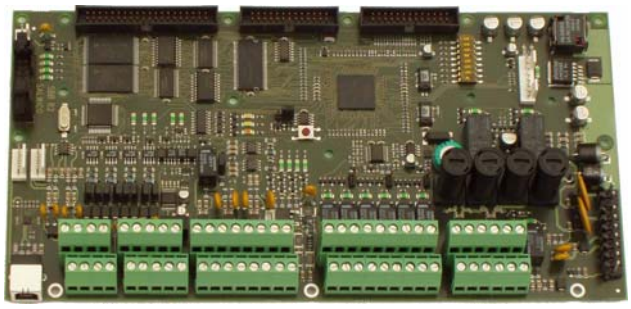


CS4000 System boards
BB, Base Board

Part no. 462001

System: Salwico CS4000 fire alarm

Description

The printed circuit board BB, Base Board is a system module in the Salwico CS4000 fire alarm system.

The Base Board is the motherboard in the system, containing all the basic in- and outputs and controlling the system communication.

For more information about how to connect the different CS4000 system boards together, please refer to CS4000 Service & Maintenance manual.

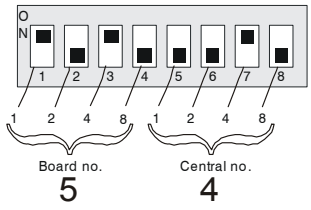
Data

Nominal voltage	27 VDC
Working voltage	19-30 VDC
Working current	110 mA
Cable terminals	2.5 mm^2
Temperature range	0°C to +55°C
Weight	~380 g
Dimensions (bxhxd)	248x127x37

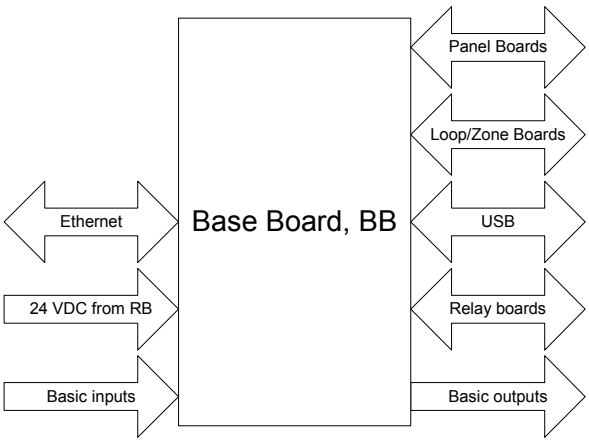
Address switch

The 8-pole DIP switch is used to set the central and base board address.
Switch 1-4 is dedicated for the board address, and switch 5-8 to the central address.
The address number can be set from 1 to 15.

Example:



Block diagram



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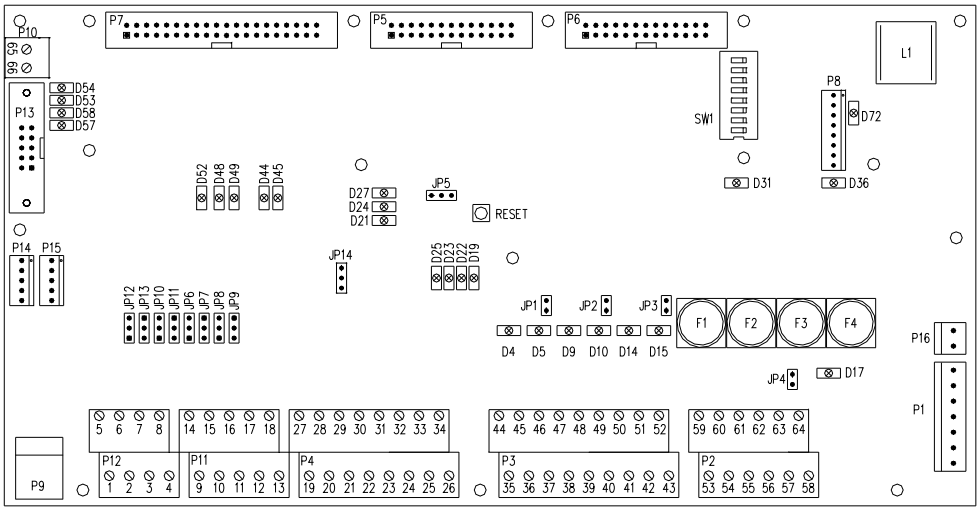
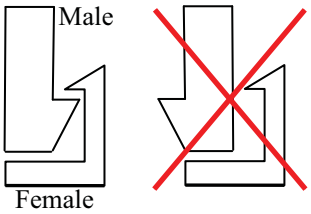
Component layout



Correct mounting of connector P1



Jumpers

JP1-4
If fitted, relay 4-7 follows the GA input.

JP5
Internal function.
Should always be mounted towards reset button

JP6-7
RS485 termination port 1, should normally be open (mounted away from terminal P12)

JP8-9
RS485 termination port 2, should normally be open (mounted away from terminal P12)

JP 10-11
RS485 termination port 3, should normally be open (mounted away from terminal P12)

JP12-13
RS485 termination port 4, should normally be open (mounted away from terminal P12)

JP14
0 or 24VDC on terminal 27-28.
For more info, see **Terminals**.

