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1. INTRODUCTION

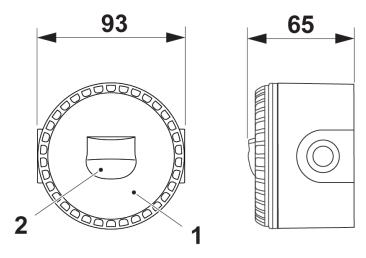
This document describes the Addressable wall VAD with isolator, type number 4480. The document contains information about the product and instructions on how to mount and connect it.

2. ABBREVIATIONS

CIE	Control and indicating equipment
LED	Light Emitting Diode
VAD	Visual Alarm Device

3. GENERAL DESCRIPTION

Addressable VAD with siren and isolator is certified to EN 54-17, EN 54-23. It can be used in indoor environment, type A. For example corridors, offices, toilets, and other public areas.



(Measure in mm)

- 1. Base
- 2. LED

3.1. BASE

Wall mounted.

3.2. LED

DATA					
LED colour	Red				
VAD coverage - high power	5.0m x 5.0m	W-2.4-5.0 (60 m³)	The VAD must be mounted so that the LED is placed at a maximum height of 2.4 meters.		
VAD coverage - low power	2.5m x 2.5m	O (13 m³)	Note, category O must be wall mounted so that the LED is placed at a maximum hight of 2.1 meters		
Flash rate selections	0.5 Hz or 1 Hz	Soft configured in EBLWin			
VAD coverage selection method		Soft configured in EBLWin			

LIGHT PATTERN					
	VAD coverage				
Frequency/ Flash rate		Hi Power	Low Power		
FidSiTidle	1 Hz	100 ms ON, 900 ms OFF	50 ms ON, 950 ms OFF		
	0.5 Hz	100 ms ON, 1900 ms OFF	50 ms ON, 1950 ms OFF		

3.3. SHORT CIRCUIT ISOLATOR

The Addressable wall VAD with isolator, 4480, 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 when programmed in EBLWin.

The isolators have to be connected consecutively regarding sequence number 00-127, in the COM loop's A-direction.

The built-in short circuit isolator will divide the COM loop into segments. A segment is the part of a loop between two isolators or between one isolator and the CIE. In case of a short circuit on a COM loop, only the affected segment will be disabled, all other loop units will continue to work normally.

Parameter	Symbol	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/A¹
The minimum voltage at which the device will change from open to close.	-	N/A¹

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 EBL512 G3 and EBL128 version 2.3.x or later, or Planning instructions for EBLOne.

4. SET THE COM LOOP ADDRESS

4.1. AUTO ADDRESSING

The 4480 supports automatic addressing via EBLWin.

For more information, see Planning instructions for the system, version 2.4.x or later.

4.2. MANUAL ADDRESSING

Each COM loop unit has to have a unique COM loop address (001-253). Set the address with the Address Setting Tool (4414 or 4414E). Use the connection cable with crocodile clips to connect the tool's SA & SB terminals with the SA & SB terminals of the addressable unit.

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

5. SET THE MODE

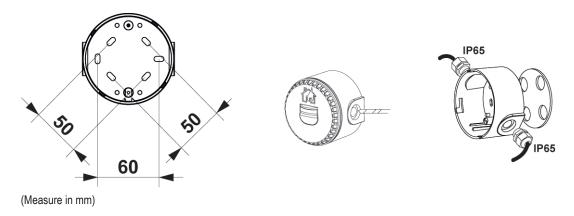
Set the mode with the address setting tool (4414 or 4414E) according to the table below.

5.1. COMPATIBILITY TABLE

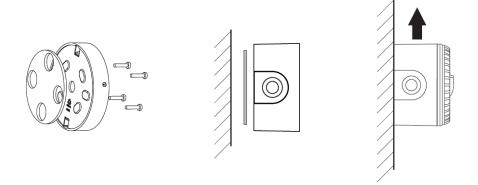
	Advanced mode	NORMAL mode	2330 mode	2312 mode
EBL512 G3	V ≥ 2.3	Not used	Not used	Not used
EBLOne	V ≥ 3.3	Not used	Not used	Not used
EBL128	V ≥ 2.3	Not used	Not used	Not used

6. MOUNTING

The VAD must be mounted at a maximum height of 2.4 meters, on the wall. Drilling diameter must be adjusted to the diameter of the cable glands. The cable glands must be compatible with declared cable size.

