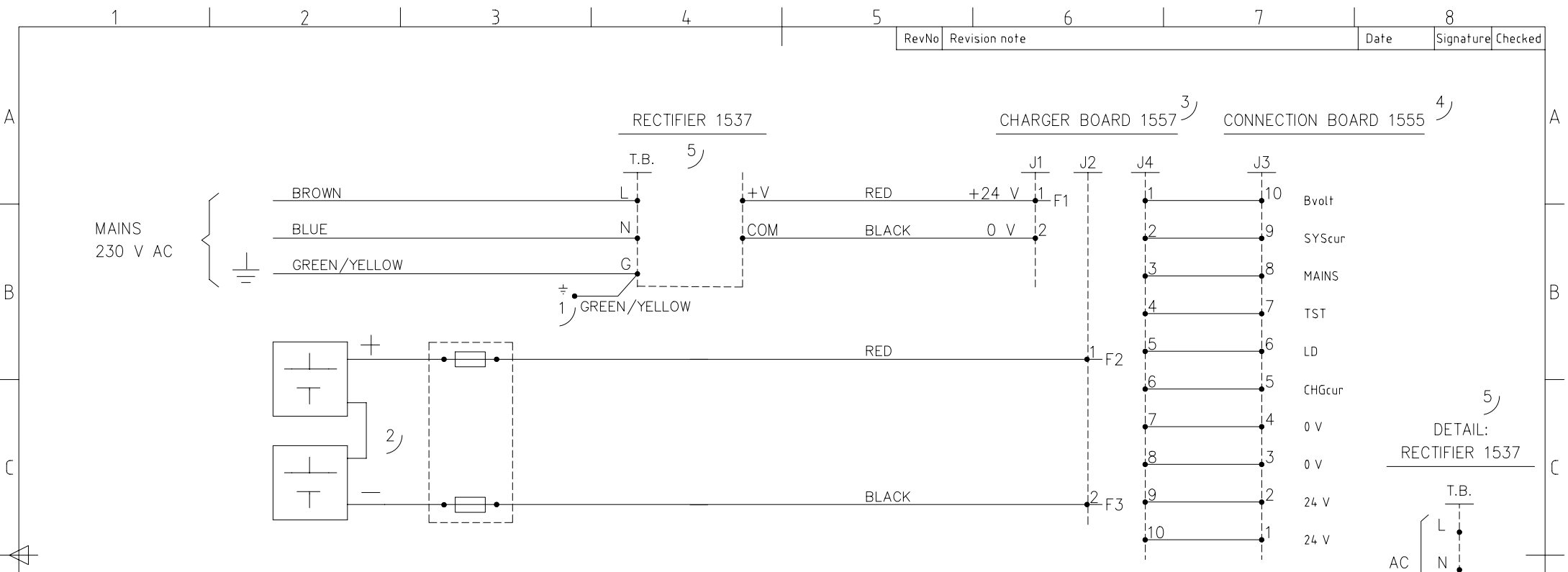
F1 = T4 A  
F2-F3 = F4 A, CERAMIC

CONNECTION'S OVERVIEW, SEE DWG. 512-31, SHEET 1.

NOTE! 24 V (12 V) IS THE RATED VOLTAGE. THE OPERATING VOLTAGE CAN BE HIGHER/LOWER.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_3211.dwg	Date 1999-06-04	Scale -
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 CONTROL UNITS 1548-1550 POWER SUPPLY CONNECTION DIAGRAM		
			DWG No.: 512-32	Edition 1	Sheet 1/3

Original Dwg A3L (420x297mm)



1) ESD PROTECTION IS TO BE CONNECTED TO THIS POINT.

2) BATTERIES (VARTA ACCU CF TYPE 12 - 24) SEALED LEAD-ACID 2 x 12 V, 24 Ah PLACED IN THE CONTROL UNIT. CABLES 2.5 mm<sup>2</sup>.

NOTE!  
 WHEN BATTERIES WITH LARGER CAPACITY ARE REQUIRED, THESE HAVE TO BE PLACED OUTSIDE THE CONTROL UNIT.  
 EXT. BATTERY FUSES MIGHT BE REQUIRED.  
 CABLE FOR BATTERIES <--> FUSES: MIN. 6 mm<sup>2</sup>.  
 CABLE FOR EBL512 <--> FUSES: MIN. 4 mm<sup>2</sup>.

3) CHARGER BOARD 1557, SEE DWG. 512-12.  
 4) CONNECTION BOARD 1555, SEE DWG. 512-13.

FUSES (ON THE CHARG. BOARD 1557) 3)  
 F1 = T4 A  
 F2-F3 = F4 A, CERAMIC

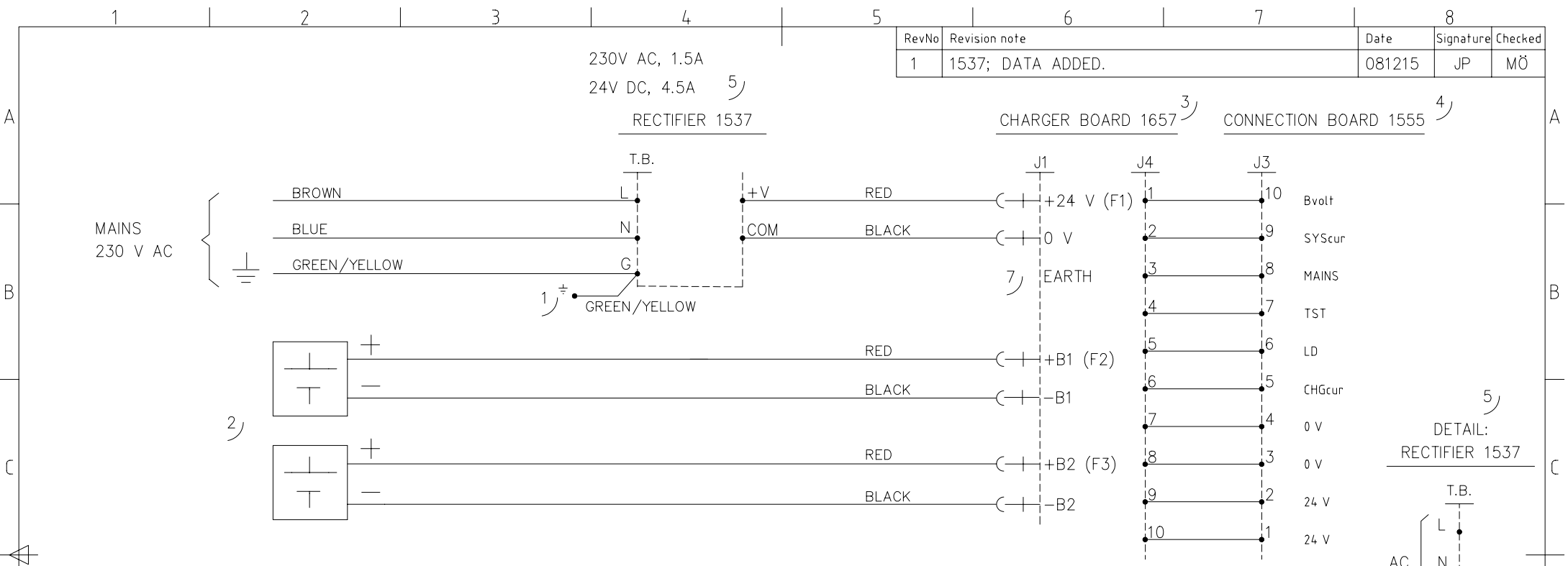
CONNECTION'S OVERVIEW, SEE DWG. 512-31, SHEET 2.

NOTE! 24 V (12 V) IS THE RATED VOLTAGE. THE OPERATING VOLTAGE CAN BE HIGHER/LOWER.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by M0	Approved by - date RP / 2001-01-16	Filename 512_322_dwg	Date 2001-01-16	Scale -
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 CONTROL UNITS 1548-1550 POWER SUPPLY CONNECTION DIAGRAM		
			DWG No.: 512-32	Edition 0	Sheet 2/3

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
1	1537; DATA ADDED.	081215	JP	MÖ



FUSES (ON THE CHARG. BOARD 1657)  
 F1 = T5 A  
 F2-F3 = T5 A, CERAMIC

- 1) ESD PROTECTION IS TO BE CONNECTED TO THIS POINT.
- 2) BATTERIES, e.g. SEALED LEAD-ACID 2 x 12 V, 24/27 Ah. CAN BE PLACED INSIDE THE CONTROL UNIT.  
NOTE!  
WHEN BATTERIES WITH LARGER CAPACITY ( $\leq 60$  Ah) ARE REQUIRED, THESE HAVE TO BE PLACED OUTSIDE THE CONTROL UNIT.  
NATIONAL REGULATIONS HAVE TO BE FOLLOWED.  
CABLES FOR EXTERNAL BATTERIES: MAX. 3 m & MIN. 4 mm<sup>2</sup>.
- 3) CHARGER BOARD 1657, SEE DWG. 512-14.
- 4) CONNECTION BOARD 1555, SEE DWG. 512-13.
- 6) FACTORY ADJUSTED TO 24 V. DO NOT USE IF NOT NECESSARY.
- 7) NOT USED/MOUNTED IN EBL512.

6) POT: +V ADJ. ( $\pm 10\%$ )

EBL512 BLOCK DIAGRAM, SEE DWG. 512-31, SHEET 3.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by JP	Checked by MÖ	Approved by - date RP / 2005-07-05	Filename 512_3231.dwg
		Date 2005-07-05	Scale -
 Panasonic Electric Works Fire & Security Technology Europe AB		EBL512 CONTROL UNITS 1548-1550 POWER SUPPLY CONNECTION DIAGRAM	
		DWG No.: 512-32	Edition 1

Original Dwg A3L (420x297mm)



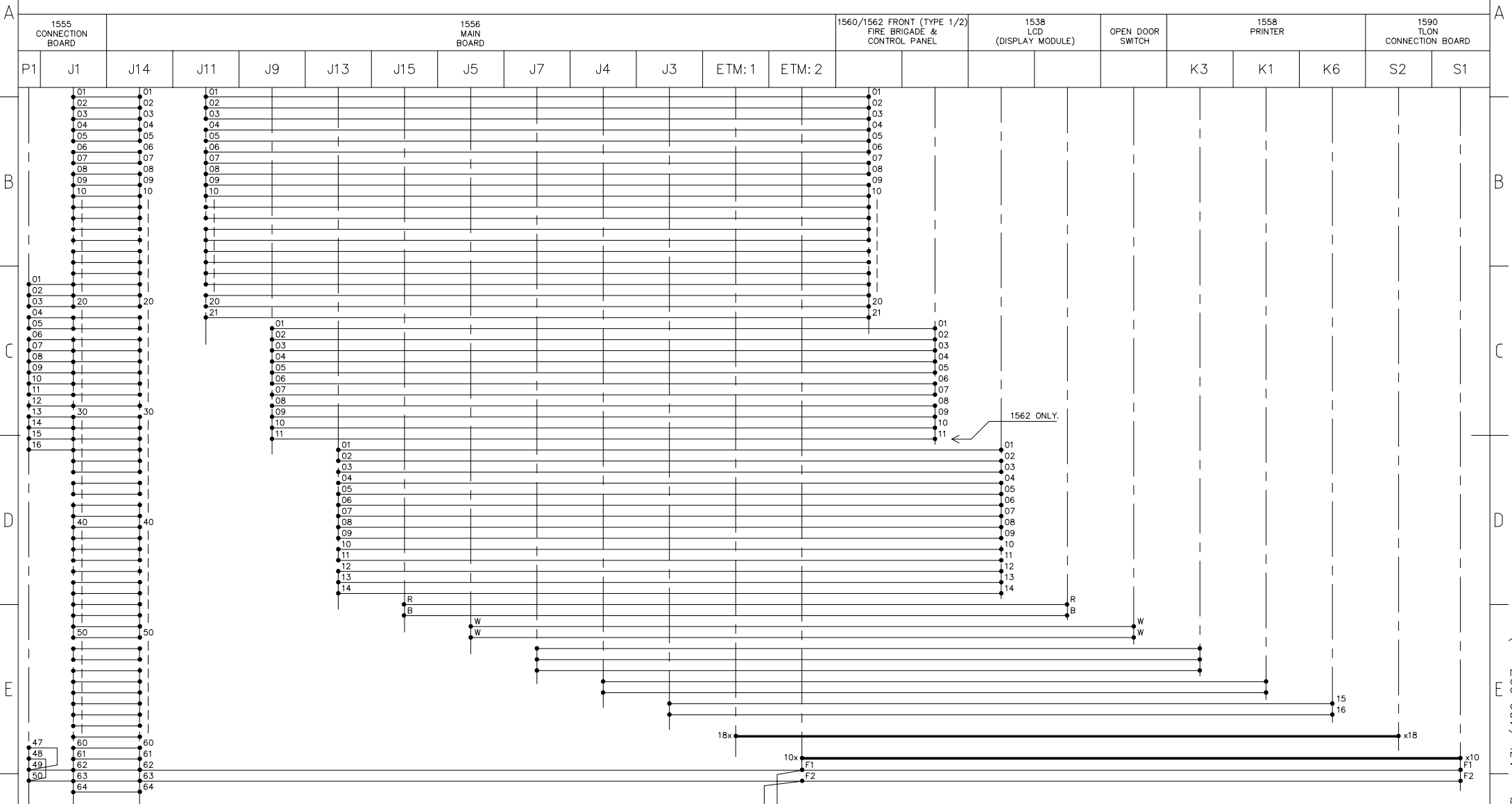
RevNo	Revision note	Date	Signature	Checked
3	1590: S1 & S2.	080212	JP	MÖ

EBL512 TYPE 1548, 1549 & 1550

EBL512 TYPE 1548 & 1549

EBL512 TYPE 1549

1)



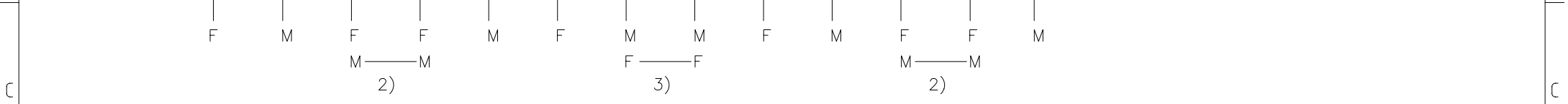
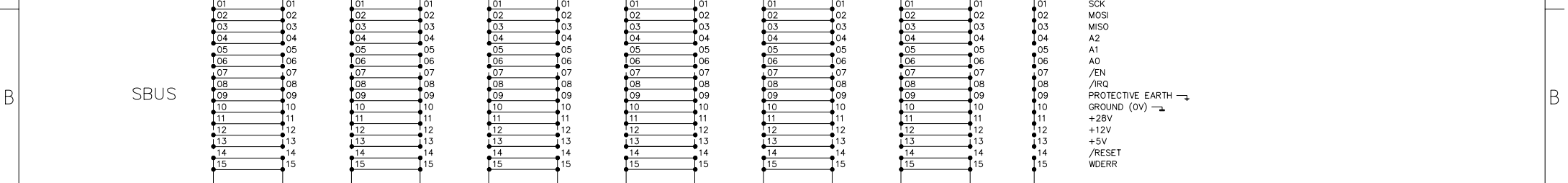
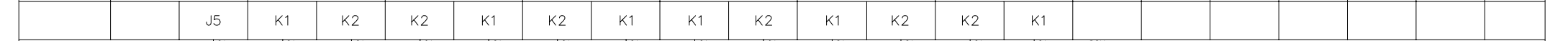
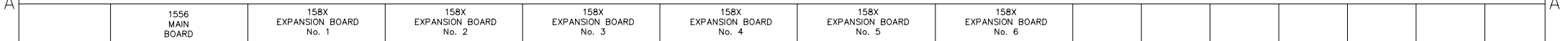
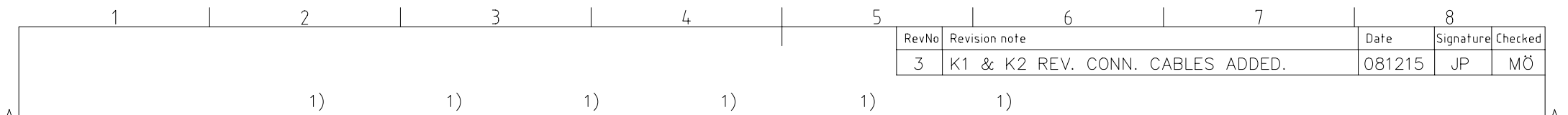
CONNECTION'S OVERVIEW, SEE DWG. 512-31.

1) OPTION WHEN REQUIRED, i.e. INCL. IN TYPE 1550.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_3313.dwg	Date 1999-07-07	Scale -	
 <b>Panasonic</b> Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 CONTROL UNITS 1548-1550 INTERNAL CONNECTION DIAGRAM			
			DWG No.: 512-33		Edition 3	Sheet 1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
3	K1 & K2 REV. CONN. CABLES ADDED.	081215	JP	MÖ



M=MALE CONNECTOR  
F=FEMALE CONNECTOR

- 1) OPTION WHEN REQUIRED.
- 2) CONNECTION CABLE (MALE CONNECTORS) 1585.
- 3) CONNECTION CABLE (FEMALE CONNECTORS) 1586.

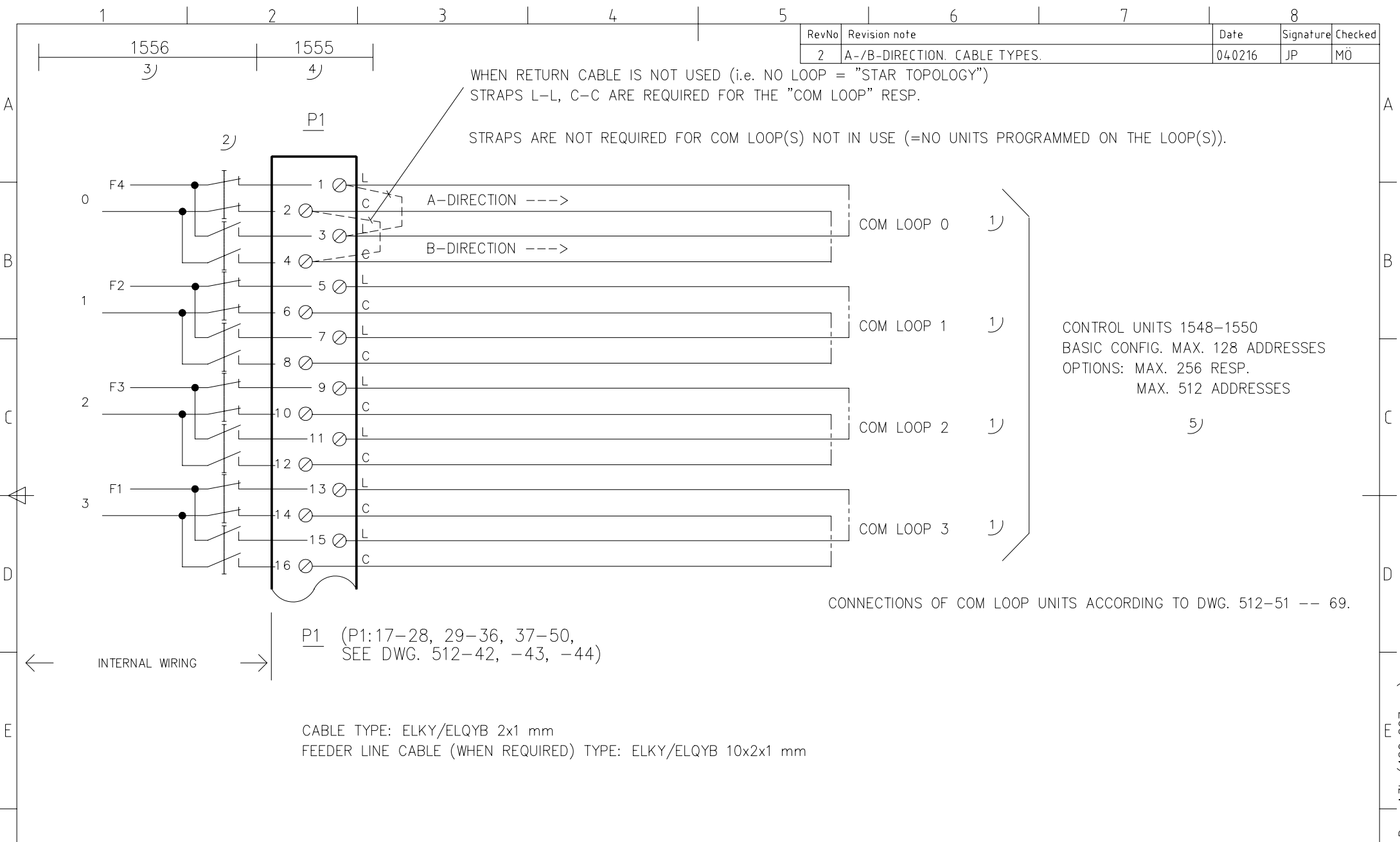
CONNECTION'S OVERVIEW, SEE DWG. 512-31.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_3413.dwg	Date 1999-07-07	Scale -	
 <b>Panasonic Electric Works</b> Fire & Security Technology Europe AB			EBL512 CONTROL UNITS 1548-1550 EXPANSION BOARDS 158X, CONNECTION DIAGRAM			
			DWG No.: 512-34		Edition 3	Sheet 1/1



Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
2	A-/B-DIRECTION. CABLE TYPES.	04-02-16	JP	MØ



- 1) NUMBER OF UNITS IN RESPECT TO TYPES & CABLE LENGTH, SEE DWG. 512-01
- 2) EACH COM LOOP CAN BE GALVANIC DISCONNECTED VIA MENU H8/S2.
- 3) MAIN BOARD 1556. FUSES F1-F4 = 1.5A. SEE DWG 512-22.
- 4) CONNECTION BOARD 1555, SEE DWG 512-13
- 5) NORMAL NUMBER OF ADDRESSES ACCORDING TO COUNTRY/RETAIL COMPANY.

