SIEMENS

FC2060

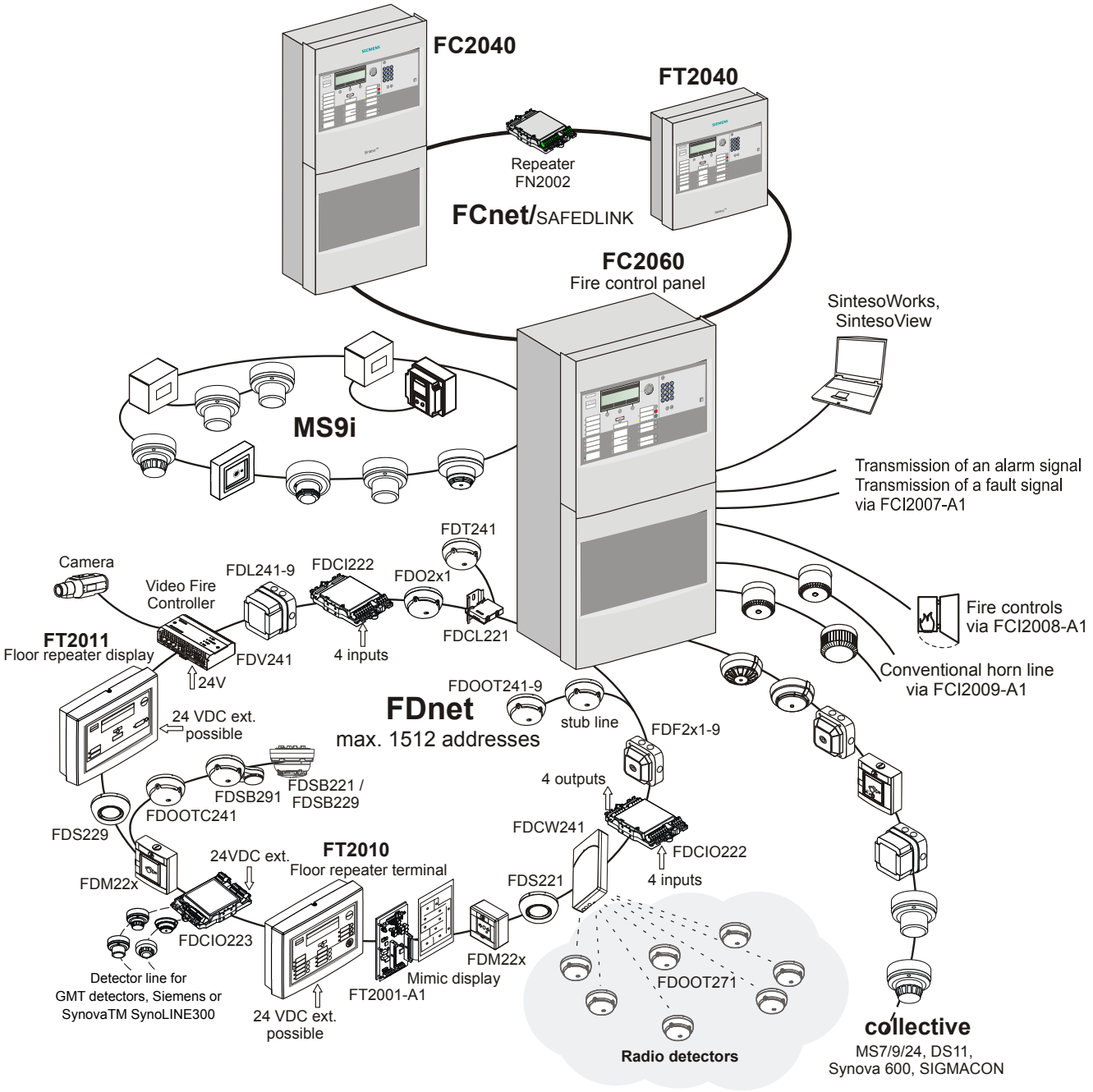
Sinteso™

Fire control panel

CE

FS20 series (MP4.0)

