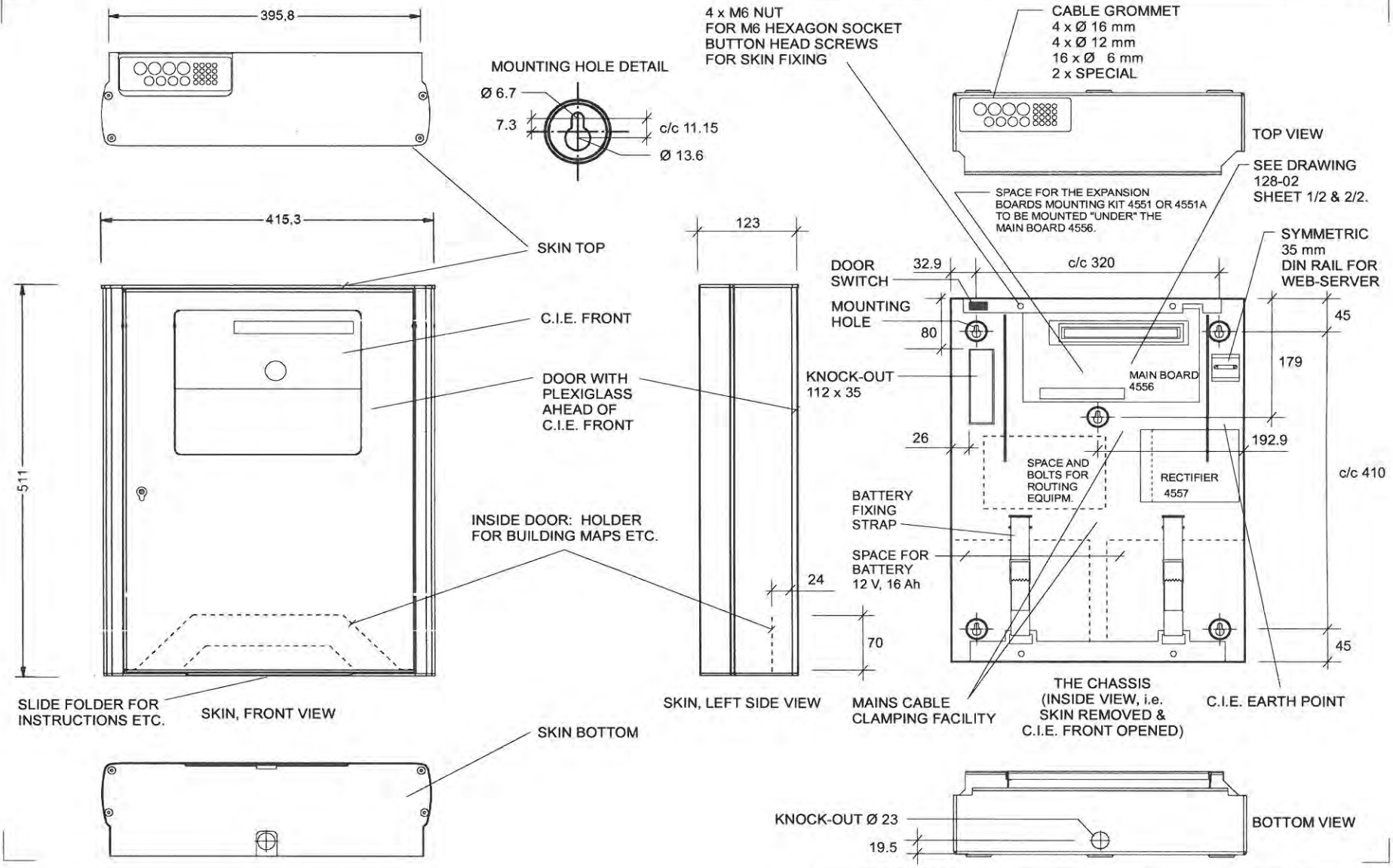
A = Approved and valid drawing. Also available as a **pdf** file.
N = Not approved or not valid drawing.

	DWG No. **128-**	Sheet	Rev./ Edi-tion	Date / Rev. Date	Title **EBL128 .....**
A	01	1/1	3	13-03-18	CONTROL UNIT 4550 DIMENSIONS & OVERVIEW
A	02	1/2	1	08-07-10	MAIN BOARD 4556 (P.C.B. NO. 9285-5A) DIMENSIONS & OVERVIEW
A	02	2/2	3	13-10-02	MAIN BOARD 4556 (P.C.B. NO. 9285-6A) DIMENSIONS & OVERVIEW
A	03	1/2	2	13-03-18	EXP. BOARDS (4580 & 4581) & KIT 4551 DIMENSIONS & OVERVIEW
A	03	2/2	1	13-03-18	EXP. BOARDS (4582 & 4583) & KIT 4551A DIMENSIONS & OVERVIEW
	04				-
	05				-
	06				-
	07				-
	08				-
	09				-
	10				-
A	11	1/1	0	06-04-04	COM LOOP CABLE LENGTH & SPECIFICATION
	12				-
	13				-
	14				-
	15				-
	16				-
	17				-
	18				-
	19				-
	20				-
A	21	1/1	6	14-05-08	TERMINAL BLOCK J1:1-4, COM LOOP CONNECTION DIAGRAM
A	22	1/3	6	14-05-08	TERMINAL BLOCK J1:5-14, S0 & S1, I0 & P/S CONNECTION DIAGRAM
A	22	2/3	2	14-05-09	TERMINAL BLOCK J1:5-14, S0 & S1, I0 & P/S CONNECTION DIAGRAM
A	22	3/3	0	14-05-08	TERMINAL BLOCK J1:5-14, S0 & S1, I0 & P/S CONNECTION DIAGRAM
A	23	1/2	3	13-10-02	TERMINAL BLOCK J1:15-22, FIRE/FAULT TX, RS485 CONNECTION DIAGRAM
A	23	2/2	0	13-10-02	TERMINAL BLOCK J1:15-22, FIRE/FAULT TX, RS485 CONNECTION DIAGRAM
A	24	1/1	3	14-01-17	TERMINALS J2:1-5, POWER SUPPLY CONNECTION DIAGRAM
A	25	1/1	3	08-12-12	CONNECTORS J3, J5 & J4, RS232 CONNECTION DIAGRAM
A	26	1/1	2	08-12-12	ADDR. MULTIPURPOSE I/O UNIT 3361 CONNECTION DIAGRAM (EXAMPLES)
	~~27~~				
A	28	1/1	3	08-12-12	ADDR. 2 VOLTAGE OUTPUTS UNIT 3364 CONNECTION DIAGRAM (EXAMPLES)
A	29	1/1	3	14-01-17	EXT. POWER SUPPLY UNIT 3366 CONNECTION DIAGRAM (EXAMPLES)
A	30	1/1	4	13-03-18	EXPANSION BOARD 4580 CONNECTION DIAGRAM
A	31	1/1	0	06-04-04	EXPANSION BOARD 4581

A = Approved and valid drawing. Also available as a **pdf** file.
N = Not approved or not valid drawing.

	DWG No. **128-**	Sheet	Rev./ Edi-tion	Date / Rev. Date	Title **EBL128 .....**
					CONNECTION DIAGRAM
A	32	1/1	2	12-08-27	IS UNITS FOR HAZARDOUS (Ex) AREA CONNECTION DIAGRAM (CONV. ZONE LINE INPUT)
A	33	1/3	2	14-05-09	EXPANSION BOARD 4583 CONNECTION DIAGRAM
A	33	2/3	0	14-05-09	EXPANSION BOARD 4583 CONNECTION DIAGRAM
A	33	3/3	0	14-05-09	EXPANSION BOARD 4583 CONNECTION DIAGRAM

RevNo	Revision note	Date	Signature	Checked
2	ADDED: 4551A & 128-02, SHEET 1/2 & 2/2.	080710	JP	MO



Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP		Checked by MO	Approved by - date RP / 2006-04-06	Filename 128_0121.dwg	Date 2006-04-04	Scale Approx. 1:5

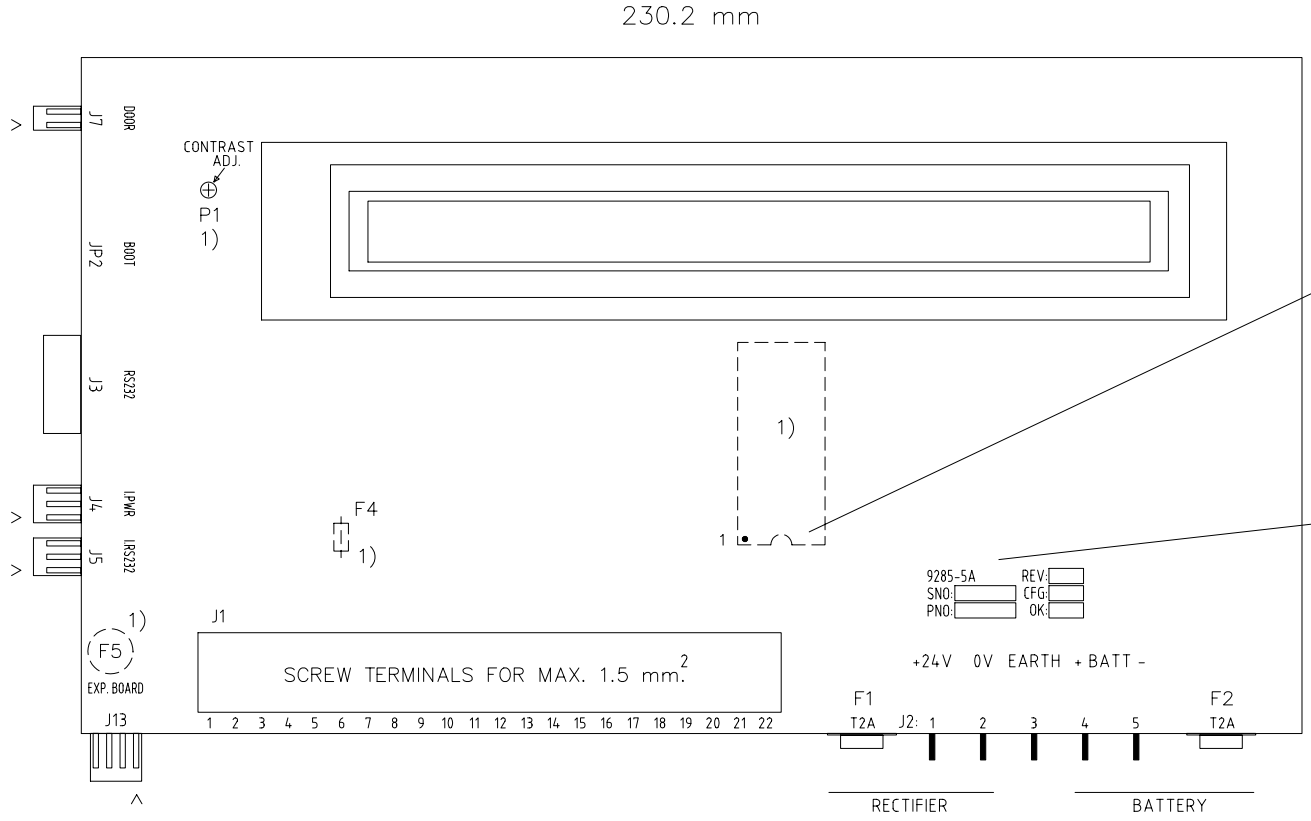
Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

EBL128 CONTROL UNIT (C.I.E.) 4550
DIMENSIONS & OVERVIEW

DWG No.: 128-01 | Edition 2 | Sheet 1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
1	ADDED: SHEET 2 AND P.C.B. No.	080710	JP	MÖ



OPTION 1)

RS485 TRANSCEIVER COMPONENT,
(COMMUNICATION MODULE 4552)
MOUNTED IN A SOCKET.

127.5 mm

P.C.B. LABEL

9285–5A P.C.B. NO. – DIAGRAM/LAYOUT VER.
SNO SERIAL NO.
PNO PRODUCT NO.
REV REVISION
CFG CONFIGURATION
OK OK SIGNATURE

J1: TERMINAL BLOCK FOR CONNECTION OF EXTERNAL EQUIPMENT TO THE C.I.E.
J2: TAB TERMINALS FOR CONNECTION OF POWER SUPPLY (RECTIFIER & BATTERY).
J3: "D" CONNECTOR (9 WAYS, MALE). RS232 INTERFACE FOR A PC (Win128) SERIAL CONNECTOR.
J4: CONNECTOR FOR POWER SUPPLY OF THE WEB–SERVER 1588.
J5: CONNECTOR FOR RS232 SERIAL LINE TO THE WEB–SERVER 1588.

J7: CONNECTOR FOR THE DOOR SWITCH.
J13: CONNECTOR FOR EXPANSION BOARDS (4580 & 4581) RIBBON CABLE, SEE DRAWING 128–03.

JP2: JUMPER (BOOT). ONLY USED BY THE MANUFACTURER.

P1: POTENTIOMETER FOR ADJUSTMENT OF LCD CONTRAST. 1)

F1: FUSE (T2A L 250V, 5x20 mm) FOR +24 V DC INPUT FROM RECTIFIER 1537.
F2: FUSE (T2A H 250V, CERAMIC, 5x20 mm) FOR +24 V TO/FROM THE BATTERY.
F4: FUSE (F1.5A, NOT REPLACEABLE) FOR THE COM LOOP. 1)
F5: FUSE (T500mA 250V, TR5) FOR THE EXPANSION BOARDS. 1)

THE P.C.B. IS MOUNTED IN THE C.I.E. HOUSING ACCORDING TO DRAWING 128–01.

CONNECTIONS ACCORDING TO DRAWINGS 128–21 – –25.

