Panasonic

4462

ADDRESSABLE 2 INPUTS UNIT WITH ISOLATOR

Fire alarm solutions technical description

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1. INTRODUCTION

This document describes the addressable 2 inputs unit with isolator, type number 4462.
The document contains information about the product and instructions on how to mount and connect it.

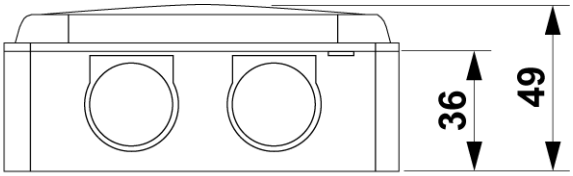
2. ABBREVIATIONS

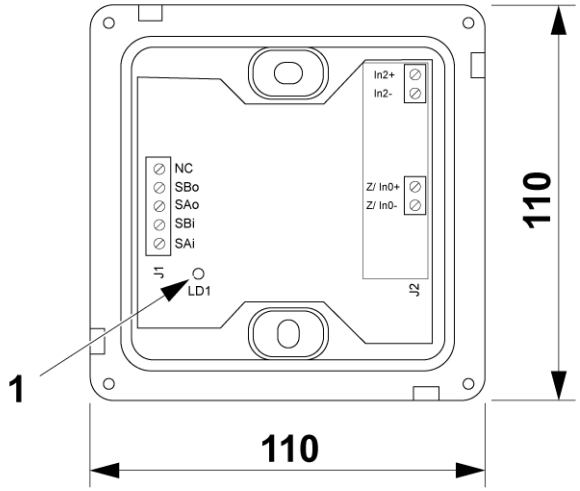
I/O	Input/Output
NC	Normally closed
NO	Normally open

3. GENERAL DESCRIPTION

The addressable 2 inputs unit has 9 screw terminals for cable connections.
The inputs are programmed via EBLWin.

The unit is intended to be surface mounted. The unit is intended for indoor use.





(Measure in mm)

1. LED

3.1. LED

The 4462 has a red LED. This LED will only be lit by the function 'Toggle LED' via EBLWin.
For more information, see Planning Instructions for the system.

The function is valid for EBL512 G3 and EBL128 from version 2.4.0.

3.2. GENERAL INPUT

The unit has two general inputs. Input for NC or NO contact.

The general inputs will be nominated Z/In0 and In2.

3.3. SHORT CIRCUIT ISOLATOR

The 4462 has a built-in short circuit isolator that requires no separate COM loop address. Like any other short circuit isolator, it will be given an individual sequence number, either when programmed in EBLWin or via automatic addressing function.

For systems ≤ EBL512 G3 2.2.x: The isolators must be connected consecutively regarding sequence number 00-127, in the COM loop's A-direction.

For systems ≥ EBL512 G3 2.3.X: The sequence numbers can automatically be generated and sorted consecutively in the COM loop's A-direction. Function “Arrange sequence numbers” in EBLWin must be activated. (Tools/Options/EBLWin Settings).

Parameter	Memn	Value
The maximum line voltage	V_{max}	30V DC
The nominal line voltage	V_{nom}	24V DC
The minimum line voltage	V_{min}	12V DC
The maximum rated continuous current with the switch closed	$I_{C\ max}$	350 mA
The maximum rated switching current on short circuit conditions	$I_{S\ max}$	2 A
The maximum leakage current with the switch open	$I_{L\ max}$	1.5 mA
The maximum series impedance with the switch closed	$Z_{C\ max}$	90 mΩ
The maximum voltage at which the device isolates (i.e. close to open)	$V_{SO\ max}$	11V DC
The minimum voltage at which the device isolates (i.e. close to open)	$V_{SO\ min}$	5V DC
The maximum voltage at which the device will change from open to close.	-	N/A[1]
The minimum voltage at which the device will change from open to close.	-	N/A[1]

