

## Clunid DCP-1

Fire Detection & Suppression Control Panel

Product Brochure I ASIA



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# Clunid - the heart of modern fire protection



The Clunid DCP-1 is a modular fire detection and suppression control panel that can take over all relevant monitoring and control functions in fire protection systems – precisely tuned and compiled to meet specific customer and project requirements. Its possible applications are almost unlimited. In addition, the unique Clunid control panel generation is characterized by a particularly high level of operational safety and very simple operation.



#### Simple operation

With the **full-color 7**" **touch display**, operators maintain an overview even in stressful situations, such as a fire.

- The user guidance is intuitive thanks to the familiar tile design.
- Operating status are visualized by the color of the display and messages are shown in full text.
- Consistent self-explanatory icons with binding instructions for action prevent errors.

The information from all fire detection and monitoring elements converges in modern fire detection and suppression control panels. They receive events, evaluate them, provide fire alarms and important status information, automatically control suppression systems and other fire case-dependent actions, and initiate tests of critical functions. Thus they form the heart of modern fire protection systems.

- Flat menu structures allow direct and fast navigation for all events.
- The menu navigation is tailored to the different users according to the authorizations granted respectively in each case.

The Clunid DCP-1 can be equipped with zone control panels with which operating procedures and indications can be carried out conveniently via a large number of freely configurable buttons and LEDs.



#### Full-color 7" touch display

## NIKING

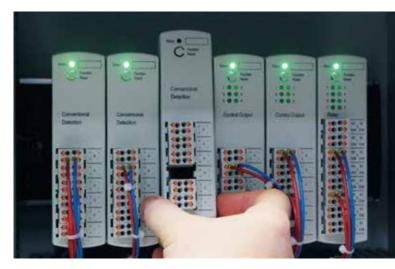




**High operational safety** 

The new and modern control panel technology of the Clunid DCP-1 stands for highest availability and operational safety:

- **TWIN PROCESSING**: The processors are always redundant, not only on the central card, but also in the function modules and zone control panels. This minimizes the risk of failures.
- Automatic plausibility checks: The integrated LogicManager prevents user errors already during configuration. A later occurrence of corresponding malfunctions will thus be avoided.
- HOT SWAP module exchange: Individual function modules can be exchanged without taking the control panel out of operation and causing downtimes.
- No risk with updates: Updates and parameterizations are carried out during operation without necessary shutdowns.
- Large event memory: The generously dimensioned event and history memory helps to comprehensively trace faults and quickly eliminate the causes.



HOT SWAP module exchange



Function module with redundant processor

Trusted above all.

#### **Universal application**



Supported by its powerful computer performance, the possible applications of the Clunid DCP-1 are almost unlimited:

- The Clunid DCP-1 offers the flexibility of a programmable logic controller (PLC) and thus also enables very complex controls, for example for multi-zone suppression systems.
- Thanks to the powerful network technology, not only complex controls but also very extensive systems can be realized.
- With the Reflex module, fast evaluation of fire detector signals and instantaneous suppression system actuation are also possible, as required for certain fire risks and suppression system types.
- Modules are available for both conventional lines and addressable loops.
- Power supply units with wide-voltage input, the DC/DC converter for controlling horns and solenoid valves without sufficient wide-voltage input as well as VdS, FM and other approvals make the Clunid DCP-1 internationally applicable.



# Modular design



In its standard configuration, the Clunid DCP-1 is equipped with a touch display including collective indications, a redundant central card, battery supply and a power supply unit. It is prepared for up to 72 function modules and 27 zone control panels.

#### **Central card**

Fast reactions and strong computer performance characterize the central card technology. The central card is always equipped with redundant processors and thus reduces the probability of failure to a minimum.

#### **Function modules**

All function modules are equipped with a redundant processor as well. They are available to suit the various applications and requirements – from input modules for conventional lines or addressable loops to output modules such as control groups or relays and communication modules such as fire brigade peripherals or networks.

## The Reflex module

signals and instantaneous suppression system actuation.

#### The voltage output and control group modules

with electronic fuses and are therefore also UL- and FMcompliant. The control group module can also be used to operate impulse solenoid valves and components with a high continuous current demand.

Compared to conventional relay cards, the control a multiple of relays, whereby different switching voltages are possible.

The well designed module concept offers a number of advantages for project planning and service. All modules have the same width and can be used in any slot in the control panel, regardless of the module type. This means that the space in the control panel enclosure can be optimally utilized.



## Clunid DCP-1 Individually constructed

As standard the Clunid DCP-1 is fitted with touch display including group displays, a central and redundant signal processing unit, power supply unit and battery supply. It is prepared for up to 72 function modules and 27 Zone control panels.

#### Signal processing unit

The control panel technology is characterized by rapid responses and powerful computer performance. The signal processing unit is fitted with redundant processors and thus reduces the probability of failure to a minimum.

#### **Function modules**

The implementation of customer-specific requirements takes place through the modular structure of individual function modules, all of which are equipped with redundant processors to increase availability. (Input modules: limit value or loop AP ring bus; output modules: monitored control output, electronically monitored ext. power supply; communication modules: relays, optocouplers, fire brigade peripherals, network)

#### Power supply unit

The Clunid DCP-1 can be used worldwide. The power supply units used come with extended voltage range input and cover various supply voltages. The Output power and Control output modules are provided with electronic fuses and are thus VdS, UL and FM-conformant.

#### DC/DC converter

A DC/DC converter can be optionally integrated which stabilizes the output voltage of the Control groups and thus provides a constant output voltage even in battery operation or during temperature fluctuations. This is often necessary for standard components such as horns or solenoid valves without adequate extended voltage range input.

#### **Enclosure sizes**

Nearly all components can be fitted in the four standard enclosure sizes 04UD, 14UD, 21UD and 40UD. These can be individually extended and offer sufficient scope for a configuration that meets your needs.

#### Networking

Standard networking is accomplished via CAT.7 data cables, fire alarm cables or fiber optic cables.

CAT.7 - data cable 100 m 100 Mbit/s Ethernet 150 m 100 Mbit/s BroadR 450 m 10 Mbit/s BroadR