1) THE COMPONENT IS MOUNTED ON THE REVERSE SIDE OF THE P.C.B.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP		Checked by MÖ	Approved by - date RP / 2006-04-06	Filename 128_0211.dwg	Date 2006-04-04	Scale Approx. 1:1

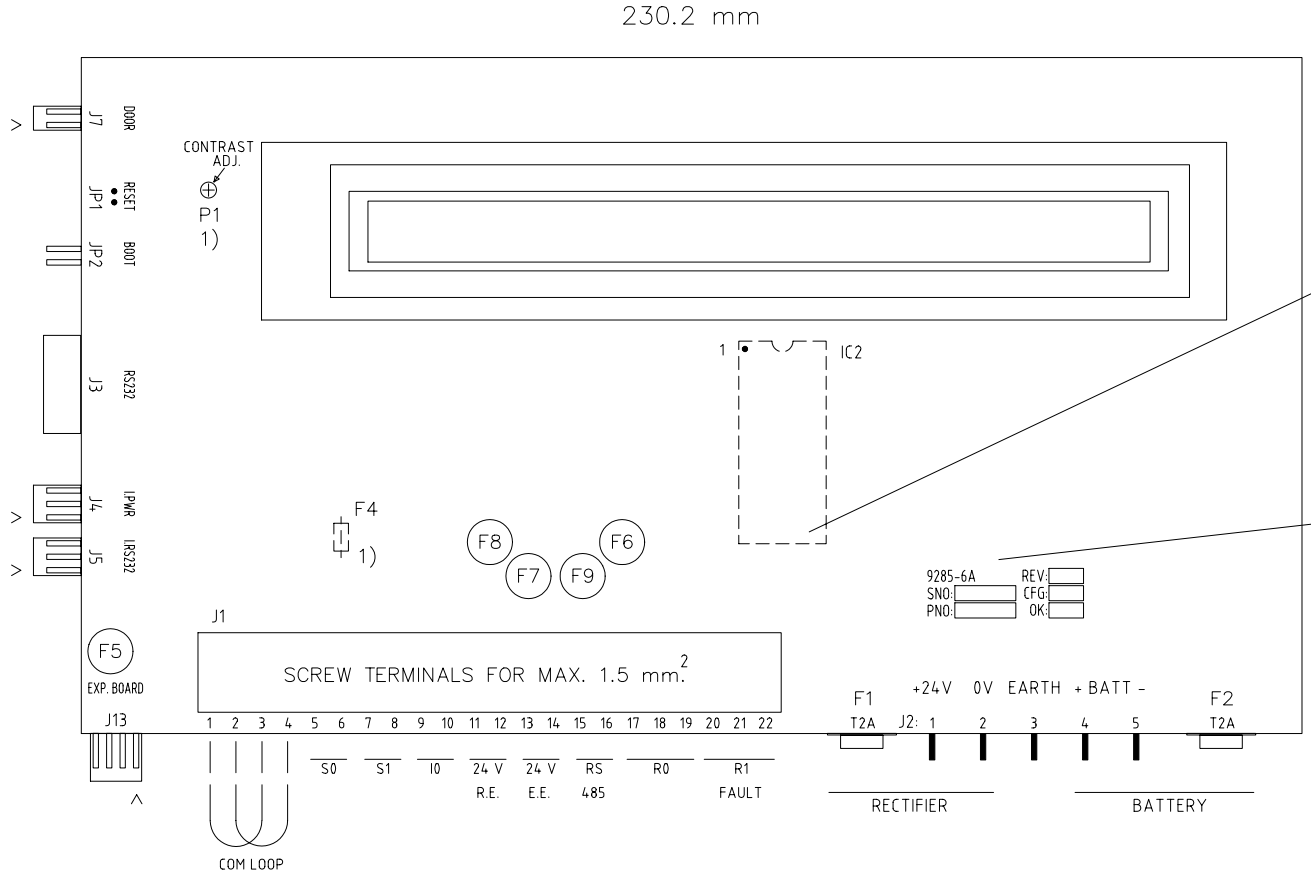
Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

EBL128 MAIN BOARD 4556 (P.C.B. No. 9285-5A)
DIMENSIONS & OVERVIEW

DWG No.: 128-02 | Edition 1 | Sheet 1/2

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
1	JP1 ADDED. JP2 PINS ADDED.	081212	JP	MÖ



OPTION
RS485 TRANSCEIVER COMPONENT,
(COMMUNICATION MODULE 4552)
MOUNTED IN A SOCKET.

P.C.B. LABEL

9285-6A P.C.B. NO. – DIAGRAM/LAYOUT VER.
SNO SERIAL NO.
PNO PRODUCT NO.
REV REVISION
CFG CONFIGURATION
OK OK SIGNATURE

J1: TERMINAL BLOCK FOR CONNECTION OF EXTERNAL EQUIPMENT TO THE C.I.E.
J2: TAB TERMINALS FOR CONNECTION OF POWER SUPPLY (RECTIFIER & BATTERY).
J3: "D" CONNECTOR (9 WAYS, MALE). RS232 INTERFACE FOR A PC (Win128) SERIAL CONNECTOR.
J4: CONNECTOR FOR POWER SUPPLY OF THE WEB-SERVER II 1598.
J5: CONNECTOR FOR RS232 SERIAL LINE TO THE WEB-SERVER II 1598.

J7: CONNECTOR FOR THE DOOR SWITCH.
J13: CONNECTOR FOR EXPANSION BOARDS (4580/4581/4583) RIBBON CABLE, SEE DRAWING 128-03.

JP2: JUMPER (BOOT). ONLY USED BY THE MANUFACTURER.
1) P1: POTENTIOMETER FOR ADJUSTMENT OF LCD CONTRAST.

F1: FUSE (T2A L 250V, 5x20 mm) FOR +24 V DC INPUT FROM RECTIFIER 1537.
F2: FUSE (T2A H 250V, CERAMIC, 5x20 mm) FOR +24 V TO/FROM THE BATTERY.
1) F4: FUSE (F1.5A, NOT REPLACEABLE) FOR THE COM LOOP.
F5: FUSE (T500mA 250V, TR5) FOR THE EXPANSION BOARDS.
F6: FUSE (T200mA 250V, TR5) FOR VOLTAGE OUTPUT S1.
F7: FUSE (T200mA 250V, TR5) 24 V POWER SUPPLY OUTPUT FOR ROUTING EQUIPMENT.
F8: FUSE (T500mA 250V, TR5) 24 V FOR VOLTAGE OUTPUT S0.
F9: FUSE (T500mA 250V, TR5) 24 V POWER SUPPLY OUTPUT FOR EXTERNAL EQUIPMENT & WEB-SERVER (J4).

THE P.C.B. IS MOUNTED IN THE C.I.E. HOUSING ACCORDING TO DRAWING 128-01.

CONNECTIONS ACCORDING TO DRAWINGS 128-21 – -25.

1) THE COMPONENT IS MOUNTED ON THE REVERSE SIDE OF THE P.C.B.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference
Designed by JP		Checked by MÖ	Approved by - date RP / 2008-07-10	Filename 128_0212.dwg	Date 2008-07-10	Scale Approx. 1:1

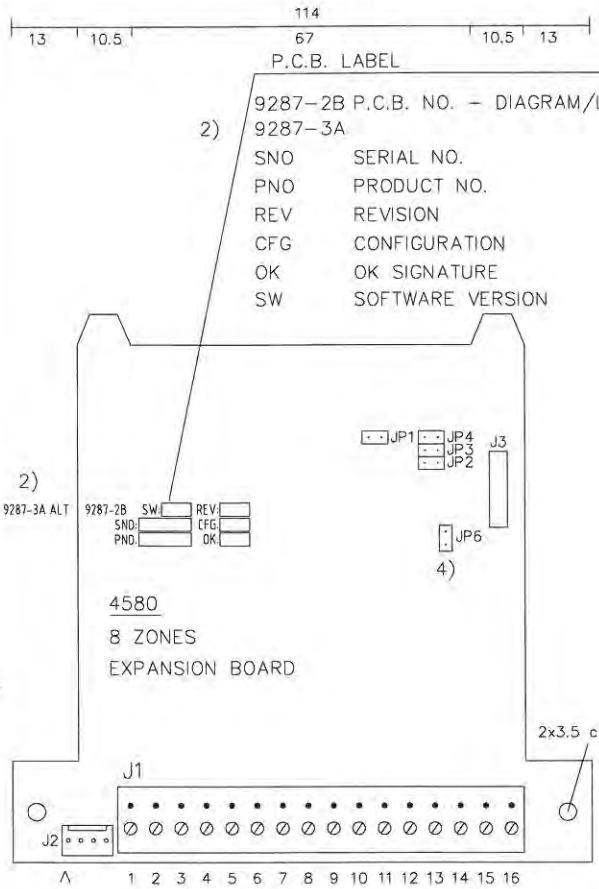
Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

EBL128 MAIN BOARD 4556 (P.C.B. No. 9285-6A)
DIMENSIONS & OVERVIEW

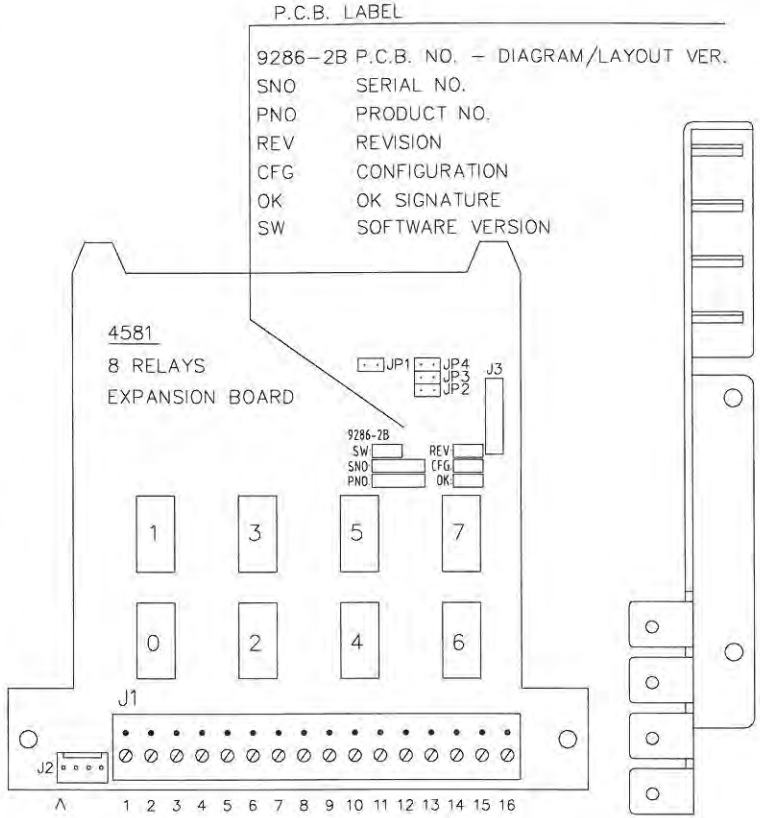
DWG No.: 128-02 | Edition 1 | Sheet 2/2

Original Dwg A3L (420x297mm)

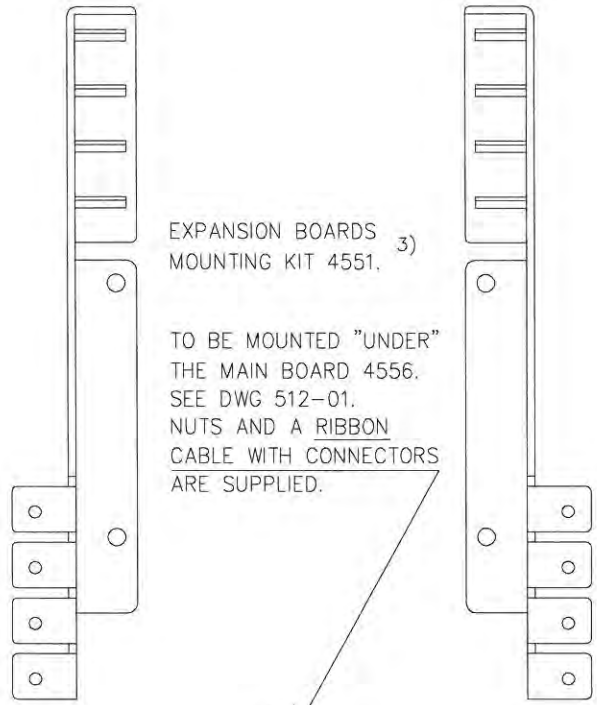
RevNo	Revision note	Date	Signature	Checked
1	REV: DWG NAME. ADDED: SHEET 2 & NOTE 2) – 4).	080710	JP	MÖ



CONNECTIONS ACCORDING TO DWG 128–30.

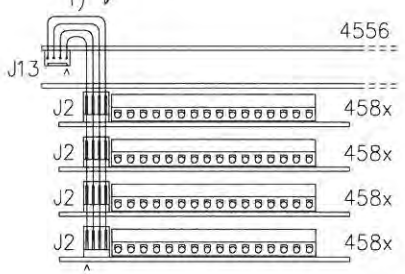


CONNECTIONS ACCORDING TO DWG 128–31.



EXPANSION BOARDS MOUNTING KIT 4551. 3)

TO BE MOUNTED "UNDER" THE MAIN BOARD 4556. SEE DWG 512–01. NUTS AND A RIBBON CABLE WITH CONNECTORS ARE SUPPLIED.



J1: TERMINAL BLOCK FOR CONNECTION OF ZONE LINE INPUTS 0–7.
J2: CONNECTOR FOR THE RIBBON CABLE CONNECTOR. 1)
J3: CONNECTOR FOR PRODUCTION ONLY.

JP1: JUMPER. SHUNT MOMENTARILY FOR A RESTART.
JP2: JUMPER FOR BOARD NO. SETTING. (SHUNTED = "1")
JP3: JUMPER FOR BOARD NO. SETTING. (SHUNTED = "2")
JP4: JUMPER FOR BOARD NO. SETTING. (SHUNTED = "4")

J1: TERMINAL BLOCK FOR CONNECTION OF RELAY OUTPUTS 0–7.
J2: CONNECTOR FOR THE RIBBON CABLE CONNECTOR. 1)
J3: CONNECTOR FOR PRODUCTION ONLY.

JP1: JUMPER. SHUNT MOMENTARILY FOR A RESTART.
JP2: JUMPER FOR BOARD NO. SETTING. (SHUNTED = "1")
JP3: JUMPER FOR BOARD NO. SETTING. (SHUNTED = "2")
JP4: JUMPER FOR BOARD NO. SETTING. (SHUNTED = "4")

1) RIBBON CABLE WITH CONNECTORS. TO BE CONNECTED TO THE MAIN BOARD CONNECTOR "J13".
2) 9287–3A REQUIRED FOR E–O–L RESISTOR 4K7.
3) FOR LATEST EBL128 HOUSING: EXP. BOARD MOUNTING KIT 4551A, SEE SHEET 2/2.
4) FOR PRODUCTION ONLY. NORMALLY JP6 SHALL BE SHUNTED.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference

Designed by	Checked by	Approved by - date	Filename	Date	Scale
JP	MÖ	RP / 2006-04-06	128_0311.dwg	2006-04-04	Approx. 1:1

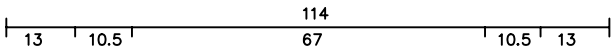
Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

EBL128 EXP. BOARDS (4580 & 4581) & KIT 4551
DIMENSIONS & OVERVIEW

DWG No.: 128-03	Edition	Sheet
	1	1/2

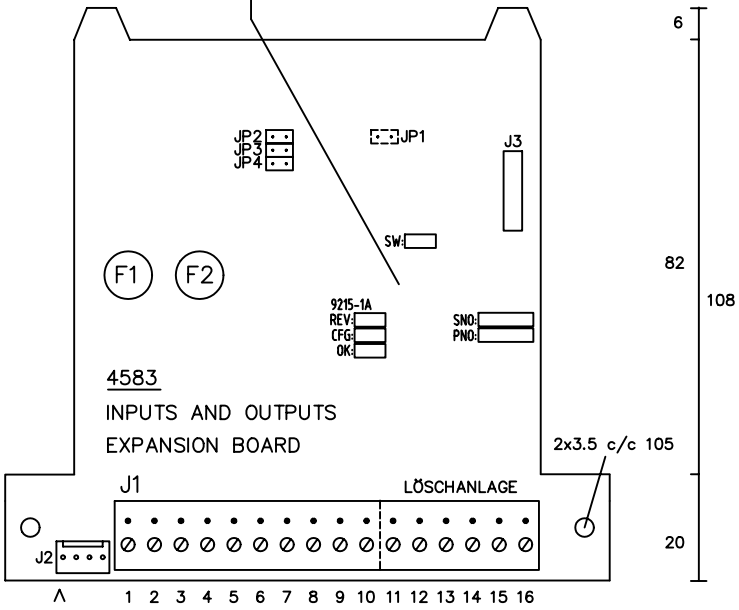
Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked



P.C.B. LABELS

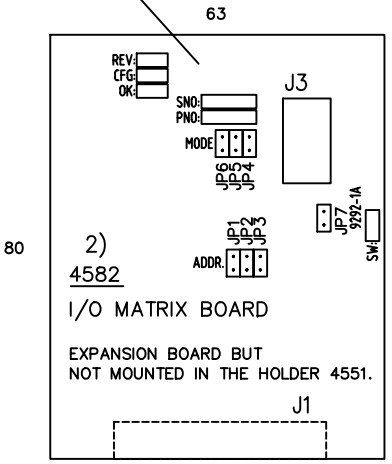
9215–1A P.C.B. NO. – DIAGRAM/LAYOUT VER.
SNO SERIAL NO.
PNO PRODUCT NO.
REV REVISION
CFG CONFIGURATION
OK OK SIGNATURE
SW SOFTWARE VERSION



CONNECTIONS ACCORDING TO DWG 128–30.

