



FC2040

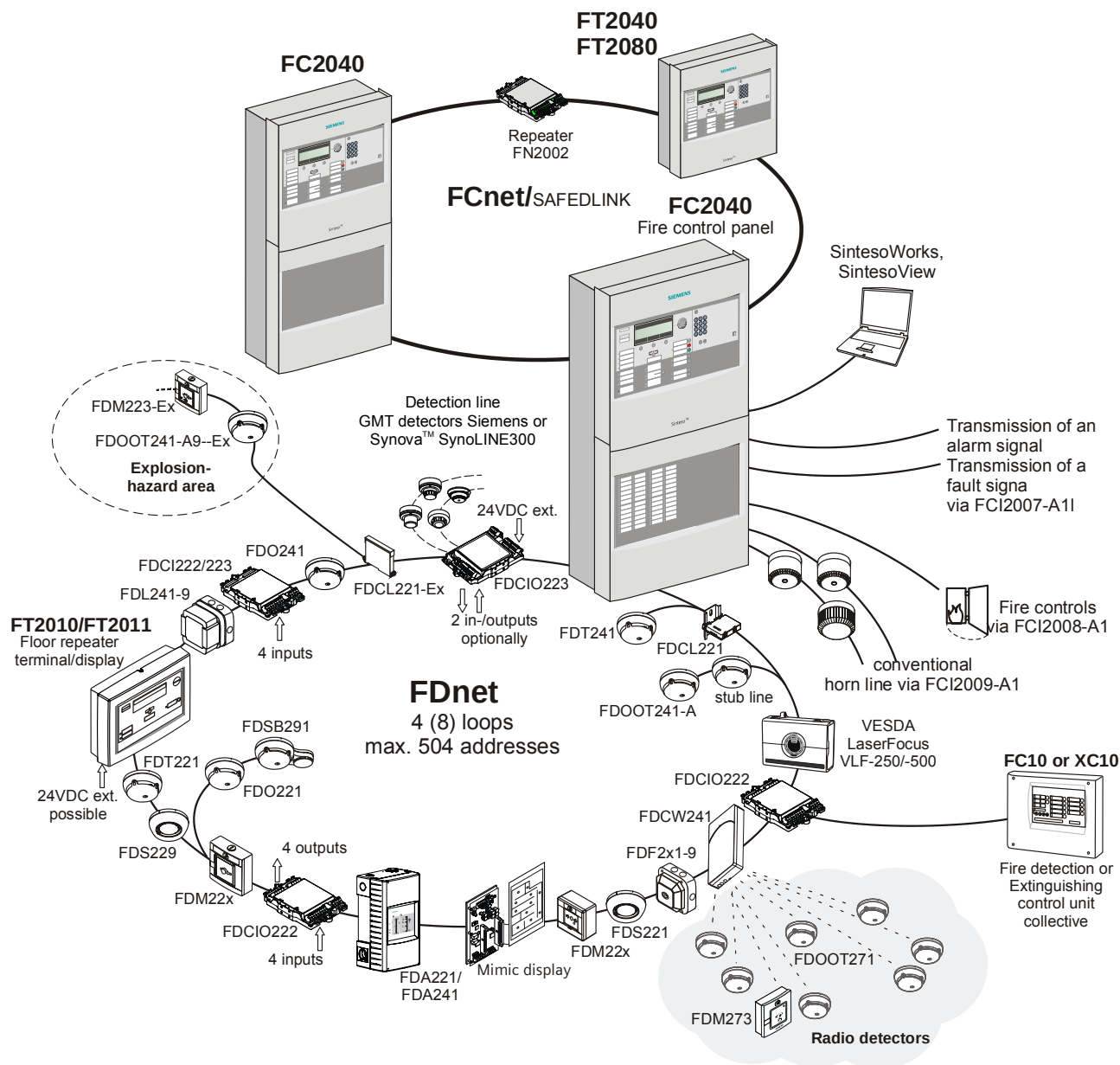
Sinteso™

Fire control panel



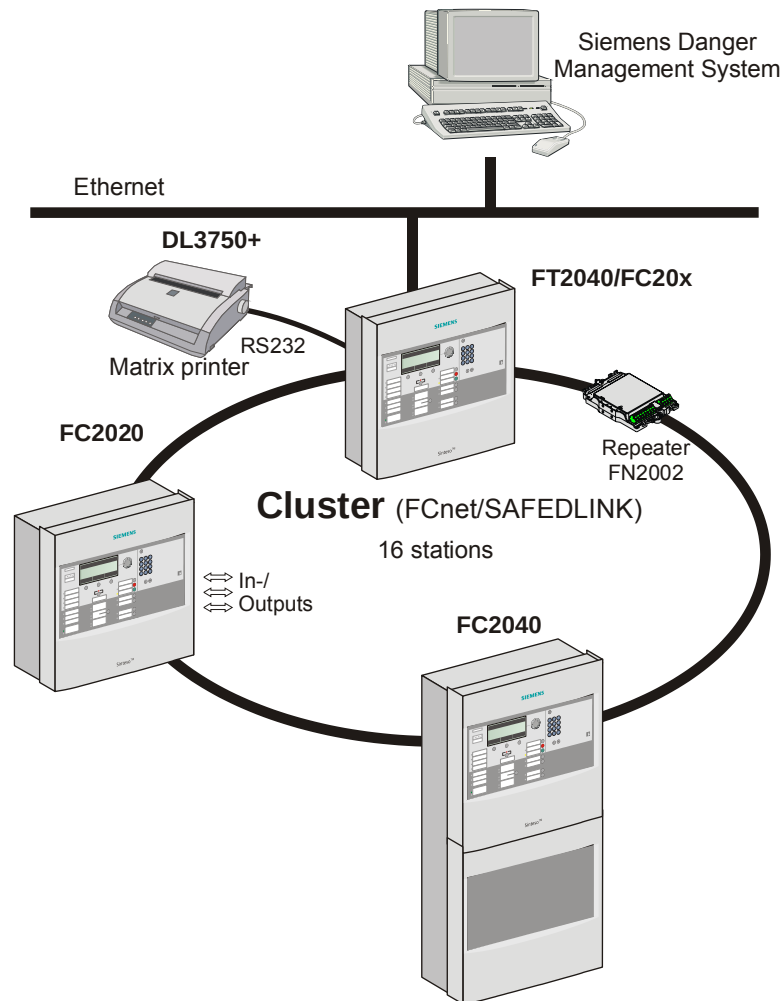
FS20 series, MP6

- 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

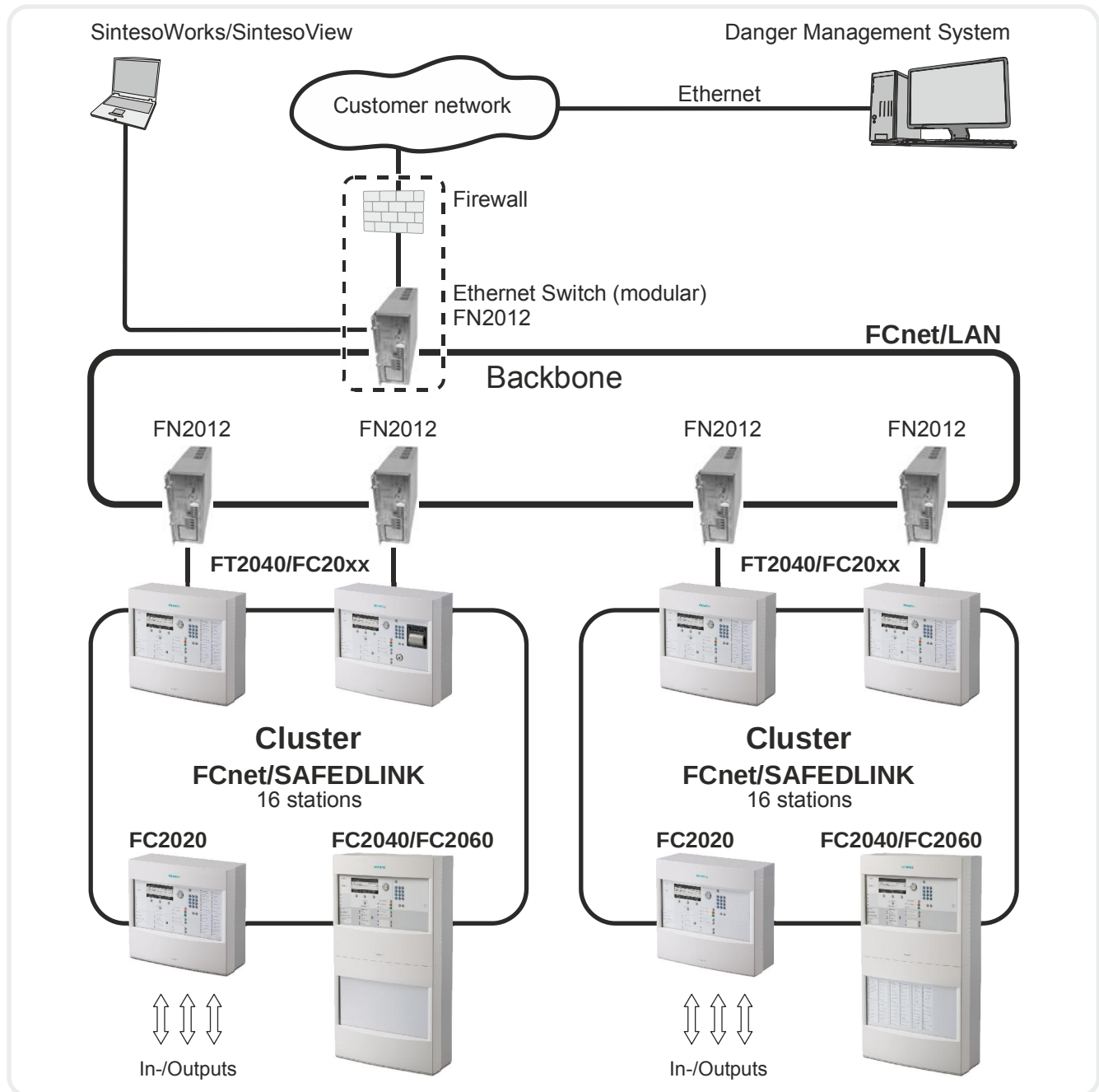


Networking of several fire control panels

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.



