AutroGuard® **V-100/AP** base for Autroprime

Features

- AutroGuard® V-100/AP base for Autroprime systems
- Interfaces a selection of AutroGuard protectors to the Autroprime system
- Provides detection benefits from AutroGuard® protector V-430, with the option of integrated sounder and/or VAD
- SelfVerify functionality for supported AutroGuard protectors
- Tool-free wiring for easy and fast connection
- Easy and reliable mounting of protector head
- Integrated short circuit isolator
- Automatic addressing, address follows the base
- Four optional cable entries (knockouts) allow quick entry of the cables to the interior
- Integrated tag holder
- Prepared for both concealed conduit wiring and surface mounted wiring

Description

The AutroGuard® V-100/AP base (standard version) and V-100/APM base (marine version) for Autroprime systems are intended to be used for all variants of the multicriteria protector V-430 series. Autroprime system software version 2.1.5 or newer is required.

All these protectors provide the detection benefits from AutroGuard® protector V-430 series, however there are some functional limitations when used with Autroprime.

Functional limitations - Protector

- Operation Class and Performance Class as legacy MultiSensors (BH-320 series).
- It is possible to configure the unit as Heat only by setting Performance class in both Day and Night modes. In this case, there will be a Panel LED "Reduced detection".
- No AutroGuard specific fault messages, only "sensor fault".
- No support of AutroGuard features "Cover Detection (CD)" and "Testmode".

- Swapping to a different protector head causes a new unit (which must be configured manually) and a missing unit (which the operator must accept as removed).
- Not possible to scan the detection loop before protector heads are mounted.
- Remote output follows the LED indicator.

Functional limitations - Sounder/VAD functions

- No per-unit configurability.
- The AutroGuard base V-100/AP sets the sounder to "High Volume".
- The AutroGuard base V-100/AP sets the visual alarm device (VAD) to "Open Class 0,5Hz".
- Supports configuration of global sounder pulse patterns.
- Supports only the following tones: Continuous, Slow Whoop.
- No global settings for VAD.
- No SelfVerify for Sounder and VAD functions.

Number of Units / Limitations

Note that there are limitations to how many AutroGuard /AP units there can be on one loop. The limiting factors are as follows:

- The number of addresses a unit occupies (logical units). Autroprime has a total of 135 addresses, recommended no more than 120 addresses. The V-100/AP base with AutroGuard protectors occupies the following number of addresses:
  - V-100/AP with AutroGuard V-430:
    1 address
  - V-100/AP with other AutroGuard V-430 variants (for example, V-430-S, V-430-VADW-CC, or V-430-S-VADR):
    3 addresses
- Loop current: maximum 250 mA per loop
  a) See loop current consumption for each V-430 variant in respective data sheets. Do not plan to use 100% of the available current - the system must operate with e.g. wire breaks.
  b) Note that when the loop current increases the corresponding maximum loop resistance goes down.
  In most installations 200 mA is a good compromise between cable diameter and useful distance.

Part Numbers

116-V-100/AP	AutroGuard base for Autroprime in white, standard version
116-V-100-BK/AP	AutroGuard base for Autroprime in black, standard version
116-V-100-CC/AP	AutroGuard base for Autroprime in customized color, standard version
116-V-100/APM	AutroGuard base for Autroprime in white, marine version
116-V-100-BK/APM	AutroGuard base for Autroprime in black, marine version
116-V-100-CC/APM	AutroGuard base for Autroprime in customized color, marine version

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Mounting and Connections

The base is prepared for easy mounting and fastening of the protector head. To prevent tampering, the protector head can be locked to the base in a one-hand operation by means of a locking tool.

After the protector head is mounted, the loop diagnostic tool AS2000 can be used to scan all loops, view the loop topology and type of bases, and detect possible short-circuits or breaks on the loops.

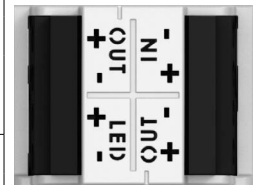The base features alternative cable entries/exits:

- one Ø = 25 mm cable entry/exit used to feed wiring from inside and through the ceiling (concealed conduit wiring)
- four cable entries for surface-mounted wiring