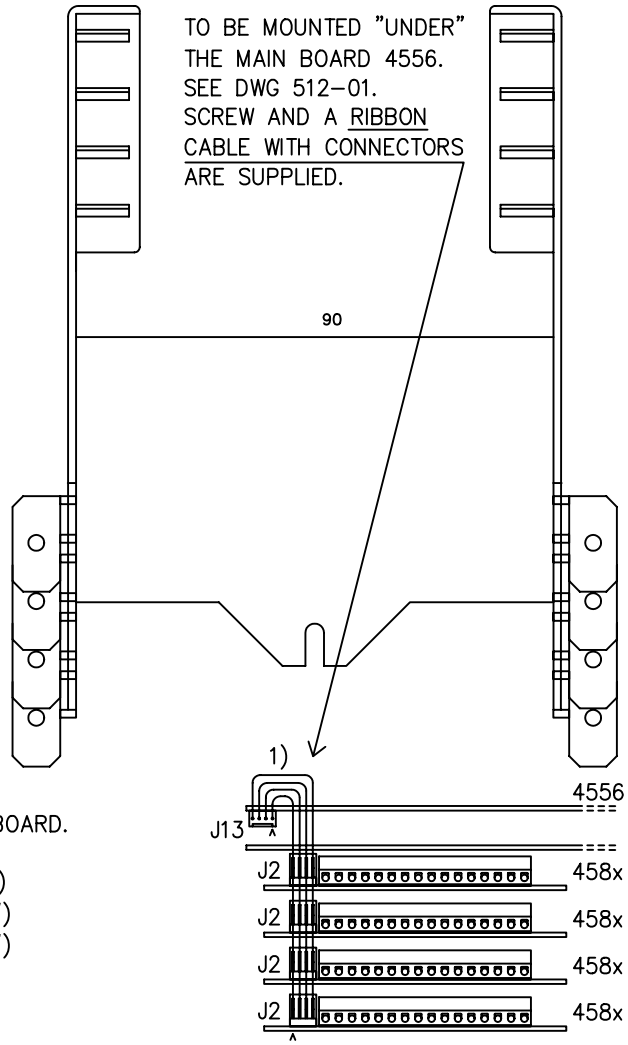
P.C.B. LABELS

9292–1A P.C.B. NO. – DIAGRAM/LAYOUT VER.
SNO SERIAL NO.
PNO PRODUCT NO.
REV REVISION
CFG CONFIGURATION
OK OK SIGNATURE
SW SOFTWARE VERSION



EXPANSION BOARDS MOUNTING KIT 4551A. 3)

TO BE MOUNTED "UNDER" THE MAIN BOARD 4556. SEE DWG 512–01. SCREW AND A RIBBON CABLE WITH CONNECTORS ARE SUPPLIED.



J1: TERMINAL BLOCK FOR CONNECTION OF INPUT 0–4/OUTPUT 0–2.
J2: CONNECTOR FOR THE RIBBON CABLE CONNECTOR. 1)
J3: CONNECTOR FOR PRODUCTION ONLY.

JP1: JUMPER. SHUNT MOMENTARILY FOR A RESTART.
JP2: JUMPER FOR BOARD NO. SETTING. (SHUNTED = "1")
JP3: JUMPER FOR BOARD NO. SETTING. (SHUNTED = "2")
JP4: JUMPER FOR BOARD NO. SETTING. (SHUNTED = "4")

F1: FUSE (T200mA 250 V, TR5) FOR +24 V DC OUTPUT 0.
F2: FUSE (T200mA 250 V, TR5) FOR +24 V DC OUTPUT 1.

J1: CONNECTOR FOR CONNECTION TO AN APPLICATION BOARD.
J3: CONNECTOR FOR PRODUCTION ONLY.
JP1: JUMPER FOR BOARD NO. SETTING (SHUNTED = "1")
JP2: JUMPER FOR BOARD NO. SETTING (SHUNTED = "2")
JP3: JUMPER FOR BOARD NO. SETTING (SHUNTED = "4")
JP4: JUMPER FOR MODE SETTING.
JP5: JUMPER FOR MODE SETTING.
JP6: JUMPER FOR MODE SETTING.

1) RIBBON CABLE WITH CONNECTORS. TO BE CONNECTED TO THE MAIN BOARD CONNECTOR "J13".
2) AVAILABLE ON THE AUSTRALIAN MARKET ONLY. MOUNTED ON AN APPLICATION BOARD.
3) FOR OLDER EBL128 HOUSING: EXP. BOARD MOUNTING KIT 4551, SEE SHEET 1/2.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference
Designed by JP		Checked by MÖ	Approved by - date RP / 2008-07-10	Filename 128_0302.dwg	Date 2006-07-10	Scale Approx. 1:1

Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

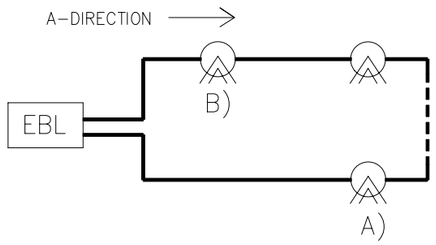
EBL128 EXP. BOARDS (4582 & 4583) & KIT 4551A DIMENSIONS & OVERVIEW

DWG No.: 128-03 | Edition 0 | Sheet 2/2

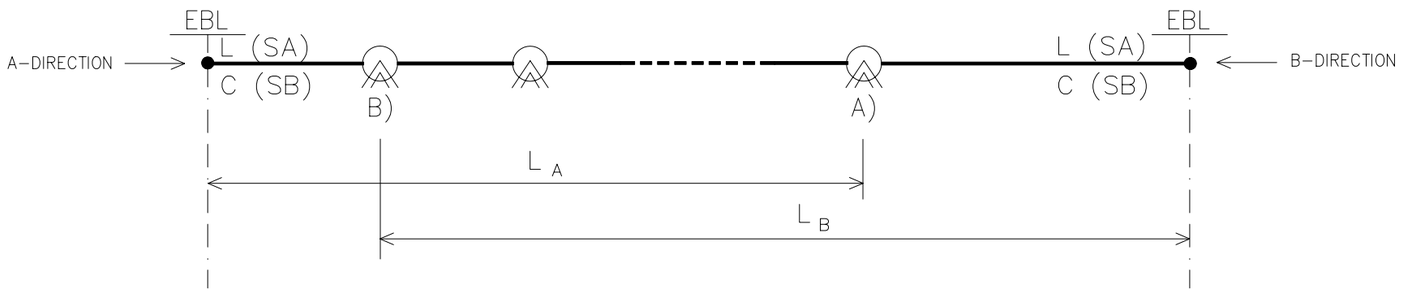
Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked

1. COM LOOP, NO FEEDER LINE



EQUIVALENT DIAGRAM



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)

NOTE! COMM. IN B–DIRECTION ONLY IN CASE OF A BREAK (CUT–OFF) OR SHORT–CIRCUIT ON THE LOOP.

CABLE TYPE EXAMPLES

COM LOOP: ELKY 2 x 1mm (0.75mm^2) (TWISTED PAIR)
FEEDER LINE: ELKY 10 x 2 x 1mm (TWISTED PAIRS)
OR THE HALOGEN–FREE & FLAME–PROOF TYPES:
COM LOOP: ELQYB 2 x 1mm (TWISTED PAIRS)
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 LOOP

THE UNITS ARE TO BE DISTRIBUTED AS EVEN AS POSSIBLE ON THE COM LOOP

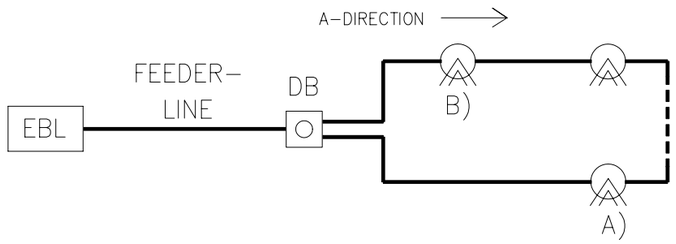
MAXIMUM NUMBER OF ADDRESSES (127) ON THE COM LOOP ONLY SHOWS THE ADDRESSES POSSIBLE TO USE.

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

EACH UNIT'S CURRENT CONSUMPTION IS FOUND IN EBL128 PLANNING INSTRUCTIONS, CHAPTER "CURRENT CONSUMPTION".

MAXIMUM CABLE LENGTH (L), i.e. THE CONDUCTOR RESISTANCE [1] IN RELATION TO THE CURRENT CONSUMPTION AND MAXIMUM CURRENT ON THE COM LOOP: SEE PLANNING INSTRUCTIONS, CHAPTER "COM LOOP CABLE LENGTH".

2. COM LOOP INCL. FEEDER LINE



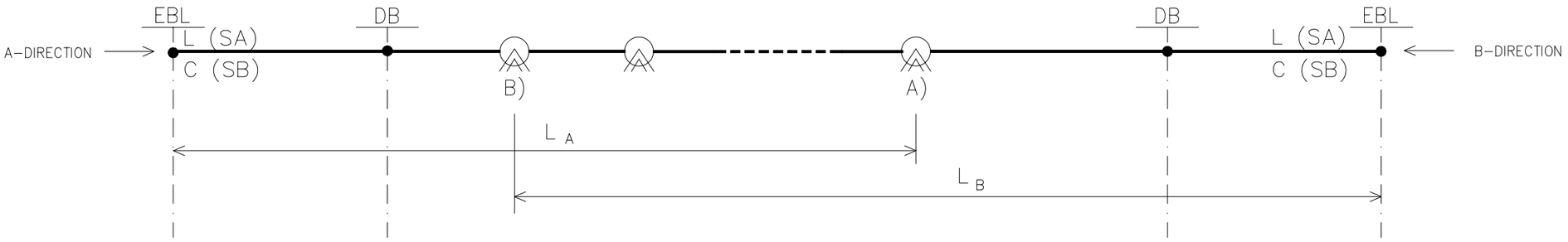
DB = DISTRIBUTION BOX

EBL = EBL128

THE LONGEST OF L_A AND L_B = CABLE LENGTH (L)

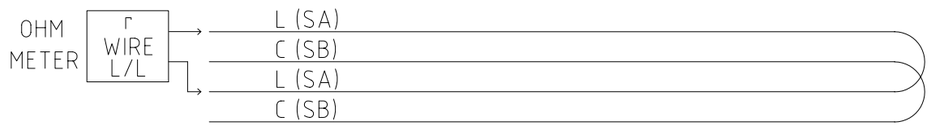
(IN THIS EXAMPLE L_B IS THE LONGEST)

EQUIVALENT DIAGRAM



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

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



Itemref	Quantity	Title/Name, designation, material, dimension etc		Article No./Reference	
Designed by JP		Checked by MÖ	Approved by - date RP / 2006-04-06	Filename 128_1101.dwg	Date 2006-04-04	Scale -

Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

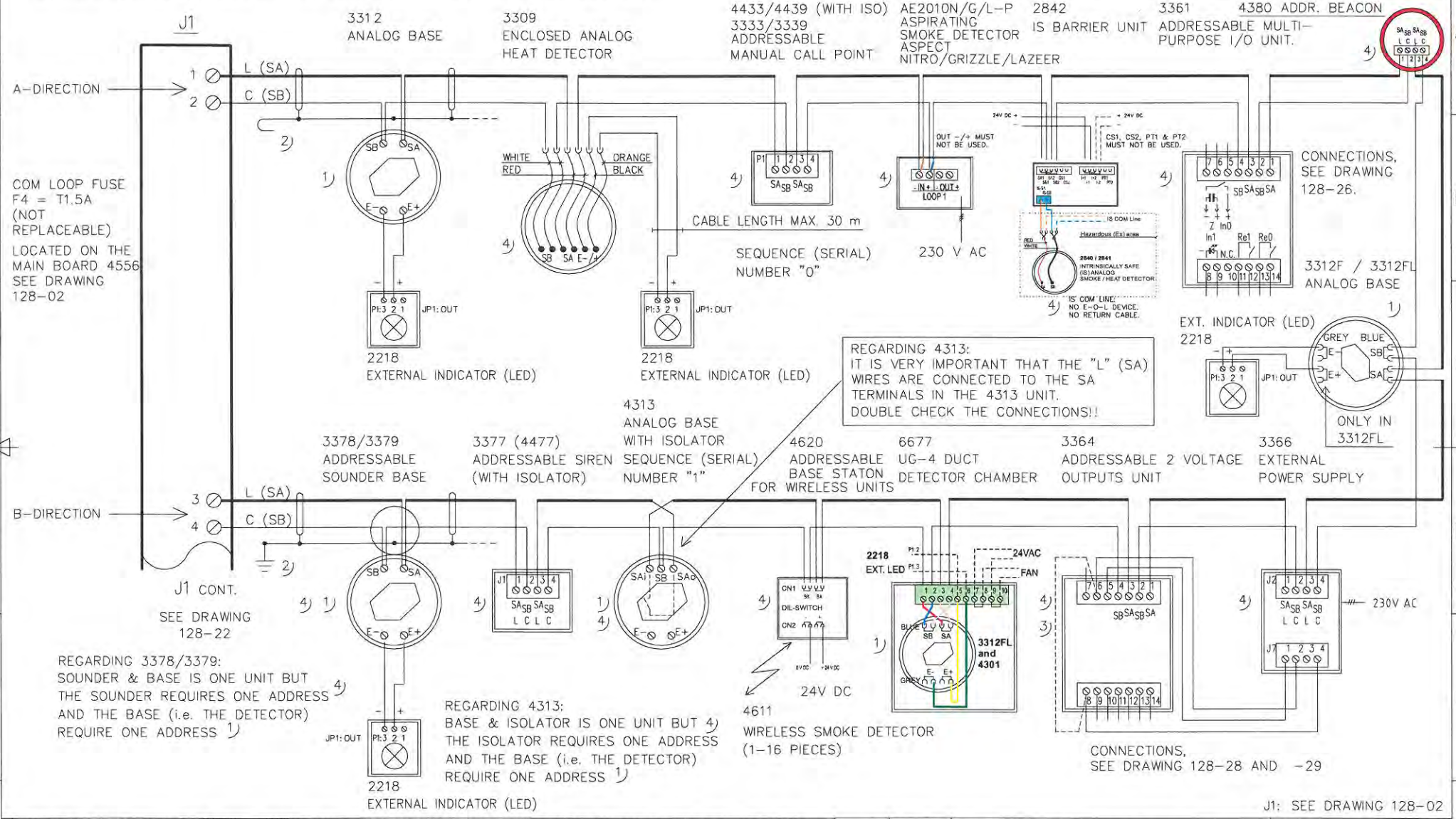
EBL128 COM LOOP
CABLE LENGTH & SPECIFICATIONS

DWG No.: 128-11 | Edition 0 | Sheet 1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
6	GENERAL UPDATE AND NEW UNITS ADDED	140508	JP	MÖ

A TECHNICAL ADDRESS (001–255) AND THE MODE SHALL BE SET IN EACH COM LOOP UNIT.