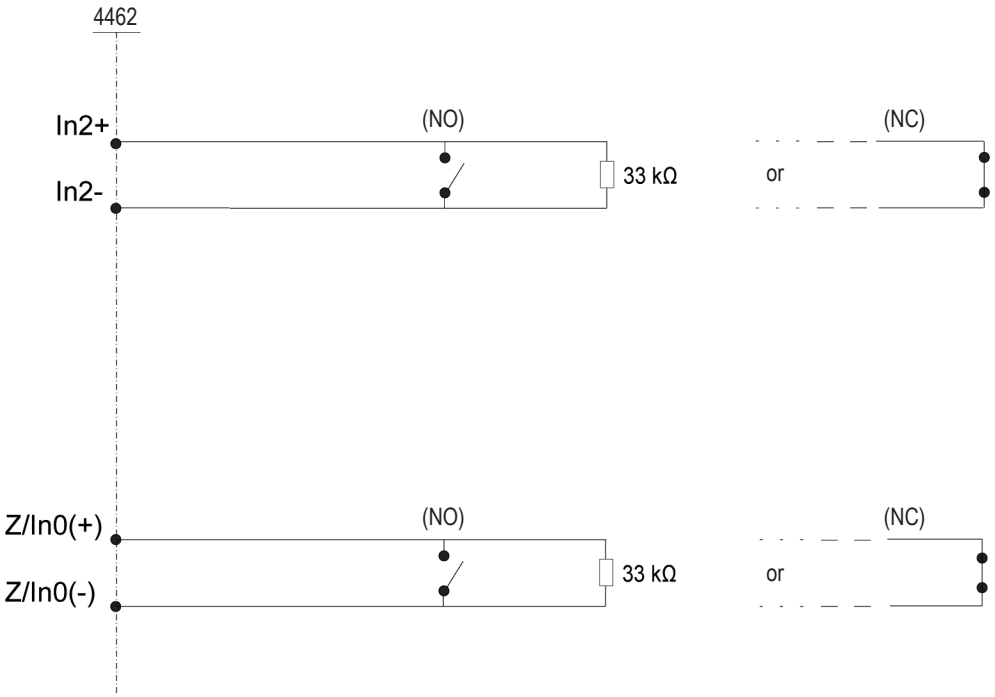
1) The device can change from open to close by commands from the control and indicating equipment only. This can be done at minimum to maximum line voltage, i.e. 12V DC – 30V DC.

For more information on short circuit isolators, see the Planning instructions for EBL128 or EBL512 G3 version 2.3.x or later.

4. FUNCTION

4.1. GENERAL INPUTS

The monitored input Z/In0 can be used as general input.
The input In2 is a fixed general input.
The general input can be supervised or not supervised.



4.1.1. THRESHOLD LEVELS

The state of the general input depends on the resistance measured.

	Supervised		Not Supervised	
Line resistance R[2]	**NO**	**NC**	**NO**	**NC**
R > 43 k**Ω**	Fault	N/A		Activated
43 k**Ω** ≥ R >10 k**Ω** (nom.33kΩ)	Not activated	N/A	Not activated	Activated
R ≤ 10 k**Ω**	Activated	N/A	Activated	Not activated

2) Approximate values, accuracy ± 10%

5. SET THE COM LOOP ADDRESS

5.1. AUTO ADDRESSING

The 4462 supports automatic addressing via EBLWin.
For more information, see Planning instructions for the system.

5.2. MANUAL ADDRESSING

If auto addressing is not used, there is a possibility to manually set the address.
Each COM loop unit has to have a unique COM loop address (001-253). The address is set with the Address Setting Tool (4414).

The COM loop address and mode settings have to be done before the unit is connected to the COM loop.

6. SET THE MODE

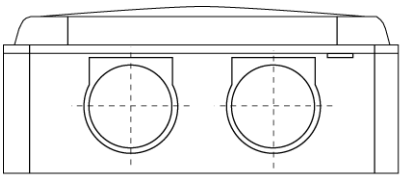
The mode is set with the Address Setting Tool (4414) according to the table below.

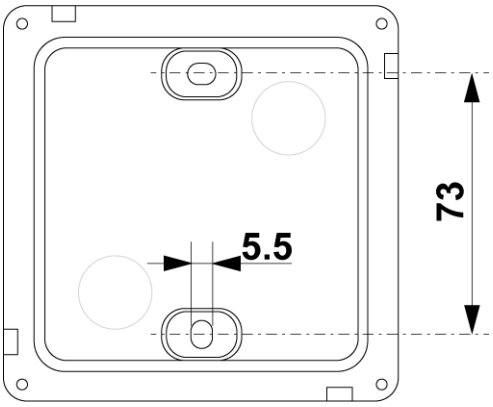
6.1. COMPATIBILITY TABLE

	Advanced mode	NORMAL mode	2330 mode	2312 mode
EBL512 G3	V ≥ 2.4	Not used	Not used	Not used
EBL128	V ≥ 2.4	Not used	Not used	Not used
EBL512	Not used	Not used	Not used	Not used
Configured as:	-	-	-	-
Isolator in use:	Yes	-	-	-

7. MOUNTING

Mount the 4462 on the wall or in the ceiling.