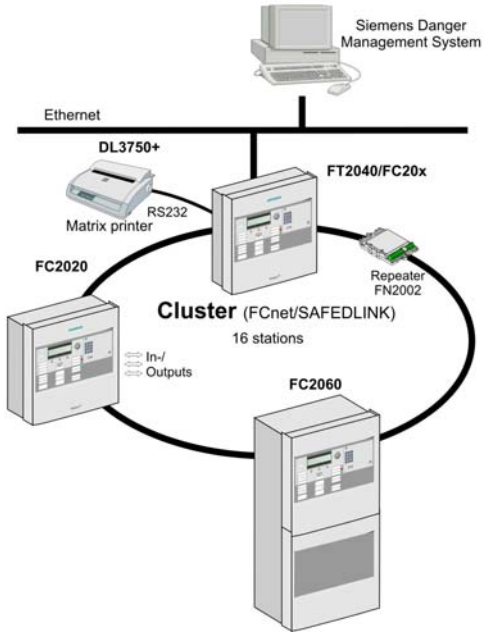
- **Modular, prefabricated, microprocessor-controlled fire control panel with integrated user-friendly operating unit for up to max. 1512 addresses**
- **Processes signals from various detector systems like:**
  - FD20 devices of the Sinteso series
  - collective fire detectors of the MS7/9/24, DS11, Synova 600, SIGMACON series
  - addressable fire detectors of the MS9i series
- **Fire control panel can be used as stand-alone version or can be networked**
- **Up to 64 stations (fire control panels and fire terminals) can be connected in one network**
- **Integrated degraded mode function**
- **Redundant network node, degraded mode operation according to EN 54**
- **Fast Ethernet interface for a heterogeneous network**
- **Option of printer, key switches, LED displays**
- **Slots for serial ports and max. 5 extra cards**
- **Emergency power supply for emergency operating time of up to 72 hours**
- **Recognition and automatic read-in (auto configuration) of all FDnet devices, ready for operation immediately**
- **Time and situation-dependent changeover of detector parameter sets**
- **Floor repeater devices, alarm devices and mimic displays in detector loop (FDnet)**
- **Flexible programming of complex applications and controls**
- **Stored data can be uploaded via remote access**
- **Firmware download of all processor controlled control panel components**



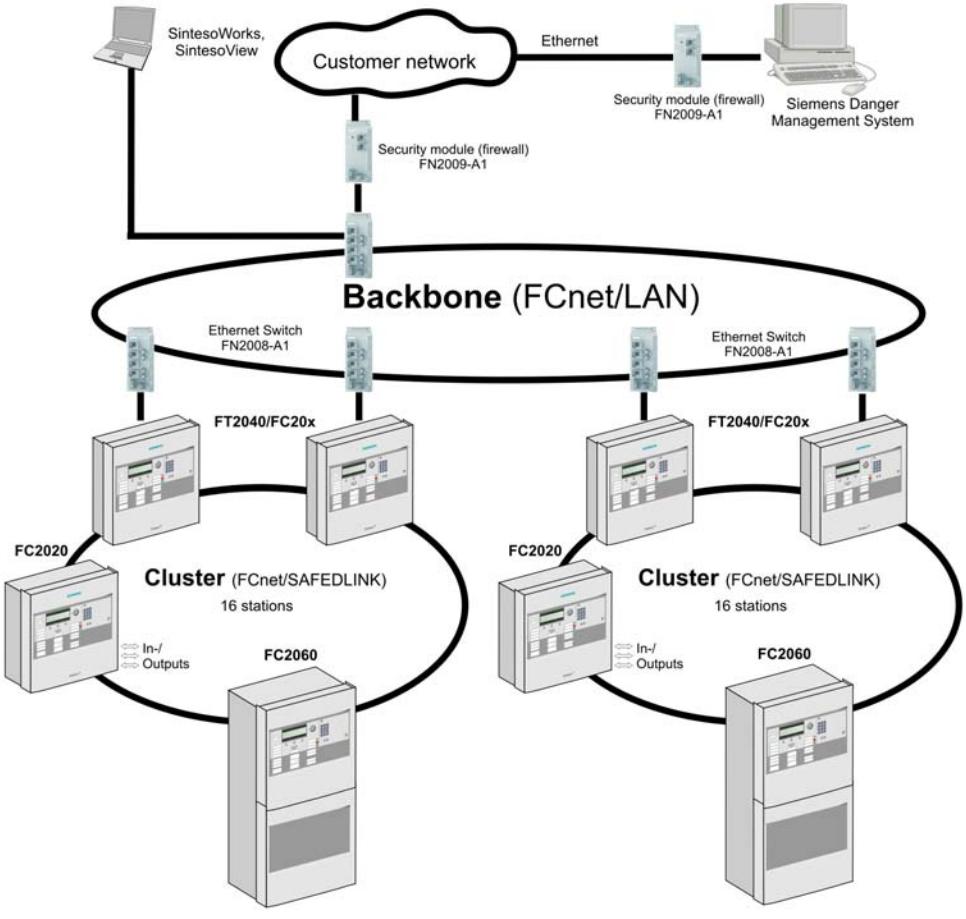
FDnet	Collectively	MS9i	I/Os (programmable)
4 integrated loops (8 with loop extension) + 4 loops with max. 252 addresses per line card	8 lines per line card	2 loops per line card (with max. 100 addresses per line card)	12 free programmable inputs/outputs per I/O card