1) ANALOG SMOKE DETECTORS 430X AND 440X & ANALOG HEAT DETECTOR 3308, CAN BE PLUGGED IN THE BASE.
2) IF SCREENED CABLE IS USED ONLY INCOMING (OR OUTGOING) SCREEN SHALL BE CONN. TO THE C.I.E. FUNCTIONAL EARTHING POINT. CONNECT THE SCREENS NEAR THE UNIT. KEEP COM LOOP WIRES AS SHORT AS POSSIBLE AND TWISTED >6 TURNS.
3) THE UNIT REQUIRE EXT. POWER SUPPLY, e.g. 3366. NOTE! ALSO DURING ADDRESS SETTING.
4) PROGRAMMING TOOL (3314/4414) IS USED FOR COM LOOP ADDRESS & MODE SETTING, BEFORE THE UNIT IS CONNECTED TO THE COM LOOP.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP		Checked by MÖ	Approved by - date RP / 2006-04-06	Filename 128_2161.dwg	Date 2006-04-04	Scale -

Panasonic
Panasonic Eco Solutions Nordic AB

EBL128, TERMINAL BLOCK J1:1–4, COM LOOP CONNECTION DIAGRAM

DWG No.: 128-21 | Edition 6 | Sheet 1/1

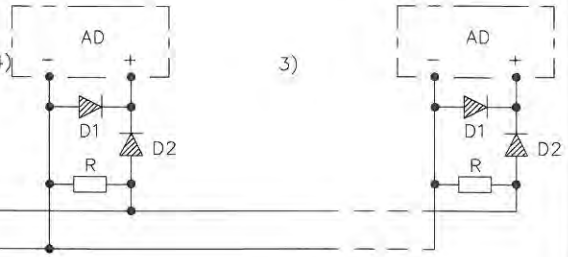
Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
6	INFORMATION ADDED & REVISED.	140508	JP	MÖ

NOTE!
DRAWING EDITION/REV NO. >=2, IS VALID FOR MAIN BOARD 4556 WITH P.C.B. NO. 9285-6A.
DRAWING EDITION/REV NO. 0 OR 1, IS VALID FOR MAIN BOARD 4556 WITH P.C.B. NO. 9285-5A.

NOTE 2!
This drawing 128-22, sheet 1 of 3, is valid when the Voltage outputs S0-S1 have not to fulfil the EN54-13 regulation. Else drawing 128-22, sheet 3 of 3 is valid.

AD=ALARM DEVICE (SIREN, ETC.)
D1=SUPPRESSION DIODE (e.g. 1N4004) WHEN REQUIRED
D2=SERIES DIODE (1N4004)
R=33K



SEE DRAWING 128-21
J1 CONT.

F8 500mA 4) + 5
− 6
F6 200mA 4) + 7
− 8
5) 5V + 9
10
F7 200mA + 11
12
F9 500mA + 13
0 V 14

S0, 24 V DC, SUPERVISED,[1] PROGRAMMABLE (CONTROL EXPRESSION & NORMALLY LOW OR HIGH) [2]

S1, 24 V DC, SUPERVISED,[1] PROGRAMMABLE (CONTROL EXPRESSION & NORMALLY LOW OR HIGH) [2]

IO, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN / CLOSED)
NO (>20K) 5) NC (<500R) ALT.
THE INPUT HAS TO BE ACTIVATED > 0.5 SEC.

24 V (max. 200 mA) POWER SUPPLY OF ROUTING EQUIPMENT (FIRE/FAULT TX)
CONNECTION OF ROUTING EQUIPMENT, SEE DRAWING 128-23.

24 V (max. 500 mA) POWER SUPPLY OF EXTERNAL EQUIPMENT (E.G. FBP 1826/1828, AAU 1735/1736, EPU 1728)
CONNECTIONS, SEE DRAWING 128-23, SHEET 1 & 2.

NOTE! THE TOTAL CURRENT CONSUMPTION ON POWER SUPPLY OUTPUTS J1:13-14 AND J4 (SEE DRAWING 128-25) IS MAX. 500mA.

FUSES F6-F9: SEE DRAWING 128-02 SHEET 2/2.

SEE DRAWING 128-25

J1 CONT.
SEE DRAWING 128-23

VOLTAGE OUTPUTS S0-S1 ARE AS DEFAULT SET TO OUTPUTS FOR ALARM DEVICES.
- TYPE "ALARM DEVICE"
- INTERMITTENT 0.8/0.8 s
- NORMALLY LOW
- SUPERVISED
- TRIGGER COND. "GENERAL FIRE ALARM"

1) AFTER CONNECTION/COMMISSIONING, THE SUPERVISED OUTPUTS HAVE TO BE CALIBRATED VIA MENU H5/A1. THE CALIBRATED VALUE HAS TO BE IN THE RANGE 1K-50K, ELSE A FAULT WILL BE GENERATED. NOTE! ONLY A NORMALLY LOW OUTPUT CAN BE SUPERVISED, ALT. CAN BE PROGRAMMED AS NOT SUPERVISED.

2) NOTE! DURING RESTART OF EBL128 A NORMALLY HIGH OUTPUT WILL BE LOW FOR A FEW SECONDS.

3) R=33K CAN BE MOUNTED IN THE LAST UNIT AS AN END-OF-LINE RESISTOR OR INDIVIDUALLY IN UP TO FIVE UNITS (i.e. UP TO FIVE 33K RESISTORS).

4) VOLTAGE DEPENDING ON PROGRAMMING. SEE TABLE:

Output S0 / S1		
Programmed as:	Not activated (Control expression not true.)	Activated (Control expression true.)
Normally low	Supervision voltage 1.5-3.6 V [a]	24 V
Normally high	24 V [2]	≤ 4.2 V

[a] Depending on the number of supervision resistors (1-5).

NOTE! THE SUPERVISON VOLTAGE HAS REVERSE POLARITY COMPARED TO 24 V.

5) THE PROGRAMMABLE INPUT IO CAN BE PROGRAMMED AS SUPERVISED.
SEE SHEET 2/3.

NOTE!
24 V DC IS THE NOMINAL VOLTAGE WHEN THE MAIN POWER SOURCE (RECTIFIER) IS USED.
WHEN THE SECOND POWER SOURCE (BACK-UP BATTERY) IS USED THE VOLTAGE CAN BE 21.6-28 V DC

J1: SEE DRAWING 128-02.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP		Checked by MÖ	Approved by - date RP / 2006-04-06	Filename 128_2261.dwg	Date 2006-04-04	Scale -

Panasonic
Panasonic Eco Solutions Nordic AB

EBL128, TERMINAL BLOCK J1:5-14, S0&S1, IO & P/S. CONNECTION DIAGRAM

DWG No. 128-22 | Edition 6 | Sheet 1/3

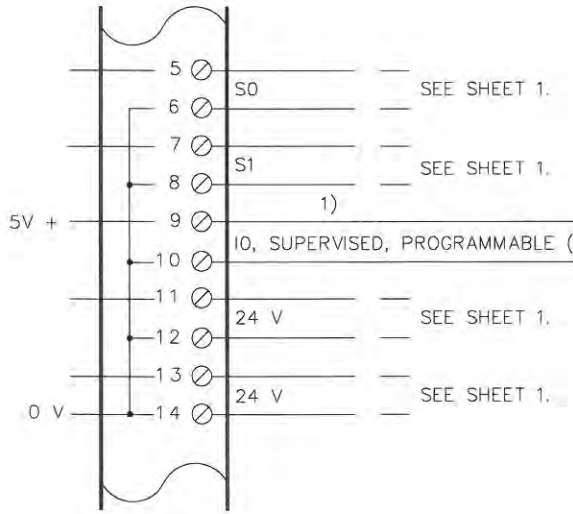
Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
2	INFO. REVISED.	140509	JP	MÖ

NOTE!
THIS DRAWING, i.e. SHEET 2/3, IS VALID FOR MAIN BOARD 4556 WITH P.C.B. NO. 9285-6A.

SEE DRAWING 128-21

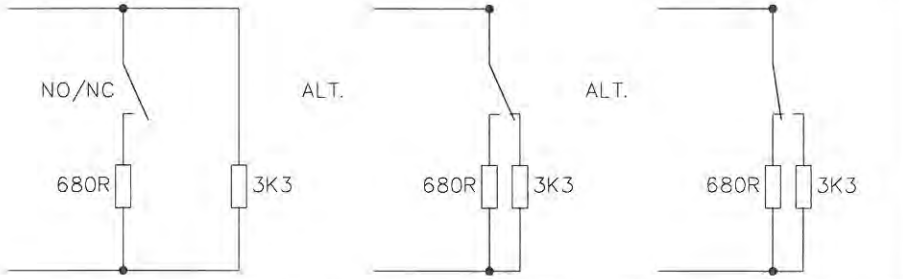
J1 CONT.



J1 CONT.

SEE DRAWING 128-23

1) CONNECTION TO SUPERVISED INPUT I0, EXAMPLES:



Line resistance **R**	Normally high resistance	Normally low resistance
R > 6K8	Open circuit (cut-off)	Open circuit (cut-off)
6K8 ≥ R > 2K (nom. 3K3)	Not activated	Activated
2K ≥ R > 70 (nom. 680)	Activated	Not activated
R ≤ 70	Short-circuit	Short-circuit

1) THE PROGRAMMABLE INPUT I0 CAN AS AN ALTERNATIVE BE PROGRAMMED AS NOT SUPERVISED, i.e. AS NO / NC. SEE SHEET 1 and 3.

NOTE!
24 V DC IS THE NOMINAL VOLTAGE WHEN THE MAIN POWER SOURCE (RECTIFIER) IS USED.
WHEN THE SECOND POWER SOURCE (BACK-UP BATTERY) IS USED THE VOLTAGE CAN BE 21.6-28 V DC.

J1: SEE DRAWING 128-02.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference
Designed by JP		Checked by MÖ	Approved by - date RP / 2008-07-10	Filename 128_2222.dwg	Date 2008-07-10	Scale -

Panasonic
Panasonic Eco Solutions Nordic AB

EBL128, TERMINAL BLOCK J1:5-14, S0&S1, I0 & P/S. CONNECTION DIAGRAM

DWG No.: 128-22 | Edition 2 | Sheet 2/3

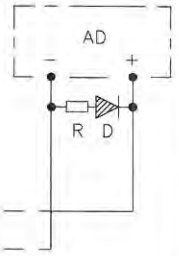
Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
0	–	–	–	–

NOTE!
THIS DRAWING, i.e. SHEET 3/3 IS VALID FOR MAIN BOARD 4556 WITH P.C.B. NO. 9285-6A.

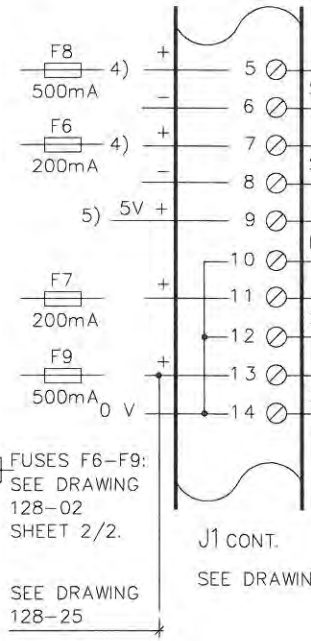
NOTE 2!
This drawing 128-22, sheet 3 of 3, is valid when the Voltage outputs S0-S1 have to fulfil the EN54-13 regulation. Else drawing 128-22, sheet 1 of 3 is valid.

AD=ALARM DEVICE (SIREN, ETC.)
NOTE! ONE AD, MAX. 15 mA.
(E.g. FULLEON SYMPHONI LOW POWER.)
D=SERIES DIODE (1N4007)
R=RESISTOR 1K / 1W



SEE DRAWING 128-21

J1 CONT.



S0, 24 V DC, SUPERVISED,[1] PROGRAMMABLE (CONTROL EXPRESSION & NORMALLY LOW)

S1, 24 V DC, SUPERVISED,[1] PROGRAMMABLE (CONTROL EXPRESSION & NORMALLY LOW OR HIGH)

IO, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN / CLOSED) — NO (>20K) / ALT. — 5) NC (<500R)

THE INPUT HAS TO BE ACTIVATED > 0.5 SEC.

24 V (max. 200 mA) POWER SUPPLY OF ROUTING EQUIPMENT (FIRE/FAULT TX) — CONNECTION OF ROUTING EQUIPMENT, SEE DRAWING 128-23.

24 V (max. 500 mA) POWER SUPPLY OF EXTERNAL EQUIPMENT (E.G. FBP 1826/1828, AAU 1735/1736, EPU 1728) — CONNECTIONS, SEE DRAWING 128-23, SHEET 1 & 2.

NOTE! THE TOTAL CURRENT CONSUMPTION ON POWER SUPPLY OUTPUTS J1:13-14 AND J4 (SEE DRAWING 128-25) IS MAX. 500mA.

FUSES F6-F9: SEE DRAWING 128-02 SHEET 2/2.

SEE DRAWING 128-25

J1 CONT.

