



Aspirating smoke detectors

AMX4004, basic devices

AMX4004



Product features

- Up to three combined sensors can be used for different application areas (scattered light smoke sensor, ionisation smoke sensor, flue gas sensor).
- High aspiration capacity.
- Scattered light smoke sensors for different sensitivity ranges, with pollution compensation for use in critical environments.
- Ionisation smoke sensor for detecting very small and dark smoke particles.
- Flue gas sensor for earliest fire detection (40 ppm CO).
- Integrated LC display for indicating status information.
- Configurable without accessories (menu-controlled).

Technische Daten

Operating voltage	18 V - 30 V DC
Rated voltage	24 V DC
Measuring principle	dependent on detector heads
Max. current consumption	Detector ca. 400 mA
Max. contact load	60 V DC, 1 A
IP rating	IP 54
Ambient temperature	-20 °C to +50 °C (-4 °F to +122 °F)
Sampling pipe	25 mm (0.98 inch)
Sampling pipe length	max. overall length 100 m (328 ft) max. 50 m (164 ft) as single strand
Relative humidity	max. 95 %, at 35 °C (+95 °F), no condensation
Enclosure material	Die cast aluminium
Cable gland	4 x M16, clamping range 5-9 mm (0.19 - 0.35 inch)
Weight without detector head	2.8 kg (6.2 lbs)
Dimensions without cable gland	280 x 170 x 90 mm (WxHxD) 11.02 x 6.7 x 3.5 inch (WxHxD)

Order no.: 909244

The aspirating smoke detector AMX4004 is an active smoke detection system that can be individually tuned to the application area with up to three different detector heads. Up to 12 suction holes with a 100 m (328 ft) pipe system are possible thanks to the powerful fan.

Application

Aspirating smoke detector for the detection of smoke particles and/or flue gases in aspirated air samples. The system actively draws air samples from the monitored area via a pipe system. Typical application areas are:

- □ Equipment monitoring: computer rooms, warehouses, high rack storage areas, hollow floors.
- cultural assets protection, transformer stations, etc.

Included in delivery

1 aspirating smoke detector AMX4004 909244

Not included in delivery

Detector heads:

Optical smoke detector OMX1002C 1HE,
2.73 % / m (0.83 % / ft) 906323

Optical smoke detector OMX1002C HS 1HE,
0.34 % / m (0.10 % / ft) 906324

Optischer Rauchmelder OMX1002C VHS 1HE,
0.11 % / m (0.04 % / ft) 910389

Ionisation smoke detector IMX1002E 1HE, y=0.8 909491

Flue gas detector GMX1002CO 1HE, 40 ppm 909492

Notes

The AMX4004 uses three limit lines (current increase lines) for three alarms as well as one fault line for connection to the fire detection system FMZ 5000. In addition, floating contacts for three alarms as well as fault are available.

Approvals / marking



G 212001



0786-CPD-21095





Aspirating smoke detectors

AMX4004, basic devices



AMX4004 WEA

Order no.: 909043

Basic device especially for use in wind energy converters
(with integrated controlled heating).

Technical specifications

Max. current consumption	Heating approx. 1.4 A
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Aspirating smoke detectors

AMX4004, detector heads

Optical smoke detector OMX1002C 1HE

Order no.: 906323



Technical specifications

Sensitivity	2.73 % / m (0.83 % / ft)
Weight	0.07 kg (0.15 lbs)
Dimensions	55 x 40 mm (DxH) 2.16 x 1.57 inch (DxH)

Optical smoke detector OMX1002C HS 1HE

Order no.: 906324



Technical specifications

Sensitivity	0.34 % / m (0.10 % / ft)
Weight	0.07 kg (0.15 lbs)
Dimensions	55 x 40 mm (DxH) 2.16 x 1.57 inch (DxH)

Optical smoke detector OMX1002C VHS 1HE

Order no.: 910389



Technical specifications

Sensitivity	0.11 % / m (0.04 % / ft)
Weight	0.07 kg (0.15 lbs)
Dimensions	55 x 40 mm (DxH) 2.16 x 1.57 inch (DxH)

Ionisation smoke detector IMX1002E 1HE

Order no.: 909491



Technical specifications

Sensitivity	$y = 0.8$
Weight	0.1 kg (0.02 lbs)
Dimensions	55 x 40 mm (DxH) 2.16 x 1.57 inch (DxH)

Flue gas detector GMX1002 CO 1HE

Order no.: 909492



Technical specifications

Trigger value Carbon monoxide	40 ppm
Weight	0.05 kg (0.05 lbs)
Dimensions	55 x 40 mm (DxH) 2.16 x 1.57 inch (DxH)



Aspirating smoke detectors

HELIOS AMX5000, basic devices

AMX5001



Product features

- Autolearning function.
- Separate airflow monitoring with one or two aspiration lines.
- Adjustable sensitivity of 0.002 - 10 % / m (0.0006 - 3.049 % / ft).
- High sampling power (high negative pressure of 400 Pa).
- Highly sensitive smoke sensors with contamination compensation for use in critical environments.
- Full integration into the Minimax fire alarm system FMZ 5000.