A data matrix code on the protector base's tagholder contains information on the part number, version, serial number and type.
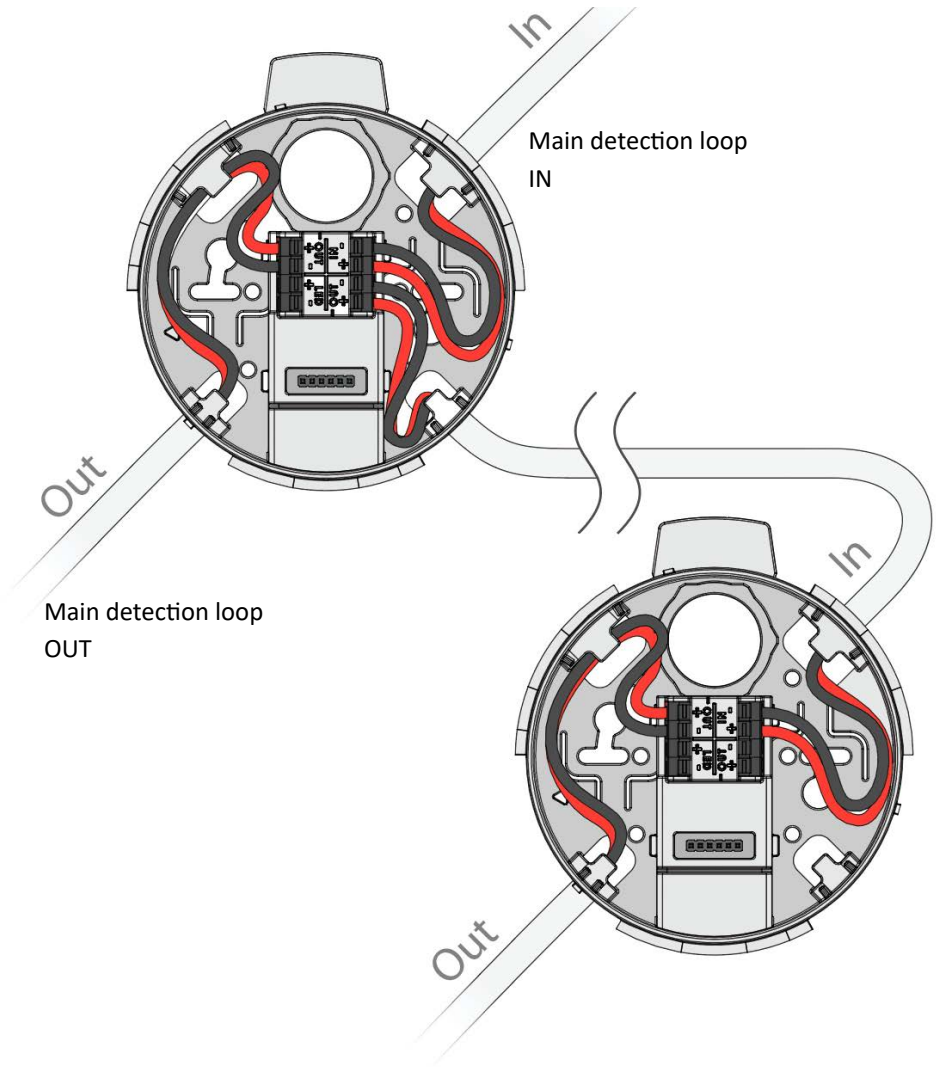
Connections

The connectors are "push-in" type, and do not require tools for stiff cables. See specification.

Connector	Description	Remarks
IN +	Loop + input	
IN -	Loop - input	
OUT +	Loop + output (Main/Branch)	Note that either of the outputs on the connector can be used for the main loop or a branch-off.
OUT -	Loop - output (Main/Branch)	
OUT +	Loop + output (Main/Branch)	
OUT -	Loop - output (Main/Branch)	
LED +	Remote LED + output	LED connection to external LED indicator as Fire Protection Equipment (FPE). Maximum 5 mA.
LED -	Remote LED - output	

Note that the colors of the wires in the illustration below are used as a reference only and may differ. Make sure + and - are connected correctly according to the table above.

