



FC330A-ECO

Synova™

Auto-addressing analogue 1-Loop fire detection panel

CE

-
- Commissioning in no time – thanks to automatic address allocation
 - Auto-addressing makes setting dip switches unnecessary
 - Automatic localizing of interruptions & shorts
 - Unshielded cables prevent irksome ground-returns
 - Periodic self-test facility
 - Serial interface for third-party building management systems, repeaters, printer, etc.
 - Additional cards may be retrofitted at anytime for customized solutions
 - Maintenance can be tailored to customer needs

Features

The FC330A-ECO has all the requirements for intelligent systems. Addressing is automatic and address allocation takes only seconds. To improve security and increase speed, distributed intelligence enables detectors to verify danger signals independently.

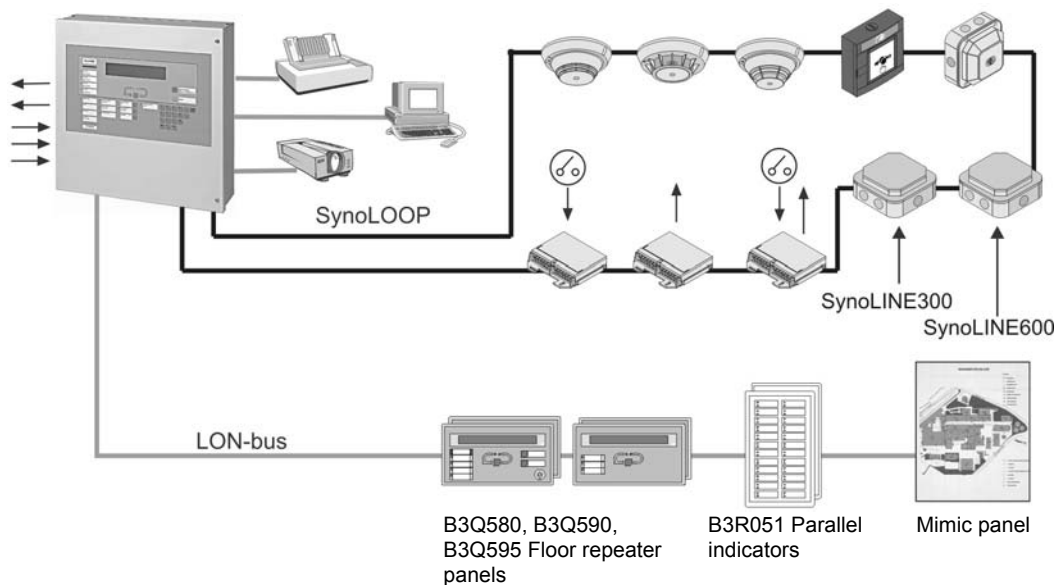
128 addressable Synova fire detectors, regardless of type, may be connected to the FC330A-ECO fire detection panel.

Commissioning, which comprises auto-addressing of all connected elements, is executed by the intelligent SynoLOOP transmission protocol. Time-consuming preparatory work such as setting dip switches etc., is no longer necessary, providing reliable on-time commissioning.

Siemens equips all auto-addressable elements with isolating links so they do not require individual resetting. If a short circuit occurs, the panel localizes and isolates the defective cable section. The loop system permits data flow in both directions up to the error source, with optimum safety. Thanks to automatic isolation, planning or adapting detector groups or fire sections to changing needs is more convenient.