Technical specifications

Operating voltage	10.5 - 30 V DC
Rated voltage	24 V DC
Alarm sensitivity	0.02 % / m - 10 % / m (0.006 % / ft - 3.049 % / ft)
Advance signals 1,2,3	0.002 - 10 % / m (0.0006 % / ft - 3.049 % / ft, programmable in increments of 10 %
Max. current consumption	Inactive/fault approx. 340 mA Alarm I approx. 390 mA
Number of relays	3
Max. contact load	50 V DC, 1 A
IP rating	IP 54
Ambient temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Intake pressure	> 400 Pa (power level 5)
Suction noise at fan level 3 (standard)	43 dB (A)
Number of installation spaces for add-on modules	4
Sampling pipe	Plug-in system 25 mm (0.98 inch)
Relative humidity	max. 95 %, temporarily without condensation 70 % constantly
Enclosure material	ABS-Blend, UL 94-V0
Specification according to	EN 54-20, classes A, B and C
Weight	3.85 kg (8.5 lbs)
Dimensions	265 x 397 x 146 mm (WxHxD) 10.4 x 15.6 x 5.8 inch (WxHxD)

Order no.: 908095

The HELIOS AMX5000 aspirating smoke detector is a highly sensitive active smoke detection system of the latest generation. In addition to monitoring advance signals and contamination, it also provides the option of the user-specific adjustment of the sensitivity.

The powerful fan enables up to 24 sampling holes with 200 m (656 ft) pipe system per smoke sensor.

The HELIOS AMX5000 is even able to detect the smallest smoldering fires and can be used practically everywhere.

Version AMX5001: basic device with simple display.

For 1 sampling pipe and 1 smoke sensor.

Application

Aspirating smoke detector for the detection of smoke particles by air sampling. The system takes on air sampling probe in from the monitoring area via a pipe system.

Typical applications:

Equipment monitoring: IT systems, electrical distributors, switch cabinets, etc.

Room monitoring: IT rooms, clean rooms, warehouses, high rack storage areas, hollow floors, protection of objects of cultural value, transformer stations, etc.

Included in delivery

1 aspirating smoke detector AMX5001 908095

Not included in delivery

Smoke sensor OMX5005, 0.5 % / m - 10 % / m (0.152 % / ft - 3.049 % / ft) 908099
Smoke sensor OMX5010, 0.1 % / m - 10 % / m (0.030 % / ft - 3.049 % / ft) 908100
Smoke sensor OMX5020, 0.02 % / m - 10 % / m (0.006 % / ft - 3.049 % / ft) 908101
Relay module KMX5005 RK 908103
Memory module MMX5005 908104
Configuration software HELIOS Config 908105
Project planning software HELIOS PipeCalc 908106

Spare parts

Case fastener (4 pieces) 909434

Notes

The HELIOS AMX5000 can be connected to a higher-level fire alarm panel via dry changeover contacts. The HELIOS AMX5000 can be integrated into the FMZ5000 fire alarm system with LoopAP via modules. Indication and operation are thus possible at the fire alarm panel.

Approvals / marking



G 208193



0786-CPD-20637





Aspirating smoke detectors

HELIOS AMX5000, basic devices



AMX5002

Order no.: 908096

Basic device with simple display.
For 2 aspiration tubes and 2 smoke sensors.

Technical specifications

Max. current consumption	Inactive/fault approx. 380 mA Alarm I approx. 450 mA
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AMX5101

Order no.: 908097

Basic device with 10-LED display.
For 1 aspiration tube and 1 smoke sensor.

Technical specifications

Max. current consumption	Inactive/fault approx. 340 mA Alarm I approx. 405 mA
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AMX5102

Order no.: 908098

Basic device with 10-LED display.
For 2 aspiration tubes and 2 smoke sensors.

Technical specifications

Max. current consumption	Inactive/fault approx. 380 mA Alarm I approx. 490 mA
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Aspirating smoke detectors

HELIOS AMX5000, detector heads

Smoke sensor OMX5005



Order no.: 908099

Technical specifications

Sensitivity	0.5 % / m - 10 % / m (0.152 % / ft - 3.049 % / ft)
Weight	0.30 kg (0.66 lbs)
Dimensions	150 x 125 x 95 mm (WxHxD) 5.90 x 4.92 x 3.74 inch (WxHxD)

Smoke sensor OMX5010



Order no.: 908100

Technical specifications

Sensitivity	0.1 % / m - 10 % / m (0.030 % / ft - 3.049 % / ft)
Weight	0.30 kg (0.66 lbs)
Dimensions	150 x 125 x 95 mm (WxHxD) 5.90 x 4.92 x 3.74 inch (WxHxD)

Smoke sensor OMX5020



Order no.: 908101

Technical specifications

Sensitivity	0.02 % / m - 10 % / m (0.006 % / ft - 3.049 % / ft)
Weight	0.30 kg (0.66 lbs)
Dimensions	150 x 125 x 95 mm (WxHxD) 5.90 x 4.92 x 3.74 inch (WxHxD)



Aspirating smoke detectors

HELIOS AMX5000, detector heads

Detector interface AMX1002 IF



Order no.: 908102

Detector can be used to insert up to two detector heads.
Detection of pre-alarm and main alarm via the HELIOS AMX5000.

