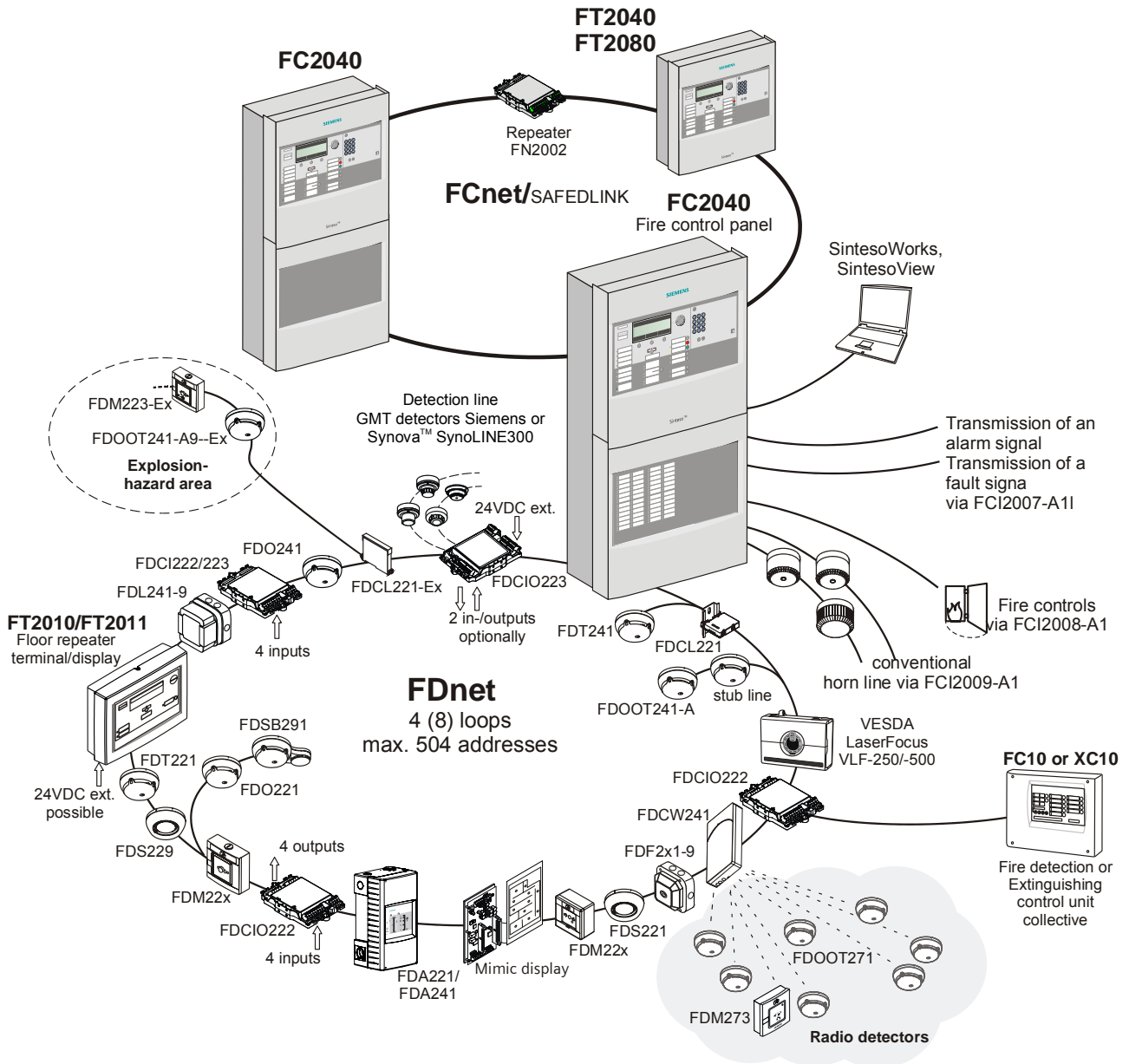# SIEMENS

FC2040

Sinteso™

Fire control panel

FS20 series, MP6
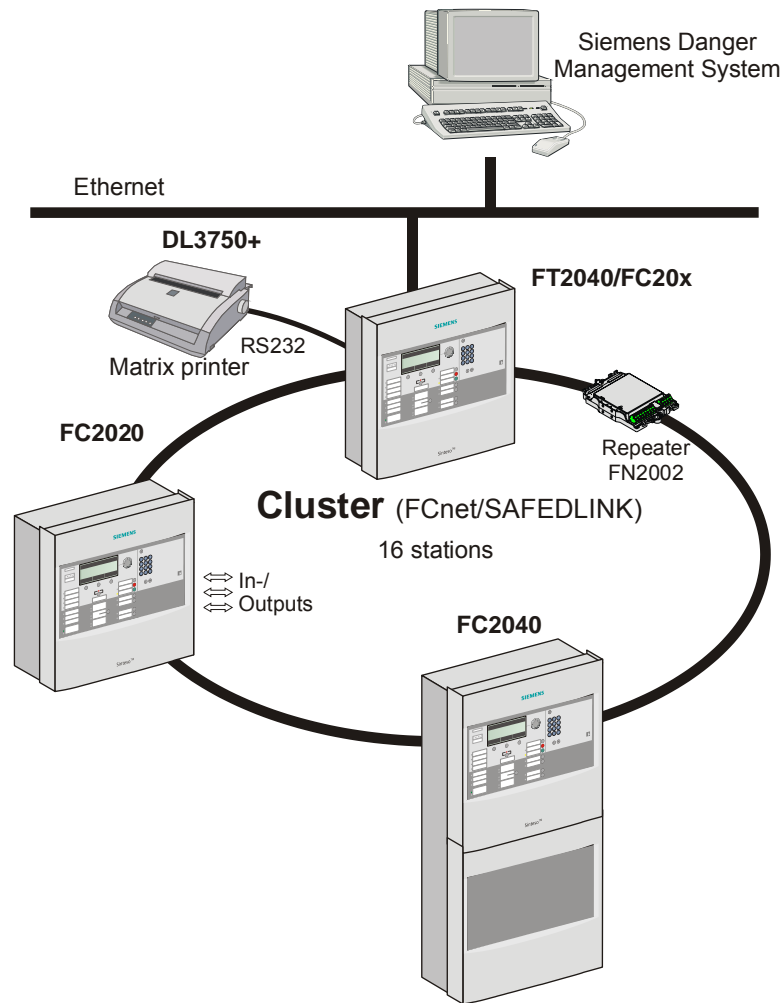
CE

- **Compact, pre-assembled, microprocessor-controlled fire control panel with integrated operating unit for up to 504 addresses**
- **Fire control panel can be used as a standalone version or can be networked**
- **Up to 64 stations, such as control panels and terminals, can be linked to form a network**
- **Integrated degraded mode function**
- **Redundant network node, degraded mode operation according to EN 54**
- **Fast Ethernet interface for a heterogeneous network**
- **Integrated user-friendly operating unit**
- **Can be extended by adding printer, key switches, LED indicators**
- **Slots for RS232 and RS485 serial interfaces**
- **Emergency power supply for emergency operating time of up to 72 hours**
- **Detection and automatic reading in (auto-configuration) of all FDnet devices, ready for operation immediately**
- **Processes signals from Sinteso detector series**
- **Time and situation-dependent changeover of detector parameter sets**
- **Floor repeater devices, alarm devices, and mimic displays on detector line (FDnet)**
- **Flexible configuration of complex applications and controls**
- **Configuration data can be uploaded/downloaded via remote access**
- **Firmware for all processor-controlled control panel components can be updated**

FT2040
FT2080

FC2040

Repeater
FN2002

FCnet/SAFEDLINK

FC2040
Fire control panel

SintesoWorks,
SintesoView

FDM223-Ex

FDOOT241-A9--Ex

**Explosion-
hazard area**

Detection line
GMT detectors Siemens or
Synova™ SynoLINE300

24VDC ext.