Fire alarm cable (J-Y(ST)Y-2x2x0.8 MX-)) 350 m 10 Mbit/s BroadR

#### Fiber optic cable

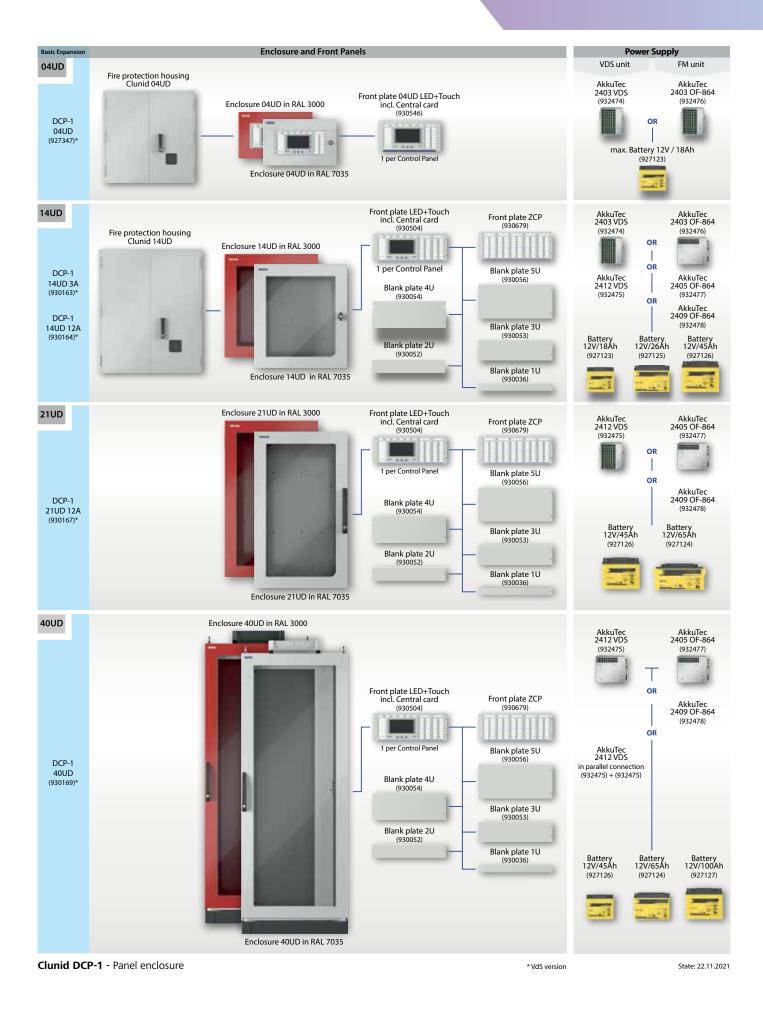
(e.g. A-DQ (ZN) B2Y MM OM2-5 (n= 4, 8,12, ...) up to 9,600 m 10/100 Mbit/s Ethernet nG50/125 Multimode up to 8,000 m 10/100 Mbit/s Ethernet nG62.5/125 Multimode from 2022 10/100 Mbit/s Ethernet nG9/125 single mode

The Viking Corporation (Far East) Pte Ltd | 69 Tuas View Square, Westlink Techpark, Singapore 638621

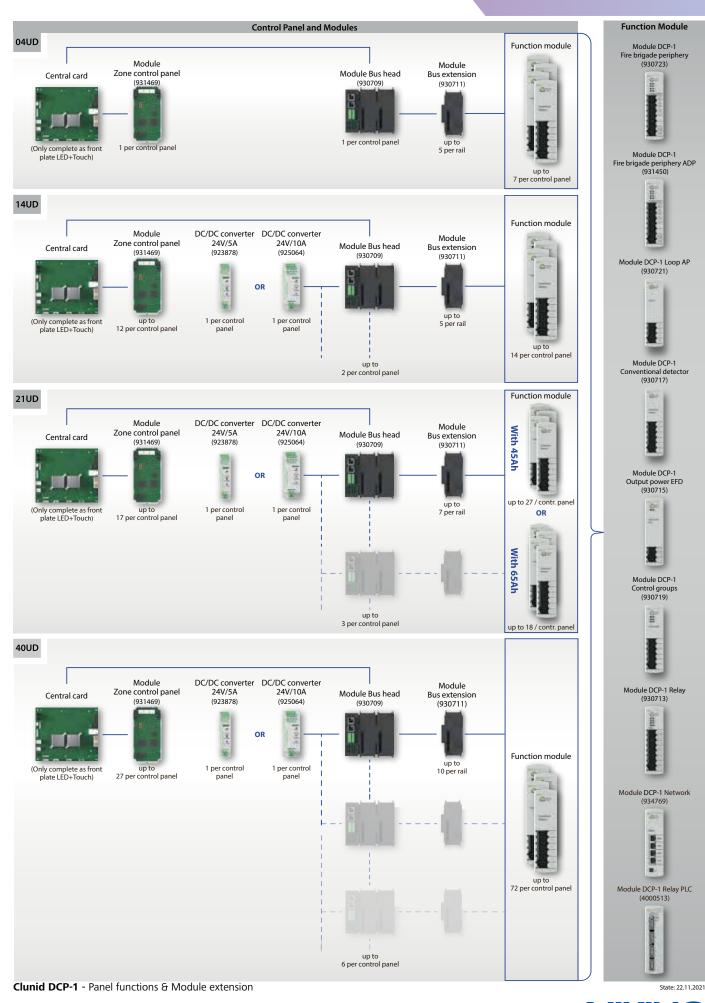
Fiber optic converter Multimode FL MC 1000 SC (4001520) Monomode in preparation for 2022







# NIKING



#### Trusted above all.

NIKING



#### Control panel DCP-1 04UD



#### Application

The latest control panel technology for use as a combined fire detection and extinguishing control panel in single and multizone extinguishing systems. Modular design and factory-installed configuration is carried out according to the customers project requirements.

#### **Technical specifications**

Mains voltage	Power supply unit AkkuTec: 2403 VdS
	2403 OF-864 93.5 - 264.5 V AC
Mains frequency	47 Hz - 63 Hz
Operating voltage nom.	24 V DC
Operating voltage range central card	19 V - 29 V DC
Quiescent current (without modules and zone control panel)	max. 310 mA
Battery	2 x 12 V / max. 18 Ah
Number of function modules	max. 7
Ambient temperature (operation)	-5 °C to +50 °C (+23 °F to +122 °F)
Storage temperature (without batteries)	-30 °C to +80 °C (-22 °F to +176 °F)
Relative humidity	max. 95 % no condensation
IP rating	IP 54
Enclosure	Sheet steel RAL 7035 light grey or RAL 3000 red
Function module mounting rail	max. 1 pc. 105 x 310 mm (WxL) 4.13 x 12.2 inch (WxL) max. 7 function modules/mounting rail
Mounting rail	max. 1 pc. 35 x 500 mm (WxL) 1.38 x 19.69 inch (WxL) 400 mm usable space next to the voltage distribution block
Dimensions	526 x 330 x 276 mm (WxHxD) 20.71 x 12.99 x 10.9 inch (WxHxD)
Weight	approx. 9 kg (19.8 lbs) (without modules)
Specification	EN54-2, EN54-4, EN12094-1
Mounting	wall-mounted installation

Fire detection and suppression control panel DCP-1 in wall-mounted housing in modern industrial design. Optimum control panel equipment due to modular design. Intuitive operator guidance via full-colour 7" touch display with 17 freely configurable LED collective displays. The configuration of the control panel is done via the configuration software "LogicManager" with an intuitive and user-friendly interface. Commissioning, maintenance and service work is carried out via the ServiceAssistant. For both applications, the interface between the control panel and the PC, tablet or smartphone is realized via the Clunid ServiceBox.

#### **Product features**

- Highly available complete system through redundant central card, redundant function modules and redundant zone control panels
- Function modules can be replaced during operation thanks to hot-plug technology
- Optional 1 Zone control panel for displaying and operating the extinguishing areas or as individual detector group display
- Installation of up to 7 function modules via module Bus head or module Bus extension on function module mounting rail
- Simple labeling of the zone control panel via insert sheets

#### Included in delivery

Variable. The configuration of the control panel is done via the DCP-1 Configurator.

