



FC2080

Sinteso™

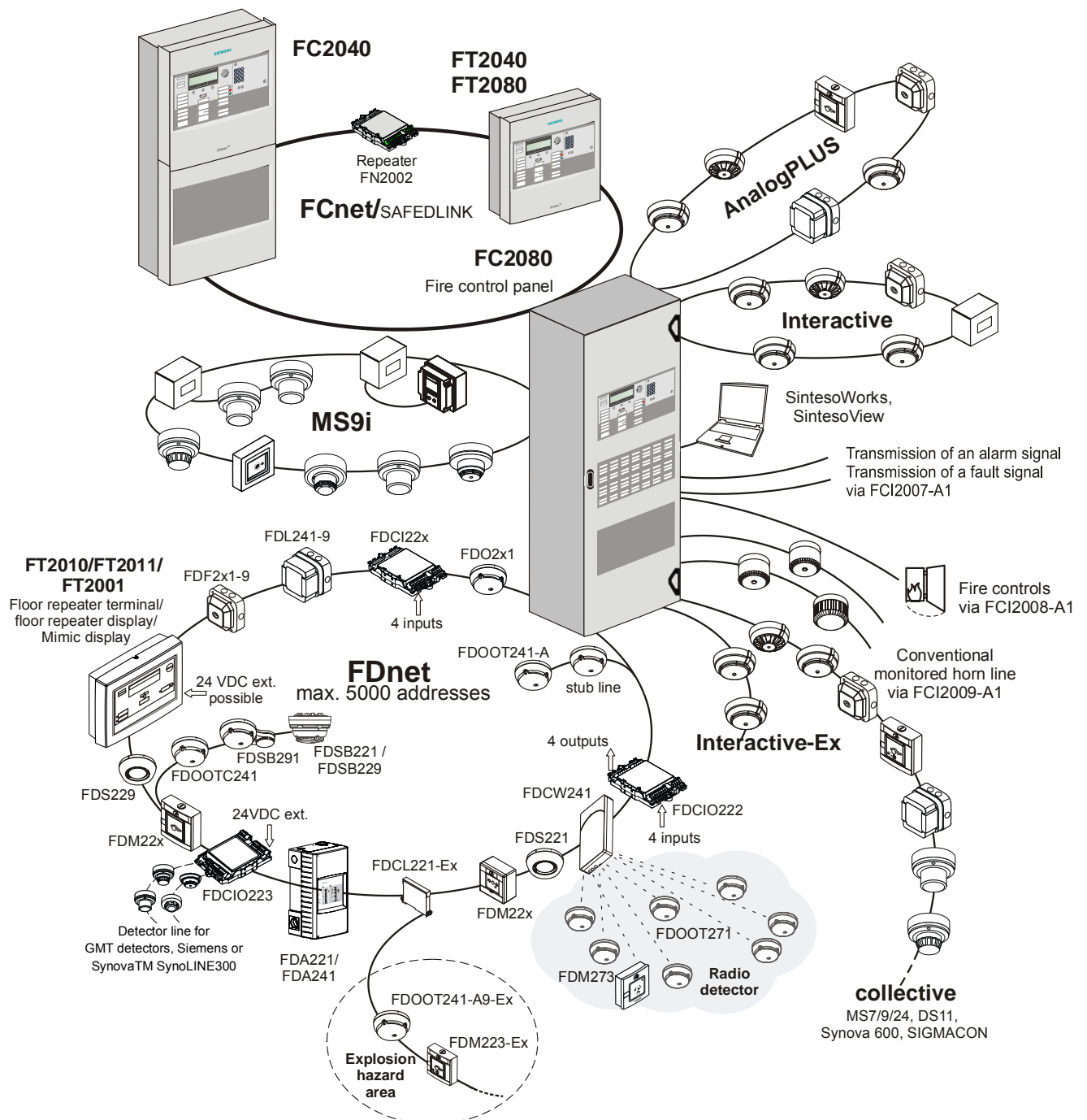
Fire control panel (19", modular)



FS20 series, MP6

- **Modular microprocessor-controlled fire control panel for up to 5000 addresses, without operating unit**
- **Can be mounted in 19" pedestal cabinet**
- **Processes signals from various detector series:**
 - FD20 devices from the Sinteso series
 - Collective fire detectors from the MS7/9/24, DS11, Synova 600, and SIGMACON series
 - Addressable fire detectors from the MS9i, interactive, and AnalogPLUS series
- **System with multiple redundancy**
- **Separate processor card and communication cards**
- **Can be optionally equipped with a second processor card for redundant operation or with automatic switchover in the event of a fault**
- **Integrated degraded mode function**
- **Modular expansion possible through the addition of up to 37 module bus cards**
 - line and I/O cards
- **Hot plug system: Module bus cards can be changed during operation.**
- **Automatic recognition and addressing of module bus cards**
- **Up to 64 stations, such as control panels and terminals, can be linked to form a network**