Transmission of an
alarm signal
Transmission of a
fault signa
via FCI2007-A1l

FDO241

FDCI222/223

FDL241-9

FDCL221-Ex

FDCIO223

2 in-/outputs
optionally

FT2010/FT2011
Floor repeater
terminal/display

4 inputs

FDT241

FDCL221

Fire controls
via FCI2008-A1

FDnet
4 (8) loops
max. 504 addresses

FDOOT241-A

stub line

conventional
horn line via FCI2009-A1

FDSB291

FDT221

FDO221

24VDC ext.
possible

FDS229

4 outputs

FDM22x

FDCIO222

4 inputs

FDA221/
FDA241

Mimic display

FDS221

FDM22x

FDCIO222

FDCW241

FDF2x1-9

VESDA
LaserFocus
VLF-250/-500

FC10 or XC10

Fire detection or
Extinguishing
control unit
collective
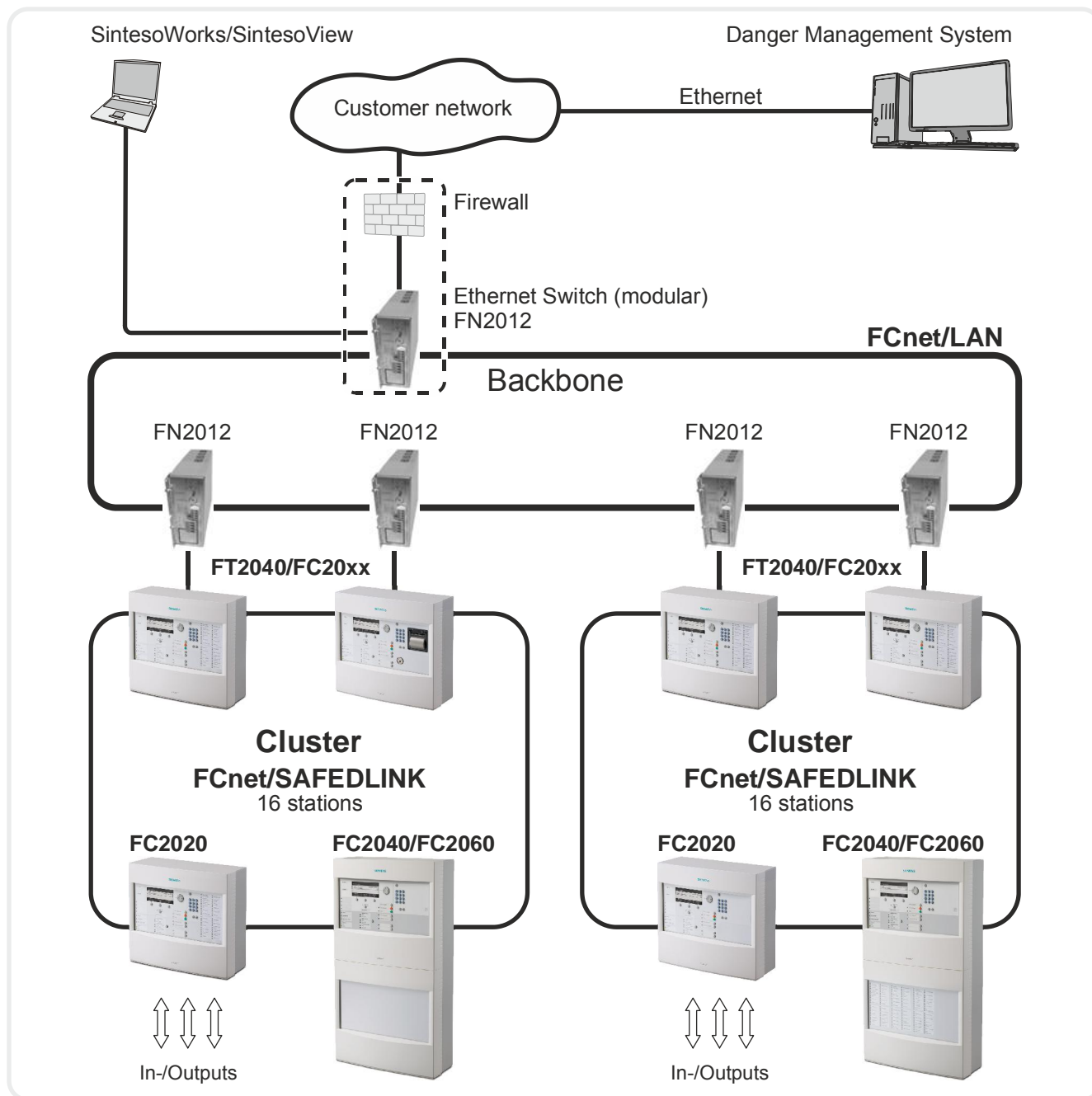
FDOOT271

FDM273

Radio detectors

2

Networking of several fire control panels

Up to 32 control panels and terminals can be linked to form a cluster (FCnet/SAFEDLINK network). If the cluster is connected to a danger management system via BACnet, up to 16 control panels and terminals can be networked.