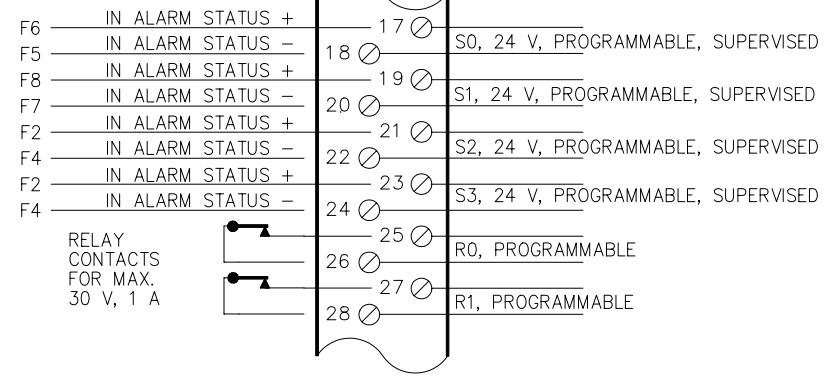
Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by MØ	Approved by - date RP / 1999-12-15	Filename 512_4112.dwg	Date 1999-06-03	Scale -	
			EBL512 CONNECTION BOARD 1555 T.B. P1:01-16 COM LOOPS 0-3, CONNECTION DIAGRAM			
			DWG No.: 512-41		Edition 2	Sheet 1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
4	DIODE INFO ADDED.	080212	JP	MÖ

1555

P1 (P1:01-16, SEE DWG. 512-41)



- 1)
- 4)
- 5)
- 8)
- 2)
- 3)

EACH OUTPUT HAS TO BE PROGRAMMED.  
SEE PLANNING INSTRUCTIONS/PROGRAMME FOR MORE INFORMATION.

NOTE! IN PLAN512/WIN512, OUTPUTS S0-S3 GET THE FOLLOWING DEFAULTS: ALARM DEVICE, GENERAL FIRE ALARM, INTERMITTENT (0.8/0.8 sek.) and 24 V WHEN ACTIVATED.

OUTPUTS R0-R1 HAVE THE FOLLOWING DEFAULTS: CONTROL (GENERAL), STEADY ACTIVATION, NORMALLY OPEN BUT NO FUNCTION (TRIGGER CONDITION), i.e. R0 & R1 ARE NOT ENABLED.

NOTE! DURING CALIBRATION THE OUTPUTS HAVE TO BE LOW (NO VOLTAGE ON THE S0-S3 OUTPUTS), i.e. A NORMALLY HIGH OUTPUT WILL BE LOW A FEW SECONDS (DURING THE CALIBRATION). A NORMALLY HIGH OUTPUT WILL BE LOW A FEW SECONDS DURING A RESTART OF EBL512.

P1 (P1:29-36, 37-50, SEE DWG. 512-43, -44)

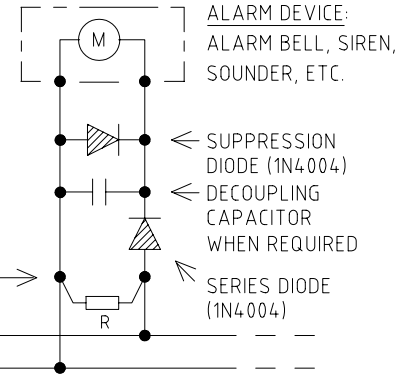
INTERNAL WIRING

- 1) REVERSE POLARITY IN NORMAL SUPERVISED STATUS (= NORMALLY LOW OUTPUT, NOT ACTIVATED). NOTE! A NORMALLY HIGH OUTPUT IS NOT SUPERVISED.
- 2) IN GERMAN CONFIGURATION, S3 IS CONNECTED TO F1/F3 AND IT HAS THE SAME POLARITY IN SUPERVISED AND ACTIVATED STATUS RESP.
- 3) RELAY CONTACT CAN BE PROGRAMMED AS NORMALLY CLOSED (NC) OR NORMALLY OPEN (NO).
- 4) VOLTAGE OUTPUT CAN BE PROGRAMMED TO BE NORMALLY LOW (NO VOLTAGE IN NORMAL STATUS) OR NORMALLY HIGH (24 V IN NORMAL STATUS).
- 6) CONNECTION BOARD 1555. FUSES F1-F8 = 500 mA. SEE DWG. 512-13.
- 7) IN MOST CONFIG./CONVENTIONS, F2/F4 ARE ALSO USED FOR 24 V POWER SUPPLY, SEE DWG. 512-44.
- 8) AFTER CONNECTING/CHANGING EQUIPMENT ON A SUPERVISED OUTPUT, A CALIBRATION HAS TO BE PERFORMED VIA MENU H5/A1. EBL512 VERSION  $\geq$  2.2.3: CALIBRATION VALUE HAS TO BE 4K7-50K, ELSE A FAULT WILL BE GENERATED.

- 2) REGARDING SUPERVISED OUTPUTS (S0-S3 & OUTPUT UNITS 2262/2263: OUTPUT 0-3):

RESISTOR AND DIODES (1N4004) ARE REQUIRED ACCORDING TO THE FIGURE. EXAMPLE, SHOWING HOW TO CONNECT ALARM DEVICES. SUPERVISED WIRING: END OF LINE RESISTOR 10K/33K IN THE LAST ALARM DEVICE. INDIVIDUALLY SUPERVISED ALARM DEVICES (1-5 pcs.). A RESISTOR (R) IN UP TO FIVE ALARM DEVICES:

ONE SUPERVISED ALARM DEVICE: R=10K-33K  
TWO SUPERVISED ALARM DEVICES: R=20K-33K  
THREE SUPERVISED ALARM DEVICES: R=33K  
FOUR SUPERVISED ALARM DEVICES: R=33K  
FIVE SUPERVISED ALARM DEVICES: R=33K

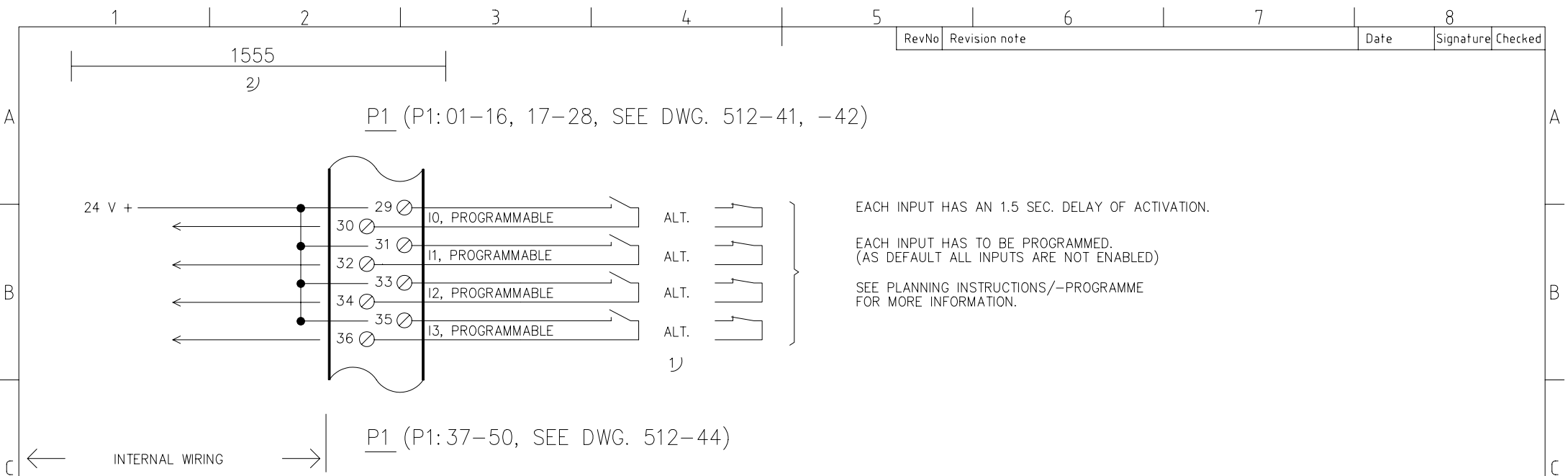


NOTE! INDIVIDUALLY SUPERVISED ALARM DEVICES = WIRES ARE SUPERVISED TO THE POINTS ON THE ALARM DEVICE WHERE THE RESISTOR IS CONNECTED.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by	Checked by	Approved by - date	Filename	Date	Scale	
JP	MÖ	RP / 1999-12-15	512_4214.dwg	1999-06-03	-	
			EBL512 CONNECTION BOARD 1555 T.B. P1:17-28 PROGRAMMABLE OUTPUTS CONNECTION DIAGRAM			
			DWG No.: 512-42	Edition 4	Sheet 1/1	

24 V IS THE RATED VOLTAGE. THE OPERATING VOLTAGE CAN BE HIGHER/LOWER.

Original Dwg A3L (420x297mm)



1) INPUT CAN BE PROGRAMMED AS NORMALLY OPEN (NO) OR NORMALLY CLOSED (NC).  
NOTE! INPUT PROGRAMMED AS NC, IF NOT USED, A STRAP ON THE TERMINAL BLOCK P1 IS REQUIRED.

2) CONNECTION BOARD 1555, SEE DWG 512-13.

24 V IS THE RATED VOLTAGE. THE OPERATING VOLTAGE CAN BE HIGHER/LOWER.

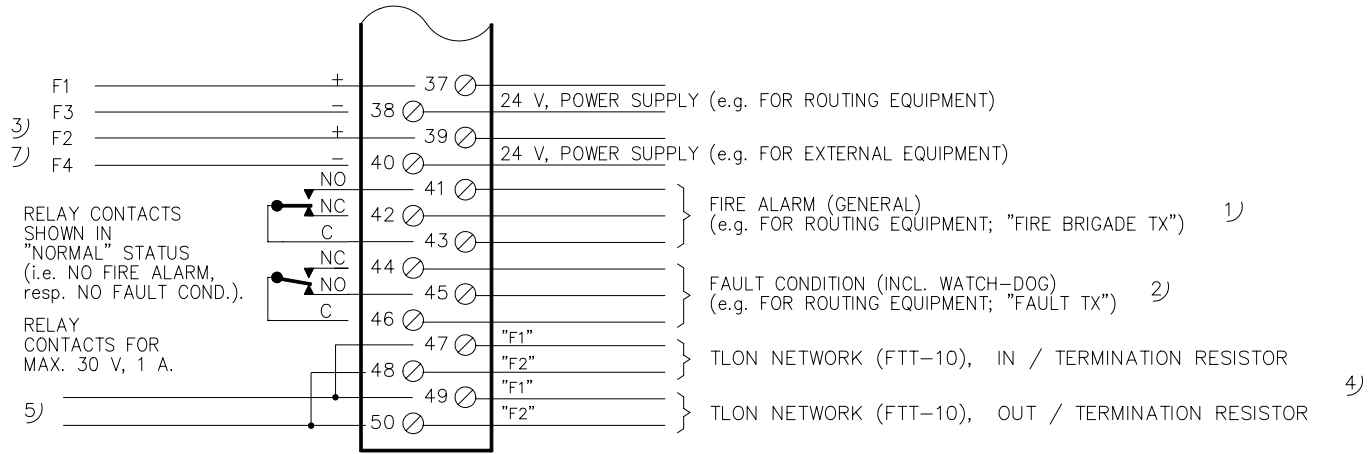
Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by M0	Approved by - date RP / 1999-12-15	Filename 512_431_.dwg	Date 1999-06-03	Scale -	
 <b>Panasonic Electric Works</b> <b>Fire &amp; Security Technology Europe AB</b>			EBL512 CONNECTION BOARD 1555 T.B. P1:29-36 PROGRAMMABLE INPUTS CONNECTION DIAGRAM			
			DWG No.: 512-43	Edition 0	Sheet 1/1	

Original Dwg A3L (420x297mm)

1555

6)

P1 (P1:01-16, 17-28, 29-36, SEE DWG. 512-41, -42, -43)

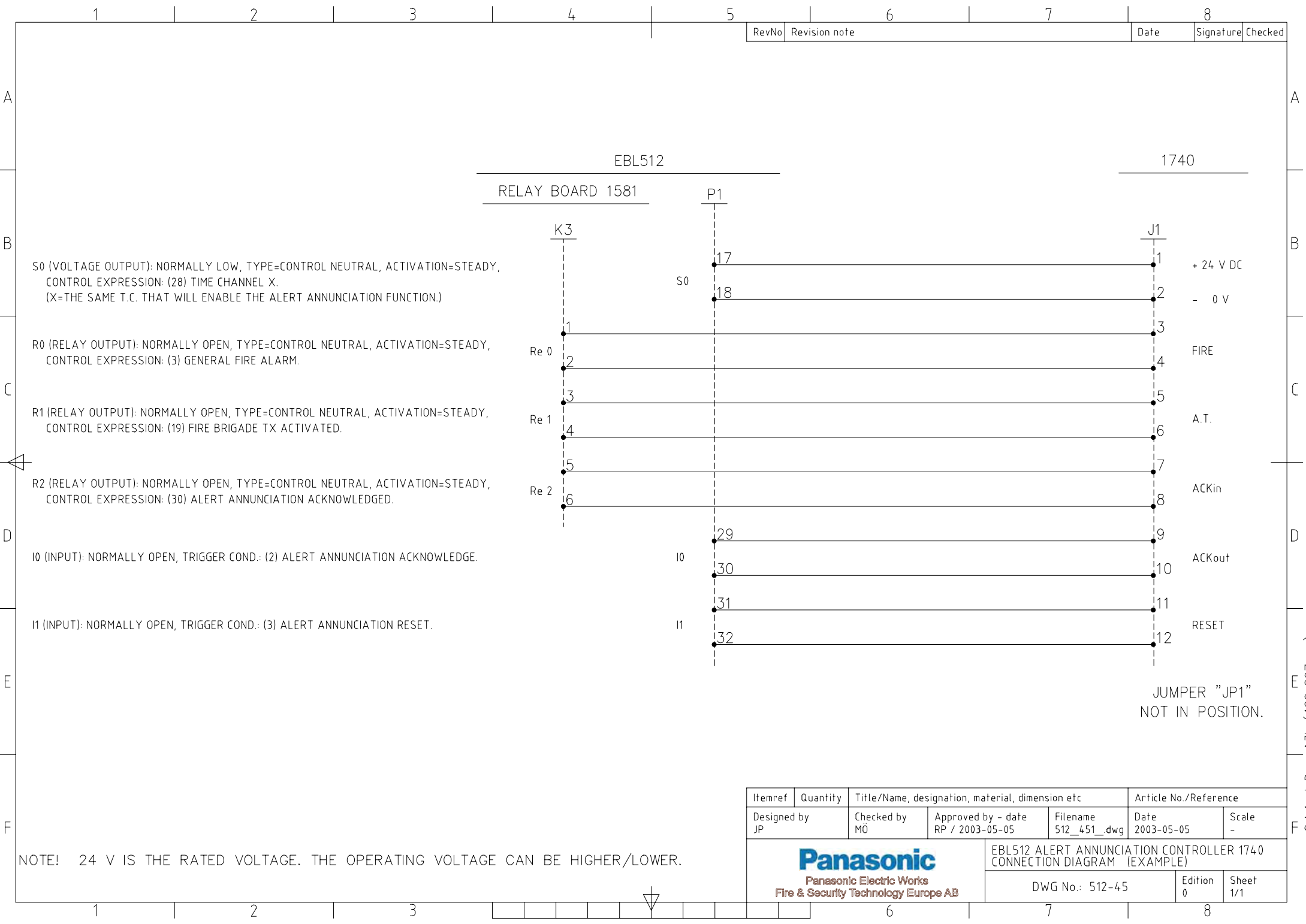


- 1) OUTPUT (ACTIVATED) IS INDICATED BY LED "FIRE BRIGADE TX" } LED "TEXT" DEPENDING ON COUNTRY/CONFIGURATION.
- 2) OUTPUT (ACTIVATED) IS INDICATED BY LED "FAULT TX"
- 3) FUSES F1-F4 = 500 mA. SEE ALSO DWG. 512-42
- 4) SEE DWG. 512-49.
- 5) INTERNAL WIRING (SEE DWG. 512-33) TO THE TLON CONNECTION BOARD 1590, SEE DWG. 512-23, MOUNTED ON THE MAIN BOARD 1556, SEE DWG 512-22.
- 6) CONNECTION BOARD 1555, SEE DWG 512-13.
- 7) F2/F4 IN MOST CONFIGURATIONS/CONVENTIONS ALSO USED FOR OUTPUTS S2/S3, SEE DWG. 512-42.