Technical specifications

Weight	0.26 kg (0.56 lbs)
Dimensions	150 x 115 x 95 mm (WxHxD) 5.90 x 4.52 x 3.74 inch (WxHxD)

Optical smoke detector OMX1002 C



Order no.: 801226

Detector head for use in the HELIOS AMX5000 via the detector interface AMX1002 IF.

Technical specifications

Sensitivity	2.73 % / m (0.83 % / ft)
Weight	0.07 kg (0.56 lbs)
Dimensions	55 x 55 mm (DxH) 2.16 x 2.16 inch (DxH)

Optical smoke detector OMX1002C HS



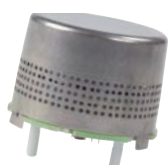
Order no.: 904639

Detector head with increased sensitivity for use in the HELIOS AMX5000 via the detector interface AMX1002 IF.

Technical specifications

Sensitivity	0.34 % / m (0.10 % / ft)
Weight	0.07 kg (0.56 lbs)
Dimensions	55 x 55 mm (DxH) 2.16 x 2.16 inch (DxH)

Ionisation smoke detector IMX1002E



Order no.: 797144

Technical specifications

Sensitivity	y = 0,8
Weight	0.06 kg (0.13 lbs)
Dimensions	55 x 55 mm (DxH) 2.16 x 2.16 inch (DxH)

Flue gas detector GMX1002 CO



Order no.: 900959

Technical specifications

Trigger value Carbon monoxide	40 ppm
Weight	0.06 kg (0.13 lbs)
Dimensions	55 x 35 mm (DxH) 2.16 x 1.37 inch (DxH)



Aspirating smoke detectors

Vesda laser, basic devices

LaserFocus VLF-250



Product features

- Two-level air filtering.
- AutoLearn alarm thresholds and air flow rate.
- Ultrasonic airflow rate reading.
- Laser-based, absolute smoke identification.
- Programmable alarm threshold values.
- Pre-set pipe network constructions.
- Installation and start-up can be carried out in delivered condition.

Technical specifications

Sensitivity range	0.025 - 20 %/m (39 inch)
Ambient temperature	0 °C to +40 °C (32 °F to +104 °F)
Temperature of the aspirated air	0 °C to +40 °C (32 °F to +104 °F)
Operating voltage	18 - 30 V DC
Rated voltage	24 V DC
Quiescent current	220 mA
Alarm current	295 mA
Rated output	5.2 W
Rated output for alarm	7.0 W
Areas of coverage	max. 250 m ² (2691 square foot)
IP rating	IP 30
Maximum pipe length	1 x 25 m (984 inch), 2 x 15 m (590 inch)
Event memory	max. 18000 entries
Aspiration tube	Plug-in system 25 mm (0.98 inch)
Relative humidity	5 - 95 %, No condensation
Colour of enclosure	Light grey
Weight	2.0 kg (4.4 lbs)
Dimensions	255 x 185 x 90 mm (WxHxD) 8.9 x 7.3 x 3.5 inch (WxHxD)

Order no.: 908495

The LaserFocus VLF-250 is designed to ensure extremely early smoke detection for small and operationally critical areas. The detector constantly takes air samples through inlets to a pipe network where the air is filtered and sent to a collection chamber. Using light dispersion technology, the presence of even the smallest amounts of smoke can be identified. An immediate airflow rate measuring value display on the air inlet pipe presents the ultrasound airflow rate reading. The system is resistant to changes in air temperature and air pressure and is not damaged by impurities.

Included in delivery

1 LaserFocus VLF-250

Not included in delivery

Mounting hardware

Approvals / marking



G 205060



0832-CPD-0771





Aspirating smoke detectors

Vesda laser, basic devices

LaserCompact VLC-400 AP



Product features

- Large sensitivity range.
- AutoLearn.
- Airflow monitoring.
- Absolute smoke detection.
- Compatible with Loop AP technology.

Technical specifications

Sensitivity range	0.005 - 20 %/m (39 inch)
Ambient temperature	-10 °C to +39 °C (+14 °F to +102.2 °F)
Temperature of the aspirated air	-20 °C to +60 °C (-4 °F to +140 °F)
Communication protocol	Loop AP
Number of detectors per loop	Max. 126
Isolators	1 loop isolator
Operating voltage	18 - 30 V DC
Rated voltage	24 V DC
Quiescent current	225 mA
Alarm current	245 mA
Rated output	5.4 W
Rated output for alarm	5.9 W
Areas of coverage	max. 800 m ² (8611 square feet)
IP rating	IP 30
Maximum pipe length	1 x 80 m (3150 inch), 2 x 50 m (1968 inch)
Event memory	max. 10240 entries
Aspiration tube	Plug-in system 25 mm (0.98 inch)
Relative humidity	10 - 95 %, No condensation
Colour of enclosure	Light grey
Weight	1900 g (4.2 lbs)
Dimensions	225 x 225 x 85 mm (WxHxD) 8.9 x 8.9 x 3.9 inch (WxHxD)

Order no.: 908494

The LaserCompact detector VLC-400 AP is designed for use with FMZ 5000 fire detection control panel with Loop AP communication protocol. The VLC-400 AP is equipped with an integrated loop isolator on the main processor card. The detector units all the advantages of aspiration smoke detection, including early warning in small areas. Via a simple pipe network, a high-performance aspirator continuously sucks air into a central detector. On the first level, dust and dirt are filtered before the air reaches the early smoke detector in the detector chamber. In order to guarantee optimal response to a large variety of smoke types, a highly effective laser light source and a sensor configuration are used in the detector chamber.