Siemens Danger Management System

Ethernet

DL3750+

FT2040/FC20x

RS232

Matrix printer

Repeater FN2002

FC2020

Cluster (FCnet/SAFEDLINK)

16 stations

In-/ Outputs

FC2040

An optical Ethernet network (FCnet/LAN) allows up to 14 clusters with up to 16 stations to be operated on one network. A maximum of 64 stations is supported in total.

You will find details of system networking in product data sheet 008955.

Function features

- The FC2020 is a compact fire control panel with integrated operating unit for processing signals from Sinteso devices.
- The control panel may be used as a standalone unit or networked.
- The control panel and the fire detection system are custom-configured using the SintesoWorks software.
- All detector lines are monitored for ground faults.
- Customer texts can be adapted directly on the operating unit of the control panel or with the SintesoWorks software.
- Up to 2000 events can be retrieved from the event memory based on various criteria.
- Automatic summer/winter time changeover
- Siemens danger management system can be connected

Function elements

Operating unit

The following elements are available on the operating unit:
– CPU module and electronics
– Ethernet connection
– Slots for RS232 and RS485 modules and network modules (SAFEDLINK)
– Space for 'Kaba' or 'Nordic' key switch
– Space for event printer (depending on version)
– Peripheral data bus connection for optional LED modules

Periphery board

The following elements are available on the periphery board:
– Connection terminals for FDnet lines, remote transmission (alarm, fault), horn output, configurable control inputs and outputs, monitored alarm and fault output, emergency supply, power supply
– Slot for loop extension (FDnet)

Power supply unit 150 W, emergency power supply

The power supply feeds the hardware and charges the batteries.
In the event of a power cut, the batteries provide emergency current.

Housing

A pivoting mounting plate can be fitted for the following elements above the periphery board on the rear housing panel:
– 1x fire brigade periphery module (for Germany)
– 1x sounder module, as an alternative to mounting on U-rail TS3

Configuration

The FXS2002 SintesoWorks software allows the system to be customized.

Application ranges

The FC2040 is ideal for medium-sized applications, e.g., for use in industrial plants, regional banks, or office complexes.
Thanks to the flexible networking options, the FC2040 can also be used for large-scale sites.

Operation

Each control unit has an integrated operating unit. The control panel can also be operated via a separate FT2040 fire terminal.
You will find details and more information in product data sheet 009386.

Overview of FC2040 fire control panels

	Housing (Comfort)		Housing (Large)
FC2040-AA	**FC2040-AE**	**FC2040-AG**	**FC2040-GA**
	Featuring 48 indicator groups with one red/green + one yellow LED each	Featuring 96 indicator groups with one red/green + one yellow LED each	