Mixed usage possible, but with a max. of 5 cards per control panel.

Up to 32 fire control panels und fire control terminals can be connected in a single cluster (FCnet/SAFEDLINK) or up to 16 stations when the cluster is connected to a danger management system.



Using a fiber-optic Backbone (FCnet/LAN) up to 14 of the above mentioned clusters (with up to 16 stations each) can be networked. The entire network may contain up to 64 stations.



➔ For details about system networking, please refer to product data sheet 008955.

Characteristics

- The FC2060 is a modular fire control panel with integrated operating unit for large installations and for modernizing large older fire detection installations.
- The FC2060 processes signals from Sinteso, collective MS7/9/24, DS11, Synova 600, SIGMACON and addressable MS9i devices.
- An integrated card cage with 5 slots allows
  - FDnet line cards FCL2001-A1 to be used (for extra lines)
  - Collective line cards FCL2002-A1
  - MS9i line cards FCL2003-A1
  - I/O card FCI2008-A1 (with 12 programmable inputs/outputs)
- Mixed use of all line and I/O cards possible.
- In the event of a defect, the extra line cards can be replaced without the control panel having to be powered down.
- The fire control panel may be used as a stand-alone unit or networked.
- Using the user-friendly engineering tool SintesoWorks, the control panels can be configured to create a customized solution.
- Adaptation of customer texts on the terminal itself or using the configuration tool.
- Up to 2000 events can be stored and recalled according to various criteria.
- Automatic daylight saving time switchover.
- Integration to Siemens Danger Management System.

Functional elements

Operating unit

The following are located on the operating unit:

- CPU module and electronic components for operating unit
- Ethernet connection
- Plug-ins for RS232, RS485 modules and networking modules (SAFEDLINK)
- Space for 'Kaba' or 'Nordic' key switch
- Space for event printer

Periphery board

The following are located on the peripheral board:

- Connection terminals for FDnet loops, remote transmission (alarm, fault), horn outputs, programmable control inputs/outputs, monitored alarm and fault output, degrade supply, power supply
- 2 plug-ins for loop extension (FDnet)

Card cage (5 slots)

There is a card cage on the rear housing panel for use of max. 5 line cards (FDnet, collective, MS9i) and/or I/O cards.

Power supply unit 150 W, emergency power supply

Provides the hardware with the necessary power and charges the batteries

- The batteries supply emergency power in case of power failure

Housing
A pivoting mounting panel can be installed on the housing backplane to allow installation of:
- 1 fire brigade periphery module
- 2 sounder modules (can also be mounted onto the U-rail TS35)

Configuration
The engineering tool (SintesoWorks) permits the system to be adapted to specific customers' requirements.