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Main detection loop
IN

Main detection loop
OUT

In

Out

In

Out

Branch-off

If necessary, a branch-off can be connected to a detection loop if the existing cable layout requires this. Note that redundancy will be lost and safety is reduced on the branch-off.
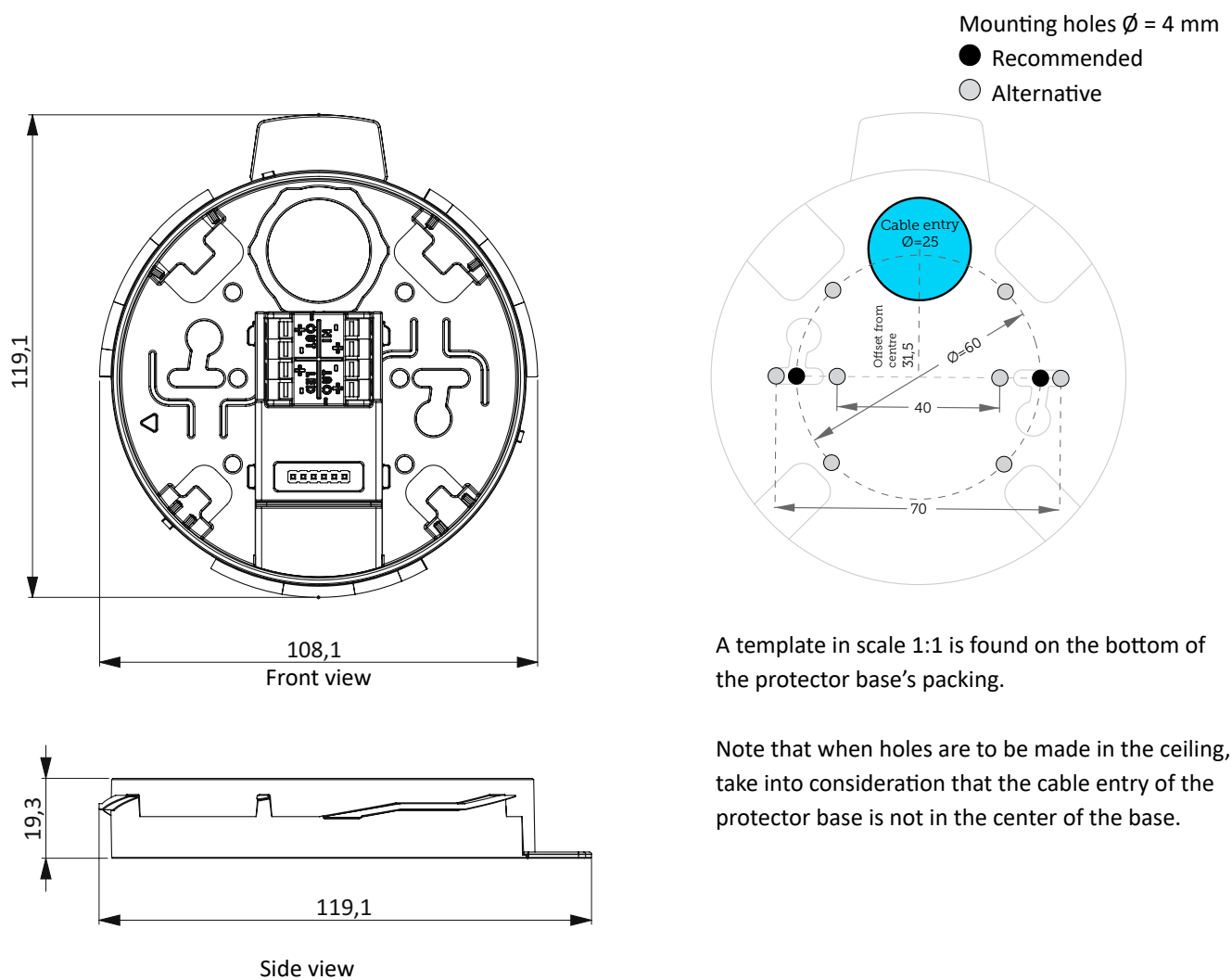
Local regulations apply.

Technical specifications

Dimensions	Height = 19.3 mm (49.6 mm including protector) Diameter = 108.1 mm (119.1 mm including tag holder)	
Weight	45 g	
Housing material	PC ABS, flammability classification UL94 V-0	
Color	White: RAL9010 Black: RAL9005 Customized colors available on request.	
Ingress protection	IP44D with protector (IP55 when used with conduit box)	
Current consumption base - Average	60 µA	
Current consumption protector - Average	60 µA	
Current consumption - Normal (base + protector)	120 µA	
Current consumption - Alarm (Red LED indicator ON) – (base + protector)	1.8 mA	
Current consumption - Fault	2.3 mA	
Remote LED output	5 mA (non-supervised)	
Cable requirements	Minimum 0.14 mm² / AWG26 Maximum 2.5 mm² / AWG14 The connectors are "push-in" type, and do not require tools for stiff cables with larger cross section (> 0.5 mm² and up to a maximum of 2.5 mm²)	
Connection capacity	Conductor cross section, solid	0.14 mm² to 2.5 mm²
	Conductor cross section, flexible	0.14 mm² to 2.5 mm²
	Conductor cross section, flexible, with ferrule without plastic sleeve	0.25 mm² to 1.5 mm²
	Conductor cross section, flexible, with ferrule with plastic sleeve	0.25 mm² to 1.5 mm²
	Conductor cross section AWG/kcmill	26 to 14
System compatibility	Requires Autroprime system version 2.1.5 or later	
Operating temperature	-30 to +70 °C (+80 °C when configured as heat protector)	
Storage temperature	Maximum 85 °C	
Operating humidity	10 % - 95 % RH (non-condensing)	
Country of origin	Norway	
EN 54 approval short circuit isolator	EN 54-17:2005	

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Accessories

Part number	Description
116-WAS-2000	AS2000 loop diagnostic tool
116-BWP-143A/AG	Air duct sampling unit
116-BWP-143A-SS/AG	Air duct sampling unit, stainless steel
116-BWP-100/20/AG	Conduit box 20 mm
116-BWP-100/25/AG	Conduit box 25 mm
116-WBJ-220	AutroGuard removal tool
116-WBJ-5/07	Test gas
116-WBJ-20	Testifire XTR2 smoke and heat sensor test tool

Dimensions and outlines (in mm)

Mounting holes Ø = 4 mm
● Recommended
○ Alternative

Front view

119,1

108,1

Side view

19,3

119,1

Cable entry
Ø=25

Offset from centre 31,5

Ø=60

40

70

A template in scale 1:1 is found on the bottom of the protector base's packing.

Note that when holes are to be made in the ceiling, take into consideration that the cable entry of the protector base is not in the center of the base.