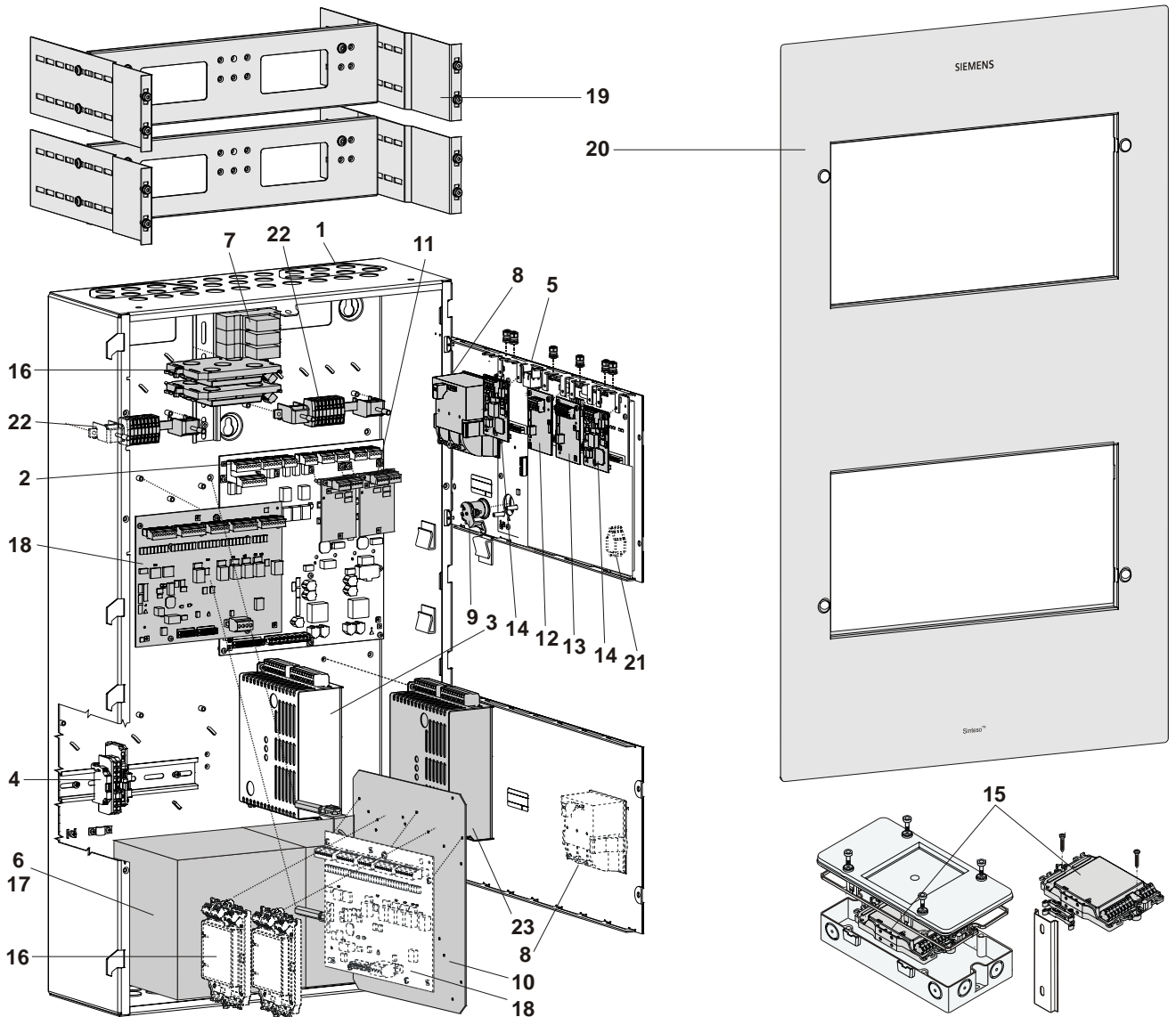| 4 loops with power supply (150 W) Max. battery capacity 26 Ah	4 loops with power supply (150 W) Max. battery capacity 26 Ah	4 loops with power supply (150 W) Max. battery capacity 26 Ah	4 loops with power supply (150 W) Max. battery capacity 45 Ah

Extensions

FTO2001-A1	**FH2007-A1**	**FH2003-A1**	**FH2005-A1**
Event printer	Housing (standard + plan compartment) 430 x 398 x 183 mm	Housing (Comfort) 430 x 796 x 183 mm	Housing (Large) 430 x 796 x 283 mm

For installation in
– FC2040-AA
– FC2040-AE
– FC2040-AG
– FC2040-GA
RS232 module must

be ordered separately

Empty housing for A4 documents
Depth 150 mm

Empty housing for free use

FH2002-A1	**FH2004-A1**
Housing (Standard) 430 x 398 x 183 mm	Housing (Large Extension) 430 x 398 x 283 mm

E.g., for extra batteries, Operating add-ons or Event printer
Space for batteries
2x FA2003-A1 (7 Ah) or
2x FA2004-A1 (12 Ah)

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

Empty housing for free use

E.g., for extra batteries, Operating add-ons or Event printer
Space for batteries
2x FA2003-A1 (7 Ah) or
2x FA2004-A1 (12 Ah) or
2x FA2005-A1 (17 Ah) or
2x FA2006-A1 (26 Ah)