Included in delivery

1 LaserCompact VLC-400 AP

Not included in delivery

Mounting hardware

Approvals / marking



G 203025



0832-CPD-0770





Aspirating smoke detectors

Vesda laser, basic devices

LaserCompact VLC-500



Product features

- Large sensitivity range.
- Two-level dust filter.
- AutoLearn.
- Airflow monitoring.
- Absolute smoke detection.
- Three alarm settings (information, pre-alarm and main alarm).
- Three programmable relays.
- Single pipe inlet.
- Simple built-in construction.

Technical specifications

Sensitivity range	0.005 - 20 %/m (39 inch)
Ambient temperature	-10 °C to +39 °C (+14 °F to +102.2 °F)
Temperature of the aspirated air	-20 °C to +60 °C (-4 °F to +140 °F)
Operating voltage	18 - 30 V DC
Rated voltage	24 V DC
Quiescent current	225 mA
Alarm current	245 mA
Rated output	5.4 W
Rated output for alarm	5.9 W
Areas of coverage	max. 800 m ² (8611 square feet)
IP rating	IP 30
Maximum pipe length	1 x 80 m (3150 inch), 2 x 50 m (1968 inch)
Event memory	max. 12000 entries
Aspiration tube	Plug-in system 25 mm (0.98 inch)
Relative humidity	10 - 95 %, No condensation
Colour of enclosure	Light grey
Weight	1900 g (4.2 lbs)
Dimensions	225 x 225 x 85 mm (WxHxD) 8.9 x 8.9 x 3.4 inch (WxHxD)

Order no.: 908492

The LaserCompact detector VLC-500 unites all the advantages of aspirating smoke detection, including early warning in small areas where space is of utmost importance. Via a simple pipe network, a high-performance aspirator continuously sucks air into a central detector. On the first level, dust and dirt are filtered before the air reaches the early smoke detector in the detector chamber. In order to guarantee optimal response to a large variety of smoke types, a highly effective laser light source and a sensor configuration are used in the detector chamber. The status of all detectors, alarms, maintenance and fault notifications are monitored and saved with time and date stamps.

Included in delivery

1 LaserCompact VLC-500

Not included in delivery

Mounting hardware

Approvals / marking



G 298024



0832-CPD-0770





Aspirating smoke detectors

Sampling pipes

Pipe 25 x 1.5 mm (98 x 0.06 inch)



Order no.: 905253

Technical specifications

Material	PVC pressure pipe, grey, 10 bar
Weight	1.0 kg (2.2 lbs)
Length	5000 mm (196.9 inch)

Sleeve 25 mm (98 inch)



Order no.: 905264

Technical specifications

Material	PVC, grey, 16 bar
Weight	0.01 kg (0.02 lbs)

Adhesive cap 25 mm (98 inch)



Order no.: 905263

Technical specifications

Material	PVC, grey, 16 bar
Weight	0.01 kg (0.02 lbs)

Elbow 90° 25 x 13.5 mm (98 x 0.53 inch)



Order no.: 905255

Technical specifications

Material	PVC, grey, 16 bar
Weight	0.03 kg (0.07 lbs)

Bend 90° 25 x 37.5 mm (98 x 1.37 inch)



Order no.: 905254

Technical specifications

Material	PVC, grey, 16 bar
Weight	0.05 kg (0.1 lbs)

Elbow 45° 25 x 6 mm (98 x 0.23 inch)



Order no.: 905256

Technical specifications

Material	PVC, grey, 16 bar
Weight	0.03 kg (0.07 lbs)



Aspirating smoke detectors

Sampling pipes

T-piece 90° 3 x 25 mm (0.11 x 98 inch)



Order no.: 905262

Technical specifications

Material	PVC, grey, 16 bar
Weight	0.03 kg (0.07 lbs)

Coupling 25 mm (98 inch)



Order no.: 905265

Technical specifications

Material	PVC, grey, 16 bar
Weight	0.06 kg (0.1 lbs)

Seal 1.1/4" (spare seal for coupling)



Order no.: 905283

Technical specifications

Material	NBR
Weight	0.04 kg (0.1 lbs)

Hose piece for active detector



Order no.: 904393

Technical specifications

Material	PVC hose with steel reel
Weight	0.15 kg (0.33 lbs)
Length	350 mm (0.3 inch)

Hose flexible D21 grey

Order no.: 834784

Technical specifications

Material	PVC hose flexible
Weight	2.5 kg (5.5 lbs)
Length	cable roll to 10 m (394 inch)

Ceiling duct set, PVC, d=21.2



Order no.: 908699

Complete suction set for installation in the PVC sensor pipe system d=25 mm (0.98 inch), e.g. for suspended ceilings, for taking air samples from a room. Length: 0.8 m (31.5 inch).



