

PRODUCT DATASHEET

AutroGuard® V-110 and V-120 base for protector series V-530

Features

- Certified according to IEC61508 SIL2
- Intrinsically safe EX ia/EX ic (V-120)
- Tool-free wiring for easy and fast connection – no tools are required
- 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 microcontroller for communication with detection loop
- Integrated tag holder
- No-loop-break
- Ultra-low current consumption
- Prepared for both concealed conduit wiring and surface mounted wiring

General

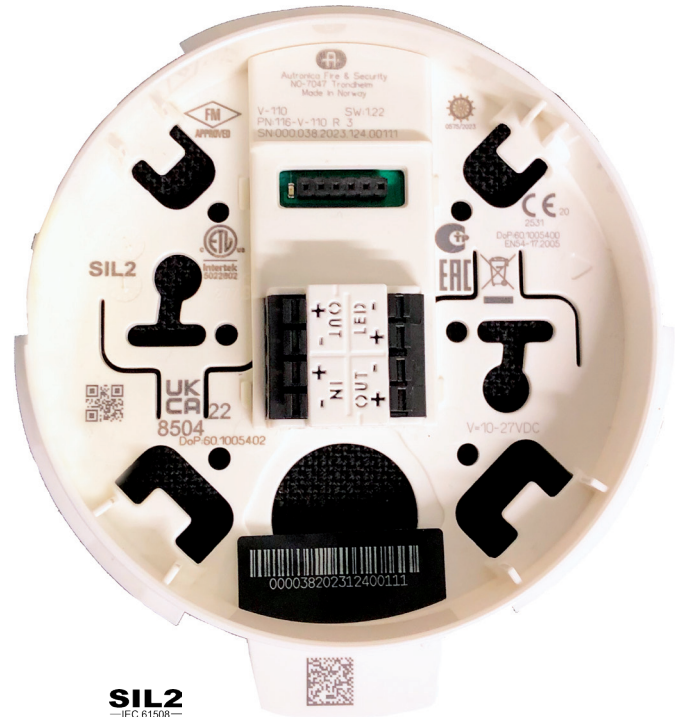
AutroGuard® V-110 and V-120 bases are the standard bases for the SIL2 certified multicriteria protector V-530 series. The V-110 has a remote LED output, and the V-120 is Ex certified.

The bases are prepared for easy mounting and fastening of the protector head. With a locking tool, the protector head can also be locked to the base in a one-hand operation.

A microcontroller inside the protector base makes the base “intelligent”. In this way, the base itself can communicate with the fire alarm panel. 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 before protector heads are mounted.

The bases feature alternative cable entries/exits:

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

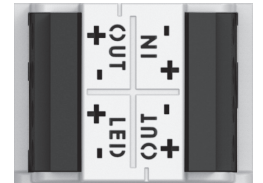


A data matrix code on the protector bases’ tagholder contains information on the part number, version, serial number and type.