NOTE! 24 V IS THE RATED VOLTAGE. THE OPERATING VOLTAGE CAN BE HIGHER/LOWER.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by M0	Approved by - date RP / 1999-12-15	Filename 512_441_dwg	Date 1999-06-03	Scale -
			EBL512 CONNECTION BOARD 1555 T.B. P1:37-50 NOT PROGRAMMABLE OUTPUTS CONN. DIAGRAM		
			DWG No.: 512-44		Edition 0

Original Dwg A3L (420x297mm)



NOTE! 24 V IS THE RATED VOLTAGE. THE OPERATING VOLTAGE CAN BE HIGHER/LOWER.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by M0	Approved by - date RP / 2003-05-05	Filename 512_451_.dwg	Date 2003-05-05	Scale -	
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 ALERT ANNUNCIATION CONTROLLER 1740 CONNECTION DIAGRAM (EXAMPLE)			
			DWG No.: 512-45		Edition 0	Sheet 1/1

Original Dwg A3L (420x297mm)

1580 8 ZONES EXPANSION BOARD

RevNo	Revision note	Date	Signature	Checked
6	2218 ADDED. 2336 REV.	081215	JP	M0

INTERNAL WIRING

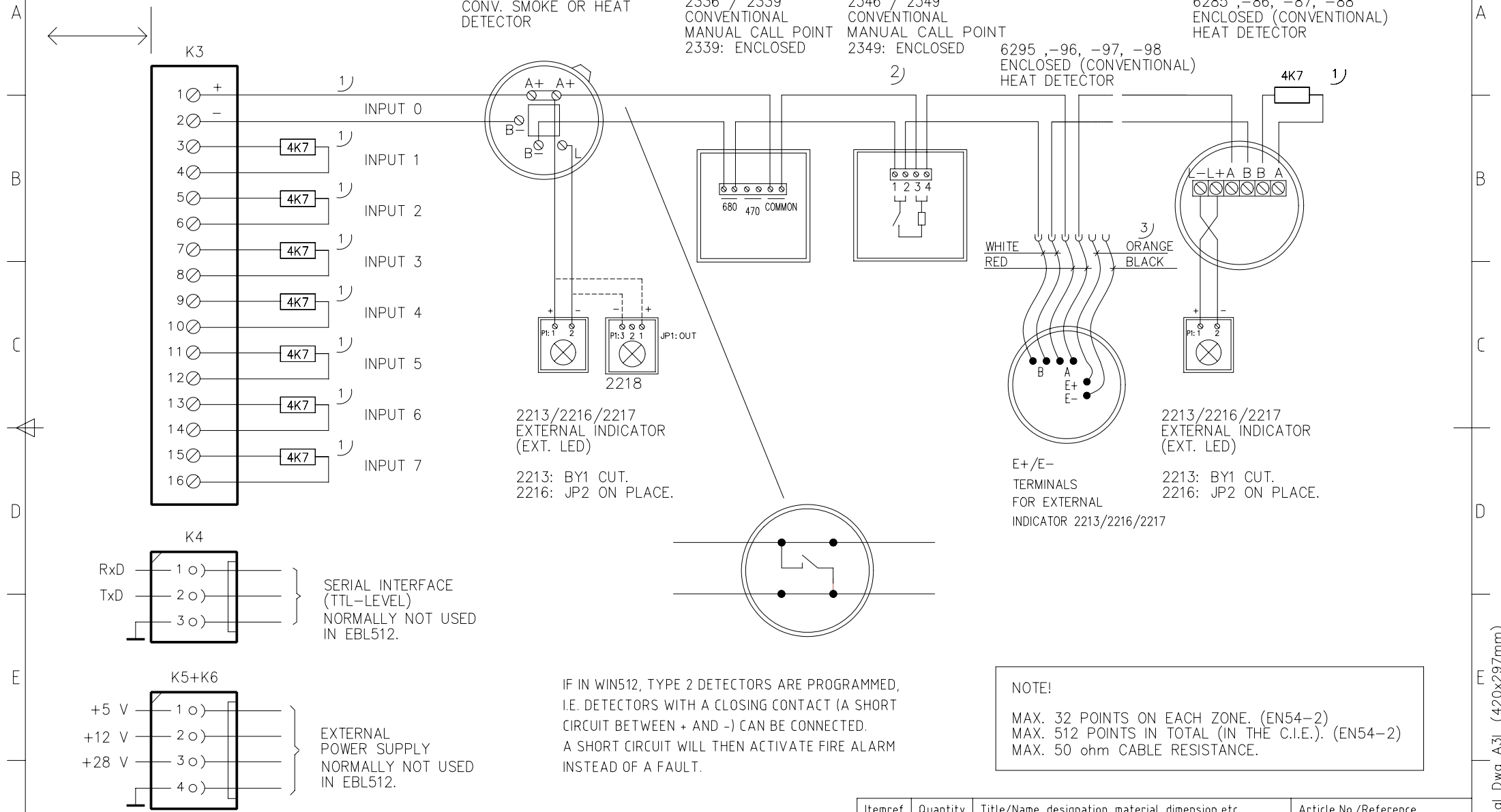
2324  
CONVENTIONAL  
DETECTOR BASE FOR  
CONV. SMOKE OR HEAT  
DETECTOR

2336 / 2339  
CONVENTIONAL  
MANUAL CALL POINT  
2339: ENCLOSED

2346 / 2349  
CONVENTIONAL  
MANUAL CALL POINT  
2349: ENCLOSED

6285, -86, -87, -88  
ENCLOSED (CONVENTIONAL)  
HEAT DETECTOR

6295, -96, -97, -98  
ENCLOSED (CONVENTIONAL)  
HEAT DETECTOR



- 1) END OF LINE RESISTOR, 4K7, IS TO BE REMOVED FROM THE TERMINAL BLOCK K3 TO THE LAST POINT ON THE ZONE LINE.
- 2) THIS PRODUCT MIGHT BE UNDER PRODUCTION.
- 3) IN 6297 & 6298: YELLOW.

**NOTE!**  
MAX. 32 POINTS ON EACH ZONE. (EN54-2)  
MAX. 512 POINTS IN TOTAL (IN THE C.I.E.). (EN54-2)  
MAX. 50 ohm CABLE RESISTANCE.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by M0	Approved by - date RP / 1999-12-15	Filename 512_4616.dwg	Date 1999-06-29	Scale -
			EBL512 EXPANSION BOARD 1580 CONNECTION DIAGRAM		
			DWG No.: 512-46	Edition 6	Sheet 1/1

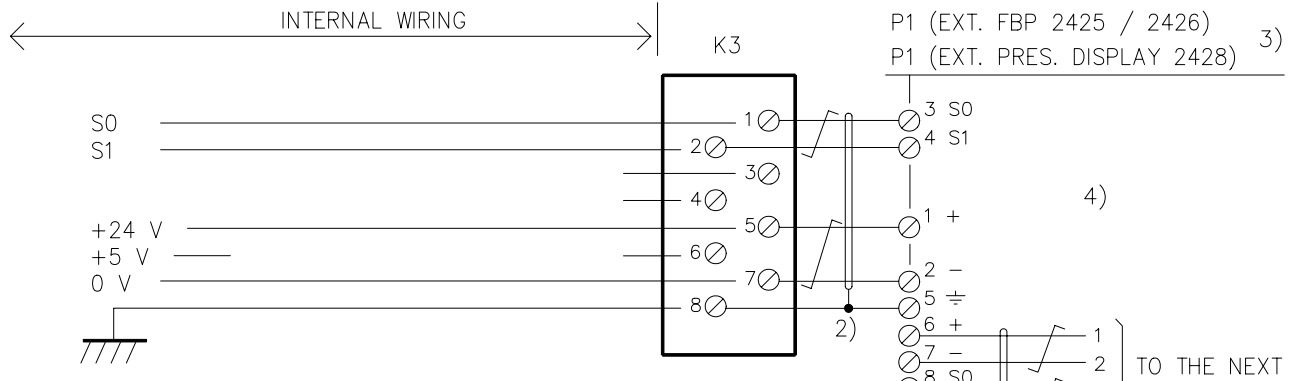
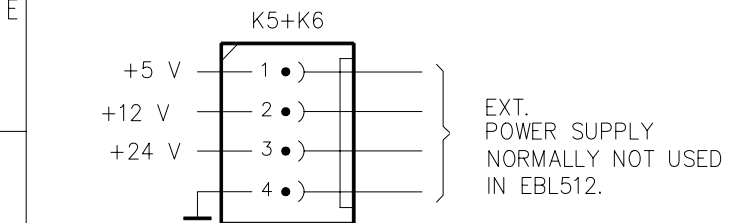
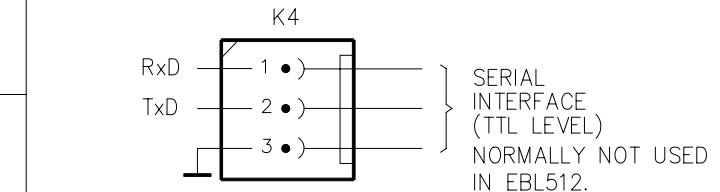
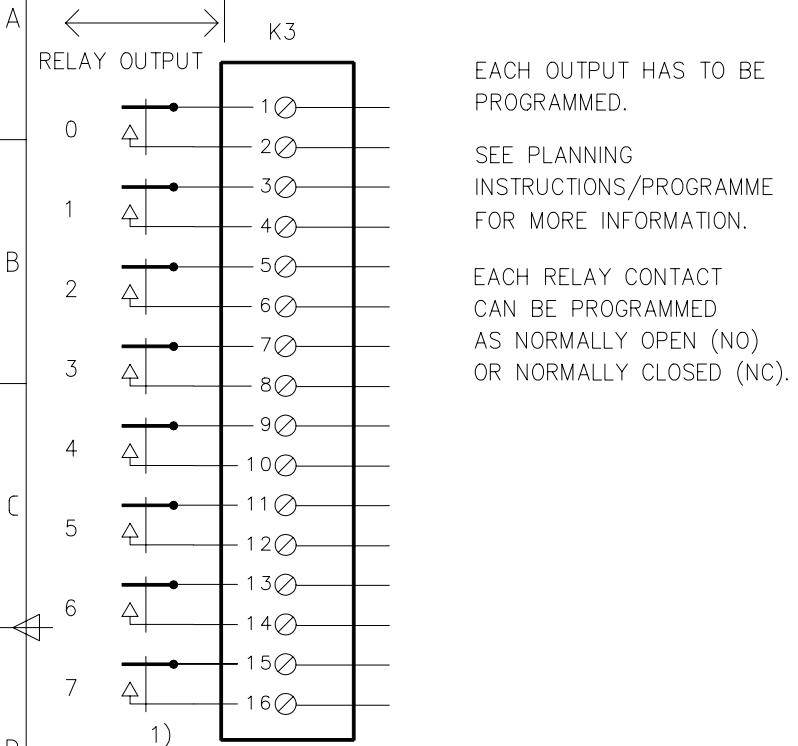
Original Dwg A3L (420x297mm)



RevNo	Revision note	Date	Signature	Checked
3	INFORMATION ADDED.	030306	JP	MÖ

1581 8 RELAYS EXPANSION BOARD

1582 EXT. FIRE BRIGADE PANEL (FBP) INTERFACE BOARD



4) UP TO 8 EXT. FBPs / DATA CONV. / EXT. DISPLAY UNITS CAN BE CONNECTED.

UP TO 1200 m CABLE CAN BE USED.

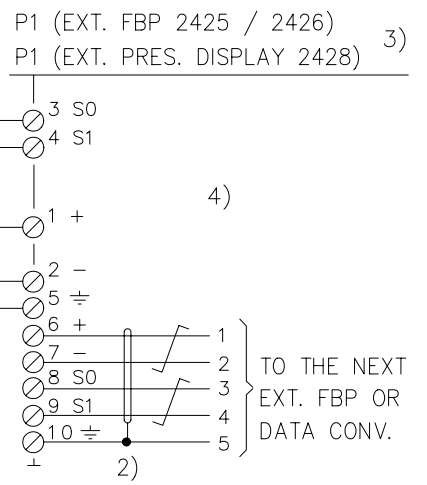
NOTE!  
TAKE IN CONSIDERATION:

- PRINTER / NO PRINTER
- CABLE LENGTH
- AVAILBLE CURRENT SUPPLY FROM C.U.

SEE PLANNING INSTRUCTIONS FOR MORE INFORMATION.

JUMPER BY4 ON THE 1582 BOARD COULD BE USED WHEN ONLY DATA CONVERTERS ARE CONNECTED, SEE PLANNING INSTRUCTIONS FOR MORE INFORMATION.

REGARDING EXT. FBPs 1826 & 1828 AS WELL AS UNITS 1728, 1735 AND 1736, SEE SHEET 2/2.



- 1) RELAY CONTACTS FOR MAX. 30 V, 1 A.
- 2) CABLE: LiYCY (TP)/LIHCH-TP 2x2x0.75 mm<sup>2</sup>
- 3) REGARDING DATA CONVERTER. (K3:1, 2, 5, 7, 8 TO K1:3, 4, 1, 2, x)

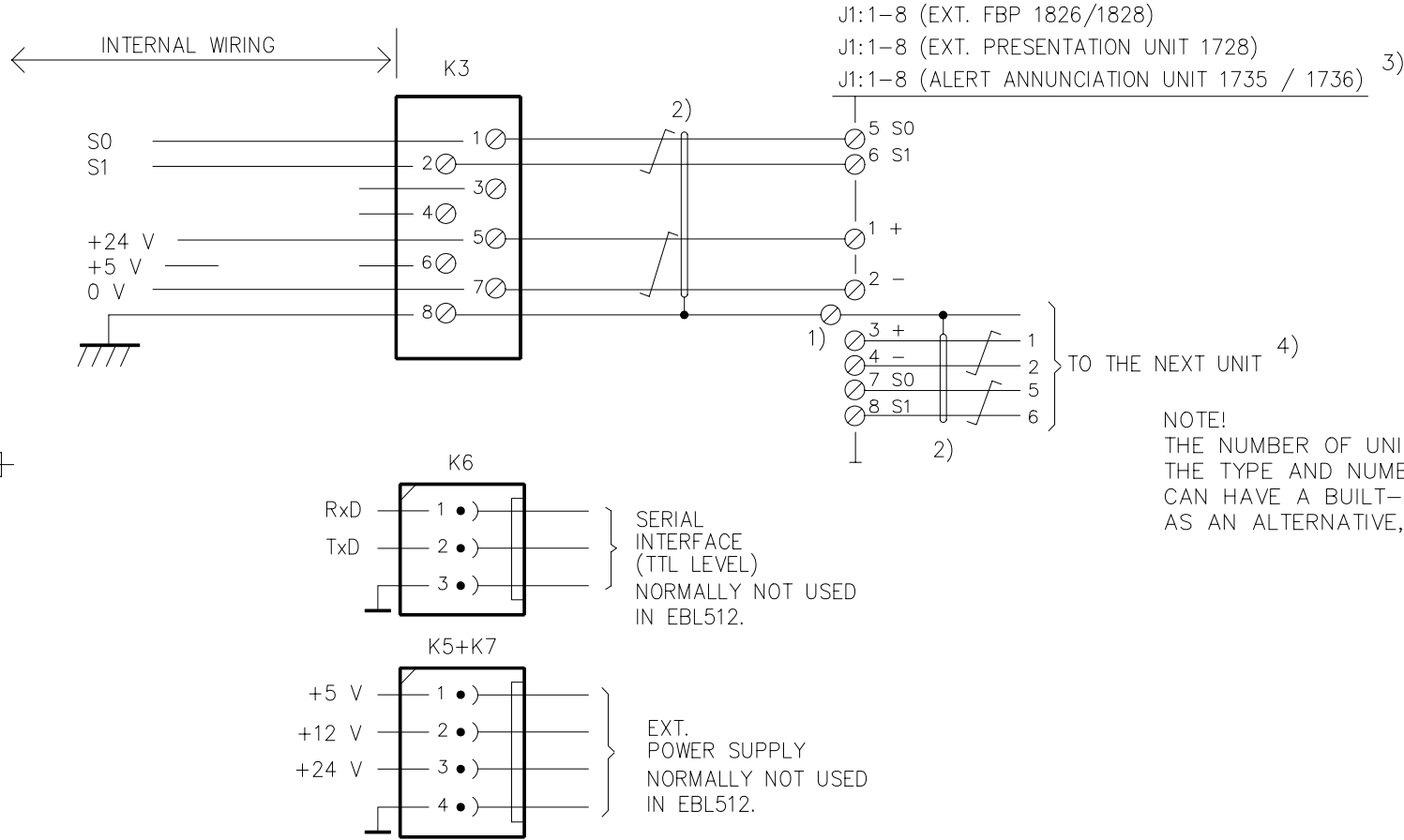
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Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_4713.dwg	Date 1999-06-04	Scale -
			EBL512 EXPANSION BOARDS 1581 & 1582 CONNECTION DIAGRAM		
			DWG No.: 512-47	Edition 3	Sheet 1/2

Original Dwg A3L (420x297mm)

1582 EXT. FIRE BRIGADE PANEL INTERFACE BOARD

1587 EXT. FIRE BRIGADE PANEL/DU INTERFACE BOARD

RevNo	Revision note	Date	Signature	Checked
1	NOTE 4, INFORMATION ADDED.	031112	JP	MÖ



NOTE!  
THE NUMBER OF UNITS ON THE LINE IS DEPENDING ON THE TYPE AND NUMBER OF UNITS (e.g. EXT. FBP 1826 CAN HAVE A BUILT-IN PRINTER).  
AS AN ALTERNATIVE, AN EXT. POWER SUPPLY CAN BE USED.

- 1) SCREW FOR CABLE FIXING CLAMP IN THE UNIT RESPECTIVELY.
- 2) CABLE: LiYCY (TP)/LIHCH-TP 2x2x0.75 mm<sup>2</sup>. UP TO 1200 m CABLE CAN BE USED.
- 3) AAU UNITS 1735/1736 CAN ONLY BE CONNECTED TO THE EXT. FBP/DU INTERFACE BOARD 1587.
- 4) END-OF-LINE (TERMINATION) RESISTOR (120R) HAS TO BE CONNECTED IN THE LAST UNIT ON THE LINE, i.e. JUMPER "JP8" SHALL BE IN POSITION (ON) IN THAT UNIT WHEN CONN. TO A 1587 BOARD.

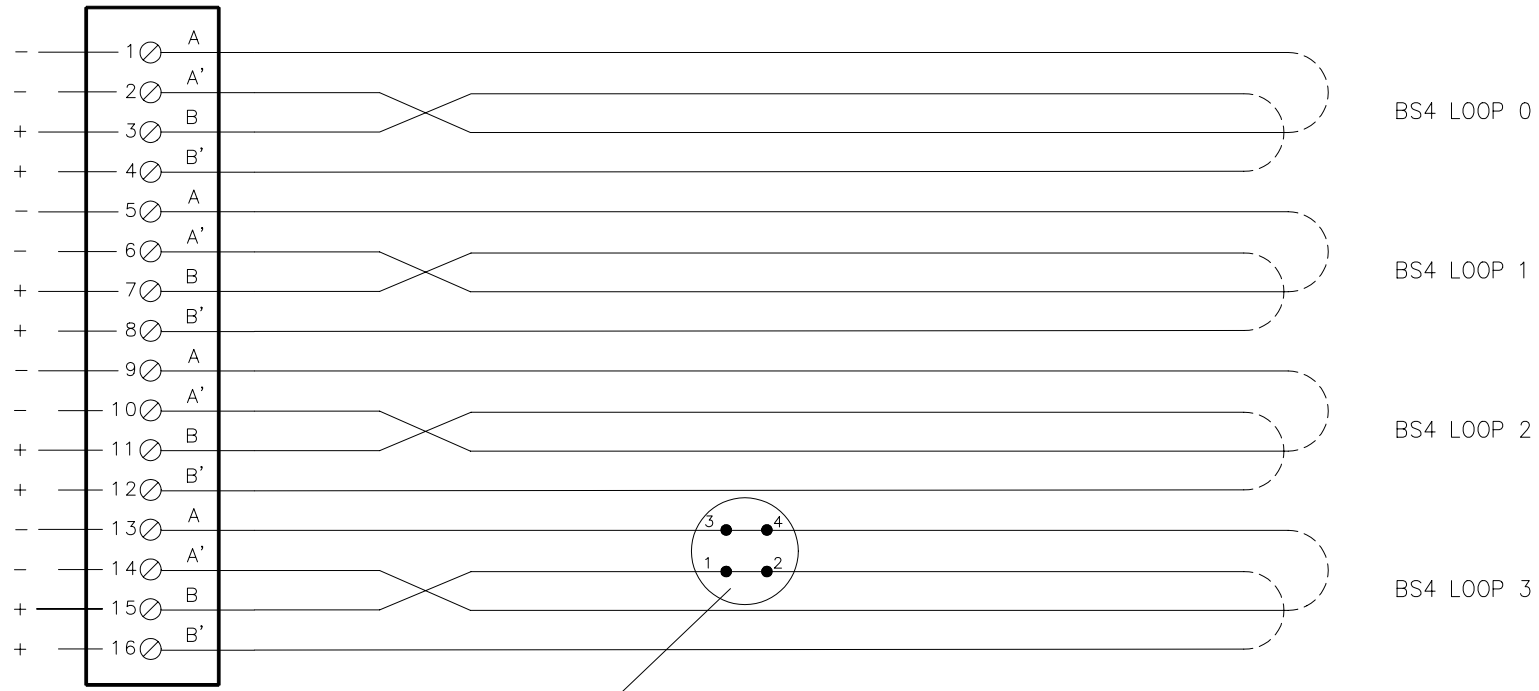
Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by MÖ	Approved by - date RP / 2003-02-24	Filename 512_4721.dwg	Date 2003-02-24	Scale -	
			EBL512 EXPANSION BOARDS 1582 & 1587 CONNECTION DIAGRAM			
			DWG No.: 512-47		Edition 1	Sheet 2/2

Original Dwg A3L (420x297mm)

1584 AUTRONICA INTERFACE BOARD

INTERNAL WIRING

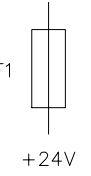
J1



BS4 LOOP 0  
BS4 LOOP 1  
BS4 LOOP 2  
BS4 LOOP 3

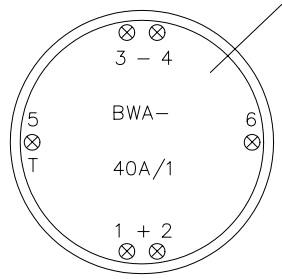
01-99 AUTRONICA (BS-100)  
UNITS ON EACH LOOP

NOTE! MAX. 512, 256 OR  
128 UNITS ACCORDING TO  
C.U. CONFIGURATION.