Aspirating smoke detectors

Aspirating pipes - connections/accessories

Pipe clamp 25 - 28 mm (0.98 - 1.10 inch)

Order no.: 905266



Technical specifications

Material	PP black
Weight	0.01 kg (0.02 lbs)

Sampling hole clip d=2.0 mm (0.08 inch)
red

Order no.: 908331



Sampling hole clip d=2.5 mm (0.09 inch)
red

Order no.: 908332

Sampling hole clip d=3.0 mm (0.11 inch)
red

Order no.: 908333

Sampling hole clip d=3.5 mm (0.14 inch)
red

Order no.: 908334

Sampling hole clip d=4.0 mm (0.16 inch)
red

Order no.: 908335

Sampling hole clip d=4.5 mm (0.18 inch)
red

Order no.: 908336

Sampling hole clip d=5.0 mm (0.19 inch)
red

Order no.: 908337

Sampling hole clip d=5.5 mm (0.22 inch)
red

Order no.: 908338

Sampling hole clip d=6.0 mm (0.24 inch)
red

Order no.: 908339

Sampling hole clip d=6.5 mm (0.26 inch)
red

Order no.: 908340



Aspirating smoke detectors

Aspirating pipes - connections/accessories

Sampling hole clip d=7.0 mm (0.28 inch)
red

Order no.: 908341

Sampling hole revision red

Order no.: 908342



Aspirating smoke detectors

Aspiration tube system, mounting accessories

Adhesive: TANGIT PVC glue

Order no.: 905267

Technical specifications

Container	500 g (1.1 lbs) can with brush
Weight	0.8 kg (1.76 lbs)

TANGIT PVC cleaner

Order no.: 905269



Technical specifications

Container	Funnel bottle 1000 ml (0.26 Gallone)
Weight	1.1 kg (2.42 lbs)



Aspirating smoke detectors

Fittings

Pipe cutter plastic pipe + hose



Order no.: 905281

For plastic pipes and hoses of 6 - 35 mm (0,23 to 1.38 inch).

Three-way ball valve, d=25 mm (0.98 inch)



Order no.: 908548

For connecting compressed air to blow the sensor pipework clean.

Pipe blow-valve, PVC, automatic



Order no.: 908721

Included in delivery

1 PVC sleeve d=40 mm (1.57 inch)
1 PVC reducer d=40/25 mm (1.57/0.98 inch)
1 backflow preventer

Compressed-air connection for PVC-DWK d=25 mm (0.98 inch)



Order no.: 908722

Included in delivery

1 PVC adapter sleeve
1 brass reducing adapter
1 compressed-air coupling

Sampling fitting set with heater, PVC, red



Order no.: 908723

For creating the pipe system at temperatures down to - 30°C (-22 °F).

Included in delivery

1 PVC T-piece including heating resistor and suction port d=5.7 mm (0.22 inch), colour coding: red

Sampling fitting set with heater, PVC, yellow



Order no.: 908724

For creating the pipe system at temperatures down to - 30°C (-11 °F).

Included in delivery

1 PVC T-piece including heating resistor and suction port d=5.9 mm (0.23 inch), colour coding: yellow

Sampling fitting set with heater, PVC, blue



Order no.: 908725

For creating the pipe system at temperatures down to - 30°C (-22 °F).

Included in delivery

1 PVC T-piece including heating resistor and suction port d=6.1 mm (0.24 inch), colour coding: blue



Aspirating smoke detectors

Fittings

Sampling fitting set with heater, PVC, green



Order no.: 908726

For creating the pipe system at temperatures down to - 30°C (-22 °F).

Included in delivery

1 PVC T-piece including heating resistor and suction port d=6.3 mm (0.25 inch), colour coding: green

Sampling fitting set with heater, PVC, white



Order no.: 908727

For creating the pipe system at temperatures down to - 30°C (-22 °F).

Included in delivery

1 PVC T-piece including heating resistor and suction port d=6.5 mm (0.26 inch), colour coding: white

Sampling fitting set with heater, PVC, black



Order no.: 908728

For creating the pipe system at temperatures down to - 30°C (-22 °F).

Included in delivery

1 PVC T-piece including heating resistor and suction port d=6.7 mm (0.26 inch), colour coding: black

Sampling fitting set with heater, PVC, violet



Order no.: 908729

For creating the pipe system at temperatures down to - 30°C (-22 °F).

Included in delivery

1 PVC T-piece including heating resistor and suction port d=6.9 mm (0.27 inch), colour coding: violet

Sampling fitting set with heater, PVC, brown



Order no.: 908730

For creating the pipe system at temperatures down to - 30°C (-22 °F).

Included in delivery

1 PVC T-piece including heating resistor and suction port d=7.1 mm (0.28 inch), colour coding: brown

Cable connector set, PVC



Order no.: 908731

For creating the pipe system in refrigerated warehouses.