#### Note

The number of modules Fire brigade periphery or Fire brigade periphery ADP is limited to a total of 1 per control panel.

#### Approvals / marking







#### Control panel DCP-1 14UD



#### **Technical specifications**

Mains voltage	Power supply unit AkkuTec: 2403 VdS, 2403 OF-864, 2405 OF-864 93.5 V - 264.5 V AC 2412 VdS, 2409 OF-864 195.5 V - 264.5 V AC
Mains frequency	47 Hz - 63 Hz
Operating voltage nom.	24 V DC
Operating voltage range	19 V - 29 V DC
Quiescent current (without function modules and zone control panel)	max. 310 mA DC
Battery (2 x 12 V)	Power supply unit AkkuTec:           2403 VdS         18 Ah / 26 Ah           2412 VdS         45 Ah           2403 OF-864         18 Ah / 26 Ah           2405 OF-864         18 Ah / 26 Ah           2409 OF-864         45 Ah
Number of function modules	max. 14
Ambient temperature (operation)	-5 °C to +50 °C (+23 °F to +122 °F)
Storage temperature (without batteries)	-30 °C to +80 °C (-22 °F to +176 °F)
Relative humidity	max. 95 %, no condensation
IP rating	IP 54 (closed housing front door) IP 31 (open housing front door)
Enclosure	Sheet steel RAL 7035 light grey or RAL 3000 red
Function module mounting rail	max. 2 pc. 105 x 310 mm (WxL) 4.13 x 12.2 inch (WxL) max. 7 function modules/mounting rail
Mounting rail	max. 1 pc. 35 x 360 mm (WxL) 1.38 x 14.17 inch (WxL) 270 mm (10.63 inch) usable space next to the voltage distribution block
Dimensions	600 x 671 x 226 mm (WxHxD) 23.62 x 26.42 x 8.9 inch (WxHxD)
Weight	approx. 15 kg (33.07 lbs) (without modules and power supply unit)
Specification	EN54-2, EN54-4, EN12094-1
Mounting	wall-mounted installation

Fire detection and suppression control panel DCP-1 in a wallmounted 19" housing in modern industrial design. Optimum control panel equipment due to modular design. Intuitive operator guidance via full-colour 7" touch display with 17 freely configurable LED collective displays. The configuration of the control panel is done via the configuration software "LogicManager" with an intuitive and user-friendly interface. Commissioning, maintenance and service work is carried out via the ServiceAssistant. For both applications, the interface between the control panel and the PC, tablet or smartphone is realized via the Clunid ServiceBox.

#### Application

The latest control panel technology for use as a combined fire detection and suppression control panel in single and multizone extinguishing systems. Modular design and factory configuration are carried out according to the individual requirements of the customers project.

#### **Product features**

- Highly available complete system through redundant central card, redundant function modules and redundant zone control panels
- Function modules can be replaced during operation thanks to hot-plug technology
- Max. 12 Zone control panels for displaying and operating the extinguishing areas or as individual detector group display
- Installation of up to 14 function modules via module Bus head or module Bus extension on function module mounting rail
- Installation of a DC/DC converter is possible to stabilize the output voltage of the control and voltage outputs
- Simple labeling of the zone control panel via an insert sheet

#### Included in delivery

Variable. The configuration of the control panel is done via the DCP-1 Configurator.

#### Note

The number of modules Fire brigade periphery or Fire brigade periphery ADP is limited to a total of 1 per control panel. Max. 2 modules Zone control panel on the front plate of the control panel and up to 10 more modules Zone control panel via Front plate zone control panel. The control unit may be operated with a maximum current of 8 A at the specified ambient temperature.

#### Approvals / marking







#### **Control panel DCP-1 21UD**



#### **Technical specifications**

Mains voltage	Power supply unit AkkuTec: 2405 OF-864 93.5 - 264.5 V AC 2412 VdS, 2409 OF-864
	195.5 V - 264.5 V AC
Mains frequency	47 Hz - 63 Hz
Operating voltage nom.	24 V DC
Operating voltage range central card	19 V - 29 V DC
Battery	Power supply unit AkkuTec:           2412 VdS         45 Ah / 65 Ah           2405 OF-864         26 Ah / 45 Ah           2409 OF-864         45 Ah / 65 Ah
Quiescent current (without function modules and zone control panel)	max. 310 mA
Number of function modules	max. 27 (26 Ah / 45 Ah batteries) max. 18 (65 Ah batteries)
Ambient temperature (operation)	-5 °C to +45 °C (+23 °F to +113 °F)
Storage temperature (without batteries)	-30 °C to +80 °C (-22 °F to +176 °F)
Relative humidity	max. 95 %, no condensation
IP rating	IP 54 (closed housing front door) IP 31 (open housing front door)
Enclosure	Sheet steel RAL 7035 light grey or RAL 3000 red
Function module mounting rail	max. 3 pc. 105 x 390 mm (WxL) 4.13 x 15.35 inch (WxL) max. 9 function modules/mounting rail
Mounting rail	max. 1 pc. 35 x 390 mm (WxL) 1.38 x 15.35 inch (WxL) 300 mm (11.81 inch) usable space next to the voltage distribution block
Dimensions	600 x 916 x 373 mm (WxHxD) 23.62 x 30.06 x 14.69 inch (WxHxD)
Weight	approx. 70 kg (154.32 lbs) (without modules)
Specification	EN54-2, EN54-4, EN12094-1
Mounting	wall-mounted installation

Fire detection and suppression control panel DCP-1 in a wall-mounted 19" housing in modern industrial design. Optimum control panel equipment due to modular design. Intuitive operator guidance via full-colour 7" touch display with 17 freely configurable LED collective displays. The configuration of the control panel is done via the configuration software "LogicManager" with an intuitive and user-friendly interface. Commissioning, maintenance and service work is carried out via the ServiceAssistant. For both applications, the interface between the control panel and the PC, tablet or smartphone is realized via the Clunid ServiceBox.

#### Application

The latest control panel technology for use as a combined fire detection and suppression control panel in single and multizone extinguishing systems. Modular design and factory configuration are carried out according to the individual requirements of the customers project.

#### **Product features**

- Highly available complete system through redundant central card, redundant function modules and redundant zone control panels
- Function modules can be replaced during operation thanks to hot-plug technology
- Max. 17 Zone control panels for displaying and operating the extinguishing areas or as individual detector group display
- Installation of up to 27 function modules via module Bus head or module Bus extension on function module mounting rail
- Installation of a DC/DC converter is possible to stabilize the output voltage of the control and voltage outputs
- Simple labeling of the zone control panel via insert sheets

#### Included in delivery

Variable. The configuration of the fire detection and suppression control panel is done via the DCP-1 Configurator.

#### Note

The number of modules Fire brigade periphery or Fire brigade periphery ADP is limited to a total of 1 per control panel. Max. 2 modules Zone control panel on the front plate of the control panel and up to 15 more modules Zone control panel via Front plate zone control panel.