SEE DRAWING 128-23

VOLTAGE OUTPUTS S0-S1 ARE AS DEFAULT SET TO OUTPUTS FOR ALARM DEVICES.
- TYPE "ALARM DEVICE"
- INTERMITTENT 0.8/0.8 s
- NORMALLY LOW
- SUPERVISED
- TRIGGER COND. "GENERAL FIRE ALARM"

1) AFTER CONNECTION/COMMISSIONING, THE SUPERVISED OUTPUTS HAVE TO BE CALIBRATED VIA MENU H5/A1.
NOTE! ONLY A NORMALLY LOW OUTPUT CAN BE SUPERVISED.

5) THE PROGRAMMABLE INPUT IO CAN BE PROGRAMMED AS SUPERVISED. SEE SHEET 2/3.

4) VOLTAGE, SEE TABLE:

Output S0 / S1		
Programmed as:	Not activated (Control expression not true.)	Activated (Control expression true.)
Normally low	Supervision voltage 1.5-3.6 V [a)]	24 V
Normally high	24 V	≤ 4.2 V

[a)] Depending on the number of supervision resistors (1-5).

NOTE! NORMALLY HIGH NOT ALLOWED.

NOTE! THE SUPERVISON VOLTAGE HAS REVERSE POLARITY COMPARED TO 24 V.

J1: SEE DRAWING 128-02.

NOTE!
24 V DC IS THE NOMINAL VOLTAGE WHEN THE MAIN POWER SOURCE (RECTIFIER) IS USED.
WHEN THE SECOND POWER SOURCE (BACK-UP BATTERY) IS USED THE VOLTAGE CAN BE 21.6-28 V DC.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference
Designed by JP		Checked by MO	Approved by – date RP / 2014-05-08	Filename 128_2203.dwg	Date 2014-05-08	Scale –

Panasonic
Panasonic Eco Solutions Nordic AB

EBL128, TERMINAL BLOCK J1:5-14, S0&S1, I0 & P/S. CONNECTION DIAGRAM

DWG No.: 128-22 | Edition 0 | Sheet 3/3

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
2	R0 DEFAULT INFORMATION ADDED.	090114	JP	MÖ

OPTION

RS485 TRANSCEIVER COMPONENT,
(COMMUNICATION MODULE 4552)
MOUNTED IN A SOCKET,
SEE DRAWING 128–02.

SEE DRAWING 128–22
J1 CONT.

S0 15
S1 16
NO 17
COM NC 18
19
COM NC 20
NO 21
22

RELAY CONTACTS DATA:
MAX. 30 V DC, 2 A.

R0, PROGRAMMABLE RELAY OUTPUT 1)

R1, NOT PROGRAMMABLE RELAY OUTPUT 2)

FOR ROUTING EQUIPMENT POWER SUPPLY,
SEE DRAWING 128–22 (J1:11–12).

FOR EXT. EQUIPMENT POWER SUPPLY
SEE DRAWING 128–22 (J1:13–14). 3)

RS485 SERIAL LINE 3)

EXT. FBP 1826/1828 OR AAU 1735/1736 OR EPU 1728 4)

1 +24 V
2 0 V
3 +24 V
4 0 V
5 S0
6 S1
7 S0
8 S1

3)

JUMPER "JP8" SHALL BE SHUNTED IN THE LAST UNIT ON THE LINE. MAX. 4 UNITS FROM WHICH MAX. 1 WITH PRINTER.

RELAY OUTPUT R0 IS AS DEFAULT SET TO OUTPUT FOR ROUTING EQUIPMENT:
- TYPE "ROUTING EQUIPMENT"
- STEADY (CONT.)
- NORMALLY OPEN
- TRIGGER COND. "FIRE BRIGADE TX"

ROUTING EQUIPMENT

(HAS TO FULFIL THE EN 60950-1 CLAUSE 6.2 REQUIREMENTS.)

PUBLIC TELEPHONE NETWORK.

1) AS DEFAULT PROGRAMMED AS OUTPUT FOR ROUTING EQUIPMENT (FIRE BRIGADE TX).
THE CONTACTS ARE SHOWN IN NORMAL STATE, i.e. NO FIRE ALARM (THE RELAY IS NOT ACTIVATED).
IN CASE OF A FIRE ALARM THE RELAY WILL BE ACTIVATED.

2) FOR ROUTING EQUIPMENT (FAULT TX).
THE CONTACTS ARE SHOWN IN NORMAL STATE, i.e. NO FAULT (THE RELAY IS ACTIVATED IN NORMAL STATE).
NOTE! THE RELAY IS NORMALLY ACTIVATED AND WILL BE DE–ACTIVATED IN CASE OF A FAULT OR
IF THE C.I.E. BECOMES POWERLESS (DEAD).

3) E.g. ELQYB 2 x 1 mm (0.75 mm^2). MAX. 1200 m. (WITHOUT CONCIDERATION TO VOLTAGE DROP, ETC.)

4) THE D.U. RESP. HAS TO BE SET TO SW MODE xxxx–1587.
REGARDING ADDRESS & SW MODE SETTINGS, SEE TECHNICAL DESRIPTION FOR THE D.U. RESP.

J1: SEE DRAWING 128–02.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference

Designed by	Checked by	Approved by - date	Filename	Date	Scale
JP	MÖ	RP / 2006-04-06	128_2321.dwg	2006-04-04	-

Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

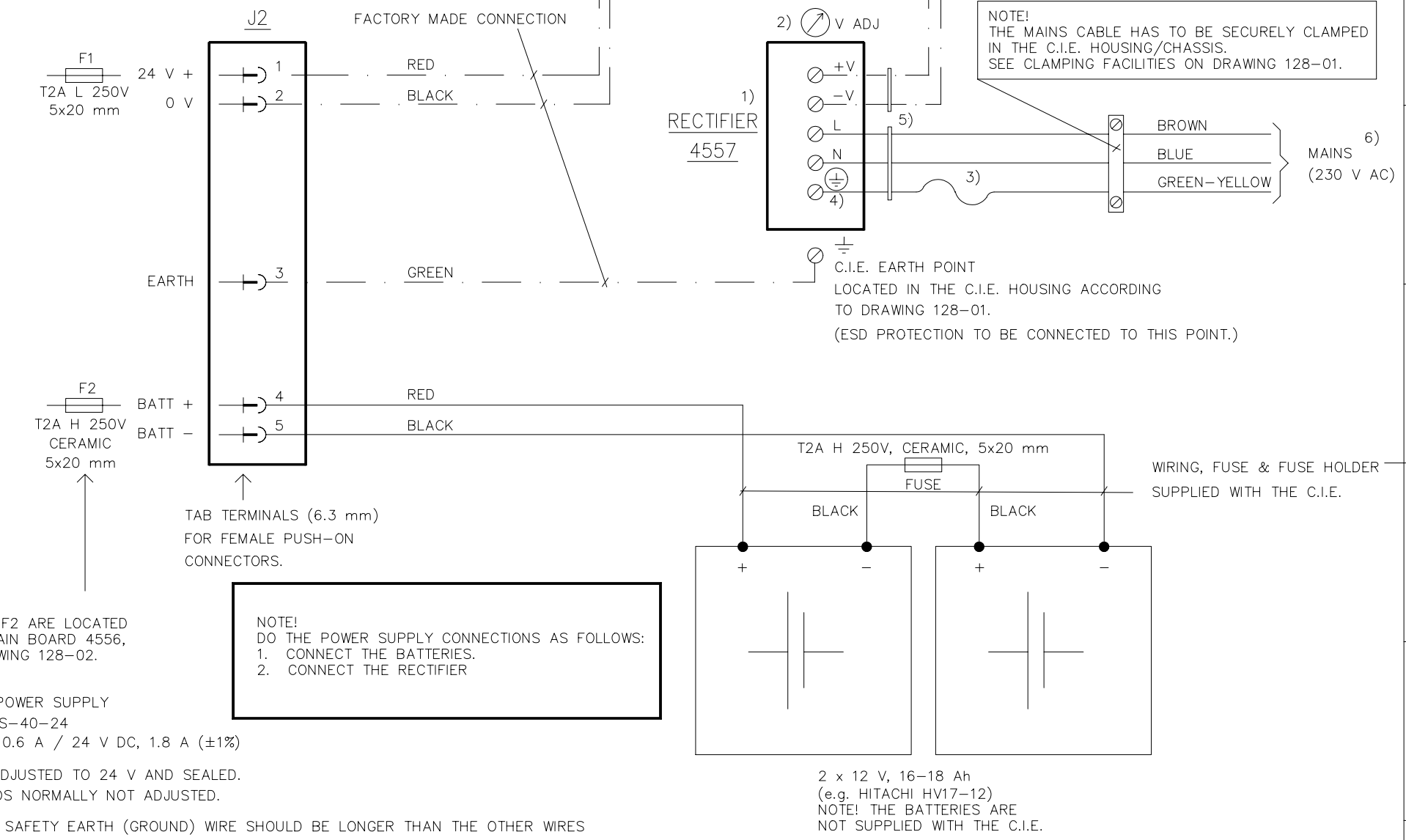
EBL128, TERMINAL BLOCK J1:15-22, FIRE/FAULT TX, CONNECTION DIAGRAM RS485

DWG No.: 128-23	Edition	Sheet
	2	1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
1	FOOTNOTE 1), ADDED INFO.	081212	JP	MÖ

MAIN BOARD 4556
SEE DRAWING 128–02



FUSES F1–F2 ARE LOCATED
ON THE MAIN BOARD 4556,
SEE DRAWWING 128–02.

NOTE!
DO THE POWER SUPPLY CONNECTIONS AS FOLLOWS:
1. CONNECT THE BATTERIES.
2. CONNECT THE RECTIFIER

1) SWITCHED POWER SUPPLY
MEANWELL S–40–24
230 V AC, 0.6 A / 24 V DC, 1.8 A (±1%)

2) FACTORY ADJUSTED TO 24 V AND SEALED.
AFTERWARDS NORMALLY NOT ADJUSTED.

3) THE MAINS SAFETY EARTH (GROUND) WIRE SHOULD BE LONGER THAN THE OTHER WIRES
TO ENSURE THAT IT IS THE LAST TO BREAK IF THE MAINS CABLE CLAMP SHOULD FAIL.

4) ONLY THE MAINS SAFETY EARTH (GROUND) WIRE MUST BE CONNECTED TO THIS TERMINAL.

5) CABLE TIES TO KEEP MAINS & 24 V DC WIRING WELL SEPARATED.

6) CONNECTED TO A HOUSEHOLD REMOVABLE FUSE INTENDED FOR FIRE ALARM ONLY.
THE FUSE SHALL BE MARKED ACCORDING TO NATIONAL REGULATIONS.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference
Designed by JP		Checked by MÖ	Approved by - date RP / 2006-04-06	Filename 128_2411.dwg	Date 2006-04-04	Scale -

Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

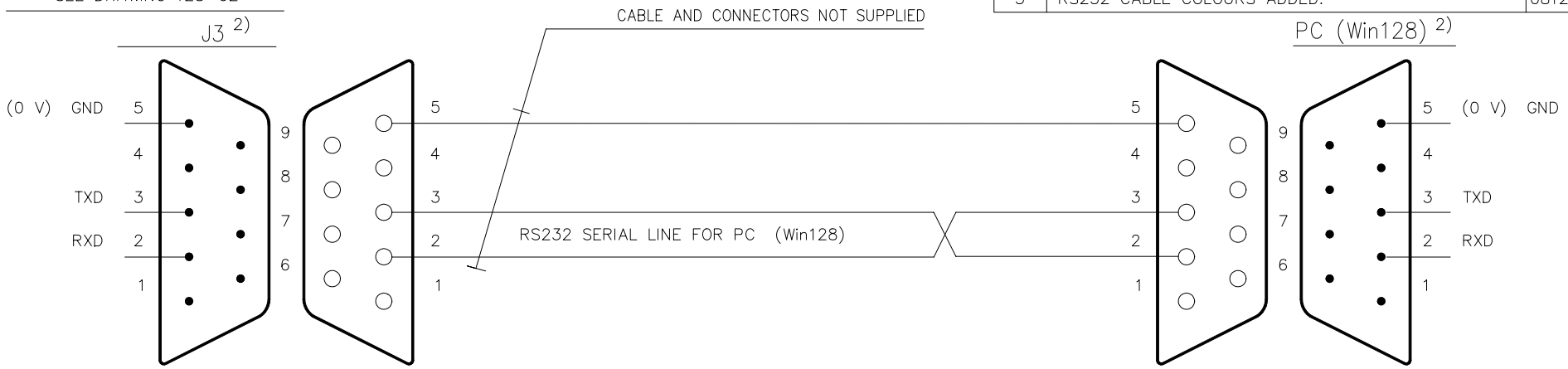
EBL128, TERMINALS J2:1-5, POWER SUPPLY
CONNECTION DIAGRAM

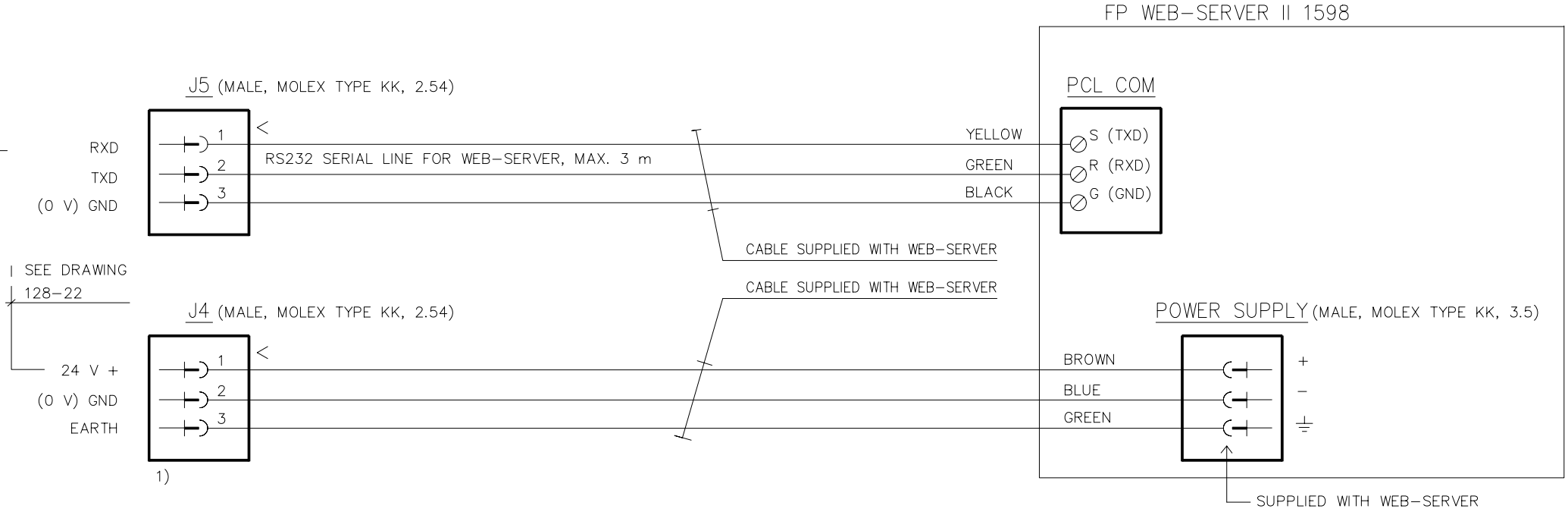
DWG No.: 128-24 | Edition 1 | Sheet 1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
3	RS232 CABLE COLOURS ADDED.	081212	JP	MÖ

MAIN BOARD 4556
SEE DRAWING 128–02





J3, J4 & J5: SEE DRAWING 128–02.