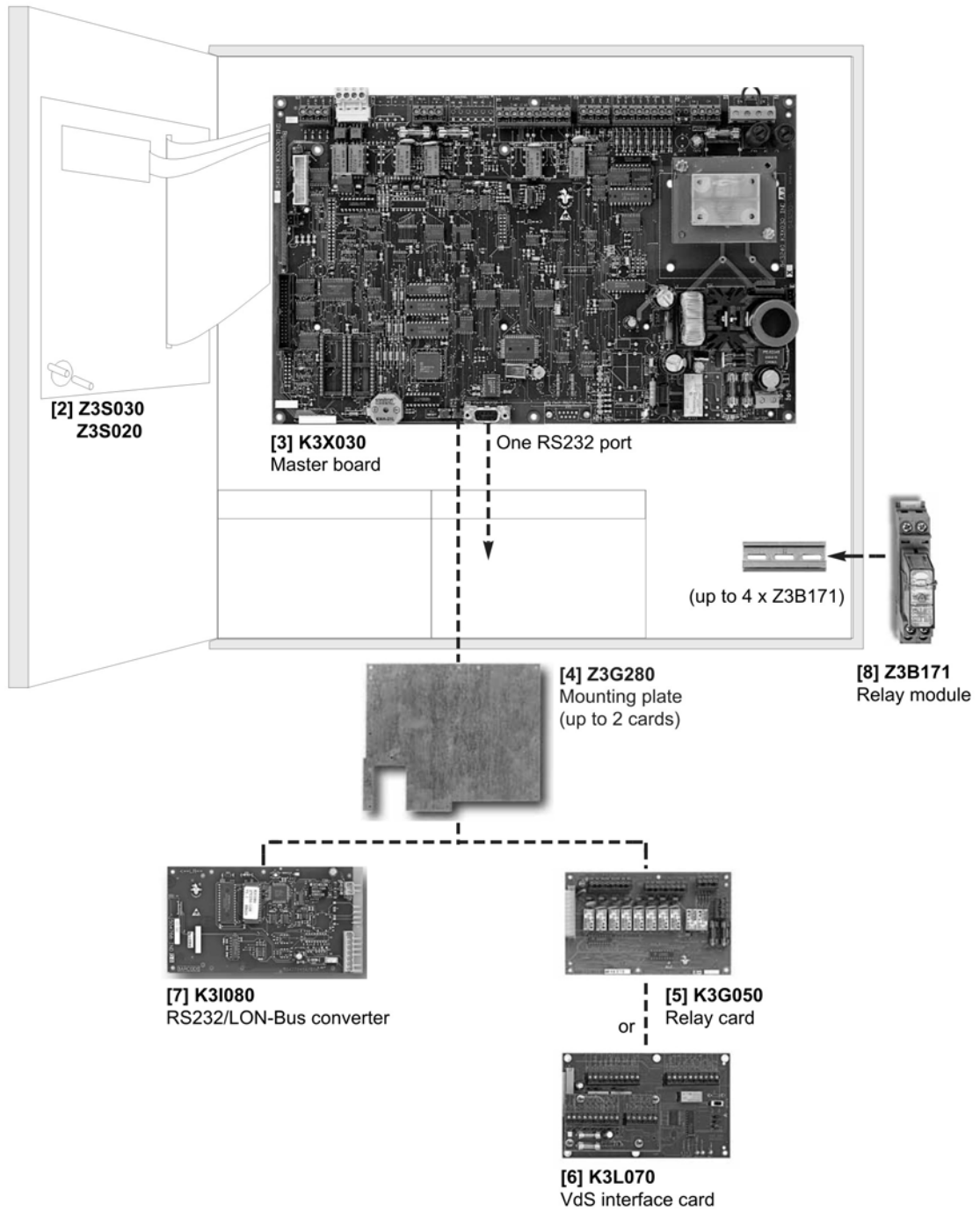
Expansion with various additional cards opens the door to almost unlimited customized solutions.

System overview



FC330A-ECO and its expansions

[1] FC330A-ECO
Control panel, 1 loop





[1] Fire detection panel FC330A-ECO

The FC330A-ECO fire detection panel accommodates:

- Smoke, heat and multi-sensor detectors and manual call points from different series
- Special detectors (flame detectors, highly sensitive detectors) for special applications
- Input and output modules
- Siren outputs

Fire detection panel FC330A-ECO is equipped with state-of-the-art software; virtually unlimited range of applications may be programmed easily.

It provides:

- Intuitive, menu-driven operation
- 128 free definable detector groups
- Dual-detector independence
- Chronological storage and retrieval of up to 200 events
- Windows-based software tool for parameter programming, etc.



[2] Access with key Z3S030/Z3S020

The system operator may access the fire detection system in three ways: by password, without a password, or with a key. Two kinds of key switches are available:

- Module Z3S030 is integrated in an existing like-key concept
- Module Z3S020 follows the Nordic fire brigade concept



[3] SynoLOOP master board K3X030

The master board is the basic control panel module and is part of its basic equipment. Switched on, the master board recognizes all connected elements and is ready to transmit fire alarms.