F1=T1A (FOR BS4 LOOP 0-3)

NOTE!  
CABLES, AUTRONICA UNITS, CONNECTIONS, ETC.  
ACCORDING TO SEPARATE DOCUMENTATION.  
MAX. CABLE RESISTANCE = 30 OHMS  
(A WIRE + B WIRE = 30 OHMS).  
MAX. CABLE CAPACITANCE = 1.8 μF.



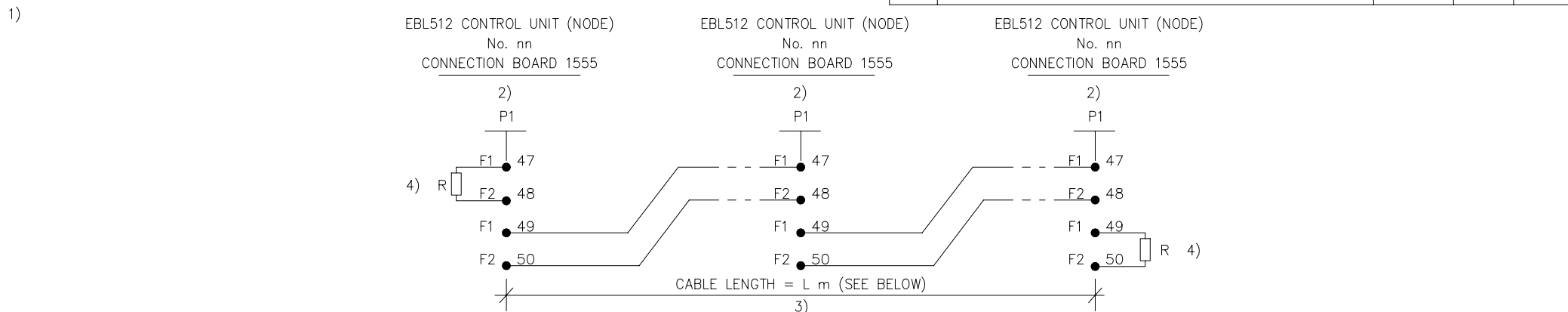
e.g. AUTRONICA ADDRESSABLE DETECTOR BASE

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by M0	Approved by - date RP / 1999-12-15	Filename 512_481_.dwg	Date 1999-07-01	Scale -	
 <b>Panasonic Electric Works</b> Fire & Security Technology Europe AB			EBL512 EXPANSION BOARD 1584 CONNECTION DIAGRAM			
			DWG No.: 512-48	Edition 0	Sheet 1/1	

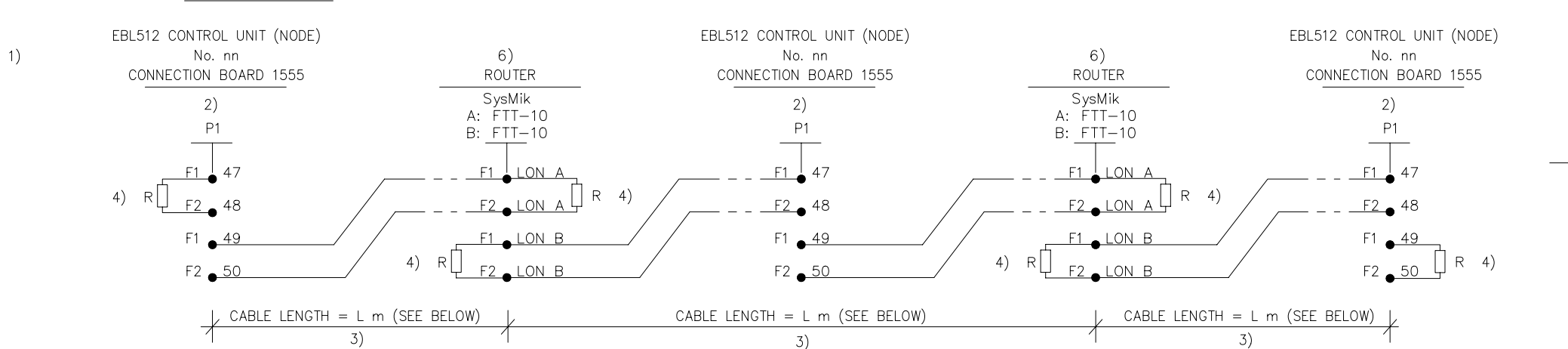
Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
1	REPEATER->ROUTER. SWEDISH CABLE TYPES ERASED.	080212	JP	MÖ

TLON CHANNEL, NO ROUTER(S)



TLON CHANNELS AND ROUTER(S)



- 1) WHEN TWO OR MORE EBL512 CONTROL UNITS ARE TO BE CONNECTED (= A SYSTEM), A TLON NETWORK, WITH ONE OR MORE SUBNETS, IS REQUIRED. MAX. 30 (No. nn=00-29) CONTROL UNITS (NODES) CAN BE CONNECTED. TWO NODES MUST NOT HAVE THE SAME No. CONNECTION TO THE NETWORK CAN BE IN FREE SEQUENCE.
  - 2) TLON CONNECTION BOARD 1590 (SEE DWG. 512-23) IS REQUIRED WHEN A CONTROL UNIT IS TO BE CONNECTED TO A TLON NETWORK. INTERNAL WIRING P1 <--> 1590 (VIA CONNECTORS ETM1:1&2 ON MAIN BOARD 1556, SEE DWG. 512-22. SEE ALSO DWG. 512-44.
  - 3) TLON CHANNEL; DOUBLY TERMINATED BUS TOPOLOGY, ECHELON FTT-10. REGARDING CABLE TYPES, LENGTHS, ETC. SEE BELOW. IN THE FIRST AND THE LAST NODE ON A CHANNEL, TERMINATION RESISTORS ARE REQUIRED. 4)
  - 4) TERMINATION RESISTOR, R = 105 OHM ± 1% (1/8 W).
  - 5) THE MAXIMUM CABLE LENGTH, NODE TO NODE, CAN BE INCREASED BY USING ROUTERS.
  - 6) ROUTER = "UNIVERSAL ROUTER MODULE". REQUIRE EXT. 24 V DC.
- MORE INFORMATION REGARDING NETWORK DESIGN, COMPONENTS, ETC. SEE SEPARATE TLON TECHNICAL DESCRIPTION.

APPROX. MAX. CABLE LENGTH L:  
 BY ECHELON RECOMMENDED CABLE TYPES:  
 BELDEN 85102 (1.3 mm/16): L=2700 m  
 BELDEN 8471 (1.3 mm/16): L=2700 m  
 LEVEL IV (0.65 mm/22): L=1400 m  
 TIA568A cat. 5 (0.51 mm/24): L=900 m

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_4911.dwg	Date 1999-06-03	Scale -	
			EBL512 SYSTEM VIA TLON NETWORK EXAMPLES, CONNECTION DIAGRAM			
			DWG No.: 512-49		Edition 1	Sheet 1/1

Original Dwg A3L (420x297mm)

A

B

C

D

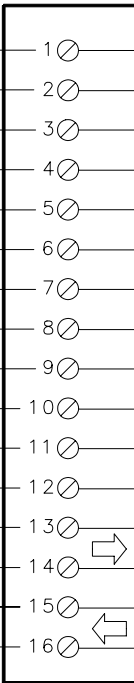
E

F

INTERNAL WIRING

K3

ÜEprüf  
BMZrs  
ASab  
ÜEab  
ÜEab  
BMZrs  
ASab  
(not used)  
LAausg  
ÜEausg  
SCHLcom/+24 V  
0 V

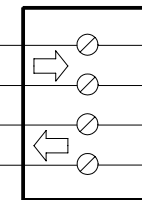


19  
2  
6  
23  
7  
8  
9  
10  
11  
12  
1+5+14+22  
13+15

P.B. (PUSH BUTTON)  
P.B.  
P.B.  
P.B.  
LED  
LED  
LED  
LED  
LED  
LED

GERMAN EXTINGUISHING EQUIPM.  
(FEUERLÖSCHANLAGE  
STEUEREINRICHTUNG)

INTERNAL WIRING



3)

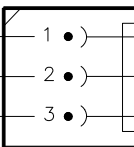
VdS STANDARD-SCHNITTSTELLE "LÖSCHEN"

OUTPUT FOR EXTINGUISHING EQUIPM. (LÖSCHBEFEHL/STÖRUNG LEITUNG)

INPUT FOR EXTINGUISH. EQUIPM. (STÖRUNG LÖSCHANLAGE/STÖRUNG LEITUNG)

K4

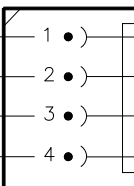
RxD  
TxD



SERIAL  
INTERFACE  
(TTL LEVEL)  
NORMALLY NOT USED  
IN EBL512.

K5+K6

+5 V  
+12 V  
+24 V



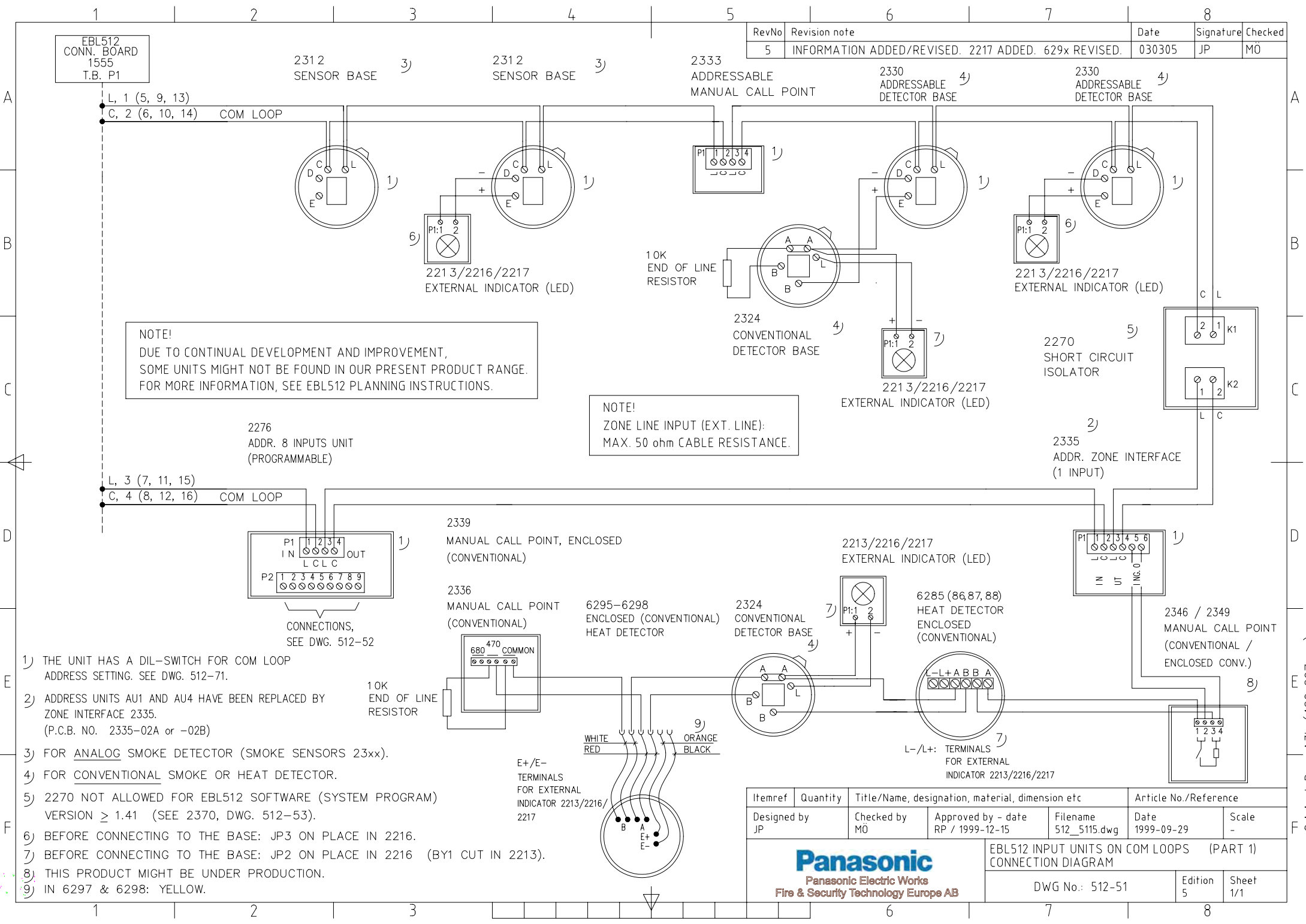
EXT.  
POWER SUPPLY  
NORMALLY NOT USED  
IN EBL512.

- 1) A CONTROL EXPRESSION HAS TO BE PROGRAMMED (Win512) TO ACTIVATE THIS OUTPUT. SEE PLANNING INSTRUCTIONS.
- 2) A FAULT CONDITION IN THE EXTINGUISHING EQUIPMENT WILL ACTIVATE THIS OUTPUT.
- 3) WHEN NO EXTINGUISHING EQUIPMENT IS CONNECTED, A 3K3 RESISTOR HAS TO BE CONNECTED ON K3:15/16, OTHERWISE FAULT SIGNAL WILL BE ACTIVATED.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by M0	Approved by - date RP / 2000-04-10	Filename 512_501_dwg	Date 2000-04-10	Scale -	
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 EXPANSION BOARD 1583 CONNECTION DIAGRAM			
			DWG No.: 512-50	Edition 0	Sheet 1/1	

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
5	INFORMATION ADDED/REVISED. 2217 ADDED. 629x REVISED.	030305	JP	MÖ



**NOTE!**  
DUE TO CONTINUAL DEVELOPMENT AND IMPROVEMENT,  
SOME UNITS MIGHT NOT BE FOUND IN OUR PRESENT PRODUCT RANGE.  
FOR MORE INFORMATION, SEE EBL512 PLANNING INSTRUCTIONS.

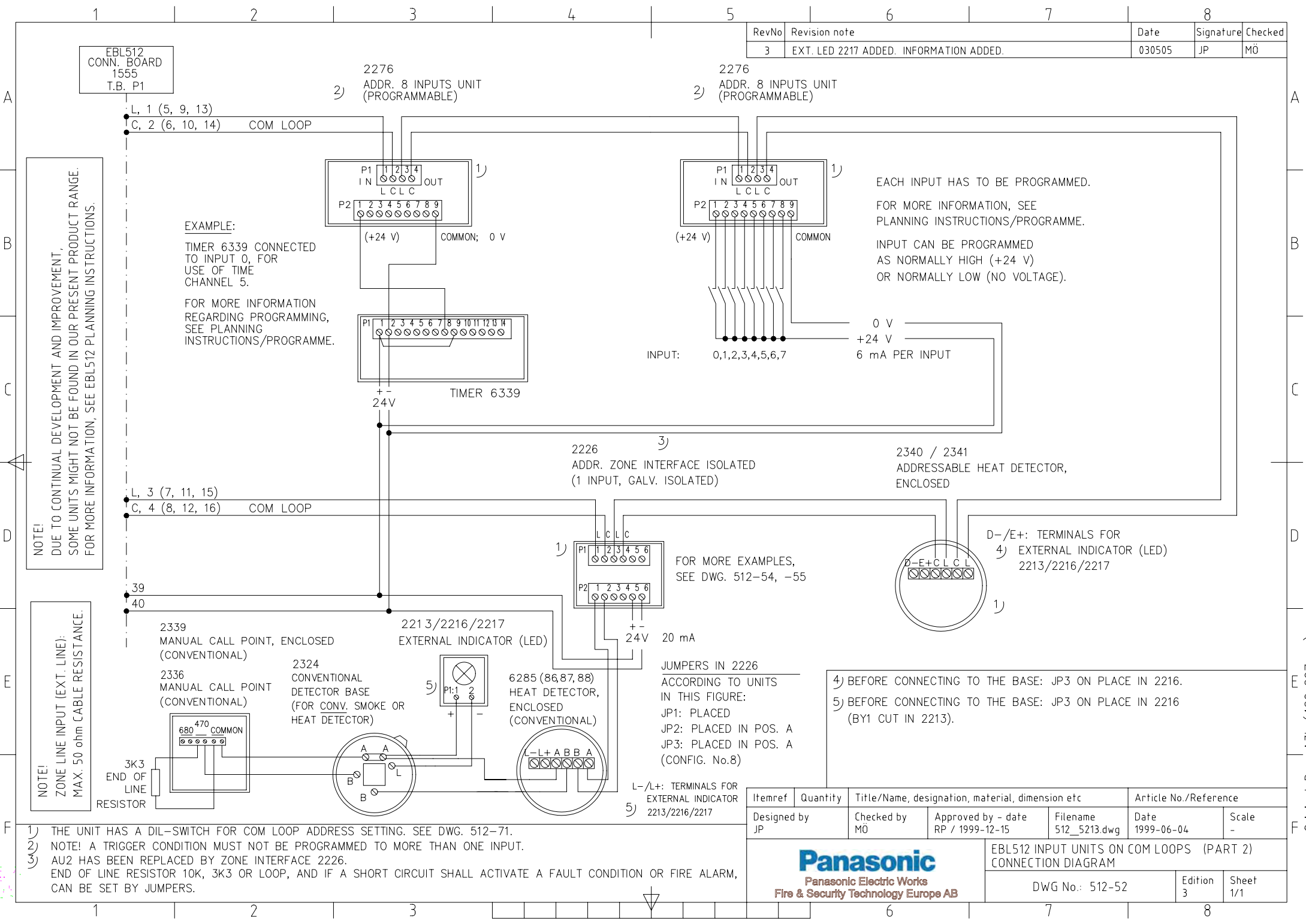
**NOTE!**  
ZONE LINE INPUT (EXT. LINE):  
MAX. 50 ohm CABLE RESISTANCE.