Application ranges

The FC2060 is ideally suited to large applications, e.g. for industrial plants, office complexes, chemicals, manufacturing etc. During modernization, it is also suited to a gradual seamless transition from older systems to Sinteso.

Operation

Each control panel has an integrated operating panel. The control panel can also be operated from a separate FT2040 operator terminal or any other control panel.

➔ For details and further information, please refer to product data sheet 009386.

Overview of FC2060-AA fire control panel (modular)

Control panel

FC2060-AA

Housing (Large)

4 loops
with power supply (150 W)
Max. battery capacity 45 Ah
with card cage (5 slots)
for extra line cards like
FDnet, collective, MS9i
or I/O card

Housing extensions

FH2004-A1

Housing (Large extension)
430 x 398 x 260 mm

Space for larger batteries
2 x FA2007-A1 (45 Ah) or
2 x FA2008-A1 (65 Ah) or
2 x FA2009-A1 (100 Ah)

FH2005-A1

Housing (Large)
430 x 796 x 260 mm

Space for larger batteries
– 4 x FA2006-A1 (26 Ah) or
4 x FA2007-A1 (45 Ah) or
2 x FA2008-A1 (65 Ah) or
2 x FA2009-A1 (100 Ah)

Printer

FTO2001-A1

Event printer
can be fitted

RS232 module must be
ordered separately

Operating add-ons

FCM2006-A1

48 display groups
with one red + one yellow LED

for retrofitting

FCM2007-A1

96 display groups
with one red + one yellow LED

for retrofitting

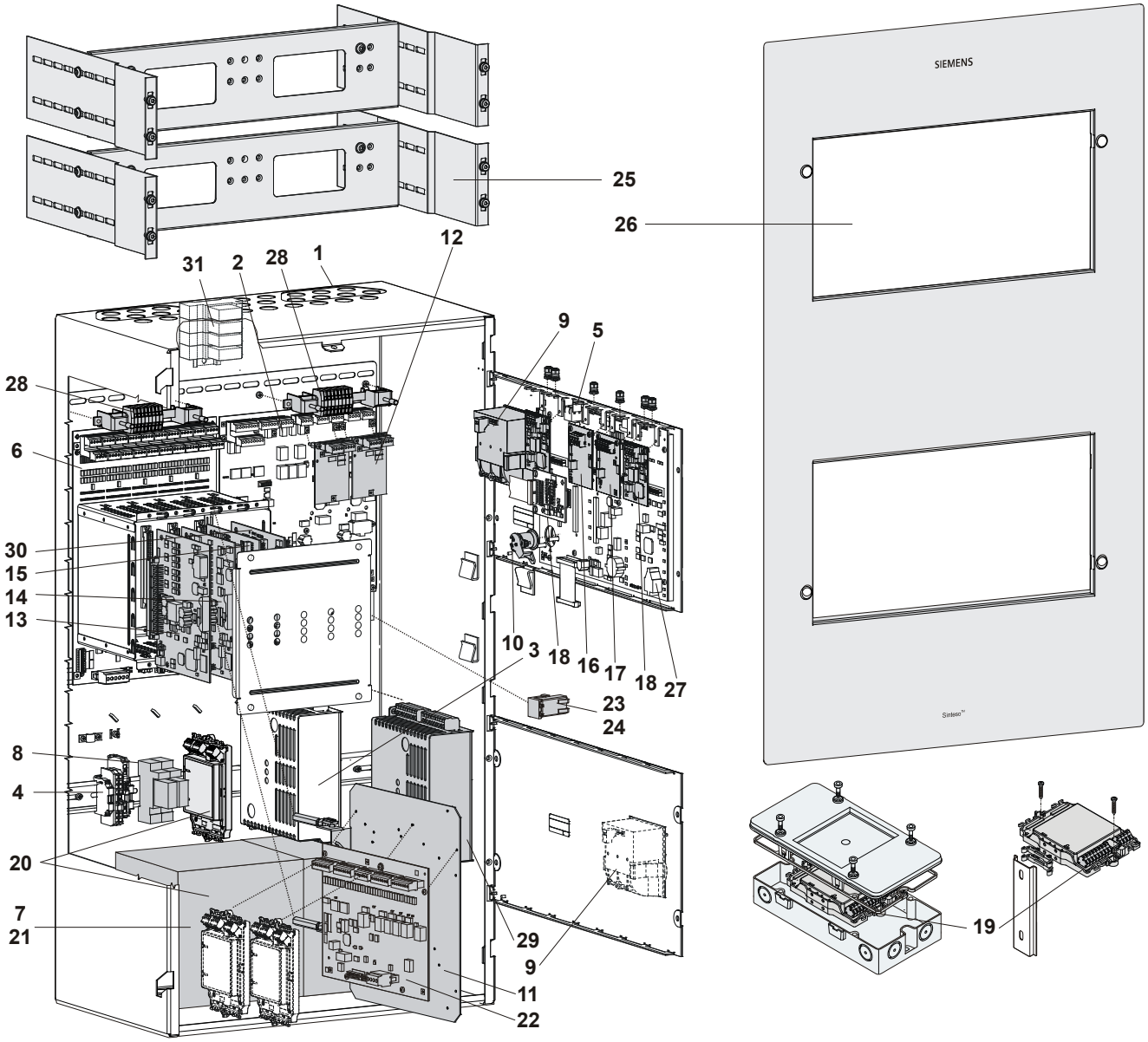
External printer

DL3750+

Matrix printer (external)
RS232 interface

RS232 module must be
ordered separately

FC2060 configuration in housing (Large)



Basic equipment		Designation	Notes
1	Rear (Large)	FHA2005-A1	Items 1-6 –> basic equipment
2	Periphery board (4 loops)	FCI2004-A1	
3	Power supply (SV 24V-150 W)	V24230-Z6-A4	
4	Mains terminals on TS35 DIN rail	–	Space for socket, relay modules etc.
5	Operating unit	FCM200x-xx	System operation and CPU at the same time, incl. cover cap
6	Card cage (5 slots)	FCA2008-A1	For FDnet, collective, MS9i line cards and I/O cards
7	Space for batteries	–	2 x 12 V / 7… 45 Ah
Expansion			
8	Relay module	Z3B171	Relay for fire controls