1) AS AN ALTERNATIVE TO J4 CAN J1:13–14 AND THE C.I.E. EARTH POINT BE USED.
NOTE! THE TOTAL CURRENT CONSUMPTION ON POWER SUPPLY OUTPUTS J1:13–14 (SEE DRAWING 128–22) AND J4 TOGETHER, IS MAX. 500mA.

2) SERIAL (MALE 9–PIN) CONNECTOR.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference

Designed by	Checked by	Approved by - date	Filename	Date	Scale
JP	MÖ	RP / 2006-04-06	128_2531.dwg	2006-04-04	-

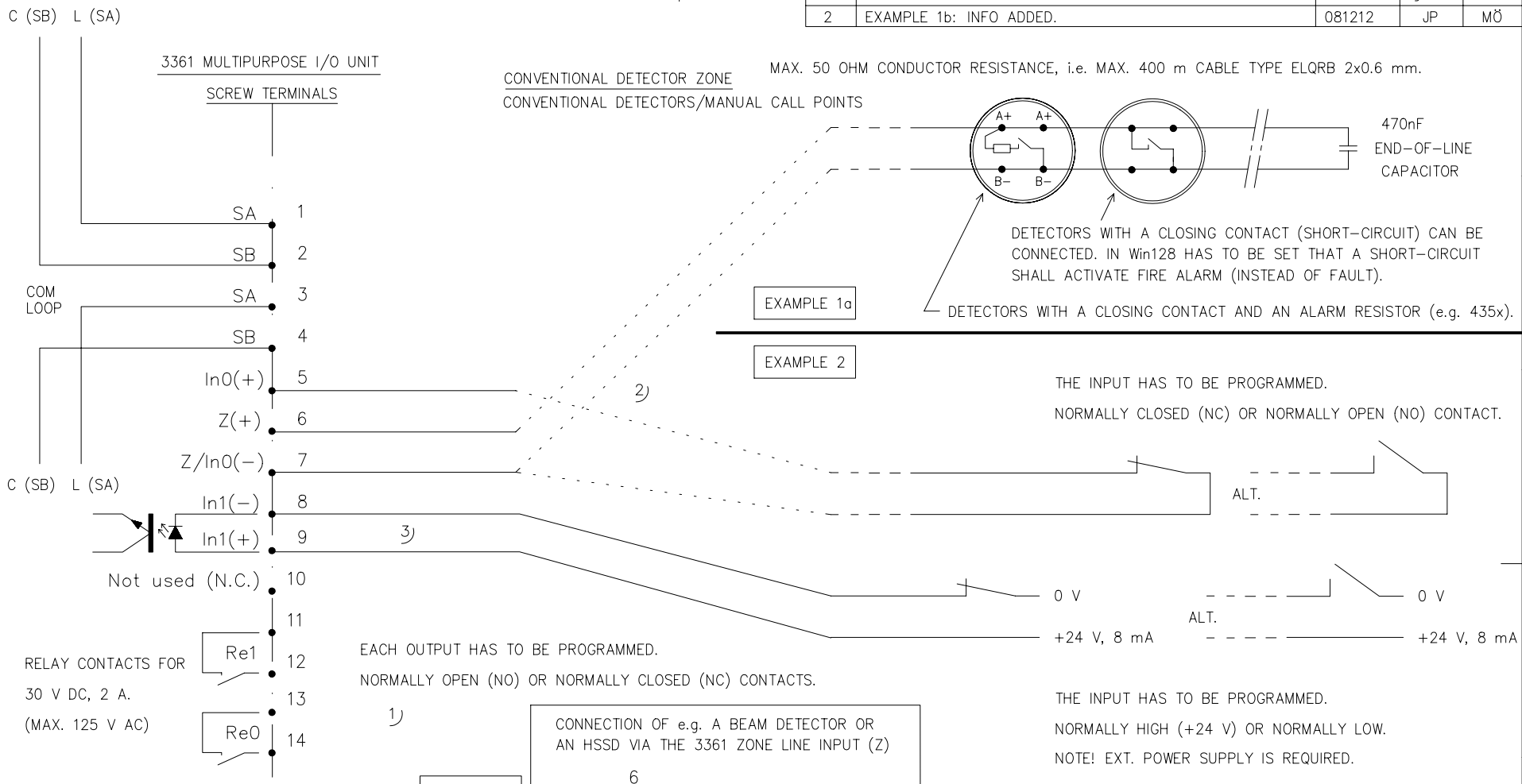
Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

EBL128, CONNECTORS J3, J5 & J4, RS232 CONNECTION DIAGRAM

DWG No.: 128-25 | Edition 3 | Sheet 1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
2	EXAMPLE 1b: INFO ADDED.	081212	JP	MÖ



1) TRIGGER CONDITION "FIRE DOOR CLOSING" SHOULD FOR SAFETY REASONS NOT BE USED FOR THESE OUTPUTS.

2) MONITORED INPUT USED AS ZONE LINE INPUT Z (6/7)

OR

MONITORED INPUT USED AS GENERAL INPUT In0 (5/7)

3) In1 (8/9): ISOLATED INPUT (OPTOCOUPLER)

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference

Designed by	Checked by	Approved by - date	Filename	Date	Scale
JP	MÖ	RP / 2006-04-06	128_2621.dwg	2006-04-04	-

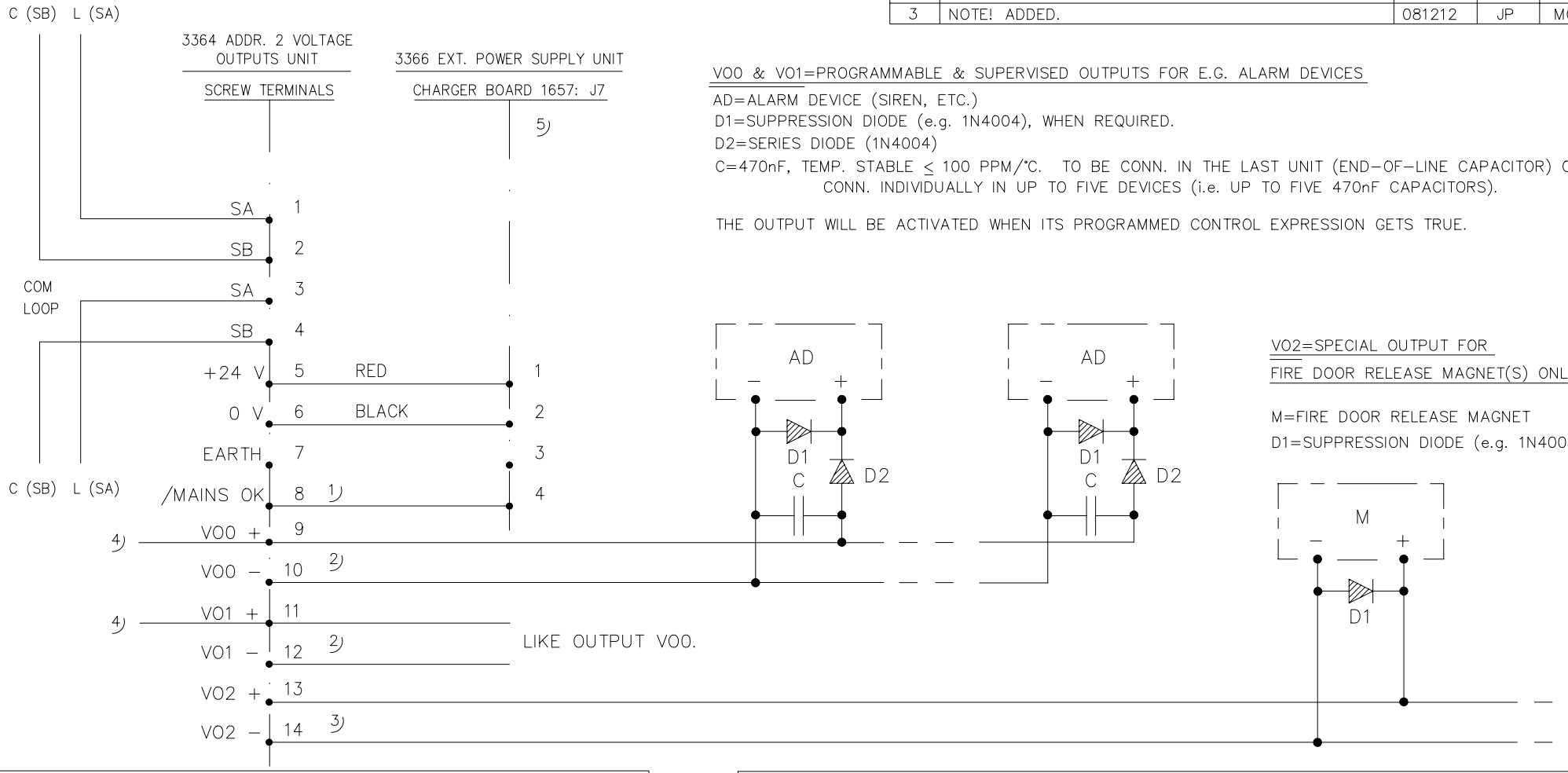
Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

EBL128 ADDR. MULTIPURPOSE I/O UNIT 3361
CONNECTION DIAGRAM (EXAMPLES)

DWG No.: 128-26	Edition 2	Sheet 1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
3	NOTE! ADDED.	081212	JP	MÖ



VO0 & VO1=PROGRAMMABLE & SUPERVISED OUTPUTS FOR E.G. ALARM DEVICES

AD=ALARM DEVICE (SIREN, ETC.)
D1=SUPPRESSION DIODE (e.g. 1N4004), WHEN REQUIRED.
D2=SERIES DIODE (1N4004)
C=470nF, TEMP. STABLE ≤ 100 PPM/°C. TO BE CONN. IN THE LAST UNIT (END-OF-LINE CAPACITOR) OR CONN. INDIVIDUALLY IN UP TO FIVE DEVICES (i.e. UP TO FIVE 470nF CAPACITORS).

THE OUTPUT WILL BE ACTIVATED WHEN ITS PROGRAMMED CONTROL EXPRESSION GETS TRUE.

VO2=SPECIAL OUTPUT FOR FIRE DOOR RELEASE MAGNET(S) ONLY

M=FIRE DOOR RELEASE MAGNET
D1=SUPPRESSION DIODE (e.g. 1N4004)

NOTE! BOTH THE 3364 UNIT AND THE 3366 UNIT HAS TO BE POWER SUPPLIED BUT NOT CONNECTED TO THE COM LOOP DURING ADDRESS SETTING.

THE OUTPUT "VO2" WILL BE ACTIVATED, i.e. GET LOW (POWERLESS) WHEN:

-- THE PROGRAMMED CONTROL EXPRESSION IS TRUE.
-- THE FIRE DOOR CLOSING FUNCTION (ABDL) IS ACTIVATED, SEE PLANNING INSTRUCTIONS.
-- 30 sec. AFTER THE "/MAINS OK" INPUT (TERM. 8) GOES HIGH.
-- 30 sec. AFTER THE COM LOOP COMM. IS INTERRUPTED, i.e. 3364 HAS NO CONN. WITH THE C.I.E.

1) NORMALLY LOW. HIGH=LOSS OF MAIN POWER SOURCE IN 3366=FIRE DOOR WILL CLOSE. NOT USED, CONNECT TERMINAL 8 TO TERMINAL 6 (0 V).

2) PROGRAMMABLE VOLTAGE OUTPUT (CONTROL EXPRESSION & NORMALLY LOW OR HIGH). 24 V DC, MAX. 1 A. SUPERVISED.
CALIBRATION OF SUPERVISED OUTPUTS HAS TO BE DONE IN THE C.I.E. (MENU H5/A2).
CALIBRATED VALUE HAS TO BE IN THE RANGE 470nF TO 5x470nF, ELSE A FAULT WILL BE GENERATED.

3) VOLTAGE OUTPUT. NORMALLY HIGH (24 V DC). MAX. 1 A. FOR FIRE DOOR RELEASE MAGNETS.

4) VOLTAGE DEPENDING ON PROGRAMMING, SEE DRAWING 128-22, NOTE 3).

5) OTHER CONNECTIONS, SEE DRAWING 128-29.