- 1) THE UNIT HAS A DIL-SWITCH FOR COM LOOP ADDRESS SETTING. SEE DWG. 512-71.
- 2) ADDRESS UNITS AU1 AND AU4 HAVE BEEN REPLACED BY ZONE INTERFACE 2335. (P.C.B. NO. 2335-02A or -02B)
- 3) FOR ANALOG SMOKE DETECTOR (SMOKE SENSORS 23xx).
- 4) FOR CONVENTIONAL SMOKE OR HEAT DETECTOR.
- 5) 2270 NOT ALLOWED FOR EBL512 SOFTWARE (SYSTEM PROGRAM) VERSION ≥ 1.41 (SEE 2370, DWG. 512-53).
- 6) BEFORE CONNECTING TO THE BASE: JP3 ON PLACE IN 2216.
- 7) BEFORE CONNECTING TO THE BASE: JP2 ON PLACE IN 2216 (BY1 CUT IN 2213).
- 8) THIS PRODUCT MIGHT BE UNDER PRODUCTION.
- 9) IN 6297 & 6298: YELLOW.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by	Checked by	Approved by - date	Filename
JP	MÖ	RP / 1999-12-15	512_515.dwg
		Date	Scale
		1999-09-29	-
<b>Panasonic</b> Panasonic Electric Works Fire & Security Technology Europe AB			
EBL512 INPUT UNITS ON COM LOOPS (PART 1) CONNECTION DIAGRAM			Edition
DWG No.: 512-51			Sheet
			1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
3	EXT. LED 2217 ADDED. INFORMATION ADDED.	030505	JP	MÖ



NOTE:  
DUE TO CONTINUAL DEVELOPMENT AND IMPROVEMENT,  
SOME UNITS MIGHT NOT BE FOUND IN OUR PRESENT PRODUCT RANGE.  
FOR MORE INFORMATION, SEE EBL512 PLANNING INSTRUCTIONS.

NOTE!  
ZONE LINE INPUT (EXT. LINE):  
MAX. 50 ohm CABLE RESISTANCE.

EXAMPLE:  
TIMER 6339 CONNECTED  
TO INPUT 0, FOR  
USE OF TIME  
CHANNEL 5.  
  
FOR MORE INFORMATION  
REGARDING PROGRAMMING,  
SEE PLANNING  
INSTRUCTIONS/PROGRAMME.

EACH INPUT HAS TO BE PROGRAMMED.  
FOR MORE INFORMATION, SEE  
PLANNING INSTRUCTIONS/PROGRAMME.  
  
INPUT CAN BE PROGRAMMED  
AS NORMALLY HIGH (+24 V)  
OR NORMALLY LOW (NO VOLTAGE).

FOR MORE EXAMPLES,  
SEE DWG. 512-54, -55

JUMPERS IN 2226  
ACCORDING TO UNITS  
IN THIS FIGURE:  
JP1: PLACED  
JP2: PLACED IN POS. A  
JP3: PLACED IN POS. A  
(CONFIG. No.8)

4) BEFORE CONNECTING TO THE BASE: JP3 ON PLACE IN 2216.  
5) BEFORE CONNECTING TO THE BASE: JP3 ON PLACE IN 2216  
(BY1 CUT IN 2213).

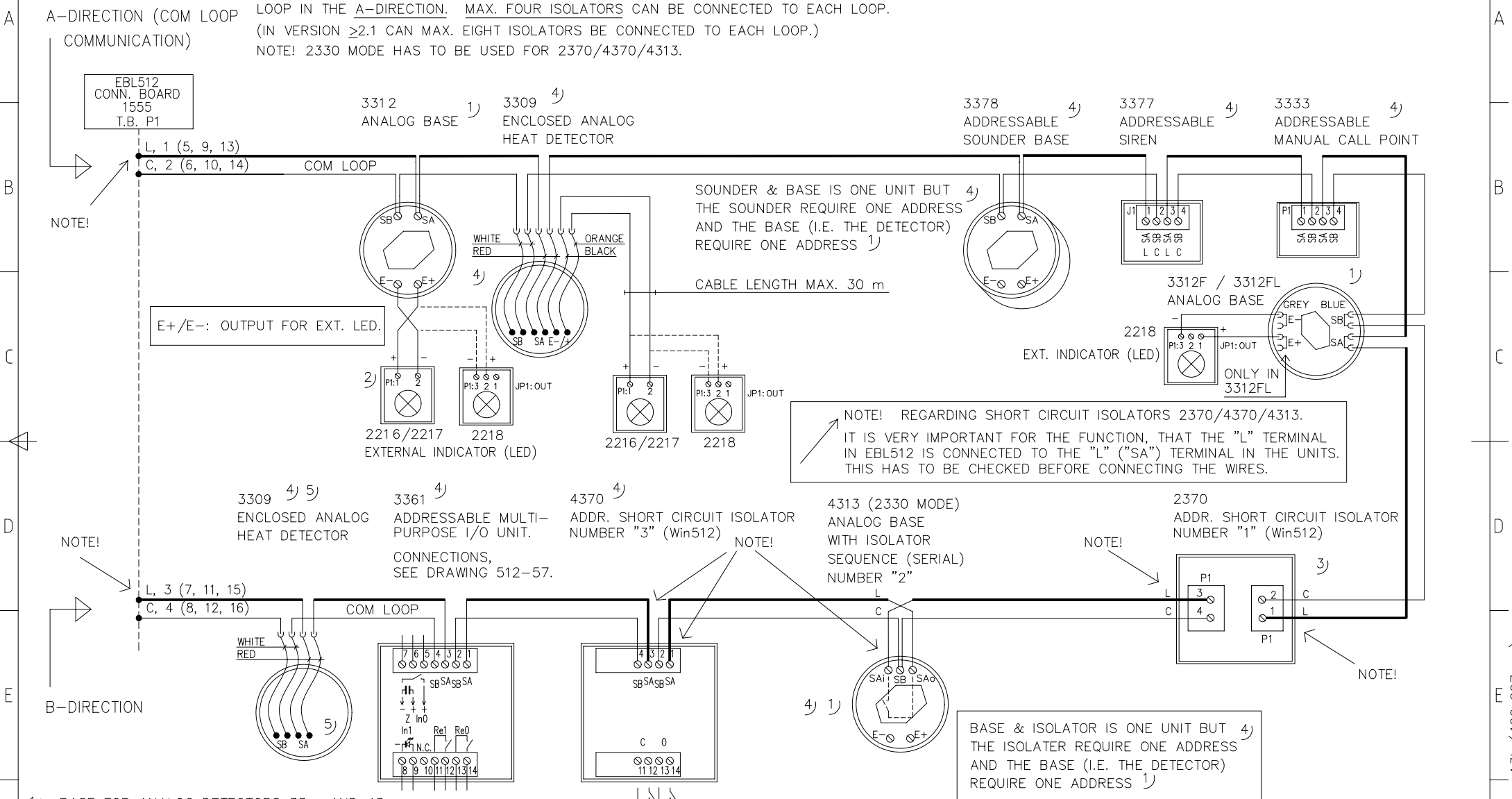
- 1) THE UNIT HAS A DIL-SWITCH FOR COM LOOP ADDRESS SETTING. SEE DWG. 512-71.
  - 2) NOTE! A TRIGGER CONDITION MUST NOT BE PROGRAMMED TO MORE THAN ONE INPUT.
  - 3) AU2 HAS BEEN REPLACED BY ZONE INTERFACE 2226.
- END OF LINE RESISTOR 10K, 3K3 OR LOOP, AND IF A SHORT CIRCUIT SHALL ACTIVATE A FAULT CONDITION OR FIRE ALARM, CAN BE SET BY JUMPERS.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_5213.dwg	Date 1999-06-04	Scale -
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 INPUT UNITS ON COM LOOPS (PART 2) CONNECTION DIAGRAM		
			DWG No.: 512-52		Edition 3

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
12	4313 MOVED. 3312F/FL ADDED. 2218 ADDED.	081215	JP	M0

2370/4370/4313 REQUIRE EBL512 SOFTWARE (SYSTEM PROGRAM) VERSION > 1.41.  
 MORE THAN ONE ISOLATOR HAVE TO BE CONNECTED CONSECUTIVELY (NUMBER 0-1-2-3) ON THE LOOP IN THE A-DIRECTION. MAX. FOUR ISOLATORS CAN BE CONNECTED TO EACH LOOP.  
 (IN VERSION ≥2.1 CAN MAX. EIGHT ISOLATORS BE CONNECTED TO EACH LOOP.)  
 NOTE! 2330 MODE HAS TO BE USED FOR 2370/4370/4313.



NOTE! REGARDING SHORT CIRCUIT ISOLATORS 2370/4370/4313. IT IS VERY IMPORTANT FOR THE FUNCTION, THAT THE "L" TERMINAL IN EBL512 IS CONNECTED TO THE "L" ("SA") TERMINAL IN THE UNITS. THIS HAS TO BE CHECKED BEFORE CONNECTING THE WIRES.

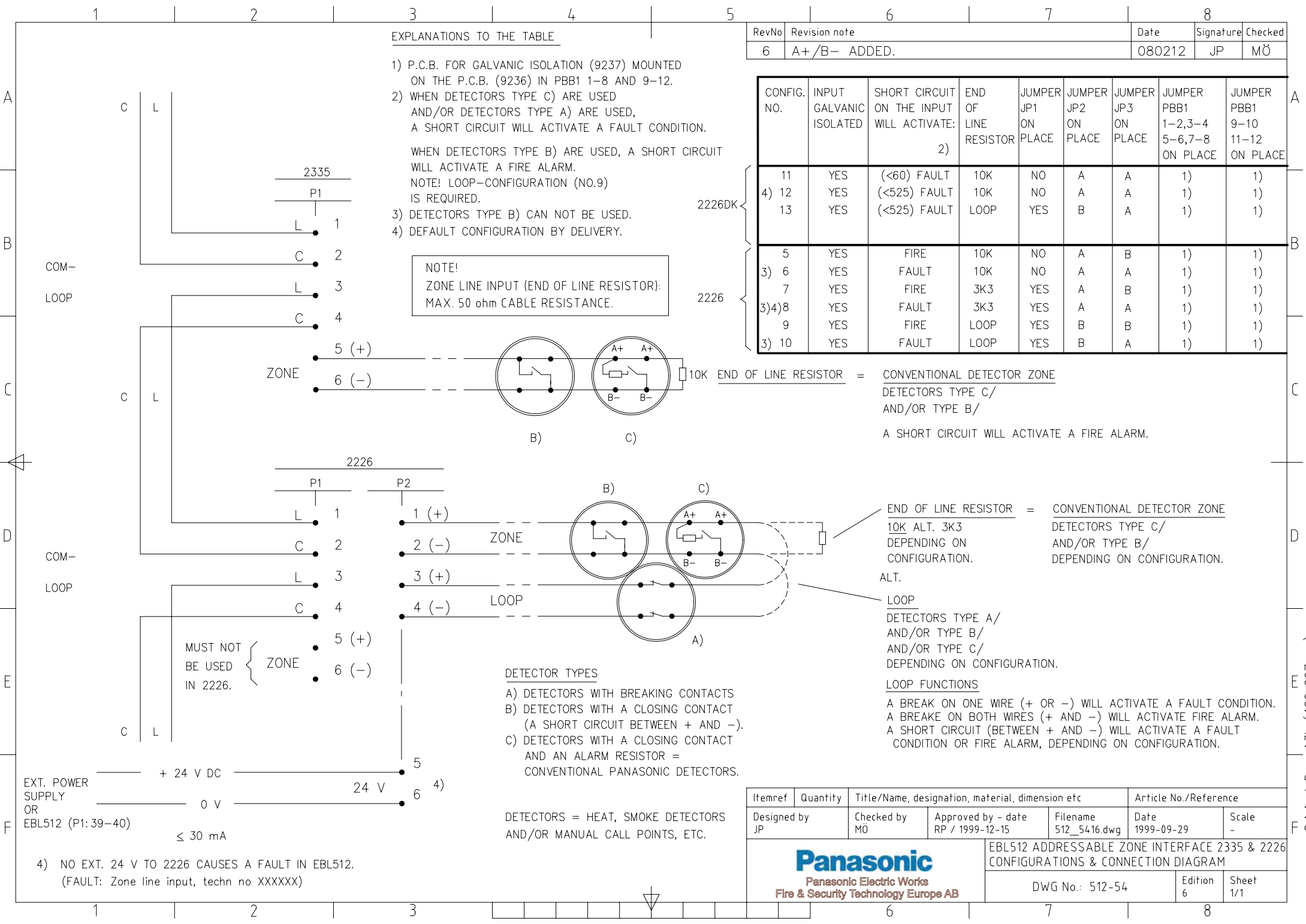
BASE & ISOLATOR IS ONE UNIT BUT THE ISOLATOR REQUIRE ONE ADDRESS AND THE BASE (I.E. THE DETECTOR) REQUIRE ONE ADDRESS

- 1) BASE FOR ANALOG DETECTORS 33xx AND 43xx. PROGRAMMING TOOL (3314) IS USED FOR DETECTOR MODE AND COM LOOP ADDRESS SETTING.
- 2) BEFORE CONNECTING TO THE BASE: JP1 ON PLACE IN 2216. (2213 CAN NOT BE CONNECTED TO 3312).
- 3) THE UNIT HAS A DIL-SWITCH FOR COM LOOP ADDRESS SETTING. SEE DWG. 512-71.
- 4) PROGRAMMING TOOL (3314) IS USED FOR COM LOOP ADDRESS SETTING, BEFORE THE UNIT IS CONNECTED TO THE COM LOOP.
- 5) ANOTHER VERSION OF 3309 HAS NO TERMINALS (E+/-) FOR EXT. LED.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by JP	Checked by M0	Approved by - date RP / 1999-12-15	Filename 512_53112.dwg Date 1999-06-04 Scale -
 <b>Panasonic Electric Works</b> Fire & Security Technology Europe AB		EBL512 INPUT UNITS ON COM LOOPS (PART 3) CONNECTION DIAGRAM	
		DWG No.: 512-53	Edition 12 Sheet 1/1

Original Dwg A3L (420x297mm)

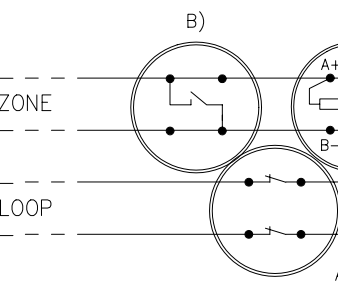
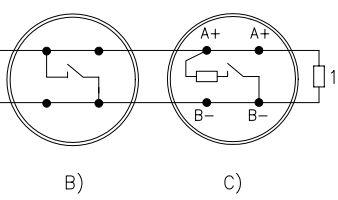




EXPLANATIONS TO THE TABLE

- 1) P.C.B. FOR GALVANIC ISOLATION (9237) MOUNTED ON THE P.C.B. (9236) IN PBB1 1-8 AND 9-12.
- 2) WHEN DETECTORS TYPE C) ARE USED AND/OR DETECTORS TYPE A) ARE USED, A SHORT CIRCUIT WILL ACTIVATE A FAULT CONDITION. WHEN DETECTORS TYPE B) ARE USED, A SHORT CIRCUIT WILL ACTIVATE A FIRE ALARM. NOTE! LOOP-CONFIGURATION (NO.9) IS REQUIRED.
- 3) DETECTORS TYPE B) CAN NOT BE USED.
- 4) DEFAULT CONFIGURATION BY DELIVERY.

NOTE!  
ZONE LINE INPUT (END OF LINE RESISTOR):  
MAX. 50 ohm CABLE RESISTANCE.



- DETECTOR TYPES**
- A) DETECTORS WITH BREAKING CONTACTS
  - B) DETECTORS WITH A CLOSING CONTACT (A SHORT CIRCUIT BETWEEN + AND -).
  - C) DETECTORS WITH A CLOSING CONTACT AND AN ALARM RESISTOR = CONVENTIONAL PANASONIC DETECTORS.

DETECTORS = HEAT, SMOKE DETECTORS AND/OR MANUAL CALL POINTS, ETC.

RevNo	Revision note	Date	Signature	Checked
6	A+ / B- ADDED.	080212	JP	MÖ

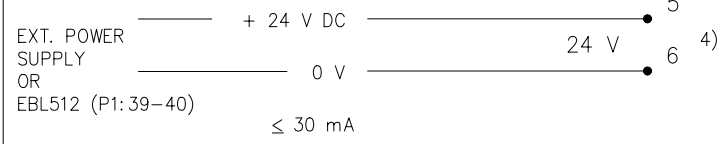
CONFIG. NO.	INPUT GALVANIC ISOLATED	SHORT CIRCUIT ON THE INPUT WILL ACTIVATE:	END OF LINE RESISTOR	JUMPER JP1 ON PLACE	JUMPER JP2 ON PLACE	JUMPER JP3 ON PLACE	JUMPER PBB1 1-2,3-4 5-6,7-8 ON PLACE	JUMPER PBB1 9-10 11-12 ON PLACE
11	YES	(<60) FAULT	10K	NO	A	A	1)	1)
4) 12	YES	(<525) FAULT	10K	NO	A	A	1)	1)
13	YES	(<525) FAULT	LOOP	YES	B	A	1)	1)
5	YES	FIRE	10K	NO	A	B	1)	1)
3) 6	YES	FAULT	10K	NO	A	A	1)	1)
7	YES	FIRE	3K3	YES	A	B	1)	1)
3)4) 8	YES	FAULT	3K3	YES	A	A	1)	1)
9	YES	FIRE	LOOP	YES	B	B	1)	1)
3) 10	YES	FAULT	LOOP	YES	B	A	1)	1)

END OF LINE RESISTOR = CONVENTIONAL DETECTOR ZONE  
DETECTORS TYPE C/  
AND/OR TYPE B/  
A SHORT CIRCUIT WILL ACTIVATE A FIRE ALARM.

END OF LINE RESISTOR = CONVENTIONAL DETECTOR ZONE  
10K ALT. 3K3  
DEPENDING ON CONFIGURATION.  
ALT.

LOOP  
DETECTORS TYPE A/  
AND/OR TYPE B/  
AND/OR TYPE C/  
DEPENDING ON CONFIGURATION.

LOOP FUNCTIONS  
A BREAK ON ONE WIRE (+ OR -) WILL ACTIVATE A FAULT CONDITION.  
A BREAK ON BOTH WIRES (+ AND -) WILL ACTIVATE FIRE ALARM.  
A SHORT CIRCUIT (BETWEEN + AND -) WILL ACTIVATE A FAULT CONDITION OR FIRE ALARM, DEPENDING ON CONFIGURATION.