9	Event printer	FTO2001-A1	For event logging
10	Key switch (Kaba)	FTO2005-C1	For operating access rights
	Key switch (Nordic)	FTO2006-B1	
11	Mounting plate	FHA2007-A1	E.g. for fire brigade periphery module
12	Loop extension (FDnet)	FCI2003-A1	For loop extension of 2 to 4, number of addresses remains the same
13	Line card (FDnet)	FCL2001-A1	For extra FDnet lines, 4 lines total 252 addresses per card
14	Line card (collective)	FCL2002-A1	For 8 collective lines MS7/9/24, DS11, Synova 600, SIGMACON
15	Line card (MS9i)	FCL2003-A1	For 2 addressable MS9i lines (max. 100 addresses)
16	RS485 module (isolated)	FCA2002-A1	For peripheral devices with RS485 port
17	RS232 module (isolated)	FCA2001-A1	For participant with RS232 port
18	Network module (SAFEDLINK)	FN2001-A1	For networking various stations

19	Repeater (SAFEDLINK)	FN2002-A1	For the extension of the system bus FCnet, max. 1 between 2 stations (mounting direct onto plane surface, onto a U-rail TS35 or in housings FDCH291/292)
20	Sounder module	FCA2005-A1	For split-up of 1 to 4 conventional horn lines
21	Battery (12 V, 7 Ah, VDS)	FA2003-A1	For emergency power supply
	Battery (12 V, 12 Ah, VDS)	FA2004-A1	
	Battery (12 V, 26 Ah, VDS)	FA2006-A1	
	Battery (12 V, 45 Ah, VDS)	FA2007-A1	
22	Fire brigade periphery module	FCI2001-D1	For Germany (FBF, FSD, ÜE, FSE, ÖA, KL)
23	Battery kit (9 Volt)	FCA2010-F1	For 9 Volt battery (3rd voltage source for France)
24	Lithium battery 9 V / 1 Ah	–	For FCA2010-F1
25	19" mounting kit	FHA2016-A1	For the installation in 3rd party housings
26	FM blind 2 HU	FHA2015-A1	For the recess mounting of housings
27	License key L1 or License key (L2)	FCA2012-A1 FCA2013-A1	For SintesoView (Visualizer) For Management System (also includes SintesoView)
28	Cable kit (communication)	FCA2014-A1	For flexible cable connections to the modules on the operating unit
29	Power supply kit (150 W, B)	FP2005-A1	For additional power supply
30	I/O card	FCI2008-A1	12 programmable inputs/outputs
31	Relay module	Z3B171	Space for U-rail TS35 L=70 mm (on site) for max. 4 relay modules