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 Sintesofire 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

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

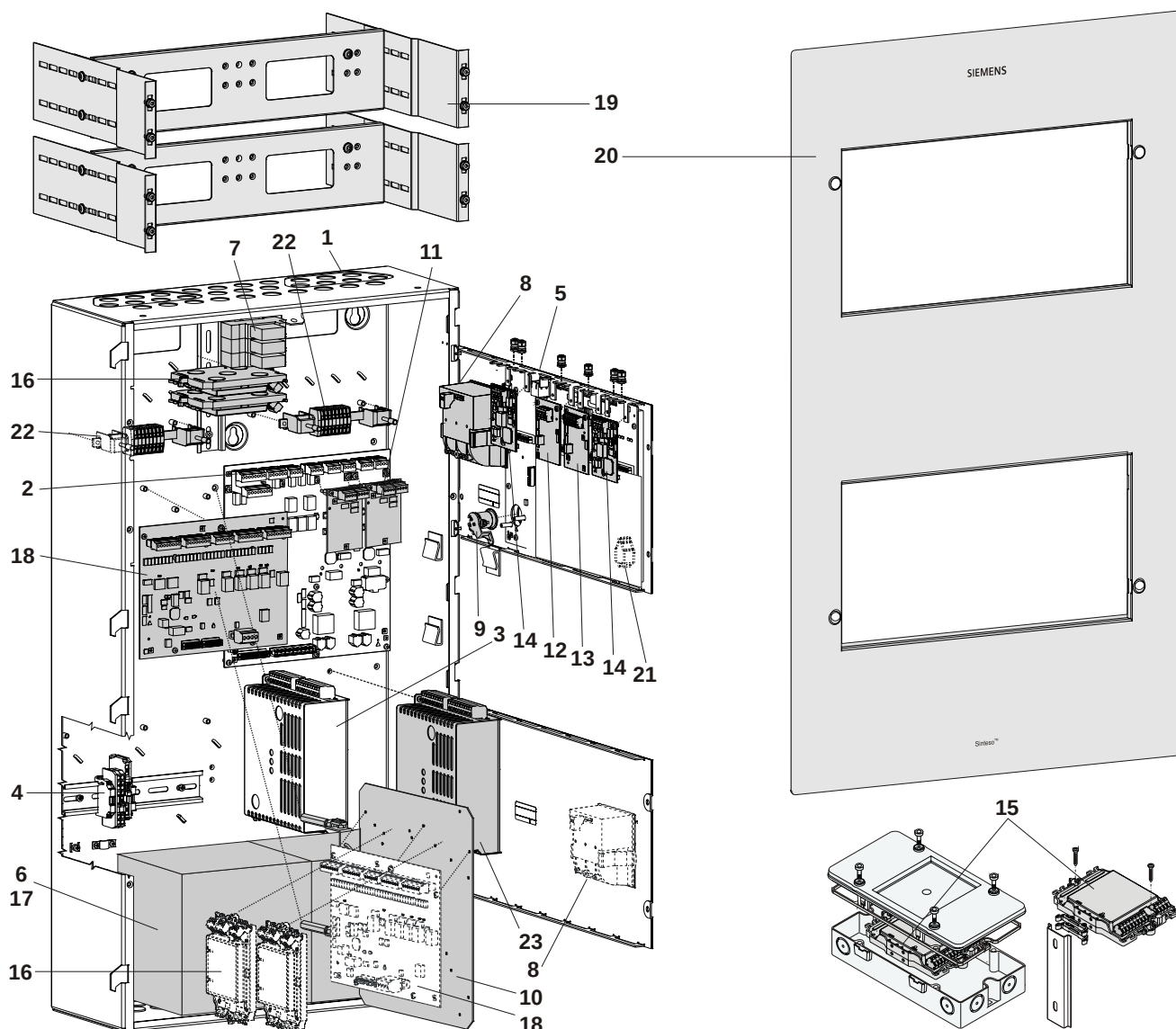
Each control unit has an integrated operating unit. The control panel can also be operated via a separate FT2040 fire terminal.

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

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

09		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		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
Batteries	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
	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