#### Approvals / marking







#### **Control panel DCP-1 40UD**



#### **Technical specifications**

Mains voltage	Power 2412 VdS 2405 OF-864 2409 Of-864	supply unit AkkuTec: 195.5264.5 V AC 93.5 - 264.5 V AC 195.5 - 264.5 V AC
Mains frequency		47 Hz - 63 Hz
Operating voltage nom.		24 V DC
Operating voltage range central card		19 V - 29 V DC
Quiescent current (without modules and zone control panel)		max. 310 mA DC
Battery (2 x 12 V)	Powe 2412 VdS 2405 OF-864 2409 OF-864	er supply unit AkkuTec: 45 / 65 / 85 /100 Ah 45 Ah 45 / 65 / 85 / 100 Ah
Number of function modules		max. 72
Ambient temperature (operation)		-5 °C to +50 °C (+23 °F to +122 °F)
Storage temperature (without batteries)		-30 °C to +80 °C (-22 °F to +176 °F)
Relative humidity		max. 95 % no condensation
IP rating (EN60529)		ed housing front door) en housing front door)
Enclosure	F	Sheet steel 12U AL 7035 light grey or RAL 3000 red
Function module mounting rail	4	s. 105 x 510 mm (WxL) I.13 x 20.08 inch (WxL) I modules/mounting rail
Mounting rail	1 360 mm (14.17 incl	pc. 35 x 515 mm (WxL) .38 x 20.28 inch (WxL) h) usable space next to oltage distribution block
Dimensions (incl. base 100 mm and passive fan)		0 x 600 mm (WxHxD) x 23.62 inch (WxHxD)
Weight	appro	ox. 200 kg (440.9 lbs) (without modules)
Specification	EN54-2,	EN54-4, EN12094-1
Mounting		Stand alone cabinet

Fire detection and suppression control panel Clunid DCP-1 in a wall-mounted 19" housing in modern industrial design. Optimum control panel equipment due to modular design. Intuitive operator guidance via full-colour 7" touch display with 17 freely configurable LED collective displays. The configuration of the control panel is done via the configuration software "LogicManager" with an intuitive and user-friendly interface. Commissioning, maintenance and service work is carried out via the ServiceAssistant. For both applications, the interface between the control panel and the PC, tablet or smartphone is realized via the Clunid ServiceBox.

#### Application

Base unit with the latest control panel technology for use as a combined fire detection and suppression control panel in single and multizone extinguishing systems in medium-scale and large projects.

#### **Product features**

- Highly available complete system through redundant central card, redundant function modules and redundant zone control panel
- Function modules can be replaced during operation thanks to hot-plug technology
- Max. 27 Zone control panels for displaying and operating the extinguishing areas or as individual detector group display
- Individual installation of up to 72 function modules via module Bus head or module Bus extension on function module mounting rail
- Installation of a DC/DC converter is possible to stabilize the output voltage of the control and voltage outputs
- Simple labeling of the zone control panel via insert sheets

#### Included in delivery

Variable. The configuration of the fire detection and suppression control panel is done via the DCP-1 Configurator.

#### Note

The number of modules Fire brigade periphery or Fire brigade periphery ADP is limited to a total of 1 per control panel. Max. 2 modules Zone control panel on the front plate of the control panel and up to 25 modules Zone control panel via Front plate zone control panel. It is possible to connect up to 2 AkkuTec 2412 VdS, AkkuTec 2405 OF-864 or AkkuTec 2409 OF-864 power supplies in parallel.

#### Approvals / marking







#### Modules

#### **DCP-1 Bus Head Module**



#### **Product features**

- Input and output socket for internal data connection
- 2 separate inputs for power supply of the module series (floating, regulated)
- 2 slots for function modules
- 1 slot for expansion with module Bus extension

#### **Technical specifications**

Operating voltage floating	19 V - 29 V DC
Operating voltage regulated (optional)	26.2 V - 26.4 V DC
Operating current (no module operating)	7 mA floating 0.5 mA regulated
Current consumption	max. 12 A
Current consumption per module slot	max. 6 A
Voltage supply	Connection block, 4-pin 2 connections for floating 2 connections for regulated
Communication CAN	2 modular plugs RJ12 6P6C, staggered screening
Number of function module slots	2
Connectivity of module Bus extension	1
Connection cross section	0.2 - 4 mm², rigid 0.5 - 2.5 mm², flexible
Ambient temperature (operation)	-5 °C to +60 °C (23 °F to 140 °F)
Storage temperature	-30 °C to +80 °C (-22 °F to 176 °F)
Relative humidity	max. 95 % no condensation
Installation position	flat
Mounting	Mounting rail 105 mm
Weight	approx. 105 g (0.23 lbs)
Dimensions	109.8 x 96.4 x 27.2 mm (WxHxD) 4.4 x 4.2 x 0.8 inch (WxHxD)
Part no. (not available for order)	930708

#### Order no.: 930709

Mounting rail module for use in all design variants of the DCP-1 series. The module contains all connections for data communication and power supply of a module series with up to 12 function modules. Power can be supplied directly from the power supply unit of the panel (floating) or, if required, additionally via a DC/DC converter (regulated). Input and output socket available for data communication. The output socket can be used for a connection of another module series.

#### Application

The module DCP-1 Bus head is the first left-aligned module on each mounting rail. It provides the power supply as well as the data- communication channel for up to 12 function modules respectively function modul slots. Two function modules can be plugged directly onto the module DCP-1 Bus head. Additional function module slots are created by adding DCP-1 Bus extension modules, part no. 930711.

#### Included in delivery

Module completely assembled and ready for installation.

#### Not included in delivery

Cable loom Clunid 14-40HE BK-BK Single wires for power supply 933227

#### Note

Only one module Bus head may be used per one function module mounting rail.

#### Approvals / marking

See panels





## Modules

### **DCP-1 Bus Extension Module**



#### Order no.: 930711

Mounting rail module for use in all design variants of the Clunid DCP-1 series. Extends a module series by one additional function module slot.

#### **Product features**

1 slot for functional module

**Technical specifications** 

- 1 slot for connection to present module series
- 1 slot for expansion with an additional module Bus extension

#### Application

The module DCP-1 Bus extension is used to extend function modules respectively function module slots. The module is either connected on the right side to a module DCP-1 Bus head, part no. 930709, or to another module DCP-1 Bus extension. Thus, a function module mounting rail can be extended to up to 12 slots.

#### Included in delivery

Module completely assembled and ready for installation.