Silicone wire, black



Order no.: 908732

For connecting the heaters, single-lead.

Included in delivery

1 packaging unit with 100 m (3937 inch)



Aspirating smoke detectors

Fittings

Silicone wire, white



Order no.: 908733

For connecting the heaters, single-lead.

Included in delivery

1 packaging unit with 100 m (3937 inch)

Filter box (small), d=25 mm (0.98 inch)



Order no.: 908734

For use in rooms with low temperatures and high dust levels.

Included in delivery

1 filter box with built- in filter
2 glands

Technical specifications

Enclosure	PVC grey
Temperature range	down to -30 °C (-22 °F)
Dimensions	80 x 82 x 85 mm (HxWxD) 3.2 x 3.2 x 0.8 inch (HxWxD)

Filter box (small)



Order no.: 908740

For use in the filter box (small).

Technical specifications

Temperature range	down to -30 °C (-22 °F)
Dimensions	80 x 80 x 20 mm (HxWxD) 3.2 x 3.2 x 0.8 inch (HxWxD)

Filter box (large) d=25



Order no.: 908735

For use in rooms with high dust levels.

Included in delivery

1 filter box with filter mat block, fine stage
2 glands

Technical specifications

Enclosure	PVC grey
Temperature range	Normal
Dimensions	120 x 122 x 85 mm (HxWxD) 4.7 x 4.8 x 3.4 inch (HxWxD)



Aspirating smoke detectors

Fittings

Filter mat block fine stage



Order no.: 908741

For use in the filter box (large).

Technical specifications

Temperature range	Normal
Dimensions	117 x 80 x 80 mm (HxWxD) 4.6 x 3.2 x 3.2 inch (HxWxD)

Filter active detector



Order no.: 900341

Air filter for use in Minimax aspirating fire detection systems in case of polluted ambient air.

Spare parts

Replacement kit filter active detector 902471
consisting of 1 coarse filter mat, 1 fine filter and
1 infusion filter 5 µm (for AMX detectors only)

Technical specifications

Enclosure	Polycarbonate, RAL7035 - light grey
Temperature range	-5 °C to +65 °C (+23 °F to +149 °F)
Relative humidity (IEC721-3-3)	max. 98 %, condensation on the filter mats must be ruled out
IP rating (EN 60529)	IP65
Weight	370 g (0.8 lbs)
Dimensions	122 x 190 x 85 mm (HxWxD) 4.8 x 7.5 x 3.4 inch (HxWxD)

Dust trap box d=25 mm (0.98 inch)



Order no.: 908736

For use in rooms with high dust levels.

Included in delivery

1 dust trap
2 glands

Technical specifications

Enclosure	PVC grey
Dimensions	240 x 250 x 90 mm (HxWxD) 9.5 x 9.8 x 3.5 inch (HxWxD)



Aspirating smoke detectors Fittings

Dust separator, cyclone d=25 mm (0.98 inch)



Order no.: 908737

For use in rooms with high dust levels.
Smoke and water separator for aspirating smoke detectors.
Filterless separation of granular foreign matter with a particle size exceeding 100 µ or liquid aerosols.

Included in delivery

1 dust and cyclone separator with adapters for installation in sensor pipe systems d=25 mm (0.98 inch)

Technical specifications

Enclosure	PVC grey
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Automatic blow-out device ADB 01A



Order no.: 908700

For aspirating smoke detectors for use in rooms with very high dust levels.
For the automatic cleaning (blowing out) of the sensor pipe system using compressed air.

Technical specifications

Operating voltage	15 - 30 V DC
Compressed-air port	Constant, approx. 4 bar

Water retaining box, standard



Order no.: 908738

For use with aspirating smoke detectors in rooms with high humidity.

Included in delivery

1 water retaining box, standard
1 gland
1 T-piece for connection to the sensor pipe
d=25 mm (0.98 inch)

Technical specifications

Enclosure	PVC grey
Dimensions	390 x 250 x 90 mm (HxWxD) 15.4 x 9.8 x 3.5 inch (HxWxD)



Aspirating smoke detectors

Fittings

Detonation flame arrester



Order no.: 908739

For detection in hazard areas zone 1 (category 2G) and zone 2 (category 3G) in accordance with the Directive 94/9/EC (ATEX 100a). BAM and TÜV-certified (TÜV = German Inspection Authority) and approved for products of explosion group IIC, up to a permissible standard gap width of ≥ 0.29 mm (1.14 inch). The aspirating smoke detector needs to be mounted outside the potentially explosive area.

Included in delivery

1 explosion and detonation arrester
2 glands

Technical specifications

Enclosure	PVC grey
Dimensions	390 x 250 x 90 mm (HxWxD) 15.4 x 9.8 x 3.5 inch (HxWxD)



Aspirating smoke detectors

OneU®

OneU active extinguishing system



Product features

- Compact and space-efficient design.
- Fire detection and fire fighting by one device directly on and in the protected site.
- Expandable by networking with slave extinguishing modules for protecting up to four other sites
- Residue-free extinguishing agent Novec™ 1230 from 3M™.
- Easy to mount due to use of international standard 19" technology.
- Minimal maintenance required.