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

Operating accessories		External printer	
FCM2038-A2	**FCM2036-A2**	**DL3750+**	
48 display groups with one red/green + one yellow LED each	96 indicator groups with one red/green + one yellow LED each	Matrix printer (external) RS232 interface	

For retrofitting	For retrofitting	RS232 module must be ordered separately	

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Layout of FC2040 inside housing (Comfort)

	Basic equipment	Designation	Notes
1	Housing (Comfort)	FHA2003-A1	Items 1-5: Basic equipment for each FC2040-xx (Comfort)
2	Periphery board (4 loops)	FCI2004-A1	
3	Power supply (SV 24V-150 W)	V24230-Z6-A5	
4	Mains terminals on TS35 DIN rail	–	Space for socket, relay modules, etc.
5	Operating unit	FCM20xx-xx	Operating unit with CPU
6	Space for batteries	–	2x 12 V / 17… 26 Ah

	Extensions	Designation	Notes
7	Relay module	Z3B171	Relay for fire controls
8	Event printer	FTO2001-A1	For logging events
9	Key switch (Kaba)	FTO2005-C1	For operating access authorization
	Key switch (nordic)	FTO2006-B1	
10	Mounting plate	FHA2007-A1	E.g., for fire brigade periphery module
11	Loop extension (FDnet)	FCI2003-A1	For extending the number of loops from two to four, the number of addresses remains the same
12	RS485 module (isolated)	FCA2002-A1	For peripheral devices with an RS485 interface
13	RS232 module (isolated)	FCA2001-A1	For devices with an RS232 interface
14	Network module (SAFEDLINK)	FN2001-A1	For networking several stations
15	Repeater (SAFEDLINK)	FN2002-A1	For extending the FCnet system bus, max. 1x repeater (SAFEDLINK) between two stations (mounted directly on a plane surface, on a TS35 U-rail, or in housing FDCH291/292)
16	Sounder module	FCA2005-A1	For splitting one conventional sounder into four
17	Battery (12 V, 26 Ah, VDS)	FA2006-A1	For the emergency power supply

Extensions		Designation	Notes
18	Fire brigade periphery module	FCI2001-D1	For Germany (FBF, FSD, ÜE, FSE, ÖA, KL)
19	19" mounting kit	FHA2016-A1	For installation in 19" third-party housing
20	FM blind 2HE	FHA2015-A1	For recessed mounting of housing
21	License key Sx	FCA20xx	For special functions
22	Cable kit (communication)	FCA2014-A1	For flexible connections running to the modules on the operating unit
23	Power supply kit (150 W, B)	FP2005-A1	For extra power supply

Technical data

Mains voltage	AC 115 / 230 V +10/-15 %
Power supply	150 W
Operating voltage	DC 21…28.4 V
Operating current	Max. 5 A
Battery capacity	2x 12 V, 26 Ah
Battery monitoring	Yes
Network monitoring	Yes
Connectable detector series	Sinteso (FDnet)
Number of lines	
– Loops (with loop extension) or	4 (8)
– Stubs	8 (16)
Number of addresses	Max. 504
Integrated inputs/outputs	
– Relay output	
– RT alarm	1
– RT fault	1
– Monitored outputs	
– Alarm	1
– Fault	1
– Horn	2
– Freely programmable inputs/outputs	12
Operating unit	Integrated
Slots for RS232, RS485 serial ports	2
Slots for network modules	2
Slots for loop extension	2
Mounting spaces for cable kit (communication)	2
Sounder module	Max. 2
Ethernet port RJ45	1
Operating temperature	-8…+42 °C
Storage temperature	-20…+60 °C
Air humidity (no condensation permitted)	≤95 % rel.
Maximum height above sea level	2000 m
Dimensions (W x H x D)	
– Without cover cap	430 x 796 x 160 mm
– With cover cap	430 x 796 x 183 mm
Color	
– Housing	~RAL 7035, light gray
– Cover cap	~RAL 9010, pure white
Protection category (IEC 60529)	IP30
Approvals	
– VdS	G206110
– LPCB	126bn/03
– FM	3048514
– DNV GL (Marine)	See document A6V10400920

09 CE 0786	**FC2040-AA / FC2040-AE / FC2040-AG / FC2040-BB / FC2040-CC / FC2040-FA / FC2040-GA / FC2040-NA**		Siemens Switzerland Ltd; Gubelstrasse 22 CH-6301 Zug Technical data: see doc. **008836**