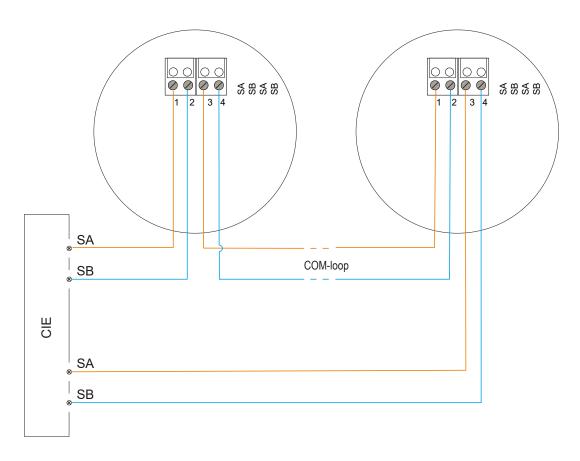


Place a gasket between the unit and the wall. Screws are not supplied.



7. INSTALLATION AND WIRING

Screen wire termination is not provided.



Wire size (Min)	Ø 0.6 mm (0.3 mm²)
Wire size (Max)	Ø 1.4 mm (1.5 mm²)

8. TECHNICAL DATA

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

Voltage: Normal 12 – 30V DC 24V DC Current: Quiescent Active: 114z flash, 7.5m x 7.5m 34 mA 34 mA 34 mA 35 mA 114z flash, 2.5m x 2.5m 32 mA 2.5 mA Power consumption 0.03 – 2.0 W Address range 001-253 Address setting With address setting tool Short circuit isolator Built-in Internal battery No Material FR ABS and polycarbonate Ambient temperature: Operating Storage -10 to +55 °C -25 to +70 °C Armbient humidity Maximum 95 % RH (Non condensing) Ingress protection rating IP21 C Size: Ø x H 93 x 65 mm Weight 100 g Colour Red or white Synchronized No		
12 - 30 V DC 24 V DC	Voltage:	
Normal 24V DC Current: 2.5 mA Activer: 65 mA - 11± Isash, 7.5m x 7.5m 34 mA - 11± Isash, 2.5m x 2.5m 35 mA - 0.5Hz, Tisash, 2.5m x 2.5m 23 mA Power consumption 0.03 - 2.0 W Address range 001-253 Address setting With address setting tool Short circuit isolator Built-in Internal battery No Material FR ABS and polycarbonate Ambient temperature: Operating Operating -10 to +55 °C -25 to +70 °C -25 to +70 °C Ambient humidity Maximum 95 % RH (Non condensing) Ingress protection rating IP21 C Size: Ø x H Ø x H 100 g Colour Red or white		12 – 30V DC
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- 0.5 Hz 7.5m x 7.5m 34 mA - 0.5 Hz flash, 2.5m x 2.5m 35 mA Power consumption 0.03 - 2.0 W Address range 001-253 Address setting With address setting tool Short circuit isolator Built-in Internal battery No Material FR ABS and polycarbonate Ambient temperature: -10 to +55 °C Operating -25 to +70 °C Ambient humidity Maximum 95 % RH (Non condensing) Ingress protection rating IP21 C Size: 93 x 65 mm Weight 100 g Colour Red or white		l
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Ambient humidity Ingress protection rating IP21 C Size: Ø x H Weight 100 g Colour Red or white		-10 to +33 C
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Colour Red or white		
Colour Red or white	Weight	
	Troigin	100 g
	Colour	Red or white
Synchronized No	00.00.	
Synchronized No No		
	Synchronized	No No

9. APPROVALS

Applicable directive/ Approval	Applicable standards	Notified body
CPR	EN54-17 (Isolator) EN54-23 (VAD)	VdS No. 0786-CPR-21531
VdS	EN54-17 EN54-23 VdS2344 VdS2504	VdS No. G217003
EMC	EN61000-6-3 (Emission) EN50130-4 (Immunity)	Self declaration VdS
RoHS	EN IEC 63000	Self declaration





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