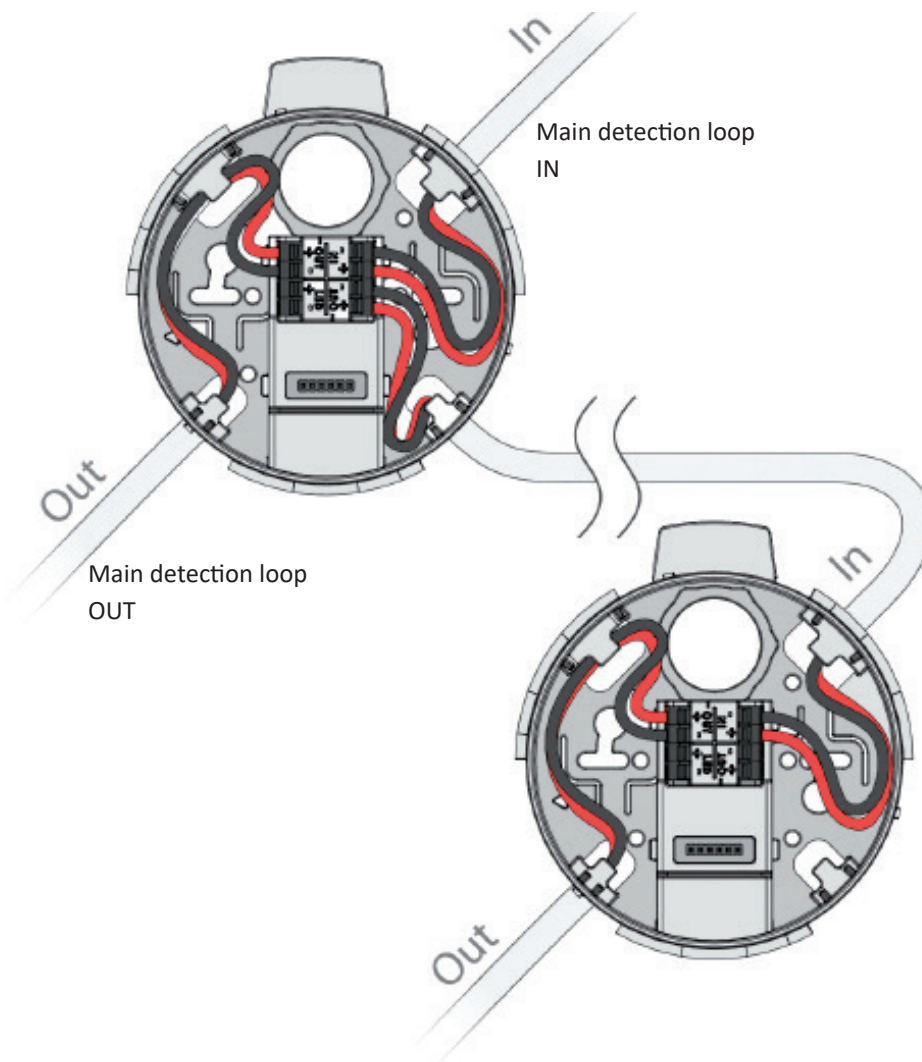
Connections

The connectors are “push-in” type, and do not require tools for stiff cables. See specification on next page.

| 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 | Applies to V-110. 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 that + and - are connected correctly according to the table above.



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 (172 g including protector) | |
| Housing material | PC ABS, flammability classification UL94 V-0 | |
| Colour | White: RAL9010 | |
| Ingress protection | IP44D (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 (Yellow LED indicator ON) – (base + protector) | 2.3 mA | |
| Remote LED output (V-110) | 5 mA (non-supervised) | |
| Cable requirements | Minimum 0.14 mm ² / AWG26 Maximum 2.5 mm ² / AWG14 The connectors are “push-in” type, and do not require tools for stiff cables with larger cross section (> 0.5 mm ² and up to a maximum of 2.5 mm ²) | |
| Connection capacity | Conductor cross section, solid | 0.14 mm ² to 2.5 mm ² |
| | Conductor cross section, flexible | 0.14 mm ² to 2.5 mm ² |
| | Conductor cross section, flexible, with ferrule without plastic sleeve | 0.25 mm ² to 1.5 mm ² |
| | Conductor cross section, flexible, with ferrule with plastic sleeve | 0.25 mm ² to 1.5 mm ² |
| | Conductor cross section AWG/kcmill | 26 to 14 |
| System compatibility | <ul style="list-style-type: none"> • AutoSafe system version 4.11 or newer • System version 4.11.3 or newer is required for variants with integrated alarm devices. • AutoGuard Protectors require AutoSafe loop panel: version 1.6 or newer • AutoGuard Protectors require Autoprime version 2.1.7 • Loop Driver Module BSD-310/BSD-311 revision 7 or newer | |
| 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 | |
| Ex certification, V-120 | ATEX/IECEX | |
| For details on certification, refer to the Autronica product portal. | | |

Part numbers

| | |
|---------------------------|--|
| 116-V-110 | V-110 standard base with SIL2 certification, with remote LED output. White |
| 116-V-120 | V-120 EX base with SIL2 certification, without remote LED output, Ex certified. White |
| 116-V-120/AP EX (pending) | V-120/AP EX base for Autoprime without remote LED output for V-530 EX protectors (pending) |

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 | AutoGuard removal tool |
| 116-WBJ-5/07 | Test gas |
| 116-WBJ-10 | Testfire smoke and heat sensor test tool |

Dimensions and outlines (in mm)