NOTE! VOLTAGE OUTPUTS VO0-VO2: 1 A CONT. / 1.4 A DURING 10 ms.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP		Checked by MÖ	Approved by - date RP / 2006-04-06	Filename 128_2831.dwg	Date 2006-04-04	Scale -

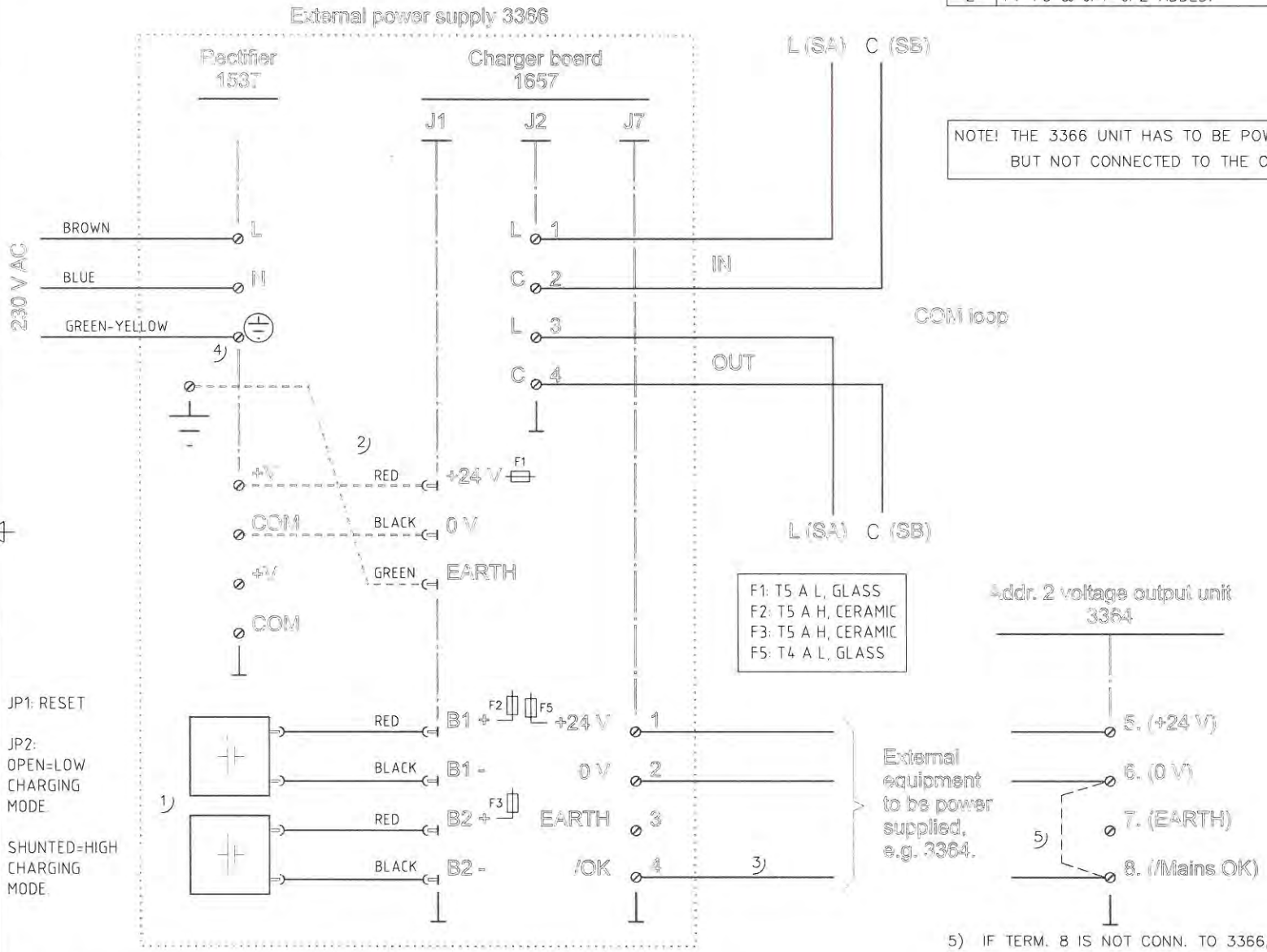
Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

EBL128 ADDR. 2 VOLTAGE OUTPUTS UNIT 3364
CONNECTION DIAGRAM (EXAMPLES)

DWG No.: 128-28 | Edition 3 | Sheet 1/1

Original Dwg A3L (420x297mm)

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



NOTE! THE 3366 UNIT HAS TO BE POWER SUPPLIED BUT NOT CONNECTED TO THE COM LOOP DURING ADDRESS SETTING.

1) THERE IS SPACE IN THE HOUSING FOR TWO MAINTENANCE–FREE SEALED LEAD–ACID BACKUP BATTERIES (2x12 V, 7.5 Ah). CONNECTION WIRES ARE SUPPLIED.

2) DASHED WIRING=FACTORY MADE CONNECTIONS.

3) ONLY REQUIRED WHEN THE "FIRE DOOR CLOSING" FUNCTION (ABDL) IS TO BE USED IN 3364. NORMALLY LOW. HIGH=LOSS OF MAIN POWER SOURCE IN 3366=FIRE DOOR SHALL CLOSE (VIA 3364).

4) ONLY THE MAINS SAFETY EARTH (GROUND) WIRE MUST BE CONNECTED TO THIS TERMINAL.

5) IF TERM. 8 IS NOT CONN. TO 3366, J7:4 IT HAS TO BE CONN. TO TERM. 6 (0V).

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference
Designed by JP	Checked by MO	Approved by - date RP / 2006-04-06	Filename 128_2921.dwg	Date 2006-04-04	Scale -

Panasonic
Panasonic Eco Solutions Nordic AB

EBL128 EXT. POWER SUPPLY UNIT 3366
CONNECTION DIAGRAM (EXAMPLES)

DWG No.: 128-29 | Edition 2 | Sheet 1/1

Original Dwg A3L (420x297mm)

4580 8 ZONES EXPANSION BOARD

RevNo	Revision note	Date	Signature	Checked
3	2324 REV. MCP ADDED.	081212	JP	MÖ

INTERNAL WIRING

P.C.B. NO. 9287-2B
ALT.
P.C.B. NO. 9287-3A

J1

1 + INPUT 0
2 –
3 + 470 nF INPUT 1
4 –
5 + 470 nF INPUT 2
6 –
7 + 470 nF INPUT 3
8 –
9 + 470 nF INPUT 4
10 –
11 + 470 nF INPUT 5
12 –
13 + 470 nF INPUT 6
14 –
15 + 470 nF INPUT 7
16 –

1) EACH ZONE LINE INPUT (0-7) CAN VIA WIN128 BE PROGRAMMED FOR ONE OF THREE MODES (TYPES):
- CAPACITIVE, E-O-L CAPACITOR 470 nF. MAX. 50 ohm CABLE RESISTANCE. MAX. 50 nF CABLE CAPACITANCE.
- RESISTOR -- Ex, E-O-L RESISTOR 10K. SEE DWG 128-32. MAX. 40 ohm CABLE RESISTANCE. MAX. 70 nF CABLE CAPACITANCE.
- RESISTOR, E-O-L RESISTOR 4K7. MAX. 50 ohm CABLE RESISTANCE. NOTE! 4580 P.C.B. NO. 9287-3A REQUIRED!

2) ANY CONVENTIONAL MANUAL CALL POINT WITH AN ALARM RESISTOR 680R (±10%).

2324
CONVENTIONAL
DETECTOR BASE FOR
CONV. SMOKE OR HEAT
DETECTOR

A+ A+
B–
B–
L

2217 EXTERNAL INDICATOR (EXT. LED)

J1: 1 2
P1: 3 2 1 JP1: OUT

2218

CONVENTIONAL
MANUAL CALL POINT

680 470 COMMON

1 2 3 4
680R

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

E–O–L DEVICE 1)

470 nF ALT. 10K ALT. 4K7

WHITE
RED
ORANGE OR YELLOW
BLACK

B A E+ E–

E+/E–
TERMINALS
FOR EXTERNAL
INDICATOR 2217

VIA Win128 CAN BE PROGRAMMED THAT
DETECTORS WITH A CLOSING CONTACT
SHALL BE CONNECTED (i.e. "ALARM AT SHORT CIRCUIT").
A SHORT CIRCUIT ON THE ZONE LINE WILL THEN ACTIVATE
A FIRE ALARM INSTEAD OF A FAULT.

J2

+24 V 1
0 V 2
L (SA) 3
C (SB) 4

J2: MALE, MOLEX
TYPE KK, 2.54

CONNECTED TO THE C.I.E. ("J13")
OR
CONNECTED TO ANOTHER EXP. BOARD ("J2")

CONNECTED TO ANOTHER EXP. BOARD ("J2")
OR
NOT CONNECTED (ON THE FOURTH EXP. BOARD)

NOTE!

MAX. 32 POINTS ON EACH ZONE.
MAX. 40 POINTS ON EACH ZONE IN AUS./N.Z.
MAX. 512 ALARM POINTS IN THE WHOLE SYSTEM.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference
Designed by JP		Checked by MÖ	Approved by - date RP / 2006-04-06	Filename 128_3031.dwg	Date 2006-04-04	Scale -

Panasonic
Panasonic Electric Works
Fire & Security Technology Europe AB

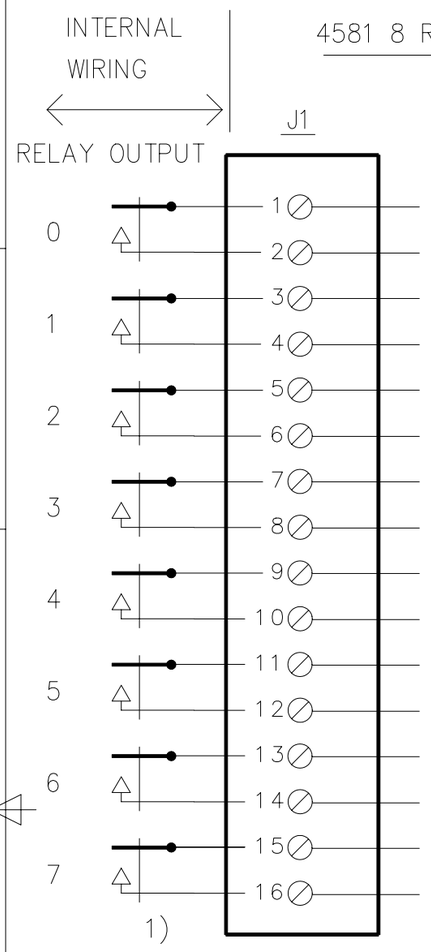
EBL128, EXPANSION BOARD 4580
CONNECTION DIAGRAM

DWG No.: 128-30 | Edition 3 | Sheet 1/1

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked

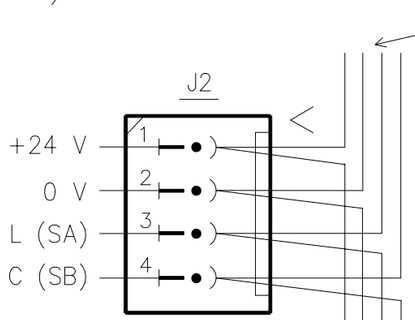
4581 8 RELAYS EXPANSION BOARD



EACH OUTPUT HAS TO BE PROGRAMMED.

SEE PLANNING INSTRUCTIONS/Win128 HELP FOR MORE INFORMATION.

EACH RELAY CONTACT CAN BE PROGRAMMED AS NORMALLY OPEN (NO) OR NORMALLY CLOSED (NC).



J2: MALE, MOLEX
TYPE KK, 2.54

CONNECTED TO THE C.I.E. ("J13")
OR
CONNECTED TO ANOTHER EXP. BOARD ("J2")

CONNECTED TO ANOTHER EXP. BOARD ("J2")
OR
NOT CONNECTED (ON THE FOURTH EXP. BOARD)

1) RELAY CONTACT RATINGS: MAX. 2 A @ 30 V DC.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by JP		Checked by MÖ	Approved by - date RP / 2006-04-06	Filename 128_3101.dwg	Date 2006-04-04	Scale -

Panasonic

Panasonic Electric Works
Fire & Security Technology Europe AB

EBL128, EXPANSION BOARD 4581
CONNECTION DIAGRAM

DWG No.: 128-31 | Edition 0 | Sheet 1/1

Original Dwg A3L (420x297mm)

NOTE!

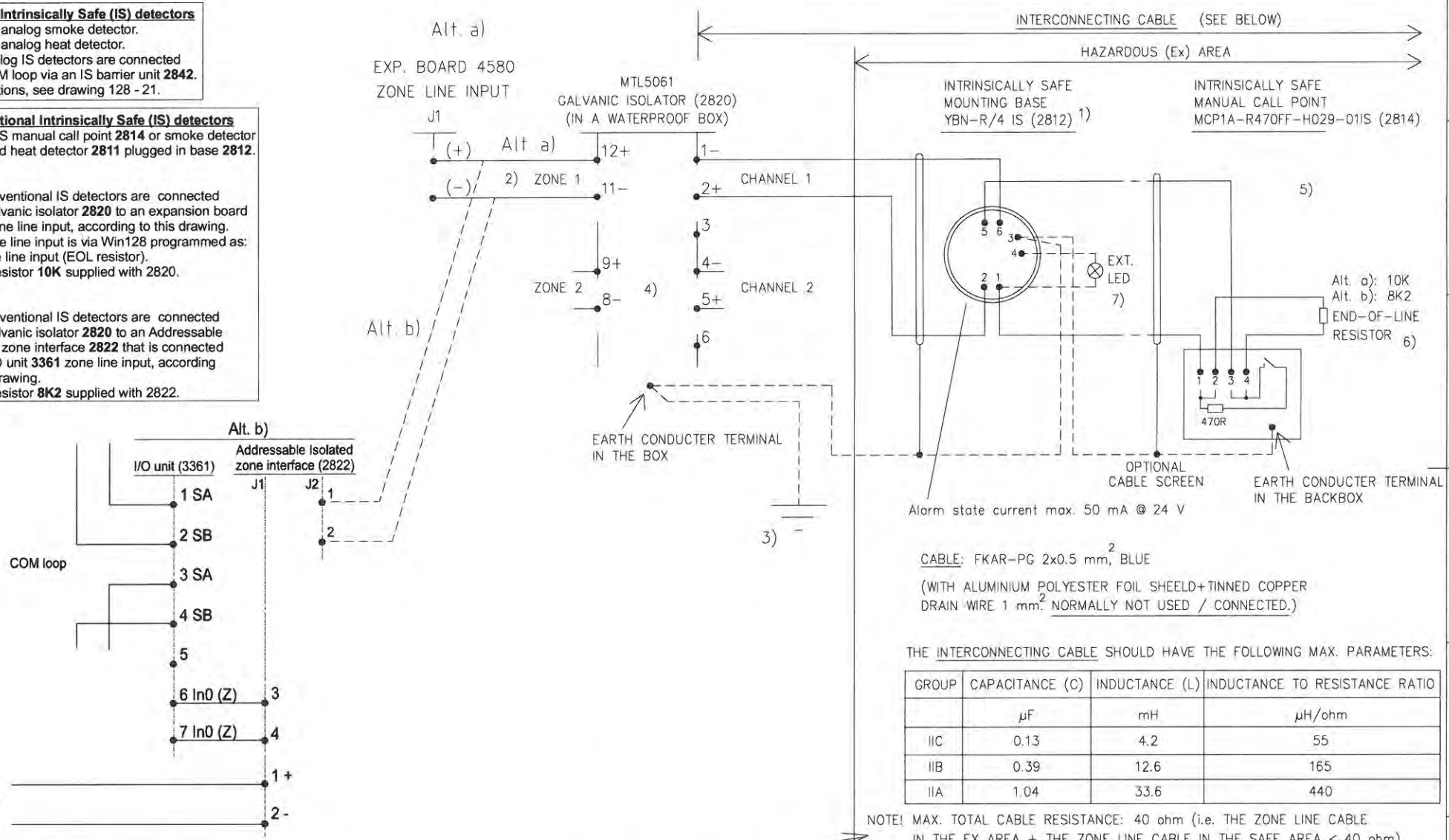
Analog Intrinsically Safe (IS) detectors
2840 IS analog smoke detector.
2841 IS analog heat detector.
The analog IS detectors are connected to a COM loop via an IS barrier unit **2842**.
Connections, see drawing 128 - 21.

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**.

Alt. a)
The conventional IS detectors are connected via a galvanic isolator **2820** to an expansion board **4580** zone line input, according to this drawing.
The zone line input is via Win128 programmed as:
EX zone line input (EOL resistor).
E-O-L resistor **10K** supplied with 2820.

Alt. b)
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.

RevNo	Revision note	Date	Signature	Checked
2	Info. added/revised. 2822 & 3361 added.	120827	JP	MÖ



CABLE: FKAR-PG 2x0.5 mm^2, BLUE

(WITH ALUMINIUM POLYESTER FOIL SHEELD+TINNED COPPER DRAIN WIRE 1 mm^2. NORMALLY NOT USED / CONNECTED.)