Technical specifications

Detection method	2 optical smoke detectors
Rated voltage	100/240 V AC, 50/60 Hz
Power consumption	100 VA to 200 VA
Emergency power supply	approx. 4 hrs
IP rating	IP 20
Ambient temperature	+10 °C to +35 °C (operation) +50 °F to +95 °F (operation) -20 °C to +65 °C (storage) -4 °F to +149 °F (storage)
Humidity	Up to 96 %, no condensation
Ports	4 dry changeover contacts Pre-alarm, fire, extinguish, group fault, for 24 V 0.5 A
Display features	1 LCD with text display 1 green LED "Operation" 1 red LED "Alarm" 1 yellow LED "Group fault" 1 yellow LED "Power supply fault"
Aspiration tube	Plug-in system 22 mm (0.86 inch)
Airflow monitoring	Approx. +/- 10 % volumetric flow rate
Extinguishing agent	Novec™ 1230
Protected volume	for a cabinet volume of max. 2.8 m ³ (98.9 cubic foot)
Weight	approx. 15 kg (33 lbs) with extinguishing agent
Enclosure dimensions	19", 1U, 640 mm (25.2 inch) deep

Order no.: 888840

The OneU is a **compact extinguishing system** in 19" format with a height unit of only 44 mm. This mini extinguishing system incorporates a central microprocessor unit, a complete smoke aspiration system and a Novec™ 1230 extinguishant container for an extinguishing volume of 2.8 m³ (98.9 cubic foot). The smoke aspiration system is equipped with two optical smoke detectors for reliable fire detection. Power is supplied by a built-in power supply unit with an input voltage range of 100 to 240 V AC and interruption-free emergency power supply of 4 hours.

Application

The ideal area of application for the OneU are spaces with a self-contained atmosphere, as found in server, network, modem and IT cabinets, modem and machine control cabinets, high- and low-voltage cabinets, and telephone distribution cabinets. The smoke aspiration system takes air samples from the entire cabinet volume and conveys them past the two sensitive smoke detectors. When the pre-alarm threshold is reached, shutdown measures can be initiated. If the smoke concentration continues to rise, the extinguishant container is triggered by the fire alarm threshold. The extinguishing agent is discharged, gasified at the discharge nozzle and distributed effectively in the cabinet.

Included in delivery

OneU active extinguishing system 888840

Not included in delivery

Aspiration tube system 907061

Optional accessories

OneU ED extinguishing module 889215

Notes

Door contact switches 889337 with retainers are to be provided by the customer.
OneU can perform fire detection monitoring for up to five server cabinets, but not selectively.
One OneU active extinguishing system can control up to 4 more extinguishing modules.

Approvals / marking





Aspirating smoke detectors

OneU®

OneU DD aspiration smoke detector



Product features

- Compact and space-efficient design.
- Fire detection directly on and in the protected site.
- Expandable by networking with OneU ED (slave extinguishing system) for protecting up to four other sites.
- Easy to mount due to use of international standard 19" technology.
- Minimal maintenance required.

Technical specifications

Detection method	2 optical smoke detectors
Rated voltage	100/240 V AC, 50/60 Hz
Power consumption	132 VA to 264 VA
Operating voltage	24 V DC
Emergency power supply	approx. 4 hrs
IP rating	IP 20
Ambient temperature	+10 °C to +35 °C (operation) +50 °F to +95 °F (operation) -20 °C to +65 °C (storage) -4 °F to +149 °F (storage)
Humidity	Up to 96 %, no condensation
Ports	4 dry changeover contacts Pre-alarm, fire, extinguish, group fault, for 24 V 0.5 A
Display features	1 LCD with text display 1 green LED "Operation" 1 red LED "Alarm" 1 yellow LED "Group fault" 1 yellow LED "Power supply fault"
Aspiration tube	Plug-in system 22 mm
Airflow monitoring	Approx. +/- 10 % volumetric flow rate
Weight	approx. 8 kg (17.6 lbs)
Enclosure dimensions	19", 1U, 480 mm (18.9 inch) deep

Order no.: 907085

The OneU DD is a smoke aspiration system in 19" format with a height unit of only 44 mm. The device incorporates a central microprocessor unit, a smoke aspiration system and a CAN bus interface for the external control of 4 OneU ED extinguishing systems. The smoke aspiration system is equipped with two optical smoke detectors for reliable fire detection. Power is supplied by a built-in power supply unit with an input voltage range of 100 to 240 V AC and interruption-free emergency power supply of 4 hours.

Application

The ideal areas of application for the OneU DD are spaces with a self-contained atmosphere, as found in server, network, modem and IT cabinets, modem and machine control cabinets, high- and low-voltage cabinets, and telephone distribution cabinets. The smoke aspiration system takes air samples from the entire cabinet volume and conveys them past the two sensitive smoke detectors. When the pre-alarm threshold is reached, shutdown measures can be initiated. If the smoke concentration continues to rise, the fire alarm is triggered by the fire alarm threshold and any extinguishing modules connected are triggered.