4) NO EXT. 24 V TO 2226 CAUSES A FAULT IN EBL512.  
(FAULT: Zone line input, techn no XXXXXX)

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_54.16.dwg	Date 1999-09-29	Scale -
		EBL512 ADDRESSABLE ZONE INTERFACE 2335 & 2226 CONFIGURATIONS & CONNECTION DIAGRAM			
		DWG No.: 512-54	Edition 6	Sheet 1/1	

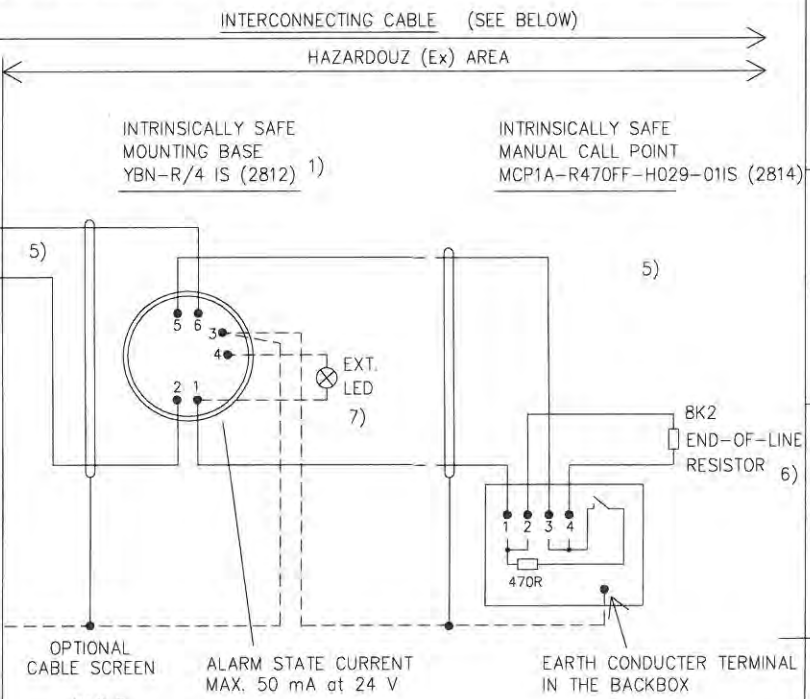
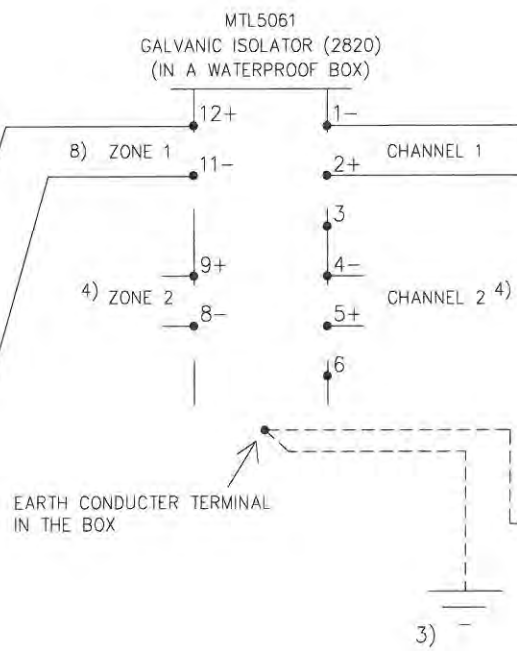
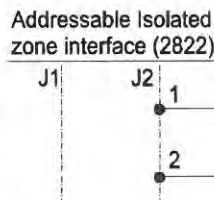
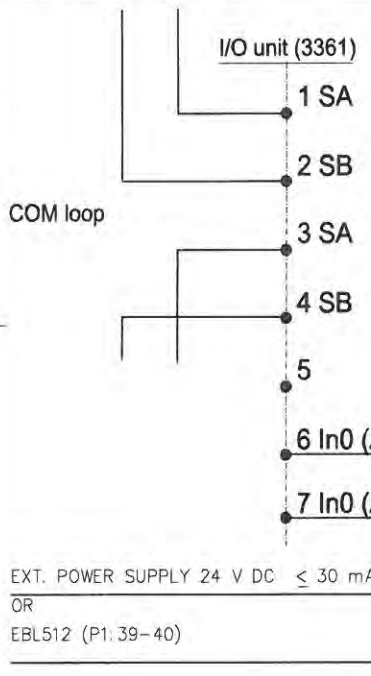
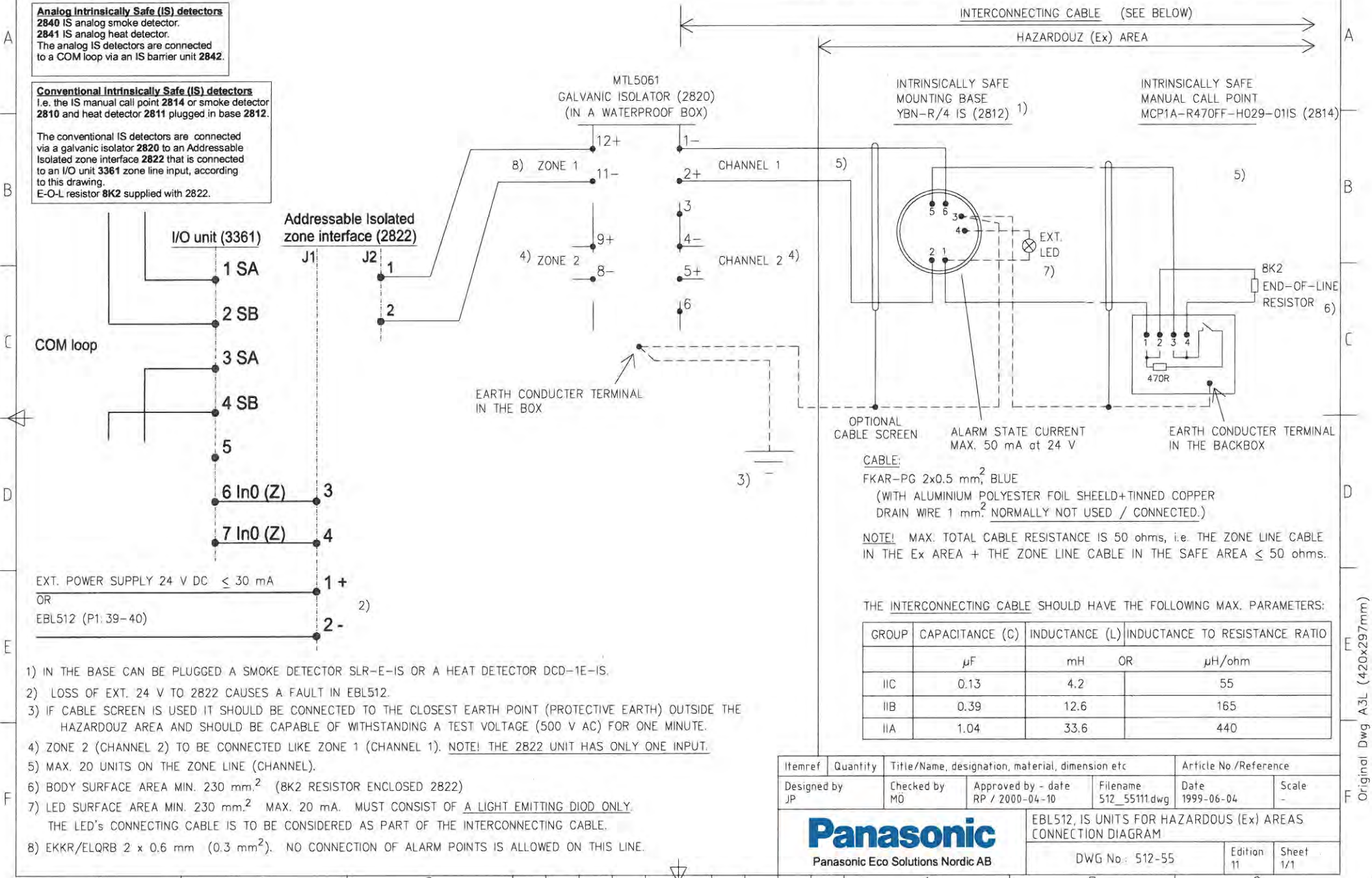
Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
11	INFO. ADDED/REVISED. 2822 & 3361 ADDED.	120904	JP	MÖ

**NOTE!**

**Analog Intrinsically Safe (IS) detectors**  
**2840** IS analog smoke detector.  
**2841** IS analog heat detector.  
 The analog IS detectors are connected to a COM loop via an IS barrier unit **2842**.

**Conventional Intrinsically Safe (IS) detectors**  
 i.e. the IS manual call point **2814** or smoke detector **2810** and heat detector **2811** plugged in base **2812**.  
 The conventional IS detectors are connected via a galvanic isolator **2820** to an Addressable Isolated zone interface **2822** that is connected to an I/O unit **3361** zone line input, according to this drawing.  
 E-O-L resistor **8K2** supplied with **2822**.



**CABLE:**  
 FKAR-PG 2x0.5 mm<sup>2</sup> BLUE  
 (WITH ALUMINIUM POLYESTER FOIL SHEELD+TINNED COPPER DRAIN WIRE 1 mm<sup>2</sup> NORMALLY NOT USED / CONNECTED.)

**NOTE!** MAX. TOTAL CABLE RESISTANCE IS 50 ohms, i.e. THE ZONE LINE CABLE IN THE Ex AREA + THE ZONE LINE CABLE IN THE SAFE AREA ≤ 50 ohms.

THE INTERCONNECTING CABLE SHOULD HAVE THE FOLLOWING MAX. PARAMETERS:

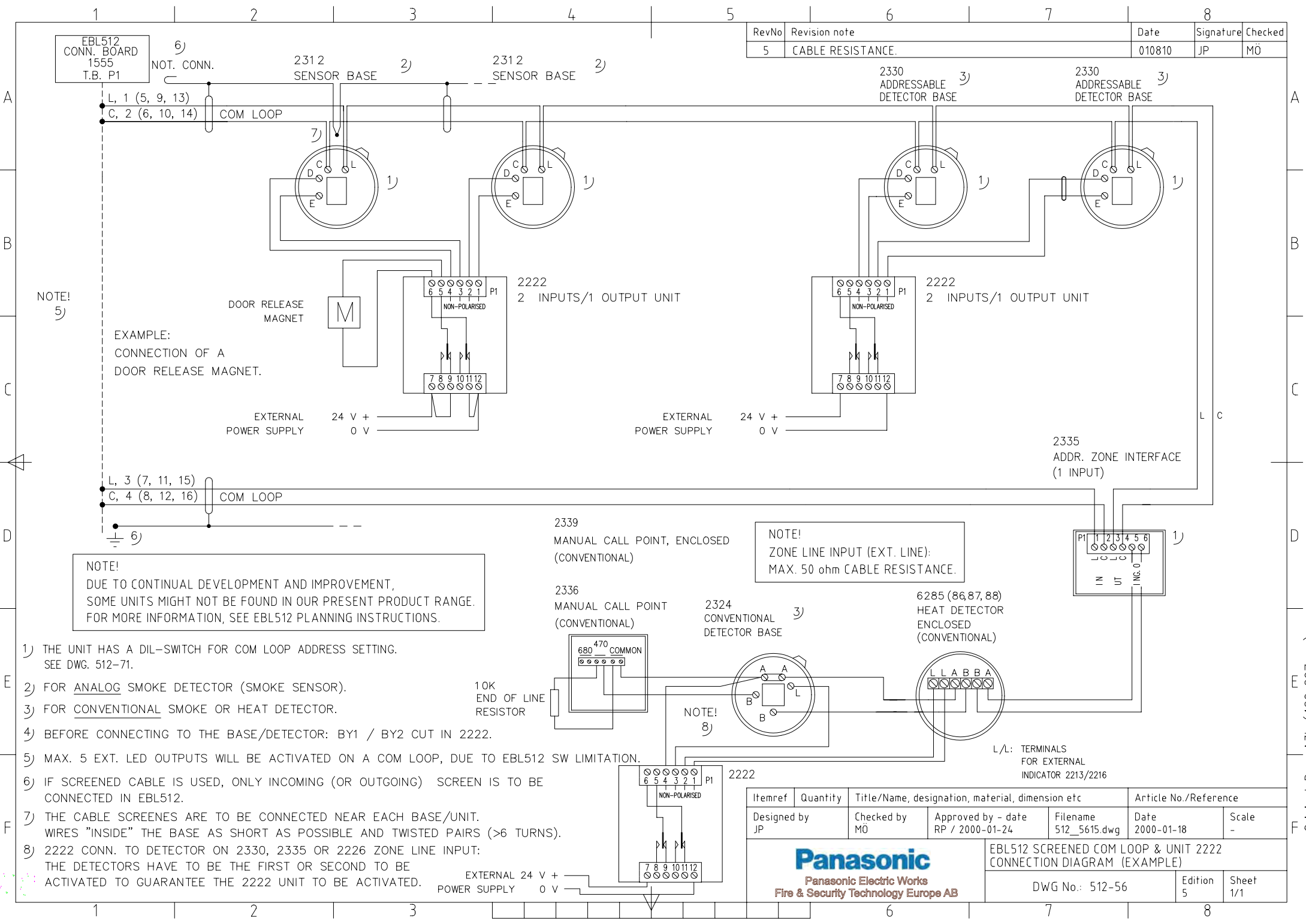
GROUP	CAPACITANCE (C)	INDUCTANCE (L)		INDUCTANCE TO RESISTANCE RATIO
	μF	mH	OR	μH/ohm
IIC	0.13	4.2		55
IIB	0.39	12.6		165
IIA	1.04	33.6		440

- 1) IN THE BASE CAN BE PLUGGED A SMOKE DETECTOR SLR-E-IS OR A HEAT DETECTOR DCD-1E-IS.
- 2) LOSS OF EXT. 24 V TO 2822 CAUSES A FAULT IN EBL512.
- 3) IF CABLE SCREEN IS USED IT SHOULD BE CONNECTED TO THE CLOSEST EARTH POINT (PROTECTIVE EARTH) OUTSIDE THE HAZARDOUS AREA AND SHOULD BE CAPABLE OF WITHSTANDING A TEST VOLTAGE (500 V AC) FOR ONE MINUTE.
- 4) ZONE 2 (CHANNEL 2) TO BE CONNECTED LIKE ZONE 1 (CHANNEL 1). **NOTE!** THE 2822 UNIT HAS ONLY ONE INPUT.
- 5) MAX. 20 UNITS ON THE ZONE LINE (CHANNEL).
- 6) BODY SURFACE AREA MIN. 230 mm<sup>2</sup> (8K2 RESISTOR ENCLOSED 2822)
- 7) LED SURFACE AREA MIN. 230 mm<sup>2</sup> MAX. 20 mA. MUST CONSIST OF A LIGHT EMITTING DIOD ONLY. THE LED'S CONNECTING CABLE IS TO BE CONSIDERED AS PART OF THE INTERCONNECTING CABLE.
- 8) EKKR/ELQRB 2 x 0.6 mm (0.3 mm<sup>2</sup>). NO CONNECTION OF ALARM POINTS IS ALLOWED ON THIS LINE.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by MÖ	Approved by - date RP / 2000-04-10	Filename 512_55111.dwg	Date 1999-06-04	Scale	
 Panasonic Eco Solutions Nordic AB				EBL512, IS UNITS FOR HAZARDOUS (Ex) AREAS CONNECTION DIAGRAM		
				DWG No.: 512-55	Edition 11	Sheet 1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
5	CABLE RESISTANCE.	010810	JP	MÖ



NOTE!  
5)

EXAMPLE:  
CONNECTION OF A  
DOOR RELEASE MAGNET.

NOTE!  
DUE TO CONTINUAL DEVELOPMENT AND IMPROVEMENT,  
SOME UNITS MIGHT NOT BE FOUND IN OUR PRESENT PRODUCT RANGE.  
FOR MORE INFORMATION, SEE EBL512 PLANNING INSTRUCTIONS.

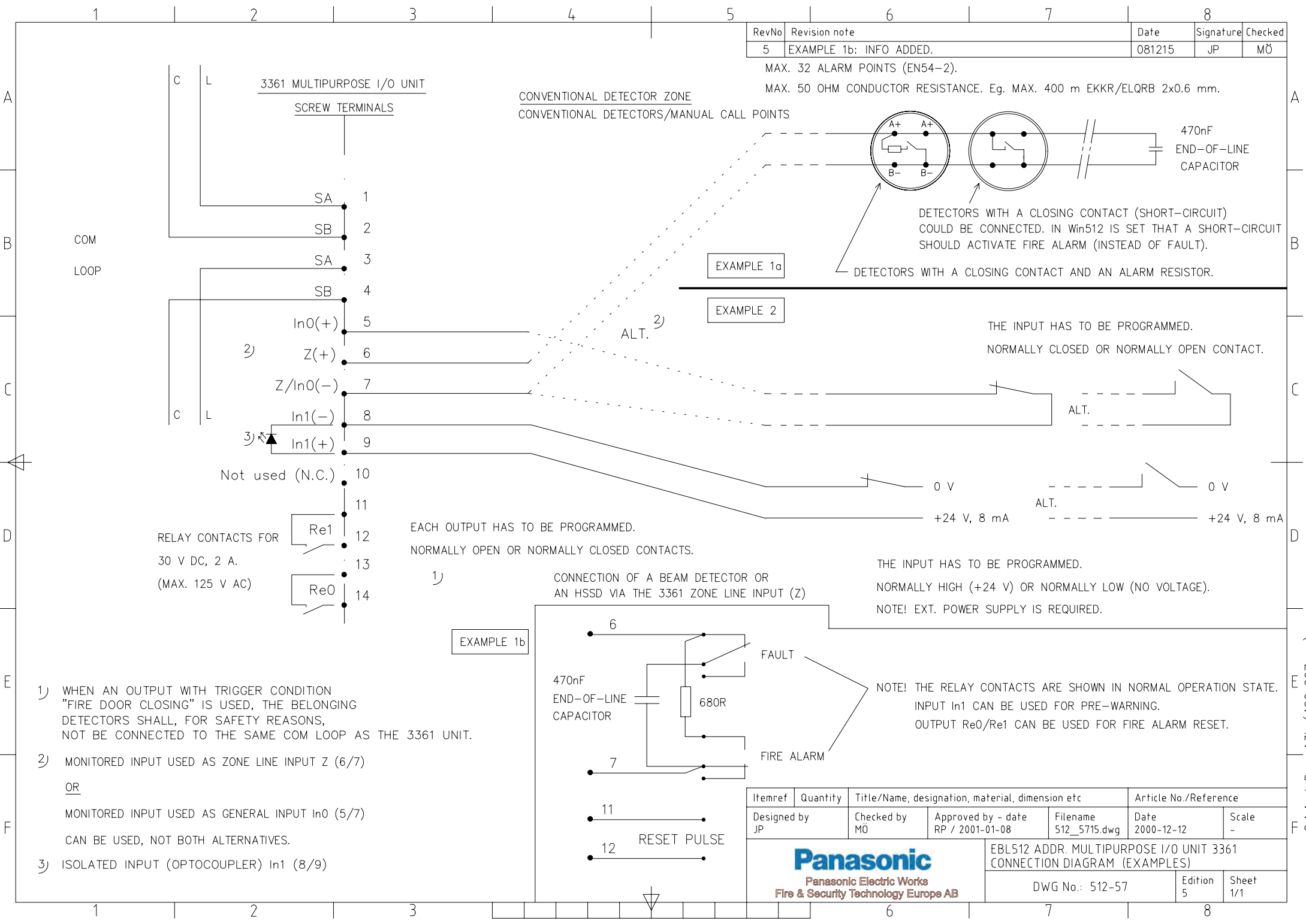
NOTE!  
ZONE LINE INPUT (EXT. LINE):  
MAX. 50 ohm CABLE RESISTANCE.

- 1) THE UNIT HAS A DIL-SWITCH FOR COM LOOP ADDRESS SETTING. SEE DWG. 512-71.
- 2) FOR ANALOG SMOKE DETECTOR (SMOKE SENSOR).
- 3) FOR CONVENTIONAL SMOKE OR HEAT DETECTOR.
- 4) BEFORE CONNECTING TO THE BASE/DETECTOR: BY1 / BY2 CUT IN 2222.
- 5) MAX. 5 EXT. LED OUTPUTS WILL BE ACTIVATED ON A COM LOOP, DUE TO EBL512 SW LIMITATION.
- 6) IF SCREENED CABLE IS USED, ONLY INCOMING (OR OUTGOING) SCREEN IS TO BE CONNECTED IN EBL512.
- 7) THE CABLE SCREENES ARE TO BE CONNECTED NEAR EACH BASE/UNIT. WIRES "INSIDE" THE BASE AS SHORT AS POSSIBLE AND TWISTED PAIRS (>6 TURNS).
- 8) 2222 CONN. TO DETECTOR ON 2330, 2335 OR 2226 ZONE LINE INPUT: THE DETECTORS HAVE TO BE THE FIRST OR SECOND TO BE ACTIVATED TO GUARANTEE THE 2222 UNIT TO BE ACTIVATED.