Technical data

CE 0786

Siemens Schweiz AG, CH-6301 Zug
Date: see manufacturing date on the product
0786-CPD-20669

EN54-2, EN54-4
Fire control panel, Safety in case of fire
FC2060-AA
Technical data see Doc. 008836

CE 0786

Siemens Schweiz AG, CH-6301 Zug
Date: see manufacturing date on the product
0786-CPD-20775

EN54-4
Power supply equipment
In fire detection and fire alarm systems
SV24V-150W

Mains voltage	AC 230 V
Power supply	150 W
Operating voltage	DC 21 … 28.6 V
Operating current	max. 5 A
Battery capacity	2 x 12 V, 45 Ah
Battery monitoring / mains monitoring	yes / yes
Connectable detector series	Sinteso, MS7/9/24, MS9i, DS11, Synova 600, SIGMACON
Number of FDnet addresses	max. 1512
Number of lines	
Integrated FDnet or stub lines	4 / 8
– with loop extension	8 / 16
FDnet (4 per line card)	max. 20
Collective (8 per line card)	max. 40
MS9i (2 per line card)	max. 10
Integrated inputs/outputs	
– Relay output	
– Remote transmission alarm	1
– Remote transmission fault	1
– Monitored outputs	
– Alarm	1
– Fault	1
– Horn	2
– Free programmable inputs/outputs	12
Free programmable inputs/outputs with max. 5 extra I/O cards	60 (12 per card)
Operating unit	integrated
Plug-in position for RS232, RS485 serial ports	2
Plug-in position for network modules	2
Plug-in position for loop extension	2
Slots for line cards (on fitted card cage)	max. 5
Mounting spaces for cable kit (communication)	2
Sounder module	max. 2
Ethernet connection RJ45	1
Operating temperature	-8… +42 °C
Storage temperature	-20 … + 60 °C
Humidity (no condensation permitted)	≤95 % rel.
Dimensions (W x H x D)	
– Without cover cap	430 x 796 x 260 mm
– With cover cap	430 x 796 x 288 mm
Color	
– Housing	grey, ~RAL 7035
– Cover cap	white, ~RAL 9010
Protection category (IEC 60529)	IP30
Standards	EN 54-2, EN 54-4
Approvals	
– VdS / LPCB	G208202 / pending