FC2040 - Control and Indicating Equipment incl. SV24V150W - 150W/24VDC Power Supply Equipment for use in fire detection and fire alarm systems installed in buildings.
305/2011/EU (CPR): EN 54-2 / EN 54-4 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3 ; 2014/35/EU (LVD): EN 60950-1 ; 2011/65/EU (RoHS): EN 50581
The declared performance and conformity can be seen in the Declaration of Performance (DoP) and the EU Declaration of Conformity (DoC), which is obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or http://siemens.com/bt/download
DoP No.: 0786-CPR-20720; DoC No.: CED-FC2040

13 CE 0786	**SV24V150W**	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug Sinteso technical data: see doc. **008837** Cerberus™ PRO technical data: see doc. **A6V10210368**

SV24V150W - Power Supply Equipment 24VDC/150W for use in fire detection and fire alarm systems installed in buildings.
305/2011/EU (CPR): EN 54-4 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3 ; 2014/35/EU (LVD): EN 60950-1 ; 2011/65/EU (RoHS): EN 50581
The declared performance and conformity can be seen in the Declaration of Performance (DoP) and the EU Declaration of Conformity (DoC), which is obtainable via the Customer Support center: Tel. +49 89 9221-8000 or http://siemens.com/bt/download
DoP No.: 0786-CPD-20775; DoC No.: CED-SV24V150W

Details for ordering

	Type	Art. no.	Designation	Weight
Control panels	FC2040-AA	A5Q00016100	Fire control panel (4 loops)	18.280 kg
	FC2040-AE	A5Q00016852	Fire control panel (4 loops)	19.200 kg
	FC2040-AG	A5Q00016854	Fire control panel (4 loops)	21.080 kg
	FC2040-GA	S54400-C3-A3	Fire control panel (4 loops)	23.000 kg
Extensions	Z3B171	BPZ:4843830001	Relay module AC 250 V / 10 A (1 relay)	0.042 kg
	FTO2001-A1	A5Q00010126	Event printer	0.250 kg
	–	A5Q00017619	Spare printer reels (10 reels)	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
	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
	FH2002-A1	A5Q00018931	Housing (Standard)	7.500 kg
	FH2007-A1	A5Q00022369	Housing (standard + plan compartment)	12.940 kg
	FH2004-A1	A5Q00018778	Housing (Large Extension)	11.820 kg
	FH2003-A1	A5Q00009906	Housing (Comfort)	12.600 kg
	FH2005-A1	A5Q00019543	Housing (Large)	15.400 kg
	FCM2038-A2	S54400-B146-A1	Operating add-on (2xLED indicator)	2.600 kg
	FCM2036-A2	S54400-B147-A1	Operating add-on (4xLED indicator)	2.800 kg
	FHA2016-A1	A5Q00020179	19" mounting kit	3.000 kg
	FHA2015-A1	A5Q00024621	UP diaphragm 2 HU	5.100 kg
	FN2006-A1	S54400-A109-A1	Fiber network module (SM)	0.770 kg
	FN2007-A1	S54400-A110-A1	Fiber network module (MM)	0.770 kg
Auxiliary power supply	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 parallel connection	1.100 kg

	Type	Art. no.	Designation	Weight
Networks (backbone)	FN2012-A1	S54400-B152-A1	Ethernet switch (modular)	0.560 kg
	FCA2031-A1	S54400-A153-A1	Connection module (MoNet)	0.020 kg + 0.050 kg for cable
	VN2002-A1	S54400-A43-A1	Ethernet module (MM)	0.030 kg
	VN2003-A1	S54400-A44-A1	Ethernet module (SM)	0.030 kg
	FHA2029-A1	S54400-B79-A1	Mounting kit (switch)	1.240 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
License keys	FCA2033-A1	S54400-P154-A1	License key (S1)	0.010 kg
	FCA2034-A1	S54400-P155-A1	License key (S2)	0.010 kg
	FCA2035-A1	S54400-P156-A1	License key (S3)	0.010 kg
External printer	DL3750+	A5Q00023962	Matrix printer (external)	7.300 kg
Spare part	–	A5Q00023963	Color ribbon for matrix printer DL3750+	0.078 kg