Connectors

P1 Internal system channel and rectifier board, RB
P5 Background debug monitor, BDM
P6 Ethernet expansion
P7 USB expansion
P9 USB Device
P10 External buzzer
P13 To relay board, OB. **NOTE!** Shared Power with Terminal 31-32.
P14 To panel board, channel A
P15 To panel board, channel B
P16 Back up power

LEDs

D4 Relay 4
D5 Relay 1
D9 Relay 5
D10 Relay 2
D14 Relay 6
D15 Relay 3
D17 Relay 7
D21 Fire indication
D19 Input 4 active
D22 Input 3 active
D23 Input 2 active
D24 Fault indication
D25 Input 1 active
D27 fault base board
D31 Relay 8, Bell output 1
D36 Relay 9, Bell output 2
D44 TX port 1
D45 RX port 1
D48 TX port 2
D49 RX port 2
D52 Power OK port 2
D53 RX port 3
D54 TX port 3
D57 TX port 4
D58 RX port 4
D72 Power to base board

Fuses

F1 Alarm bell output
F2 Alarm bell output
F3 Alarm bell output
F4 Alarm bell output

All fuses are 5x20mm, 1AT.

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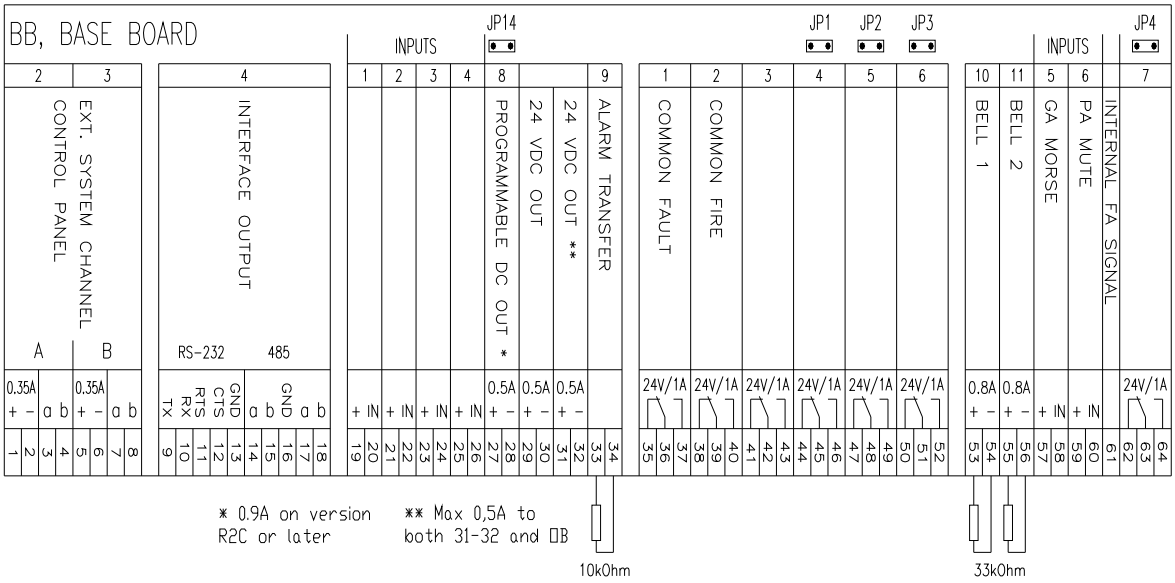
Terminals

Terminal layout



Terminal data

DESCRIPTION	TERMINAL	FUNCTION	DATA
Power Output 1 to Control & Repeater panel. External System channel A	1	Power +	24VDC, max 350mA
	2	Power -	
	3	Communication, a	RS485
	4	Communication, b	
Power Output 2 to Control & repeater panel External System channel B	5	Power +	24VDC, max 350mA
	6	Power -	
	7	Communication, a	RS485
	8	Communication, b	
Interface output (RS232 or RS485)	9	TX	RS232, isolated.
	10	RX	
	11	RTS	
	12	CTS	
	13	GND	
	14	A (same as 17)	RS485, isolated
	15	B (same as 18)	
	16	GND	
	17	A (same as 14)	
	18	B (same as 15)	
Input 1	19	+	Not isolated. Activated when terminals are shorted. For example “GA auto input”.
	20		
Input 2	21	+	
	22		
Input 3	23	+	
	24		
Input 4	25	+	
	26		

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Programmable DC out Power Output 3	27	+	27VDC, max 500mA (max 900mA on version R2C or later). JP14 mounted away from terminals= inactive 0V, active 24VDC. JP14 mounted towards terminals= inactive 24VDC, active 0V
	28	-	
24VDC out Power Output 4	29	+	27VDC, max 500mA V_{min}=18.5VDC, V_{max}=27.5VDC **NOTE!** Power Output 5 and all OB share the same 500mA (via 10 pol flat cable).
	30	-	
24VDC out Power Output 5	31	+	
	32	-	
Alarm transfer	33	+	Must be terminated with end of line resistor 10kΩ
	34	-	
Programmable output 1	35	NC	27VDC, max 1A
	36	C	
	37	NO	
Programmable output 2	38	NC	
	39	C	
	40	NO	
Programmable output 3	41	NC	
	42	C	
	43	NO	
Programmable output 4 (follows GA if jumper JP1 is mounted)	44	NC	
	45	C	
	46	NO	
Programmable output 5 (follows GA if jumper JP2 is mounted)	47	NC	
	48	C	
	49	NO	
Programmable output 6 (follows GA if jumper JP3 is mounted)	50	NC	
	51	C	
	52	NO	
Bell output 1	53	+	24VDC, max 800mA V_{min}=19.5VDC V_{max}=27.5VDC End of line resistor 33kΩ
	54	-	
Bell output 2	55	+	
	56	-	
Input GA morse	57	+	Not isolated. Active when shorted
	58		
PA mute	59	+	Not isolated Active when shorted
	60		
Internal FA signal output	61	Open collector	Active low
Programmable output 7 (follows GA if jumper JP4 is mounted)	62	NC	27VDC, max 1A
	63	C	
	64	NO	

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