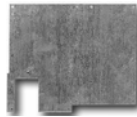
One auto-addressable loop with 128 devices (or one stub line with 32 addressable detectors). The master board has in addition the built in:

- 8 programmable control outputs
- 2 supervised horn outputs
- 2 Alarm and fault relays
- 4 programmable inputs
- 4 LEDs activated via external inputs

The RS232 interface accommodate alternatively various applications:

- System programming
- Printer connection for event protocol printouts
- LON-bus connection
- Incorporation in a building management system (BMS)

Connection of the Visualizer training tool, to operate the FC330A-ECO via your PC.



[4] Mounting plate Z3G280

The mounting plate is needed to connect up to two expansion cards, to be mounted over the master board K3X030. The cards may be mounted either vertical or horizontal.

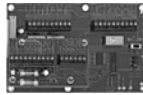


[5] Relay card K3G050

The relay card K3G050 triggers fire controls such as activation of fire doors or air vents. It offers additionally the following outputs:

- 8 relay switch contacts (max. 30 VDC / 2 A)
- 4 programmable outputs (24 VDC, 48 mA)
- 2 supervised outputs (sirens, 24 VDC, 500 mA)

One plug is provided for the K3G050 or for the K3L070.



[6] VdS Interface Card K3L070

This card is only needed, when VdS peripherals are specified.

The card contains the fire service key box adapter. It also permits the connection to a fire brigade operating panel or a transmission device. A standard extinguishing interface is provided.

One plug is provided for the K3L070 or for the K3G050.



[7] LON-bus converter card K3I080

The K3I080 LON-bus converter card is used to connect to the control panel with various LON-bus applications:

- Floor repeater panels
- Mimic panels
- LED parallel indications
- Various signal in and output possibilities

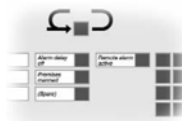
Converter cards on the LON-bus make numerous user-oriented solutions possible. For instance, up to 16 floor repeater panels may be connected to the LON bus and up to 256 addresses can be managed for max. 9216 LED displays.

The LON-bus converter card is built directly into the control panel and connected to the RS232 serial output. For more information consult the data sheet 007349.