#### Approvals / marking

See panels

Operating voltage, floating	19 V - 29 V DC
Operating voltage, regulated (optional)	26.2 - 26.4 V DC
Operating current (no module operating)	1 mA floatend 0 mA regulated
Number of function module slots	1
Current consumption per module slot	max. 6 A
Voltage supply	via module series
Connectivity of module Bus extension	1
Ambient temperature operation	-5 °C to +60 °C (+23 °F to 140° F)
Storage temperature	-30 °C to +80 ° C (-22 °F to +176 °F)
Relative humidity	max. 95 % no condensation
Installation position	flat
Mounting	Mounting rail 105 mm
Weight	appr. 41 g (0.09 lbs)
Dimensions	39.8 x 96.4 x 19.3 mm (LxWxH 1.5 x 4.2 x 0.8 inch (LxWxH)
Part no. (not available for order)	930710





#### Modules

#### **DCP-1 Conventional Detector Module**



#### **Product features**

- For conventional components with a supply voltage of 10 V - 12 V DC
- 6 conventional inputs
- Module redundancy through second processor core
- Conventional inputs usable for several extinguishing zones

#### **Techical specifications**

Operating voltage	19 V - 29 V DC
Current consumption (module in standby, no line under load)	max. 58 mA
Line voltage	10 V / 12 V DC
Line current per group	max. 120 mA
Terminating resistor	1.8 kΩ
Number of detector groups	6, quiescent current monitored
Number of detectors per group Sprinkler monitoring panel (CEA4001) Malfunction indicators:	automatic detectors 32 pcs. non automatic detectors 10 pcs. with single indication 60 pcs. without single indication 15 pcs.
Connectivity	Class B
Connection cross section	0.2-1.5 mm², rigid 0.2-2.5 mm², flexible
Ambient temperature (operation)	-5 °C to +60 °C (+23 °F to 140 °F)
Storage temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Relative humidity	max. 95 % no condensation
IP rating (EN 60529)	IP 20
Enclosure	Polycarbonate, grey
Installation position	vertical
Mounting	attachable onto module Bus head or module Bus extension
Number of female connectors	max. 6
Weight	174 g (0.38 lbs)
Dimensions	39.7 x 147 x 102 mm (WxHxD) 1.6 x 5.8 x 4.0 inch (WxHxD)
Part no (not available for order).	930716

#### Order no.: 930717

Function module for use in all design variants of the DCP-1 series. The module contains 6 quiescent current monitored detector groups for the connection of conventional detectors or switching contacts. The integrated redundant design allows the management of several extinguishing zones via one module and also ensures high reliability of the module. The alarm of a detector is reported by increasing the current. The conventional line is monitored for wire breakage and short circuit.

- Operation of detectors in alarm dependency type B possible (dual group or dual detector dependency) Monitoring of the conventional lines for wire breakage and short circuit (incl. creeping wire breakage and creeping short circuit)
- · Detection of alarm or fault from one or more detectors
- Adjustable blind time (1 to 20 seconds)
- Integrated module status LED on the front of the module for displaying the current module status
- Button on the front of the module for initiating modulespecific functions

#### Application

Connection of various types of conventional detectors in standard or industrial design. System monitoring is carried out by connecting monitoring switches with potential-free contacts. The module DCP-1 Conventional detector is installed onto a module DCP-1 Bus head or a module Bus extension. The power supply and the data connection to the central card are realized via these two modules.

#### Included in delivery

Module assembled and ready for installation.

#### Not included in delivery

Module DCP-1 Bus head	930709
Module DCP-1 Bus extension	930711
Female header HSCP-SP 2,5-1U/4 (50 pcs.)	924202
(Connection plug for field cables)	

#### Note

When using more than 2 function modules on a function module mounting rail, a module DCP-1 Bus extension, part no. 930771, is necessary for each additional function module.

#### Approvals / marking

See panels





#### Modules

#### **DCP-1 Loop AP Module**



#### **Product features**

- For the interface connection of analog addressable detectors, modules and notification devices to the communication protocol Loop AP - XP95 / Discovery
- Module redundancy through second processor core
- A high loop current allows the operation of many modules, notification devices and detectors on a single loop

#### **Technical specifications**

•	
Operating voltage (module)	19 V - 29 V DC
Current consumption (module in standby, no loop activated)	30 mA
Loop current	max. 400 mA
Loop voltage	max. 27 V DC
Number of loops	2
Number of spurs	2/4
Number of components per loop	126
Protocols	XP95, Discovery
Connectivity (FM)	Class A
Connection cross section	0.2 - 1.5 mm², rigid 0.2 - 2.5 mm², flexible
Ambient temperature operation	-5 °C to +60 °C (+23 °F to +140 °F)
Ambient temperature storage	-30 °C to +80°C (-22 °F to +176 °F)
Relative humidity	max. 95 % no condensation
IP rating (EN 60529)	IP 20
Enclosure	Polycarbonate, grey
Installation position	vertical
Mounting	attachable onto module Bus head or module Bus extension
Number of female connectors	max. 4
Weight	196 g (0.43 lbs)
Dimensions	39.7 x 147 x 102 mm (WxHxD) 1.6 x 5.8 x 4.0 inch (WxHxD)
Cable length in total	max. 2000 m per loop
Part no. (not available for order)	930720

#### Order no: 930721

Function module for use in all design variants of the Clunid DCP-1 series. The module contains 2 detector loops for the connection of a maximum of 126 addressable components each. Instead of a loop, alternatively 2 spurs can be connected. Loop components may be addressable fire detectors, alarm devices, input/output modules, control modules for notification devices and conventional modules for operating standard conventional detectors on the loop. The integrated redundancy enables the management of several extinguishing zones via one module and also ensures high reliability of the module.

- Connectivity of Soteria devices
- Integrated module status LED at the front of the module for displaying the current module status
- Button at the front of the module for initiating modulespecific functions

#### Application

For monitoring with automatic or non-automatic detectors and alarming with optical and/or acoustic signal transmitters in loop technology. System monitoring by connecting e.g. switches to addressable input modules. Control of fire protection devices potential-free or monitored by output modules. Connection of monitored, conventional notification devices via siren control modules. The module DCP-1 Loop AP is plugged onto either a module DCP-1 Bus head or a module DCP-1 Bus extension. The power supply and the data connection to the central card are realized via these two modules.

#### Included in delivery

Module assembled and ready for installation.

#### Included in delivery

Module DCP-1 Bus head	930709
Module DCP-1 Bus extension	930711
Female header HSCP-SP 2,5-1U/4 (50 pcs.)	924202
(Connection plug for field cables)	

#### Note

When using more than 2 function modules on a function module mounting rail, one module Bus extension, part no 930711, is necessary for each additional function module.

## Approvals / marking

See panels





#### Modules

#### **DCP-1 Relay Module**



#### **Product features**

- 8 potential-free changeover contacts for switching voltages up to 30 V DC
- Module redundancy through second processor core
- Relay can be used for several extinguishing zones
- Status display shows the status of each relay at the front of the module

#### **Technical specifications**

Operating voltage (module)	19 V - 29 V DC
Quiescent current (module in standby, no active relay)	15 mA
Current increase per active relay	9 mA
Operating current (all relays active)	max. 81 mA
Number of relays	8
Switching voltage per contact	30 V DC
Switching capacity per contact	60 W DC
Contact resistance	75 mΩ
Switching time	4 mx
Connection cross section	0.2 - 1.5 mm2, rigid 0.2 - 2.5 mm2, flexible
Ambient temperature operation	-5 °C to +60 °C (+23 °F to +140 °F)
Ambient temperature storage	-30 °C to +80°C (-22 °F to +176 °F)
Relative humidity	max. 95 % no condensation
IP rating (EN 60529)	IP 20
Enclosure	Polycarbonate, grey
Installation position	vertical
Mounting	attachable onto module Bus head or module Bus extension
Number of female connectors	max. 8
Weight	185 g (0.41 lbs)
Dimensions	39.7 x 147 x 102 mm (WxHxD) 1.6 x 5.8 x 4.0 inch (WxHxD)
Part no. (not available for order)	930712

#### Order no: 930713

Function module for use in all design variants of the Clunid DCP-1 series. The integrated redundancy enables the management of several extinguishing zones via one module and also ensures high reliability of the module. The module DCP-1 Relay contains 8 relays with potential-free changeover contacts. Devices connected to the contacts are event-dependent controlled by the fire detection panel.