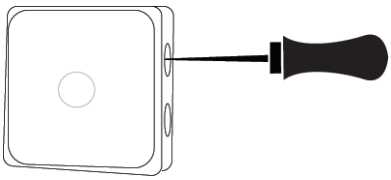




(Measure in mm)

7.1. PROTECTION COVER

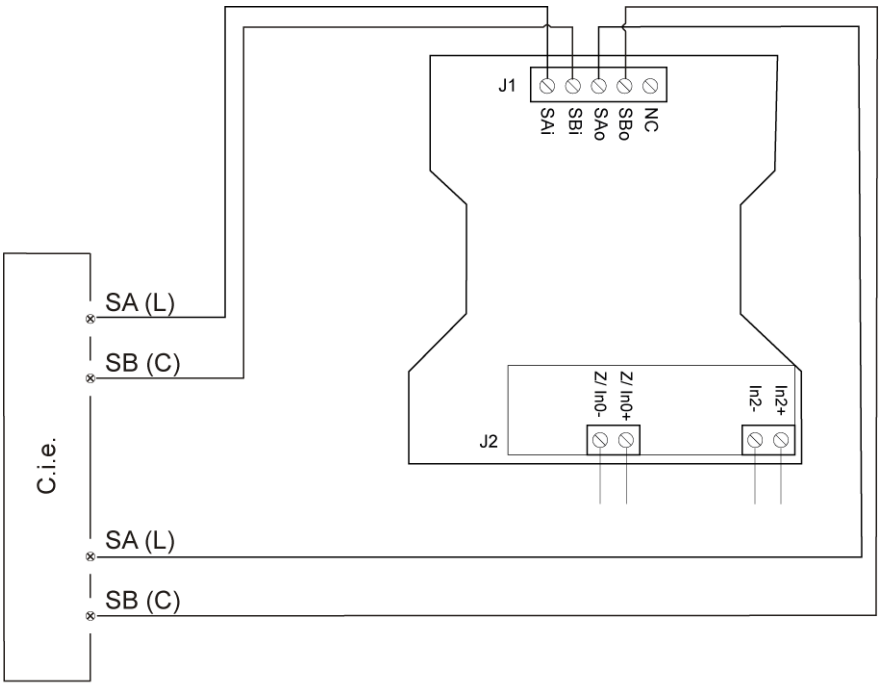
Make a small hole in the cable entry membranes with a sharp tool. Push the cable through the inlet.



Compression glands are not included for the cable entries.

8. INSTALLATION AND WIRING

Screen wire termination is not provided.



Wire size (Min)	Ø 0.6 mm (0.28 mm²)
Wire size (Max)	Ø 1.2 mm (1.5 mm²)

8.1. ELECTRICAL INTERFACE

Power supply	Via COM loop
Monitored inputs	-
Isolated inputs (optocoupler inputs)	-
Relay outputs	-
General inputs	2

9. TECHNICAL DATA

All current consumptions are valid by nominal voltage and by 25 °C.

Voltage: Allowed Normal	 12 – 30V DC 24V DC
Current: Quiescent Active	 ≤ 2.2 mA ≤ 2.2 mA
Address range	001-253
Address setting	Auto addressing (or with address setting tool)
Short circuit isolator	Yes
Internal battery	No
Material	Polypropylene
Enclosure	Standard Fibox encapsulation. (JB 6 G)
Ambient temperature: Operating Storage	 -10 to +50 °C -20 to +60 °C
Ambient humidity	Maximum 95 % RH (Non condensing)
Ingress protection rating	IP65
Size: H x W x D	 110 x 110 x 49 mm
Weight (including batteries):	188 g
Colour	RAL 9010

10. APPROVALS

Applicable directive/ Approval	Applicable standards	Notified body
CPR	EN54-17 (Short circuit isolator) EN54-18 (I/O Units)	VdS No. 0786-CPR-21589
VdS	EN54-17 EN54-18 VdS2344 VdS2504	VdS No. G218081
EMC	EN61000-6-3 (Emission) EN50130-4 (Immunity)	Self declaration VdS
RoHS	EN IEC 63000	Self declaration

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Panasonic Fire & Security Europe AB
Jungmansgatan 12
SE-211 11 Malmö
SE
Tel: +46 (0)40 697 70 00