THE INTERCONNECTING CABLE SHOULD HAVE THE FOLLOWING MAX. PARAMETERS:

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

NOTE! MAX. TOTAL CABLE RESISTANCE: 40 ohm (i.e. THE ZONE LINE CABLE IN THE EX AREA + THE ZONE LINE CABLE IN THE SAFE AREA ≤ 40 ohm)

1) IN THE BASE CAN BE PLUGGED A SMOKE DETECTOR SLR-E-IS (2810) OR A HEAT DETECTOR DCD-1E-IS (2811).
2) ELQRB 2 x 0.6 mm (0.3 mm^2). NO ALARM POINTS TO BE CONNECTED ON THIS LINE.
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).
5) MAX. 5 UNITS ON THE ZONE LINE (CHANNEL). CABLE: FKAR-PG 2x0.5 mm^2, BLUE
6) BODY SURFACE AREA MIN. 230 mm^2
7) LED SURFACE AREA MIN. 230 mm^2 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.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference

Designed by	Checked by	Approved by - date	Filename	Date	Scale
JP	MÖ	RP / 2006-04-06	128_3221.dwg	2006-04-04	-

Panasonic
Panasonic Eco Solutions Nordic AB

EBL128, IS UNITS FOR HAZARDOUS (Ex) AREA CONNECTION DIAGRAM

DWG No.: 128-32	Edition	Sheet
	2	1/1

Original Dwg A3L (420x297mm)

4583 INPUTS & OUTPUTS EXPANSION BOARD

RevNo	Revision note	Date	Signature	Checked
2	INFO. ADDED AND REVISED.	140509	JP	MÖ

NOTE!
This drawing 128-33, sheet 1 of 3, is valid for board 4583.
Drawing 128-33, sheet 3 of 3, is valid for board 4583DE.

NOTE!
24 V DC IS THE NOMINAL VOLTAGE WHEN THE MAIN POWER SOURCE (RECTIFIER) IS USED.
WHEN THE SECOND POWER SOURCE (BACK-UP BATTERY) IS USED THE VOLTAGE CAN BE 21.6-28 V DC.

OUTPUT 2, INPUT 3 & 4 CAN BE USED AS A STANDARD GERMAN EXTINGUISHING INTERFACE (STANDARDSCHNITTSTELLE "LÖSCHEN").

INTERNAL WIRING

FUSES F1-F2: SEE DRAWING 128-03 SHEET 2/2.

AD=ALARM DEVICE (SIREN, ETC.)
D1=SUPPRESSION DIODE (e.g. 1N4004) WHEN REQUIRED
D2=SERIES DIODE (1N4004)
R=33K
1-5 RESISTORS R=33K CAN BE USED.

OUTPUT 0 CAN BE USED FOR GERMAN FIRE ALARM ROUTING EQUIPMENT, FIRE ALARM. "E" "BRANDMELDUNG" (Trigger condition: Fire Brigade Tx)

J1

F1 200mA 2)
F2 200mA 2)

1) 2) 3)

OUTPUT 0, 24V DC, SUPERVISED, PROGRAMMABLE (CONTROL EXPRESSION & NORMALLY LOW OR HIGH) 3)

INPUT 0, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN OR CLOSED) 1)
NO (>20K) ALT. NC (<500R)
AN INPUT HAS TO BE ACTIVATED > 0.5 SEC.

INPUT 0 CAN BE USED FOR GERMAN FIRE ALARM ROUTING EQUIPMENT, FAULT INPUT. "J" "MELDER QUITTUNG". (Trigger condition: Fault warning routing equipment fault)

OUTPUT 1, 24V DC, SUPERVISED, PROGRAMMABLE (CONTROL EXPRESSION & NORMALLY LOW OR HIGH) 3)

OUTPUT 1 CAN BE USED FOR GERMAN FIRE KEY CABINET. "FSK ÖFFNEN". (Trigger condition: Key cabinet open)

INPUT 1, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN OR CLOSED) 1)

INPUT 1 CAN BE USED FOR GERMAN KEY CABINET, FEEDBACK. "FSK RÜCKMELDUNG". (Trigger condition: Activated Key cabinet)

INPUT 2, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN OR CLOSED) 1)

INPUT 2 CAN BE USED FOR GERMAN KEY CABINET, SUPERVISION. "FSK ÜBERWACHUNG"

3K3 680R NO/NC

OUTPUT 2, SUPERVISED, PROGRAMMABLE (CONTROL EXPRESSION & NORMALLY LOW RESISTANCE OR HIGH RESISTANCE)

SPECIAL OUTPUT FOR GERMAN EXTINGUISHING EQUIPMENT, "G" "LÖSCHANLAGE" (Trigger condition: Fire alarm)

INPUT 3, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN OR CLOSED) 1)

INPUT 3 CAN BE USED FOR GERMAN EXTINGUISHING EQUIPMENT, RELEASED. "G" "LÖSCHANLAGE AUSGELÖST". (Trigger condition: Extinguishing system released)

INPUT 4, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN OR CLOSED) 1)

INPUT 4 CAN BE USED FOR GERMAN EXTINGUISHING EQUIPMENT, FAULT INPUT. "G" "LÖSCHANLAGE QUITTUNG" (Trigger condition: Extinguishing system fault)

LÖSCHANLAGE

0 V

J2

+24 V
0 V
L (SA)
C (SB)

J2: MALE, MOLEX TYPE KK, 2.54

CONNECTED TO THE C.I.E. ("J13") OR CONNECTED TO ANOTHER EXP. BOARD ("J2")

CONNECTED TO ANOTHER EXP. BOARD ("J2") OR NOT CONNECTED (ON THE FOURTH EXP. BOARD)

	Output 0 & 1	
Programmed as:	Not activated (Control expression not true.)	Activated (Control expression true.)
Normally low	Supervision voltage 1.5-3.6 V a)	24 V
Normally high	24 V	≤ 4.2 V

a) Depending on the number of supervision resistors (1-5).

NOTE! THE SUPERVISON VOLTAGE HAS REVERSE POLARITY COMPARED TO 24 V.

1) A PROGRAMMABLE INPUT CAN AS AN ALTERNATIVE BE PROGRAMMED AS SUPERVISED. SEE DRW 128-22, SHEET 2/2.
2) VOLTAGE DEPENDING ON PROGRAMMING. SEE TABLE:
3) AFTER CONNECTION/COMMISSIONING, THE SUPERVISED OUTPUTS HAVE TO BE CALIBRATED VIA MENU H5/A1. THE CALIBRATED VALUE HAS TO BE IN THE RANGE 4K7-50K, ELSE A FAULT WILL BE GENERATED. ONLY A NORMALLY LOW OUTPUT CAN BE SUPERVISED, ALT. CAN BE PROGRAMMED AS NOT SUPERVISED. DURING RESTART OF EBL128 A NORMALLY HIGH OUTPUT WILL BE LOW FOR A FEW SECONDS.

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference
Designed by JP		Checked by MÖ	Approved by - date RP / 2008-07-10	Filename 128_3321.dwg	Date 2008-07-10	Scale -

Panasonic
Panasonic Eco Solutions Nordic AB

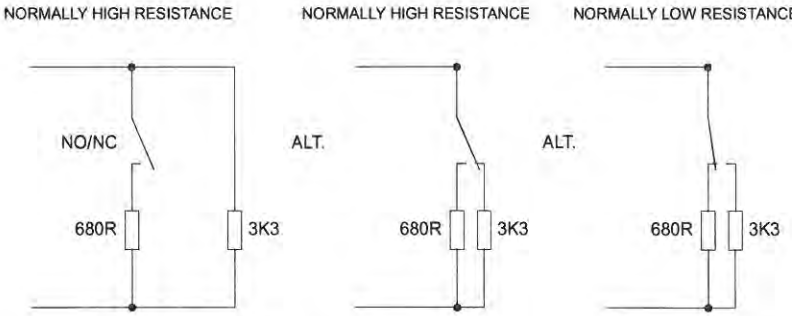
EBL128, EXPANSION BOARD 4583
CONNECTION DIAGRAM

DWG No. 128-33 | Edition 2 | Sheet 1/3

Original Dwg A3L (420x297mm)

RevNo	Revision note	Date	Signature	Checked
0	–	–	–	–

CONNECTION TO 4583 ("J1"), SUPERVISED INPUTS 0-4, EXAMPLES:



1)

4583 INPUT 0-4, SUPERVISED, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY HIGH OR LOW RESISTANCE), SEE TABLES

4583

Line resistance **R**	Normally high resistance	Normally low resistance
R > 6K8	Fault	Fault
6K8 ≥ R > 2K (nom. 3K3)	Not activated	Activated
2K ≥ R > 70 (nom. 680)	Activated	Not activated
R ≤ 70	Fault	Fault

4583DE

Line resistance **R**	Normally high resistance	Normally low resistance
R > 4K	Fault	Fault
4K ≥ R > 3K (nom. 3K3)	Not activated	Activated
3K > R > 2K	Fault	Fault
2K > R > 70 (nom. 680)	Activated	Not activated
R ≤ 70	Fault	Fault

NOTE!
24 V DC IS THE NOMINAL VOLTAGE WHEN THE MAIN POWER SOURCE (RECTIFIER) IS USED.
WHEN THE SECOND POWER SOURCE (i.e. THE BACK-UP BATTERY) IS USED THE VOLTAGE CAN BE 21.6-28 V.

1) The programmable inputs 0-4 can as an alternative be programmed as not supervised, i.e. as NO / NC.
See drawing 128-33, sheet 1 and 3.

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference

Designed by	Checked by	Approved by - date	Filename	Date	Scale
JP	MO	RP / 2014-05-09	128_3302.dwg	2014-05-09	-

Panasonic
Panasonic Eco Solutions Nordic AB

EBL128, EXPANSION BOARD 4583
CONNECTION DIAGRAM

DWG No.: 128-33	Edition	Sheet
	0	2/3

Original Dwg A3L (420x297mm)

4583 INPUTS & OUTPUTS EXPANSION BOARD

RevNo	Revision note	Date	Signature	Checked
0	–	–	–	–

NOTE!
This drawing 128-33, sheet 3 of 3, is valid for board 4583DE.
Drawing 128-33, sheet 1 of 3, is valid for board 4583.

NOTE!
24 V DC IS THE NOMINAL VOLTAGE WHEN THE MAIN POWER SOURCE (RECTIFIER) IS USED.
WHEN THE SECOND POWER SOURCE (BACK-UP BATTERY) IS USED THE VOLTAGE CAN BE 21.6-28 V DC.

INTERNAL WIRING

FUSES F1–F2: SEE DRAWING 128-03 SHEET 2/2.

OUTPUT 2, INPUT 3 & 4 CAN BE USED AS A STANDARD GERMAN EXTINGUISHING INTERFACE (STANDARDSCHNITTSTELLE "LÖSCHEN").

J1

F1 200mA 2)

F2 200mA 2)

1) 3K3 680R NO/NC

0 V

LÖSCHANLAGE

1 +	OUTPUT 0, 24V DC, SUPERVISED, PROGRAMMABLE (CONTROL EXPRESSION & NORMALLY LOW)	3)
2 –		
3 +	INPUT 0, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN OR CLOSED) NO (>20K) / ALT. NC (<500R) AN INPUT HAS TO BE ACTIVATED > 0.5 SEC.	1)
4 –		
5 +	OUTPUT 1, 24V DC, SUPERVISED, PROGRAMMABLE (CONTROL EXPRESSION & NORMALLY LOW)	3)
6 –		
7 +	INPUT 1, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN OR CLOSED)	1)
8 –		
9 +	INPUT 2, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN OR CLOSED)	1)
10 –		
11 +	OUTPUT 2, SUPERVISED, PROGRAMMABLE (CONTROL EXPRESSION & NORMALLY LOW RESISTANCE OR HIGH RESISTANCE)	
12 –		
13 +	INPUT 3, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN OR CLOSED)	1)
14 –		
15 +	INPUT 4, PROGRAMMABLE (TRIGGER CONDITION & NORMALLY OPEN OR CLOSED)	1)
16 –		

OUTPUT 0 CAN BE USED FOR GERMAN FIRE ALARM ROUTING EQUIPMENT, FIRE ALARM "E" "BRANDMELDUNG"

INPUT 0 CAN BE USED FOR GERMAN FIRE ALARM ROUTING EQUIPMENT, FAULT INPUT "J" "MELDER QUITTUNG". (Trigger condition: Fault warning routing equipment fault)

OUTPUT 1 CAN BE USED FOR GERMAN FIRE KEY CABINET. "FSK ÖFFNEN". (Trigger condition: Key cabinet open)

INPUT 1 CAN BE USED FOR GERMAN KEY CABINET, FEEDBACK. "FSK RÜCKMELDUNG". (Trigger condition: Activated Key cabinet)

INPUT 2 CAN BE USED FOR GERMAN KEY CABINET, SUPERVISION. "FSK ÜBERWACHUNG".

SPECIAL OUTPUT FOR GERMAN EXTINGUISHING EQUIPMENT,"G" "LÖSCHANLAGE". (Trigger condition: Fire alarm)

INPUT 3 CAN BE USED FOR GERMAN EXTINGUISHING EQUIPMENT, RELEASED. "G" "LÖSCHANLAGE AUSGELÖST". (Trigger condition: Extinguishing system released)

INPUT 4 CAN BE USED FOR GERMAN EXTINGUISHING EQUIPMENT, FAULT INPUT. "G" "LÖSCHANLAGE QUITTUNG". (Trigger condition: Extinguishing system fault)

J2

+24 V	1
0 V	2
L (SA)	3
C (SB)	4

J2: MALE, MOLEX TYPE KK, 2.54

CONNECTED TO THE C.I.E. ("J13") OR CONNECTED TO ANOTHER EXP. BOARD ("J2")

CONNECTED TO ANOTHER EXP. BOARD ("J2") OR NOT CONNECTED (ON THE FOURTH EXP. BOARD)

OUTPUT 0 & 1

Not activated (control expression not true): Supervision voltage 2.1 V DC

Activated (control expression true): 20.4 to 28 V DC

NOTE! THE SUPERVISON VOLTAGE HAS THE SAME POLARITY AS THE 24 V.

1) A PROGRAMMABLE INPUT CAN AS AN ALTERNATIVE BE PROGRAMMED AS SUPERVISED. SEE DRW 128-22, SHEET 2/3.
2) VOLTAGE, SEE INFO. TO THE RIGHT.
3) TERMINATION RESISTOR VALUE: 200 - 1000R. (ACCORDING TO DIN 14675)

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference
Designed by JP		Checked by MO	Approved by - date RP / 2014-05-09	Filename 128_3303.dwg	Date 2014-05-09	Scale -

Panasonic
Panasonic Eco Solutions Nordic AB

EBL128, EXPANSION BOARD 4583
CONNECTION DIAGRAM

DWG No.: 128-33 | Edition 0 | Sheet 3/3

Original Dwg A3L (420x297mm)