[8] Relay module Z3B171

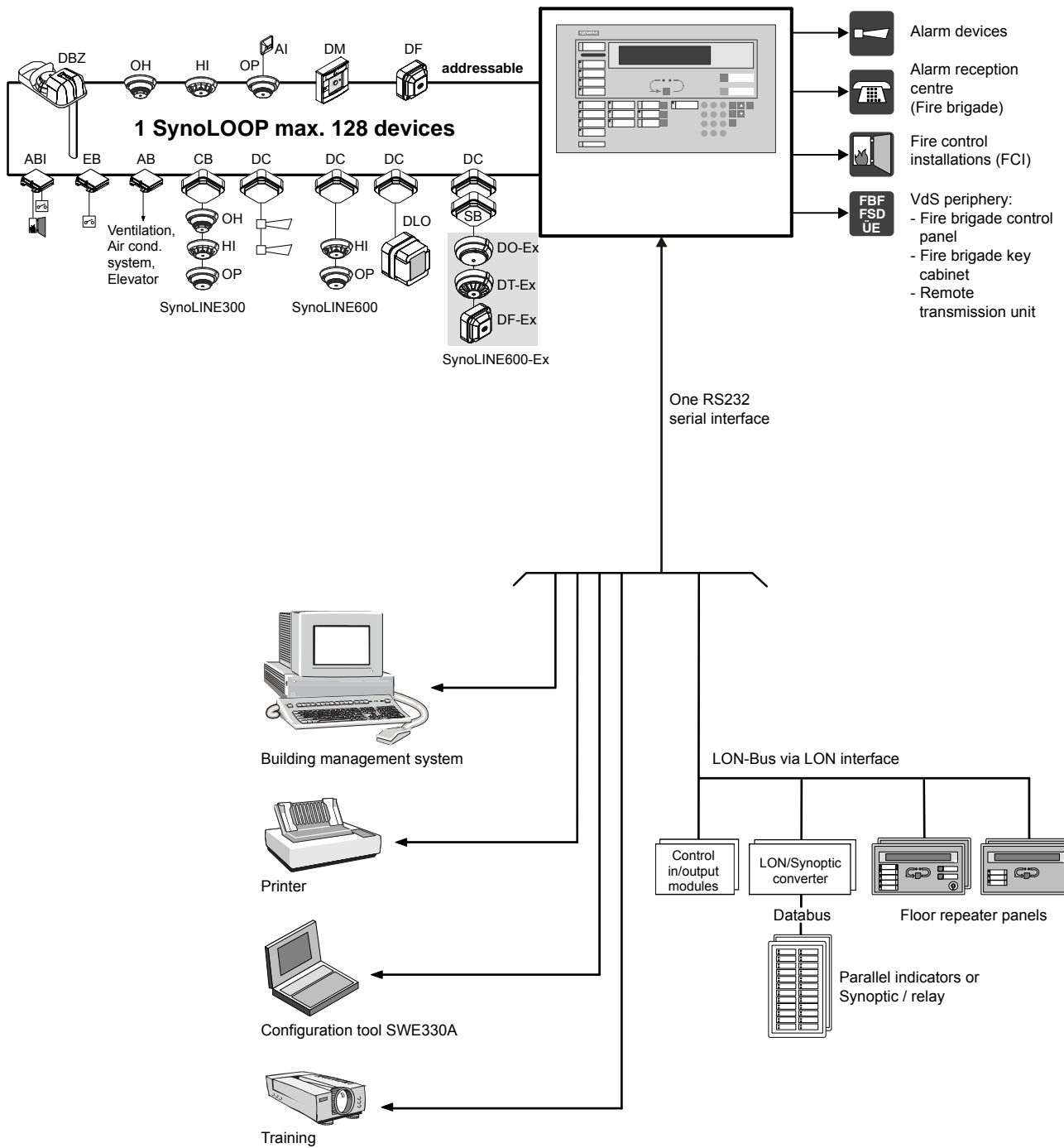
The relay module (250 VDC, 10 A) is an additional control module, activated by the control panel's control outputs. Up to 4 relay modules may be connected to the FC330A-ECO.



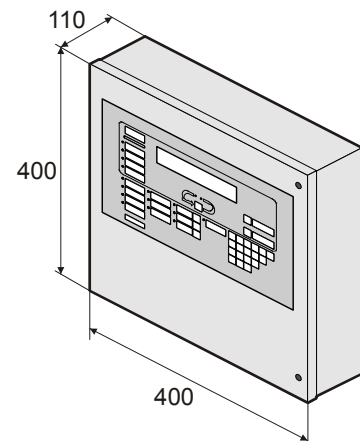
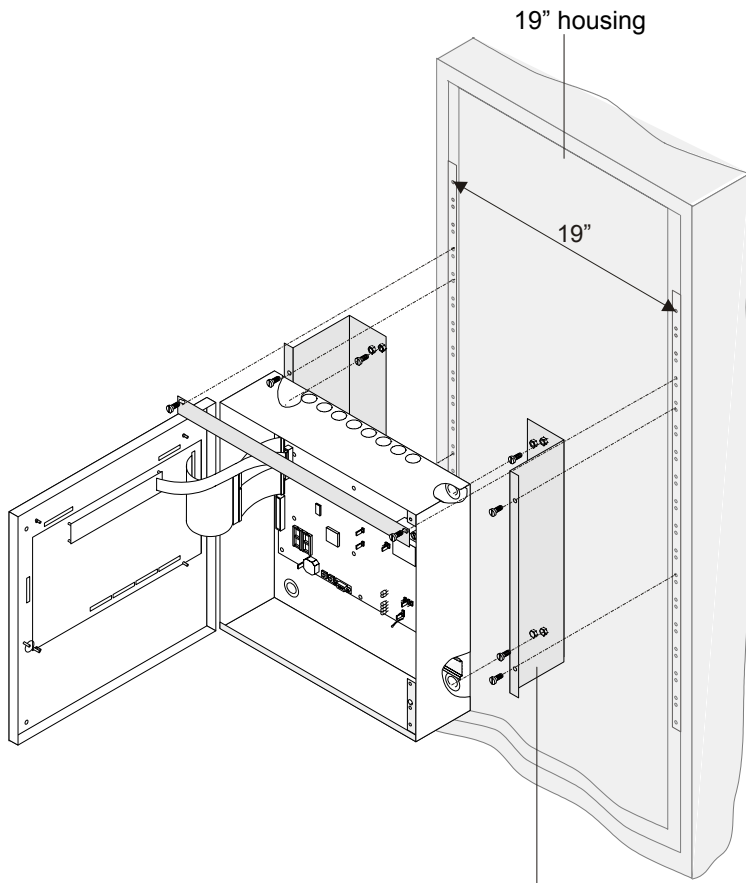
Programmable key