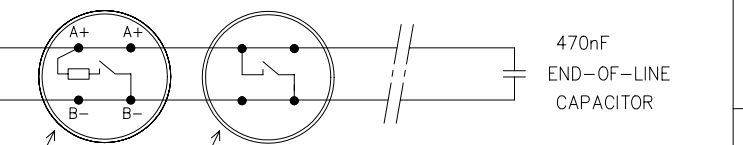
Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by	Checked by	Approved by - date	Filename
JP	MÖ	RP / 2000-01-24	512_5615.dwg
Date			Scale
2000-01-18			-
<b>Panasonic</b> Panasonic Electric Works Fire & Security Technology Europe AB			
EBL512 SCREENED COM LOOP & UNIT 2222 CONNECTION DIAGRAM (EXAMPLE)			Edition
DWG No.: 512-56			1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
5	EXAMPLE 1b: INFO ADDED.	081215	JP	MÖ



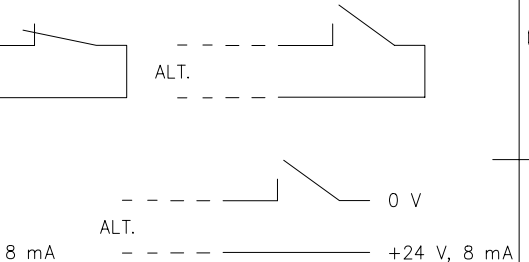
MAX. 32 ALARM POINTS (EN54-2).  
 MAX. 50 OHM CONDUCTOR RESISTANCE. Eg. MAX. 400 m EKKR/ELQRB 2x0.6 mm.



DETECTORS WITH A CLOSING CONTACT (SHORT-CIRCUIT) COULD BE CONNECTED. IN Win512 IS SET THAT A SHORT-CIRCUIT SHOULD ACTIVATE FIRE ALARM (INSTEAD OF FAULT).  
 DETECTORS WITH A CLOSING CONTACT AND AN ALARM RESISTOR.

EXAMPLE 1a  
 EXAMPLE 2

THE INPUT HAS TO BE PROGRAMMED.  
 NORMALLY CLOSED OR NORMALLY OPEN CONTACT.

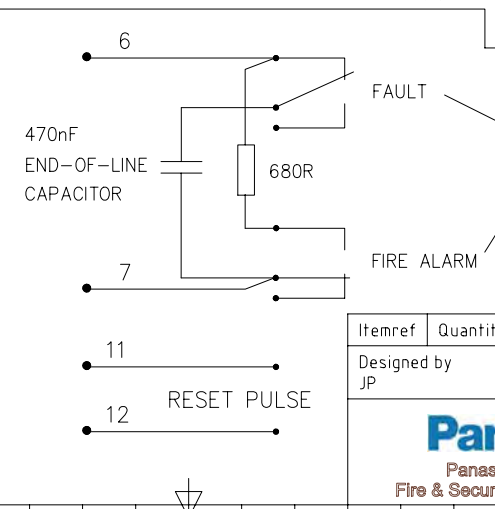


EACH OUTPUT HAS TO BE PROGRAMMED.  
 NORMALLY OPEN OR NORMALLY CLOSED CONTACTS.

THE INPUT HAS TO BE PROGRAMMED.  
 NORMALLY HIGH (+24 V) OR NORMALLY LOW (NO VOLTAGE).  
 NOTE! EXT. POWER SUPPLY IS REQUIRED.

EXAMPLE 1b

CONNECTION OF A BEAM DETECTOR OR AN HSSD VIA THE 3361 ZONE LINE INPUT (Z)



NOTE! THE RELAY CONTACTS ARE SHOWN IN NORMAL OPERATION STATE.  
 INPUT In1 CAN BE USED FOR PRE-WARNING.  
 OUTPUT Re0/Re1 CAN BE USED FOR FIRE ALARM RESET.

- 1) WHEN AN OUTPUT WITH TRIGGER CONDITION "FIRE DOOR CLOSING" IS USED, THE BELONGING DETECTORS SHALL, FOR SAFETY REASONS, NOT BE CONNECTED TO THE SAME COM LOOP AS THE 3361 UNIT.
- 2) MONITORED INPUT USED AS ZONE LINE INPUT Z (6/7)  
 OR  
 MONITORED INPUT USED AS GENERAL INPUT In0 (5/7)  
 CAN BE USED, NOT BOTH ALTERNATIVES.
- 3) ISOLATED INPUT (OPTOCOUPLER) In1 (8/9)

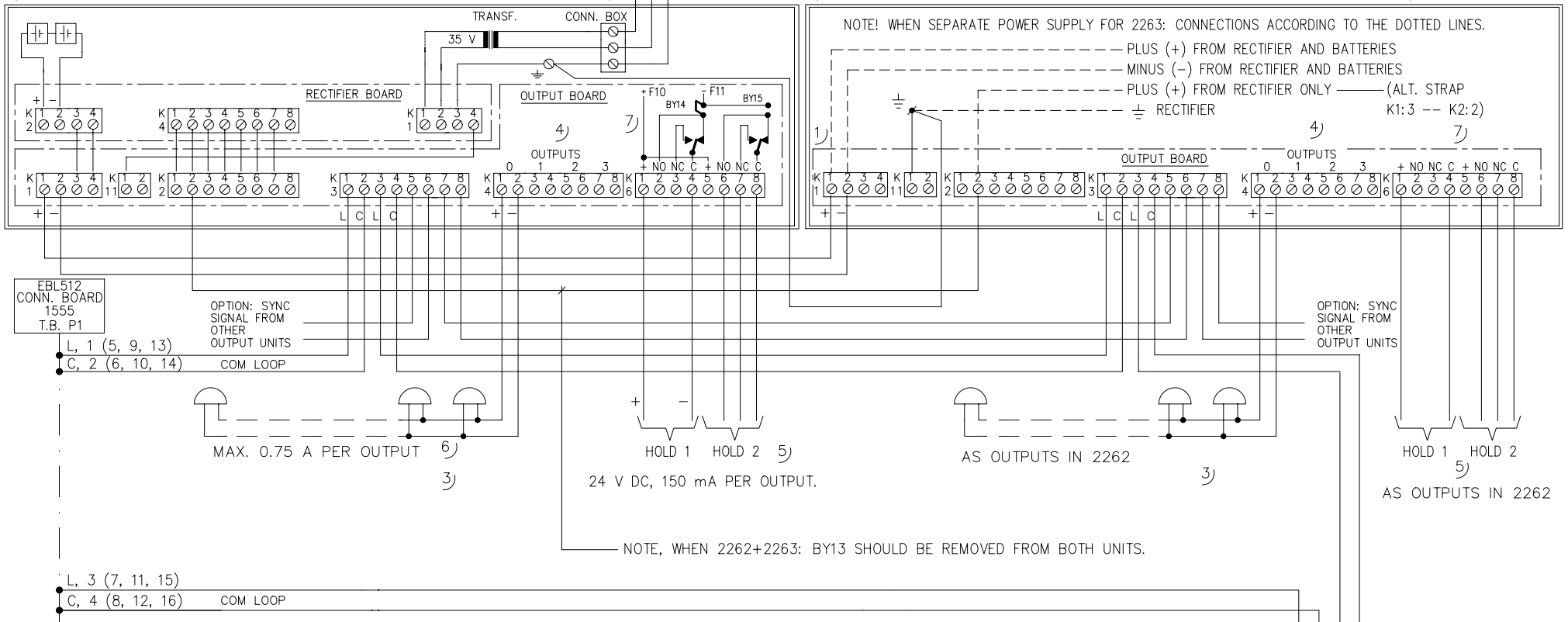
Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by MÖ	Approved by - date RP / 2001-01-08	Filename 512_5715.dwg	Date 2000-12-12	Scale -	
			EBL512 ADDR. MULTIPURPOSE I/O UNIT 3361 CONNECTION DIAGRAM (EXAMPLES)			
			DWG No.: 512-57		Edition 5	Sheet 1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
1	JUMPER BY13 INFORMATION	010117	JP	MÖ

2262  
ADDRESSABLE 4 OUTPUTS UNIT WITH POWER SUPPLY  
(OUTPUT UNIT WITH 4 SUPERVISED VOLTAGE OUTPUTS +2 SPEC. OUTP. HOLD1 & 2)

2263  
ADDRESSABLE 4 OUTPUTS UNIT WITHOUT POWER SUPPLY  
(OUTPUT UNIT WITH 4 SUPERVISED VOLTAGE OUTPUTS +2 SPEC. OUTP. HOLD1 & 2)

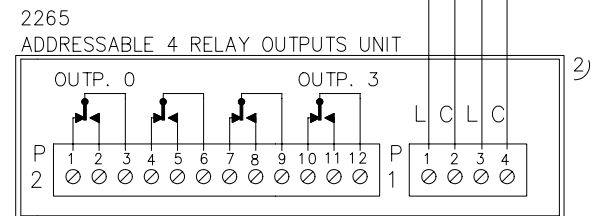
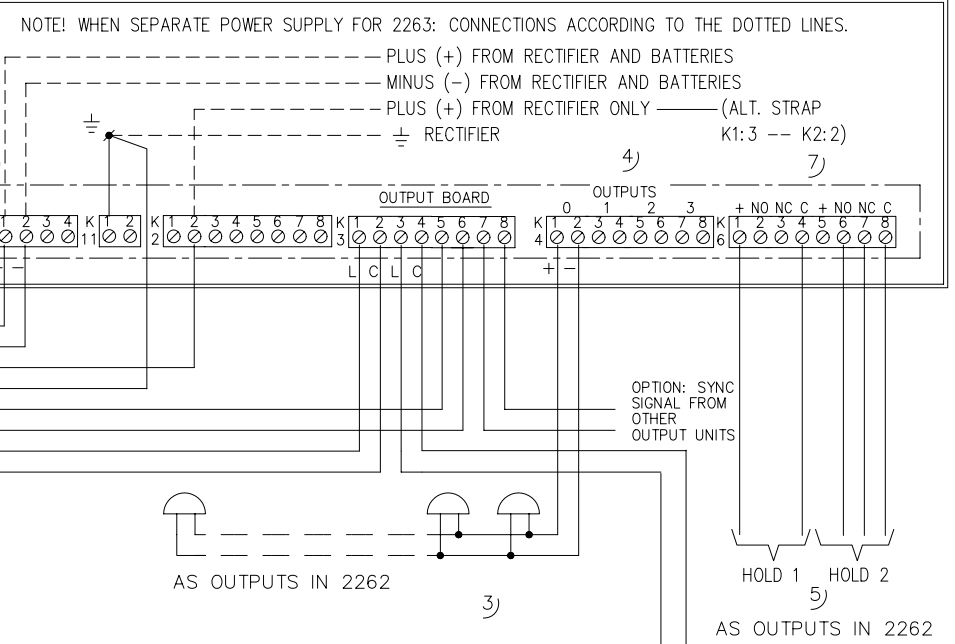


- 1) 2263 CAN HAVE EXT. POWER SUPPLY, 24 V, 4A.  
NOTE! EXT. POWER IS NOT SUPERVISED BY THE CONTROL UNIT (OR BY 2263).
- 2) THE UNIT HAS A DIL-SWITCH FOR COM LOOP ADDRESS SETTING.  
DIL-SWITCH IN 2262/2263: SW2 SEE DWG. 512-71.
- 3) REGARDING ALARM DEVICES, CONNECTION, ETC. SEE DWG. 512-42
- 4) OUTPUTS 0-3 ARE MARKED OUT1-4 ON THE P.C.B.
- 5) BY2: NO JUMPER = OUTPUTS HOLD1 & 2: STEADY 24 V DC.  
JUMPER ON PLACE = OUTPUTS HOLD1 & 2 ACTIVATED  
PARALLEL WITH OUTPUT 3 (i.e. OUTPUT 3  
ACTIVATED = NO VOLTAGE ON HOLD1 & 2.
- 6) ONE 2262: MAX. 0.75 A PER OUTPUT  
2262 + 2263: MAX. 0.375 A PER OUTPUT  
ONE 2263+EXT. POWER SUPPLY: MAX 0.75 A PER OUTPUT
- 7) HOLD1 & 2 RELAYS ARE "ACTIVATED" IN NORMAL STATUS (AS SHOWN IN FIGURE), AND WILL BE "DEACTIVATED" IN ALARM STATUS.  
JUMPER (BY14) ON PLACE = HOLD1 IS A VOLTAGE OUTPUT.  
(K6:1/4) e.g. FOR DOOR RELEASE MAGNET.  
JUMPER (BY15) REMOVED = HOLD2 IS POTENTIAL FREE RELAY CONTACTS (K6:6/7/8)

2262/2263:  
REGARDING OUTPUT BOARD  
JUMPER  
BY1: NO JUMPER = 2262  
JUMPER ON PLACE = 2263

EACH OUTPUT HAS TO BE PROGRAMMED.  
SUPERVISED = MONITORED  
FOR MORE INFORMATION,  
SEE PLANNING INSTRUCTIONS/ PROGRAMME.

NOTE!  
AFTER CHANGING JUMPER(S), PRESS RESET SWITCH (SW1).



NOT SUPERVISED OUTPUTS. RELAY CONTACTS: MAX. 30 V, 1 A.

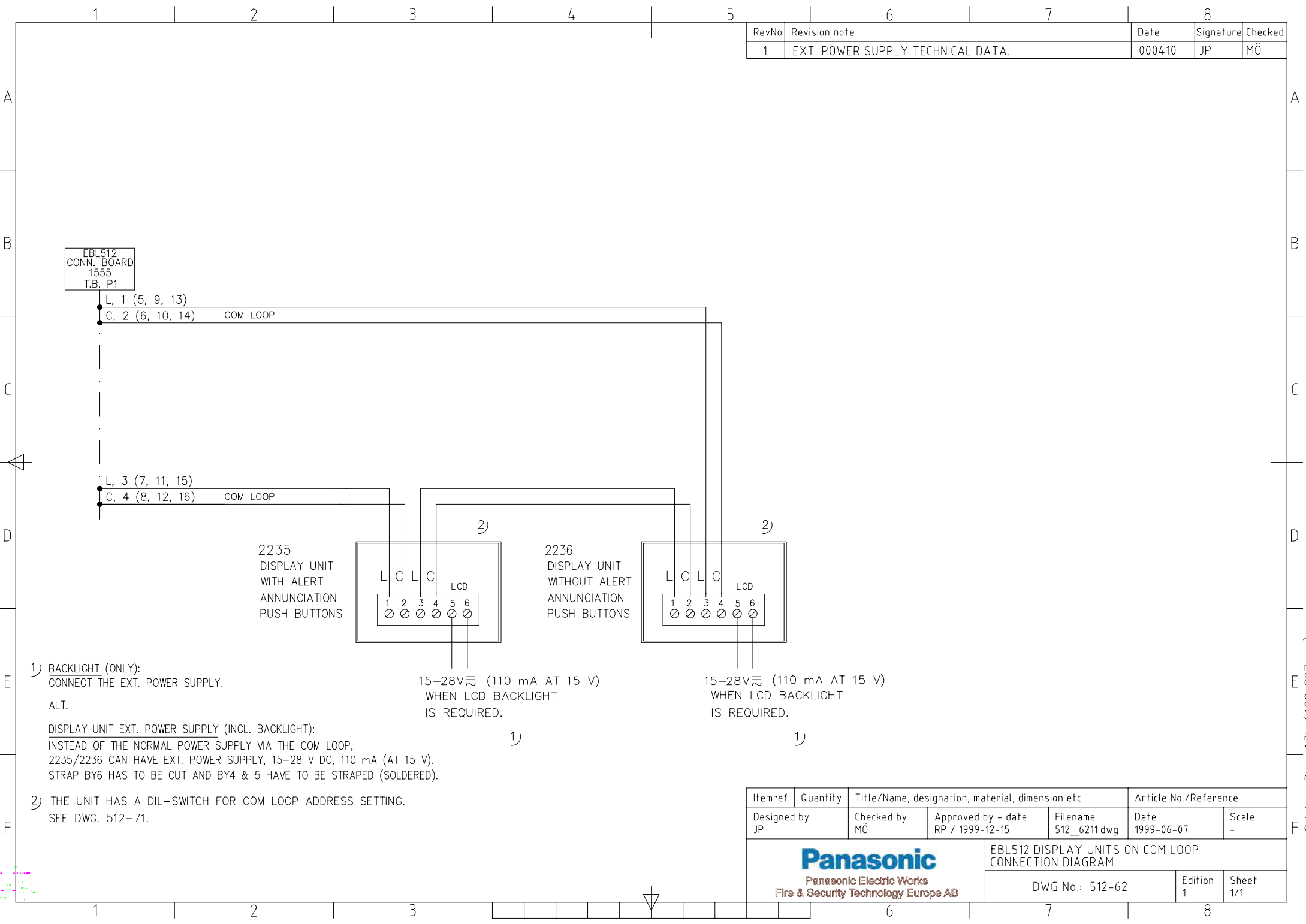
NOTE! 24 V IS THE RATED VOLTAGE. THE OPERATING VOLTAGE CAN BE HIGHER/LOWER.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_6111.dwg	Date 1999-06-04	Scale -
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 OUTPUT UNITS ON COM LOOPS CONNECTION DIAGRAM		
			DWG No.: 512-61	Edition 1	Sheet 1/1

Original Dwg A3L (420x297mm)



RevNo	Revision note	Date	Signature	Checked
1	EXT. POWER SUPPLY TECHNICAL DATA.	000410	JP	MÖ



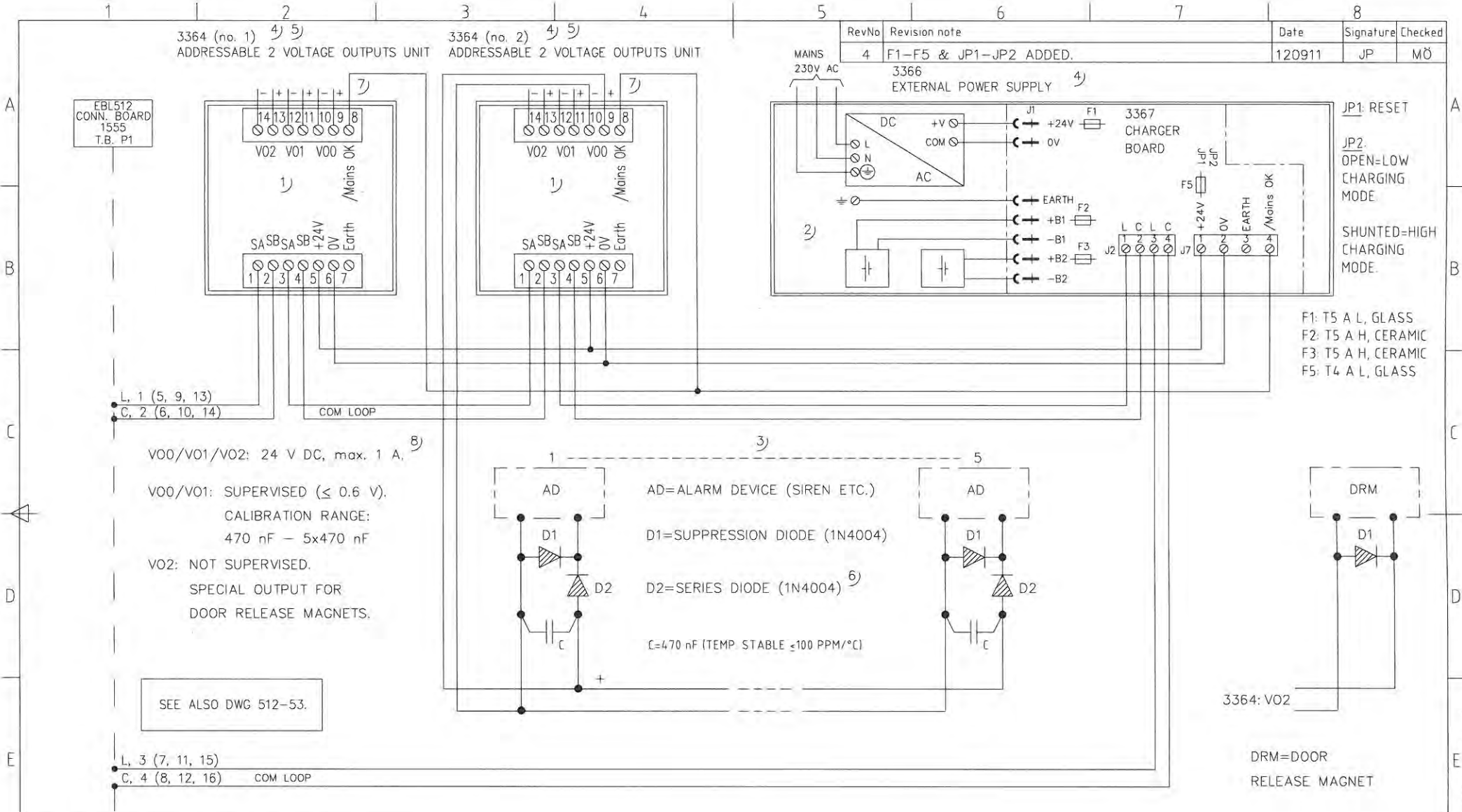
1) BACKLIGHT (ONLY):  
CONNECT THE EXT. POWER SUPPLY.  
ALT.