- Relay can be configured as main fault relay switches also in case of processor failure of the central card
- Relays can be controlled either delayed, continuously or inverted
- Integrated module status LED on the front of the module for displaying the current module status
- Button on the front of the module for initiating modulespecific functions

#### Application

FPotential-free control of e.g. fire protection devices, display panels, shutdown of ventilation systems or general information transmission. The module DCP-1 Relay is plugged onto either a module DCP-1 Bus head or a module DCP-1 Bus extension. The power supply and the data connection to the central card are realized via these two modules

#### Included in delivery

Module assembled and ready for installation.

#### Included in delivery

Module DCP-1 Bus head	930709
Module DCP-1 Bus extension	930711
Female header HSCP-SP 2,5-1U/4 (50 pcs.)	924202
(Connection plug for field cables)	

#### Note

The contacts are not intended for switching mains voltage or low-voltage consumers with high power consumption. Switching mains voltage or high power in the low-voltage range leads to malfunctions and damage to the module. When using more than 2 function modules on a function module mounting rail, one module DCP-1 Bus extension, part no. 930711, is necessary for each additional function module.

## Approvals / marking

See panels





#### Modules

#### **DCP-1 Control Groups Module**



#### **Product features**

- 6 monitored control outputs
- Module redundancy by second processor core
- Integrated electronic fuses (no fuse replacement required)
- Control outputs can be used for several extinguishing zones
- For activation of alarm devices, fire protection devices and other fire control systems
- Monitoring of the control outputs for wire breakage and short circuit

#### **Technical specifications**

Operating voltage floating	19 V - 29 V DC
Operating voltage regulated (optional)	26.2 V - 26.4 V DC
Current module	5 A max. 6 A (<1 min.)
Current consumption (module in standby, no output activated)	21 mA
Number of control groups	6
Continuous output current / control output at 24 V	max. 2 A
Pulse current (max. 250 ms)	max. 3 A
Connection cross section	0.2 - 1.5 mm², rigid 0.2 - 2.5 mm², flexible
Ambient temperature operation	-5 °C to +60 °C (+23 °F to +140 °F)
Ambient temperature storage	-30 °C to +80 °C (-22 °F to +176 °F)
Relative humidity	max. 95 % no condensation
IP rating (EN 60529)	IP 20
Enclosure	Polycarbonate, grey
Installation position	vertical
Mounting	pluggable onto module Bus head or module Bus extension,
Number of female connectors	max. 6
Weight	170 g (0.37 lbs)
Dimensions	39.7 x 147 x 102 mm (WxHxD) 1.6 x 5.8 x 4.0 inch (WxHxD)
Part no. (not available for order)	930718

#### Order no: 930719

Function module for use in all design variants of the Clunid DCP-1 series. The integrated, redundant design allows the management of several extinguishing zones via one module and also ensures high reliability of the module. The module contains 6 control groups for monitoring and controlling notification devices, fire protection devices, valves and other devices. The supply line to the devices is monitored for wire breakage and short circuit.

- Continuous current up to 2 A per output (in total max. 6 A)
- Optional use of regulated 24 V nominal voltage (DC / DC converter) for stabilizing the voltage of the control outputs by configuration
- Status display for status of each output on the front side of the module
- Control via voltage increase or polarity inversion
- Controlling either delayed or continuous
- Integrated module status LED on the front of the module for displaying the current module status
- Button on the front of the module for initiating modulespecific functions

#### Application

Monitoring and control of e.g. valves, solenoids or notification devices in extinguishing systems or other fire control systems. The module DCP-1 Control groups is plugged onto either a module DCP-1 Bus head or a module DCP-1 Bus extension. The power supply and the data connection to the central card are realized via these two modules.

#### Included in delivery

Module assembled and ready for installation.

#### Not included in delivery

Module DCP-1 Bus head	930709
Module DCP-1 Bus extension	930711
Female header HSCP-SP 2,5-1U/4 (50 pcs.)	924202
(Connection plug for field cables)	

#### Note

When using more than 2 functional modules on a function module mounting rail, one module DCP-1 Bus extension, part no. 930711 is necessary for each additional function module.

#### Approvals / marking

See panels





#### Modules

#### **DCP-1 Output Power EFD Module**



#### **Product features**

- 2 filtered power supply outputs for external devices with 24 V / 2 A each
- Redundancy via two processor cores
- Integrated electronic fuses (no replacement required)
- 1 input for ground fault monitoring between control panel voltage and protective earth (PE)
- Indication of the state of the outputs at the front of the module

#### **Technical specifications**

•	
Operating voltage floating	19 V - 29 V DC
Operating voltage regulated (optional)	21.6 V - 26.4 V DC
Quiescent current	18 mA
Number of outputs	2
Ground fault channel	1
Current consumption per output	max. 2 A
Connection cross section	0.2 - 1.5 mm², rigid 0.2 - 2.5 mm², flexiblel
Ambient temperature operation	-5 °C to +60 °C (+23 °F to +140 °F)
Ambient temperature storage	-30 °C to +80 °C (-22 °F to +176 °F)
Relative humidity (IEC 721-3-3)	max. 95 % no condensation
IP rating (EN 60529)	IP 20
Enclosure	Polycarbonate, grey
Installation position	vertical
Mounting	pluggable onto module Bus head or module Bus extension,
Number of female connectors	max. 3
Weight	163 g (0.63 lbs)
Dimensions	39.7 x 147 x 102 mm (WxHxD) 1.6 x 5.8 x 4.0 inch (WxHxD
Part no. (not available for order)	930714

#### Order no.: 930715

Function module for use in all design variants of the Clunid DCP-1 series. The integrated, redundant design enables high reliability of the module. The module contains 2 outputs for supplying external devices with an operating voltage of 24 V DC and one input for ground fault monitoring.

- Optional use of a regulated 24 V nominal voltage (DC/DC converter) for stabilization of the voltage of the voltage outputs via configuration
- Integrated module status LED on the front of the module for displaying the current module status
- Button on the front of the module for initiating modulespecific functions

#### Application

The Module Output power EFD is used to connect external loads. In addition, the module can detect and signal a ground fault between the internal voltage of the control panel and protective earth (PE). The module Output power EFD is plugged onto either a module DCP-1 Bus head or a module DCP-1 Bus extension. The power supply and the data connection to the central card are realized via these two modules.