A key on the key pad can serve as additional input. The key may be programmed for various functions (e.g. lamp test). It can be easily connected via the F02F290 to the master board K3X030.

Detailed system overview



Dimensions



Z3G290 (needs 10 rack units)
1 rack unit = 44.45 mm

Technical data

Type	K3X030	K3G050	K3I080	K3L070	Z3B171
Current consumption for FC330A-ECO and expansions					
Operation current	100 mA 1)	20 mA	10 mA	12 mA	0 mA
Alarm current	+9 mA 2)	+9 mA 2)	0 mA 3)	+40 mA	+27 mA
	1) 0.2 mA normal operation current consumption per addressable device connected 2) Per activated contact/control line/buzzer, without external load (sounders, etc.) 3) LON-devices see document 007349				
Detector loop (SynoLOOP)	1				
Programmable outputs	8 x 24 VDC / 48 mA + 4 optional				
Relay output for transmission	2 x 30 VDC / 1 A				
Supervised outputs	2 x 24 VDC / 500 mA + 2 optional				
Programmable inputs	4				
Programmable key input	1				
Programmable fire zones	128				
Programmable control zones	128				
Line resistance addressable loop	150 Ohm / 300 nF				
Supply voltage	115/230 VAC $\pm 15\%$ (VdS: +10 %) 50... 60 Hz				
Power consumption	max. 50 VA				
Battery	2 x 12 V / 12 Ah				
Standards	EN54-2, EN54-4				
Color	light grey, RAL 7035				
Operating temperature	0... +50 °C				
Humidity	$\leq 95\%$ rel.				
Protection category	IP40				
Approvals					
- VdS	G298015				
- LPCB	126h/03				

Reference documents

Doc. no.1583	Synova™ FC330A	Fire detection system (Planning, Installation, Commissioning, System operating, User application settings, Background information, Trouble shooting, Maintenance, Appendix)
Doc. no. 1923	Synova™ FC330A	Remote indicating & Control devices, Logging Printer (Installation & Commissioning).
Doc. no. 1973	Synova™ FC330A	Operating
Doc. no. 007349	LON-Bus	Data Sheet

Details for ordering

	Type	Part no	Designation	Weight
Control unit	FC330A-ECO	5437160001	Control panel 1 Loop analogue auto-addressing	8.000 kg
	FC330A-ECO-CH	5775750001	Control panel 1 Loop analogue auto-addressing including accessories for 'CH' incl. inscription stripes	8.000 kg
Accessories	FCA...	Accessory set (EPROM, inscription stripes) available languages see document 1583	0.040 kg
	Z3S020	4840820001	Key switch module 'Nordic access key'	0.140 kg
	Z3S030	4840950001	Key switch module 'like-keyed'	0.140 kg
	Z3B171	4843830001	Relay module with 1 contact 250 VAC, 10 A	0.040 kg
	F02F290	5137620001	Connecting ribbon cable for optional key	0.210 kg
	TKU2	2305080001	Surveillance contact	0.019 kg
	Z3G290	5661590001	Adapter set 19"	2.400 kg
Expansion	Z3G280	5661460001	Mounting plate for expansion cards	0.500 kg
	K3G050	5129700001	Relay card	0.254 kg
	K3L070	5238200001	VdS-interface card 'D'	0.330kg
	K3I080	5047680001	RS232/LON-bus converter	0.325 kg

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