Details for ordering

	Type	Art. no.	Designation	Weight
	FC2060-AA	A5Q00023048	Fire control panel (modular)	20.800 kg
Extensions	Z3B171	BPZ:4843830001	Relay module 250 V AC / 10 A (1 relay)	0.042 kg
	FTO2001-A1	A5Q00010126	Event printer	0.250 kg
	–	A5Q00017619	Replacement printer rolls (10 rolls)	0.090 kg
	FTO2005-C1	A5Q00010113	Key switch (Kaba)	0.013 kg
	FTO2006-B1	A5Q00010129	Key switch (Nordic)	0.050 kg
	FHA2007-A1	A5Q00010151	Mounting plate	0.800 kg
	FCI2003-A1	A5Q00010136	Loop extension (FDnet)	0.064 kg
	FCL2001-A1	A5Q00009875	Line card (FDnet)	0.120 kg
	FCL2002-A1	A5Q00010502	Line card (collective)	0.120 kg
	FCL2003-A1	A5Q00010044	Line card (MS9i)	0.120 kg
	FCI2008-A1	S54400-A6-A1	I/O card (programmable)	0.120 kg
	FCA2002-A1	A5Q00009923	RS485 module (isolated)	0.067 kg
	FCA2001-A1	A5Q00005327	RS232 module (isolated)	0.068 kg
	FN2001-A1	A5Q00012851	Network module (SAFEDLINK)	0.077 kg
	FN2002-A1	S24236-B2502-A1	Repeater (SAFEDLINK)	0.154 kg
	FCA2005-A1	A5Q00014866	Sounder module	0.140 kg
	FCA2014-A1	A5Q00023027	Cable kit (communication)	0.224 kg
	FCI2001-D1	A5Q00013100	Fire brigade periphery module	0.482 kg
	FH2004-A1	A5Q00018778	Housing (Large extension)	11.820 kg
	FH2005-A1	A5Q00019543	Housing (Large)	15.400 kg
	FCM2006-A1	A5Q00021771	Operating add-on (2xLED ind.)	2.600 kg
	FCM2007-A1	A5Q00021772	Operating add-on (4xLED ind.)	2.800 kg
	FCA2010-F1	A5Q00012569	Battery kit (9 Volt) (France only)	0.100 kg
	–	A5Q00004142	Lithium battery 9 V / 1 Ah, for FCA2010-F1	0.037 kg
	FHA2016-A1	A5Q00020179	19" mounting kit	3.000 kg
	FHA2015-A1	A5Q00024621	FM blind 2 HU	5.100 kg
	FN2006-A1	S54400-A61-A1	Fiber network module (SM)	0.770 kg
	FN2007-A1	S54400-A62-A1	Fiber network module (MM)	0.770 kg
Auxiliary power supply	FP2003-A1	A5Q00016005	Power supply kit (70 W)	0.650 kg
	FP2004-A1	A5Q00020825	Power supply kit (150 W, A) for installation into empty housing	1.366 kg
	FP2005-A1	A5Q00018779	Power supply kit (150 W, B) for cascading	1.100 kg
Networks (backbone)	FN2008-A1	S54400-F94-A1	Ethernet-Switch	0,800 kg
	FN2009-A1	S54400-F95-A1	Security module	0,800 kg
	FHA2029-A1	S54400-B79-A1	Mounting kit for Ethernet switch (Comfort)	0,500 kg
	FHA2030-A1	S54400-B81-A1	Mounting kit for Ethernet switch (Large Ext.)	0,500 kg
Batteries	FA2003-A1	A5Q00019353	Battery (12 V, 7 Ah, VDS)	2.450 kg
	FA2004-A1	A5Q00019354	Battery (12 V, 12 Ah, VDS)	3.930 kg
	FA2005-A1	A5Q00019677	Battery (12 V, 17 Ah, VDS)	5.640 kg
	FA2006-A1	A5Q00019356	Battery (12 V, 26 Ah, VDS)	7.572 kg
	FA2007-A1	A5Q00022897	Battery (12 V, 45 Ah, VDS)	15.320 kg
	FA2008-A1	A5Q00019357	Battery (12 V, 65 Ah, VDS)	22.000 kg
	FA2009-A1	A5Q00023101	Battery (12 V, 100 Ah, VDS)	32.360 kg
Software license	FCA2012-A1	A5Q00018856	License key (L1)	0.010 kg
	FCA2013-A1	A5Q00018857	License key (L2)	0.010 kg
External printer	DL3750+	A5Q00023962	Matrix printer (external)	7.300 kg
Spare part	–	A5Q00023963	Black typewriter ribbon for printer DL3750+	0.078 kg

Siemens Switzerland Ltd
Infrastructure & Cities Sector
Building Technologies Division
International Headquarters
CPS Fire Safety
Gubelstrasse 22
CH-6301 Zug
Tel. +41 41 724 24 24
www.siemens.com/buildingtechnologies

© 2012 Copyright by
Siemens Switzerland Ltd
Data and design subject to change without notice.
Supply subject to availability.