#### Included in delivery

Module assembled and ready for installation.

#### Not included in delivery

Module DCP-1 Bus head	930709
Module DCP-1 Bus extension	930711
Female header HSCP-SP 2,5-1U/4 (50 pcs.)	924202
(Connection plug for field cables)	

#### Note

When using more than 2 function modules on a function module mounting rail, one module DCP-1 Bus extension, part no. 930711, is necessary for each additional function module.

#### Approvals / marking

See panels

NIKING



#### Modules

#### **DCP-1 Network Module**



#### **Product features**

- Max. network size: 64 participants
- Ethernet or BroadR-Reach signal transmission
- Max. cable length (BroadR-Reach 10 Mbit/s): up to 450 m (CAT7), 350 m (twisted pair fire alarm cable)
- Max. cable length (Ethernet 100 Mbit/s) up to 100 m (CAT7)
- Configurable data transfer rate, ground fault monitoring as well as automatic connection monitoring
- Module redundancy through second processor core
- Integrated module status LED on the module front to display the current module status
- Status LED of the individual network connections (LNK/ACT) for displaying connection (green) and activity (yellow) for each RJ45 port
- Button for initiating module-specific functions on the module front

#### **Technical specifications**

Operating voltage	19 V - 29 V DC
Current consumption (module in standby, no output active)	85 - 102 mA (depending on port configuration)
Network connections	4x RJ45
Equipotential bonding terminal	2x Push-in spring cage
Operating temperature	-5 °C to +60 °C (+23 °F to +160 °F)
Storage temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Relative humidity	max. 95 % no condensation
IP rating (EN 60529)	IP 20
Enclosure	Polycarbonate, light grey
Installation position	vertical
Mounting	attachable onto module Bus head or module Bus extension
Weight	345 g (0.76 lbs)
Dimensions	39,7 x 147 x 102 mm (BxHxT) 1.56 x 5.79 x 4.02 (WxHxD)
Part no. (not available for order)	934768

#### Order no.: 934769

Functional module for use in all design variants of the Clunid DCP-1 series. The integrated, redundant design enables a high degree of reliability of the module. The module supports the Multiple Spanning Tree Protocol for the networking of Clunid control panels, which automatically determines the shortest path between two participants in a network and ensures that the shortest connection within the network is re-determined in case of a connection failure. Up to 64 participants can be networked. An Ethernet or BroadR-Reach signal transmission as well as the data transmission rate and ground fault detection can be configured. The connection monitoring takes place automatically after corresponding port activation in LogicManager.

#### Application

The DCP-1 Relay PLC module is plugged onto a module DCP-1 Bus head or module DCP-1 Bus extension. The PLC relays and PLC adapters are installed on the 35 mm mounting rail in the control panel.

#### Included in delivery

Module completely assembled and ready for installation.

#### Not included in delivery

Module DCP-1 Bus head	930709
Module DCP-1 Bus extension	930711
Patch panel FL-PP-RJ45-SCC	914347
Patchcable CAT7 0,15 m	4001483
Patchcable CAT7 1,5 m	4001441
Patchcable CAT7 2 m	4001443
Patchcable CAT7 3 m	4001444

#### **Optional accessories**

	4004500
LWL Converter FL MC 1000 SC	4001520

#### Note

When using a total of more than 2 functional modules on a function module mounting rail, a module DCP-1 Bus extension, part no. 930711, is required for each additional module. For longer distances, a network can be set up in fiber optic technology. The LWL Converter FL MC 1000 SC, part no. 4001520, must be used.

#### Approvals / markings

See panels





#### Accessories

#### **Gateway Clunid GW54**



#### **Product features**

- Universal platform for the connection of a Clunid or FMZ 5000 series fire alarm control panel
- · Provision of a Web API for third-party products
- Graphical user interface via the UCC App (Unified Command & Control)
- Functional expansion via additional licenses: Modbus IP, OPC UA/Pro

#### **Technical specifications**

Rated voltage	100 - 240 V AC
Rated current max.	0.8 A (100 V AC) 0.4 A (240 V AC)
Current consumption typ.	0.065 A
Fuse F1 / F2 time-lag H	5 x 20; 3.15 A / 250 V
Connection terminals	4 mm <sup>2</sup>
Overvoltage protection	yes
Communication interfaces	Network: 2 x RJ45 Serial: RS232
Operating temperature	0 °C to +45 °C +32 °F to 113 °F
Storage temperature	-25 °C to +60 °C -13 °F to + 140 °F
Relative humidity	max. 90 % no condensation
IP rating (EN60529)	IP 54
Mounting position	wall mounting
Enclosure	Polycarbonate
Color	RAL 7035, cover transparent
Weight	4.5 kg (9.92 lbs)
Dimensions with Frame Housing	400 x 350 x 132 mm (WxHxD) 15.7 x 13.8 x 5.2 inch (WxHxD) 400 x 350 x 187.1 mm (WxHxD) 15.7 x 13.8 x 7.37 inch (WxHxD)

# Approvals / markings

#### Part no.: 4002945

The Gateway Clunid GW54 serves as a universal platform for connecting Clunid and FMZ 5000 series fire alarm control panels. The Gateway is integrated into an IP54 housing including power supply, power terminals and fuse. In addition to the possibility of virtual networking of control panels (UCC App), the Gateway offers a Web API for connecting third-party BMSs. The Inveron hazard management system already offers an implemented interface for the Web API. The UCC App can be used to provide a graphical control and command center for receiving messages and sending commands. The functions of the Gateway can be extended via licenses: The Modbus IP and OPC UA License packages enable data exchange via standardized protocols.

#### **ISoftware applications**

Pre-installed, ready for operation:Clunid Connector AppFMZ 5000 ConnectorUCC AppSoftware licenses, seperately available:License package Modbus IP4005425License package OPC UALicense package OPC UA4005426License package OPC UA Pro

#### Included in delivery

Gateway Clunid GW54 Mounting material Cable Gateway - Module FMZ5000 MxNet Installation instructions (de/en)

#### Not included in delivery

Module DCP-1 Network ET	934769
Module FMZ 5000 MxNet	904877
Attachment Frame Housing 300x400x55 PC	4005905
Patch cable RJ45	

#### Spare parts

Fuse 3.15 A/250V miniature time-lag H	908576
Cable gland M20x1,5 mold.mat. GY SKINTOP	900453
Locknut 20x1.5 molding material	801722
Cable gland M20 split	4002946
Power supply UNO-PS/1AC/24DC/ 30W	4005904

#### Note

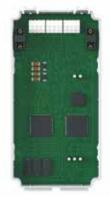
For the connection of a fire alarm panel of the series FMZ 5000 to the gateway, the FMZ 5000 MXNet module and the Attachment Frame Housing are required. For the insertion of a RJ45 patch cable, the cable entry for the data cable in the housing has been implemented as a separable entry with two openings.