DISPLAY UNIT EXT. POWER SUPPLY (INCL. BACKLIGHT):  
INSTEAD OF THE NORMAL POWER SUPPLY VIA THE COM LOOP,  
2235/2236 CAN HAVE EXT. POWER SUPPLY, 15-28 V DC, 110 mA (AT 15 V).  
STRAP BY6 HAS TO BE CUT AND BY4 & 5 HAVE TO BE STRAPED (SOLDERED).

2) THE UNIT HAS A DIL-SWITCH FOR COM LOOP ADDRESS SETTING.  
SEE DWG. 512-71.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference			
Designed by JP	Checked by MÖ	Approved by - date RP / 1999-12-15	Filename 512_6211.dwg	Date 1999-06-07	Scale -	
 Panasonic Electric Works Fire & Security Technology Europe AB		EBL512 DISPLAY UNITS ON COM LOOP CONNECTION DIAGRAM			Edition 1	Sheet 1/1
		DWG No.: 512-62				

Original Dwg A3L (420x297mm)

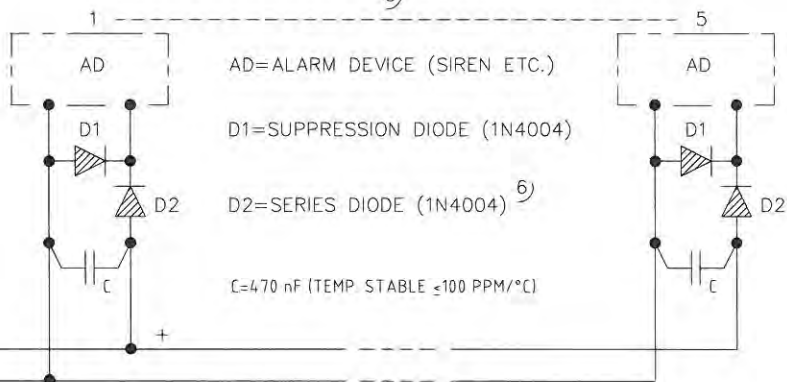


RevNo	Revision note	Date	Signature	Checked
4	F1-F5 & JP1-JP2 ADDED.	120911	JP	MÖ

- F1: T5 A L, GLASS
- F2: T5 A H, CERAMIC
- F3: T5 A H, CERAMIC
- F5: T4 A L, GLASS

V00/V01/V02: 24 V DC, max. 1 A. <sup>B)</sup>  
 V00/V01: SUPERVISED ( $\leq 0.6$  V).  
 CALIBRATION RANGE:  
 470 nF - 5x470 nF  
 V02: NOT SUPERVISED.  
 SPECIAL OUTPUT FOR  
 DOOR RELEASE MAGNETS.

SEE ALSO DWG 512-53.


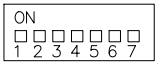


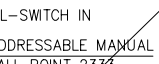


- 1) FOR MORE INFORMATION. SEE TECHNICAL DESCRIPTION MEW00529.
- 2) FOR MORE INFORMATION. SEE TECHNICAL DESCRIPTION MEW00519.
- 3) ONE, TWO OR UP TO FIVE ALARM DEVICES CAN BE CONNECTED TO A SUPERVISED OUTPUT.
- 4) PROGRAMMING TOOL (3314) IS USED FOR COM LOOP ADDRESS SETTING BEFORE THE UNIT IS CONNECTED TO THE COM LOOP.
- 5) THE UNIT REQUIRE EXT. POWER SUPPLY, e.g. 3366. NOTE! ALSO DURING ADDRESS SETTING.
- 6) HAS TO BE 1N4004 or EQUIVALENT.
- 7) IF TERMINAL 8 IS NOT CONNECTED TO 3366, J7:4, IT HAS TO BE CONNECTED TO TERMINAL 6, i.e. 0 V.
- 8) 1 A CONT. 1.4 A DURING 10 ms.

NOTE! 24 V IS THE RATED VOLTAGE. THE OPERATING VOLTAGE CAN BE HIGHER/LOWER.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 2006-03-21	Filename 512_6314.dwg	Date 2006-03-21	Scale -
<b>Panasonic</b> Panasonic Eco Solutions Nordic AB			EBL512 OUTPUT UNITS ON COM LOOPS CONNECTION DIAGRAM		
			DWG No.: 512-63	Edition 4	Sheet 1/1

Original Dwg A3L (420x297mm)

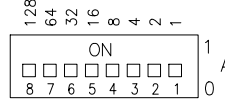
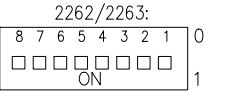
	1	2	3	4	5	6	7	8				
						RevNo	Revision note	Date	Signature	Checked		
A	00	13	26	39	52	65	78	91	104	112	120	NOTE: DUE TO CONTINUAL DEVELOPMENT AND IMPROVEMENT, SOME UNITS MIGHT NOT BE FOUND IN OUR PRESENT PRODUCT RANGE. FOR MORE INFORMATION, SEE EBL512 PLANNING INSTRUCTIONS.
	01	14	27	40	53	66	79	92	105	113	121	
	02	15	28	41	54	67	80	93	106	114	122	
B	03	16	29	42	55	68	81	94	107	115	123	
	04	17	30	43	56	69	82	95	108	116	124	
	05	18	31	44	57	70	83	96	109	117	125	
C	06	19	32	45	58	71	84	97	110	118	126	
	07	20	33	46	59	72	85	98	111	119	127	
	08	21	34	47	60	73	86	99	 DIL-SWITCH IN ADDRESSABLE DETECTOR BASE 2330 SW. No. 1-7 ARE TO BE SET ACCORDING TO 7 WAY DIL-SWITCH ("S")			
D	09	22	35	48	61	74	87	100	 DIL-SWITCH IN SENSOR BASE 2312 SW. No. 1-7 ARE TO BE SET ACCORDING TO 7 WAY DIL-SWITCH ("S")			
	10	23	36	49	62	75	88	101	 DIL-SWITCH IN ADDRESSABLE MANUAL CALL POINT 2333 SW. No. 1-7 ARE TO BE SET ACCORDING TO 7 WAY DIL-SWITCH ("S")			
E	11	24	37	50	63	76	89	102	 DIL-SWITCH IN ADDRESSABLE HEAT DETECTOR, ENCLOSED 2340/2341 SW. No. 1-7 ARE TO BE SET ACCORDING TO 7 WAY DIL-SWITCH ("S")			
	12	25	38	51	64	77	90	103	 DIL-SWITCH IN ADDRESSABLE ZONE INTERFACE 2335/2226/2821 SW. No. 8, NORMALLY SET IN POS. OFF/OPEN/O (IF IN POS. ON/1, THE LED IN 2333 WILL BLINK SIMULTANEOUSLY WITH THE COMMUNICATION TO 2333.) SW. No. 8 IS ALWAYS TO BE SET IN POS. OFF/OPEN/O			


DIL-SWITCH IN: ADDRESSABLE 8 INPUTS UNIT 2276 1)  
 OUTPUT UNITS 2262, 2263 & 2265. 2)  
 DISPLAY UNITS 2235 & 2236

NOTE! STUDY THE FIGURES/TEXT REGARDING THE DIL-SWITCHES BEFORE SETTING OF ADDRESS.

1) NOTE! SW. No. 8 (128) IS ALWAYS TO BE SET IN POS. 1 (ON).  
 2) NOTE! IN 2262/2263, 1/0 (ON/OFF) ARE REVERSE ACCORDING TO THE FIGURE TO THE LEFT. SEE THE FIGURE TO THE RIGHT.

SW. No. 1-7 (1-64) ARE TO BE SET ACCORDING TO 8 WAY DIL-SWITCH ("A")

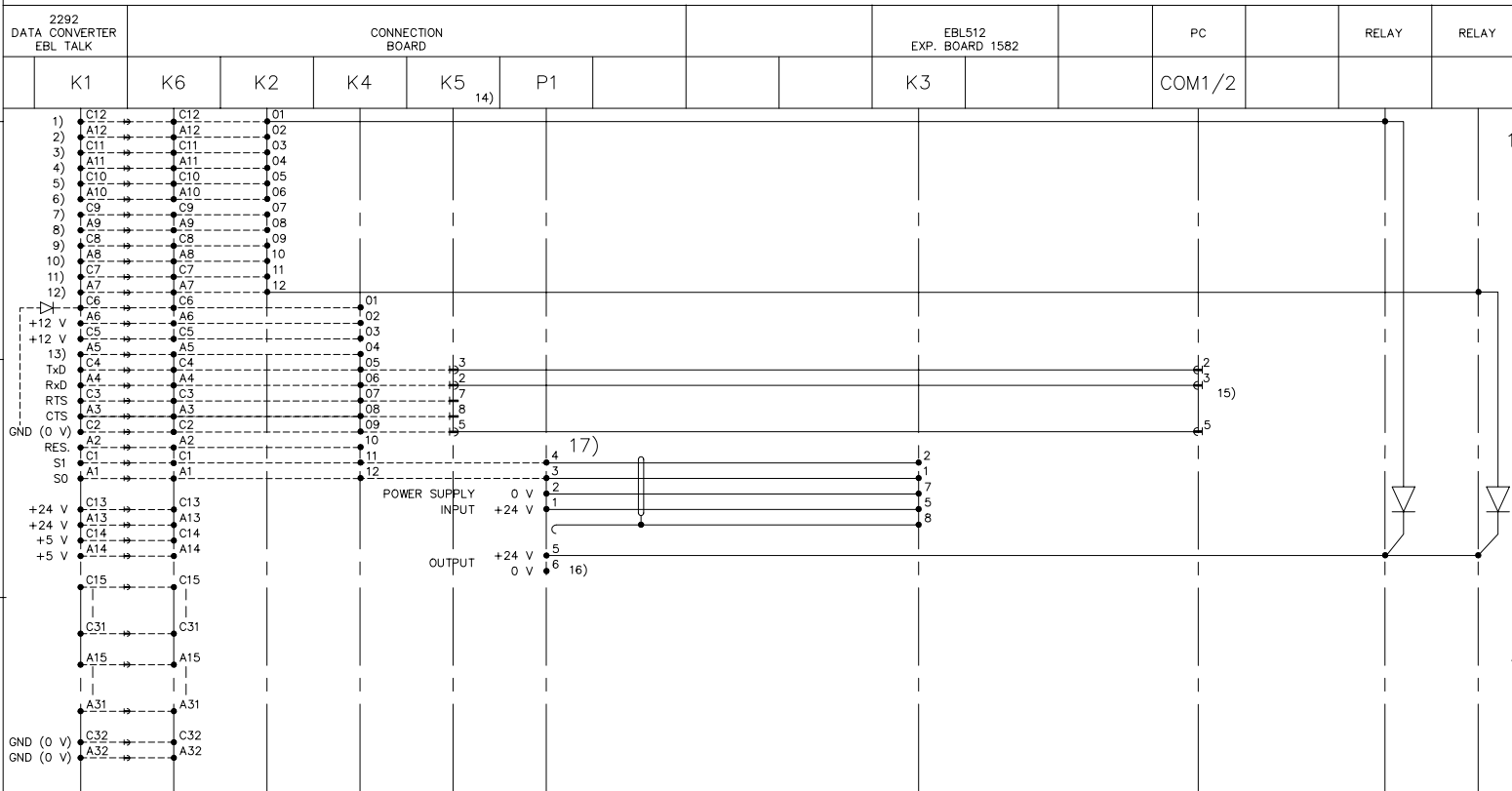



Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP	Checked by M0	Approved by - date RP / 1999-12-15	Filename 512_7111.dwg	Date 1999-06-07	Scale -	
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 ADDRESS SETTING DIL-SWITCH COM LOOP ADDRESS SETTING TABLE			
			DWG No.: 512-71	Edition 1	Sheet 1/1	

Original Dwg A3L (420x297mm)



RevNo	Revision note	Date	Signature	Checked
3	MINOR INFORMATION ADDED.	041005	JP	MÖ



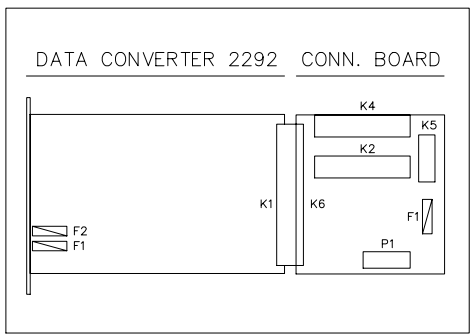
16) EXTERNAL 24 V POWER SUPPLY OF THE RELAYS COULD BE USED INSTEAD. IF SO, THE 0 V HAS TO BE CONNECTED TO TERMINAL P1:6.

17) THIS DRAWING IS SHOWING 2292 CONN. AS THE LAST UNIT ON THE LINE. A FOLLOWING UNIT SHALL BE CONN. TO THE SAME TERMINALS, I.E. P1:1-4.

OUTPUTS (ACTIVE LOW/max. 50 mA) WHEN THE FOLLOWING LEDs (SITUATED IN THE C.I.E. AND SOME IN THE EXT. FBPs) ARE LIT:

- 1) FIRE
- 2) KEY SWITCH (DOOR OPEN)
- 3) FAULT TX, i.e. =LED "FAULT TX" ACTIVATED
- 4) FAULT and/or DISABLED and/or ZONE/DETECTOR NOT RESET, i.e. =FORMER LED "DISTURBANCE".
- 5) SILENCE (SOUNDERS)
- 6) FIRE BRIGADE TX
- 7) EXTINGUISHING
- 8) VENTILATION
- 9) ZONE/DETECTOR NOT RESET ("ENCAPSULATED").
- 10) CONTROLS OFF (NOTE! NO LED.)
- 11) FIRE BRIGADE TX, DISABLED
- 12) EXTINGUISH, DISABLED

- OTHER REMARKS:
- 13) FUSE (F1/F2) FAULT (ACTIVE LOW).
  - 14) 9 WAYS "D" CONNECTOR (MALE).
  - 15) SERIAL COMM./4800 BAUD/EVEN PARITY/7 DATA BITS/2 STOP BITS.



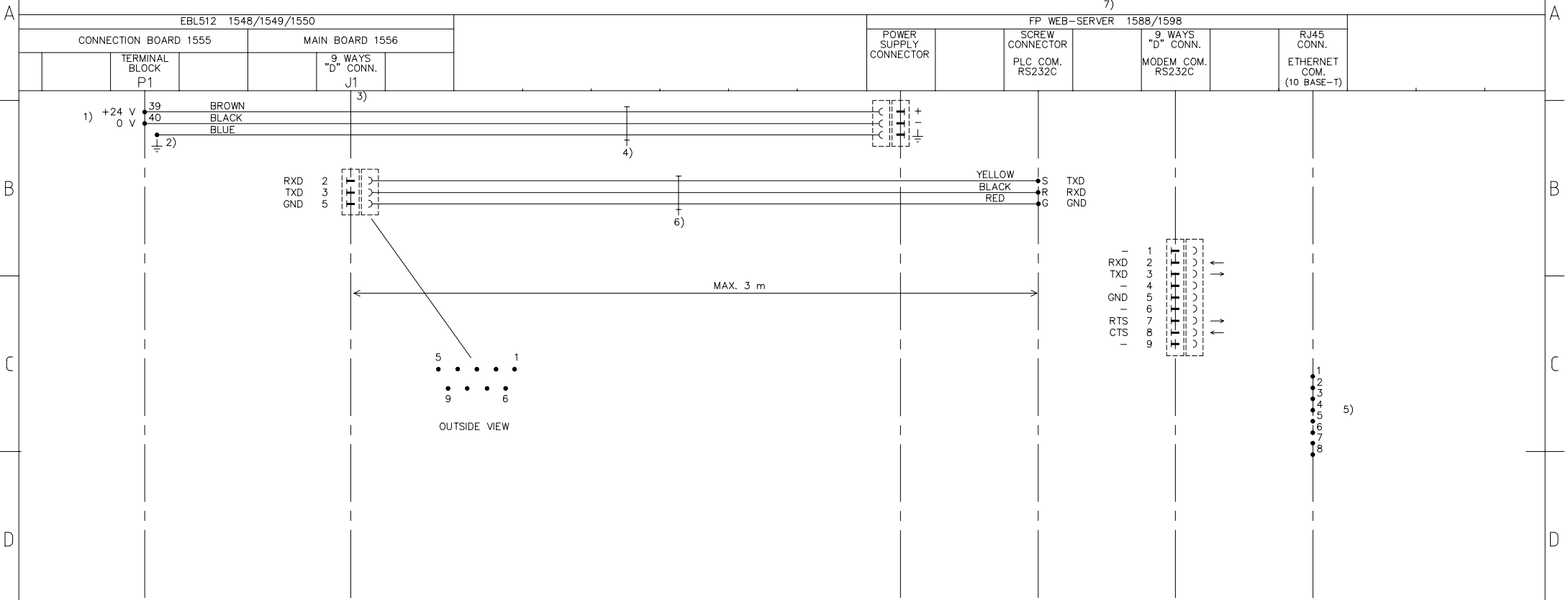
THE EXAMPLE IS SHOWING TWO RELAYS CONNECTED (& PROTECTIVE DIODS). THE RELAYS WILL BE ACTIVATED WHEN THE LEDs "FIRE" (FIRE ALARM) AND "EXTINGUISH, DISABLED" ARE LIT RESPECTIVELY.

----- = INTERNAL WIRING.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference		
Designed by JP	Checked by MÖ	Approved by - date RP / 2000-06-13	Filename 512_7213.dwg	Date 2000-06-09	Scale -
 Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 DATA CONVERTER 2292 ("EBL TALK") CONNECTION DIAGRAM		
			DWG No.: 512-72		Edition 3

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
2	CABLE COLOURS ADDED. J1; INFO. ADDED.	081215	JP	MÖ



- 1) ALT. EXTERNAL POWER SUPPLY, 24 V / 100 mA.
- 2) FUNCTION EARTH MUST BE CONNECTED TO FRAME GROUND.
- 3) SAME CONNECTOR AS THE PC WITH Win512 IS CONNECTED TO.
- 4) ATTACHED POWER SUPPLY CABLE (3 m).
- 5) CONNECTOR FOR INTERNET / INTRANET (USE A STANDARD ETHERNET CABLE).
- 6) ATTACHED RS232C CABLE. (3 m).
- 7) VERTICALLY MOUNTED ON A SYMMETRIC 35 mm DIN RAIL, OUTSIDE AND CLOSE TO THE EBL512 C.I.E.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by JP	Checked by MÖ	Approved by - date RP / 2004-01-27	Filename 512_7312.dwg
		Date 2004-01-27	Scale -
<b>Panasonic</b> Panasonic Electric Works Fire & Security Technology Europe AB			EBL512 WEB-SERVER 1588/1598 CONNECTION DIAGRAM
DWG No.: 512-73			Edition 2
			Sheet 1/1

Original Dwg A3L (420x297mm)