Included in delivery

OneU DD aspiration smoke detector 907085

Not included in delivery

Aspiration tube system 907061

Optional accessories

OneU ED extinguishing module 889215

Notes

Door contact switches 889337 with retainers are to be provided by the customer.

OneU can perform fire detection monitoring for up to five server cabinets, but not selectively.

One OneU DD can control up to 5 OneU ED modules.

Approvals / marking





Aspirating smoke detectors

OneU®

OneU ED NG extinguishing module



Product features

- Compact and space-efficient design.
- Fire extinguishing directly on and in the protected site.
- Can be expanded by networking with up to 4 OneU ED extinguishing systems.
- Easy to mount due to use of international standard 19" technology.
- Minimal maintenance required.

Technical specifications

Extinguishing agent	Novec™ 1230
Rated voltage	24 V DC
Operating voltage	24 V DC -3/+5 V
Emergency power supply	Up to 4 hrs from the master device
IP rating	IP 20
Ambient temperature	+10 °C to +35 °C (operation) +50 °F to +95 °F (operation) -20 °C to +65 °C (storage) -4 °F to +149 °F (storage)
Humidity	Up to 96 %, no condensation
Ports	4 dry changeover contacts Pre-alarm, fire, extinguish, group fault, for 24 V 1 A
Display features	In the master device only (OneU or OneU DD)
Fire detection	By the master device
Control of extinguishing system	By the master device
Protected volume	max. 2.8 m ³ (98.9 cubic foot)
Weight	approx. 12 kg (26.4 lbs) with extinguishing agent
Enclosure dimensions	19", 1U, 640 mm (25.2 inch) deep

Order no.: 889215

The OneU ED NG is an extinguishing system in 19" format with a height unit of only 44 mm (1.73 inch). The extinguishing agent used is Novec™ 1230, a chemically-acting liquid which vaporises upon being discharged from a nozzle and takes effect in gaseous form. The device incorporates an extinguishing agent tank, a microprocessor system and a CAN bus interface for networking with a higher-level OneU or OneU DD (master device). Extinguishing is triggered by the master device only. Up to 4 OneU ED NG units can be networked, which are then activated in a cascade if extinguishing is triggered, with a delay of 1 s between each unit. Power is supplied from the master device, including the 4-hour emergency power supply. All necessary device information is displayed on the master device. The dry contacts can be tapped on the device itself.

Application

The OneU ED is part of the OneU fire protection device series, acting as an additional extinguishing system for expanding the extinguishing capacity by 2.8 m³ (98.9 cubic foot). Smoke detection is always performed by the master device.

Included in delivery

OneU ED extinguishing module 889215

Optional accessories

OneU active extinguishing system 888840
OneU DD aspiration smoke detector 907085

Notes

Door contact switches 889337 with retainers are to be provided by the customer.

The OneU ED can only be operated together with a OneU active extinguishing system or a OneU DD, see manual.

Approvals / marking





Special detectors

Linear smoke detectors

FireRay 5000



Product features

- Integrated laser.
- One system controller unit can be used to control and monitor up to two detector heads.
- Monitored area min. 8 m (315 inch) to max. 100 m (3937 inch) depends on the used number of prism reflectors.
- Auto-Align: automatic ray alignment.
- Auto-Optimise: adjustment to compensate for building movement and impurities.
- 2-wire interface between system control device and detector.
- Integrated event log for 50 events per detector head.

Technical specifications

Optical wavelength	850 nm
Ambient temperature	-10 °C to +55 °C (+14 °F to +131 °F)
Storage temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Relative humidity	max. 93 %, no condensation
Operating voltage	14 - 36 V DC
Rated voltage	24 V DC
Rated current consumption with 1 detector head	5 - 6 mA
Rated current consumption with 2 detector heads	7.5 - 8.5 mA
Current consumption alignment mode	35 - 37 mA
Outputs	2 alarm relays 2 fault relays
Relay contact voltage	30 V DC
Relay contact current	100 mA
Response sensitivity	adjustable 10 - 60 %
IP rating	IP 54
Weight (system control)	1000 g (2.2 lbs)
Dimensions (system control)	202 x 230 x 87 mm (WxHxD) 7.95 x 9.05 x 3.42 inch (WxHxD)
Weight (detector head)	500 g (1.1 lbs)
Dimensions detector head	134 x 131 x 134 mm (WxHxD) 5.27 x 5.16 x 5.27 inch (WxHxD)
Dimensions prism reflectors	100 x 100 x 10 mm (WxHxD) 3.9 x 3.9 x 0.4 inch (WxHxD)

Order no.: 908458

The FireRay 5000 is a motorised, linear smoke detector with automatic alignment and optical rays. The FireRay 5000 consists of an infrared transmitter and an infrared receiver within the same device. It functions by conducting a clearly distinguished ray to a reflective prism. If the ray meets smoke, a decrease in performance is recorded and an alarm signal is triggered soon as this drops below a pre-programmed limit value. As soon as the laser is used to roughly align the ray, the Auto-Align takes over to move the ray into the optimal position. This is an ideal solution for the protection of wide areas in which the use of standard detector technology would pose significant costs.

Included in delivery

- 1 system controller unit
- 1 detector head
- 1 reflector

Approvals / marking



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