#### Modules

#### **DCP-1 Zone Control Panel Module**



#### **Product features**

- 16 freely configurable capacitive buttons 1 capacitive button per zone
- 16 freely configurable status LED each in yellow and red
- Individual labeling option for each pair of LEDs or each switch button via inlay sheets
- Simple installation via click-in technology

#### **Technical specifications**

•	
Operating voltage	19 V - 29 V DC
Quiescent current	16 mA
Current increase per active LED (constant light)	3 mA
Number capacitive buttons	16
Number LED red	16
Number LED yellow	16
Ambient temperature (operation)	-5 °C to +60 °C (+23 °F to +140 °F)
Storage temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Relative humidity	max. 95%, no condensation
Installation position	vertical
Mounting	click mounting in the frame of the front cover
Weight	107 g (0.24 lbs)
Dimensions	70 x 113 x 11 mm (LxHxD) 2.76 x 4.45 x 0.43 inch (LxHxD)
Part no. (not available for order)	931555

#### Order no.: 931469

Zone control panel for use in all design variants of the Clunid DCP-1 system. This module is a free configurable input and output interface installed in the front of the control panel. The zone control panel also serves as a display and control panel for individual extinguishing zones and as individual detector group display for fire detection systems.

#### Application

LEDs display alarms, faults, status messages and operating signals. The buttons can be used to implement various functions, such as disablements, confirmation, etc. Each button can be configured via the LogicManager as a capacitive button or with switch function.

#### Included in delivery

Module completely assembled and ready for installation. Short connection cable for connection to another zone control panel at the front panel.

#### Not included in delivery

Wiring harness 10-pol L700-2 socket strip903942(Connecting cable between two zone control panels)

#### Approvals / marking

See panels

## Socket Clunid card BBF

#### Part no.: 926970

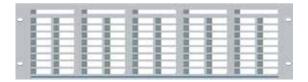
Unassembled socket to increase front foil strength when zone control panel slots are not in use and for use behind the Foil DCP-1 cover BBF, part no. 932556.





## Fire detection and suppression control panels Enclosure/front plates

#### **DCP-1 Zone Control Panel Front Plate**



#### Part no.: 930679

Front plate for mounting in the front frame of the enclosures of DCP-1 14UD, 21UD and 40UD. Labeling is carried out via an insert sheet for each area control panel. The module DCP-1 zone control panel, part. no. 931469, is simply plugged into the front plate and locked in place using latching lugs.

#### **Technical specifications**

Color	RAL 7035
Material	Aluminum
Weight	500 g (1.1 lbs)
Dimensions	19" x 4U (WxH)

#### Included in delivery

Front plate complete and ready for installation in the front of a fire detection and suppression control panel DCP-1.

#### Not included in delivery

Module DCP-1 zone control panel	931469		
Pan-head screw with washer M6 x 16 (PU 50 pcs.)	607284		
Nut KM6 "cage nut"	138670		
Wiring harness 10-pin L700-2 socket strip	903942		
(Connection wire between two front plates zone control panels)			
Foil DCP-1 cover BBF	932556		

#### Note

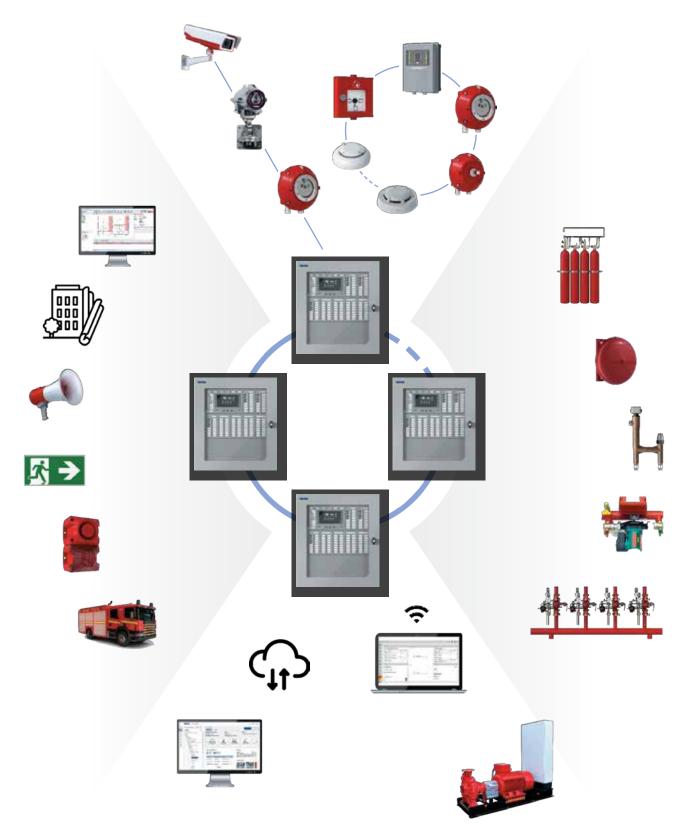
Connection wire (short) for two Zone control panels is included in delivery of module Zone control panel, part no. 931469.





## **DCP-1 Connectivity Options**

Standard and industrial detectors



*Note*: Certain options will only be available at a later date.



# NOTE

## **PRODUCTS & SOLUTIONS**

To address a wide spectrum of fire risk and challenges, Viking offers a broad and comprehensive range of products, systems and solutions classified into these four product groups:

- Water Water based fire suppression technologies
- **Foam** Foam based fire suppression technologies
- Gas Gaseous and clean agent based fire suppression technologies
- Fire Alarm & Detection Fire detection and warning technologies

Fire Sprinklers Standard Coverage Extended Coverage Storage Dry Special Residential Nozzles	Valves • Wet / Alarm • Deluge & Preaction • Dry Pipe • Pressure Regulating • Butterfly • Gate • Check	Flexible Sprinkler Hose Escutcheons Guards & Shields Test & Drain Multiple Jet Control Wrenches & Adapters Flow Meter & Proving Pipe Water Mist Systems
Fluorine Free Systems Storage Tanks • Vertical Bladder Tank • Horizontal Bladder Tank • Atmospheric Storage Tank • Tank Accessories • Pre-assembled Foam Bladder Tank	Discharge Devices • Foam Generator • Foam Sprinkler / Nozzle • Grate Nozzle • Tank Protection Monitor Equipment Foam Pump Products Valves & Accessories	<ul> <li>Proportioning Devices</li> <li>ILBP / Balanced Proportioner</li> <li>In-line Eductor</li> <li>Ratio Controller</li> <li>Wide range Proportioner</li> <li>Foam Concentrates</li> <li>Synthetic Fluorine Free Foam</li> </ul>
CO2 • High Pressure • Low Pressure Clean Agent Systems • FM-200 <sup>®</sup> Systems • Novec™ 1230 Systems	Pre-Engineered Systems • FM-200° Systems • Novec™ 1230 Systems Cabinet Protection System Server Rack Protection System	Inert Gas Systems • IG-01 • IG-100 • IG-55 • IG-541
Control Panels <ul> <li>Addressable</li> <li>Conventional</li> <li>Extinguishing</li> <li>Mimic</li> </ul>	Detectors • Smoke • Heat • Flame • Infra Red • Beam	Manual Call Points Strobes Sounders Bells Interface Modules I.S. / Explosion Proof Devices Marine Application Field Devices

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