- **Supplied with the following pre-fitted interfaces:**
 - 2x integrated FCnet interfaces
 - 1x separate Ethernet connection on CPU card for SintesoWorks
 - 4x Ethernet connections on communication card, one of which features ground fault monitoring
 - Integrated RS485 and RS232 serial interface
- **Emergency power supply for emergency operating time of up to 72 hours**
- **Floor repeater terminals, alarm devices, and mimic displays supplied with power via detector line (FDnet)**
- **Time and situation-dependent changeover of detector parameter sets**
- **Turbo isolation in the event of a short-circuit to ensure uninterrupted availability of FD20 devices**
- **Freely programmable control based on Boolean algebra**
- **Configuration data can be uploaded/downloaded via remote access**
- **Firmware for all processor-controlled control panel components can be updated**



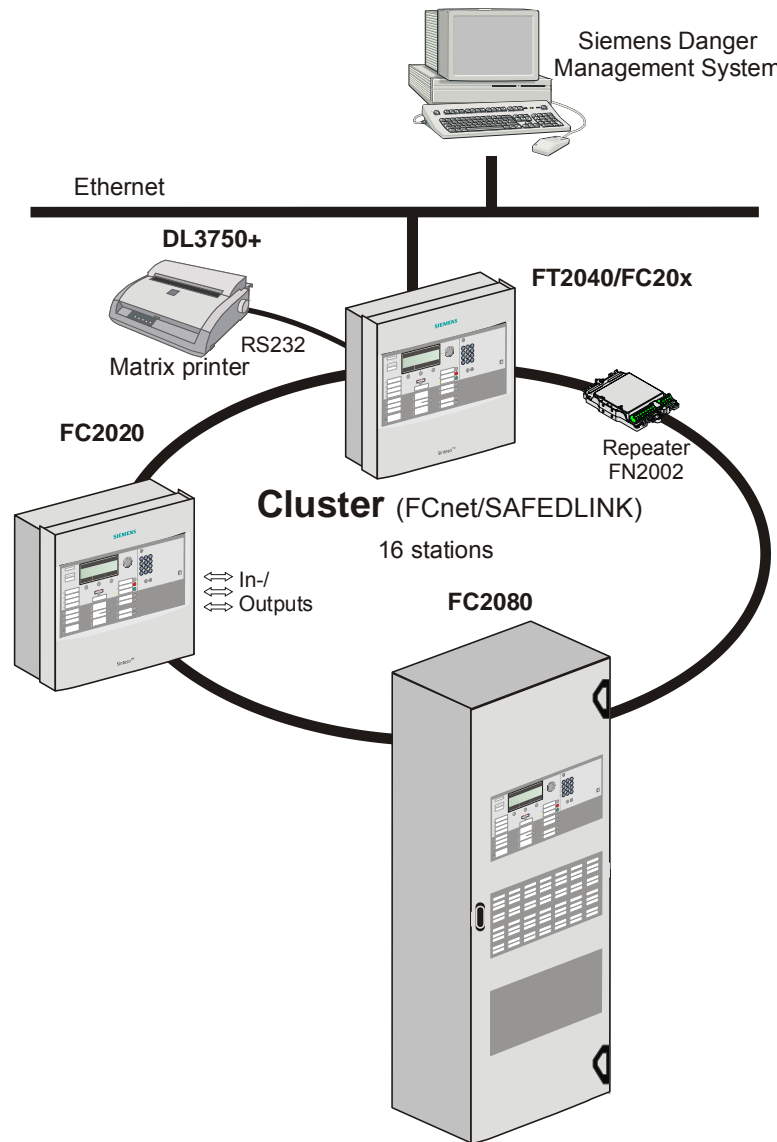
Possible extensions for card cage with five slots

FCL2001-A1	Line card (FDnet)	4x loops each with 252 addresses, max. of 252 addresses per line card
FCL2002-A1	Line card (collective)	8x lines each with a maximum of 32 devices
FCL2003-A1	Line card (MS9i)	2x loops each with a maximum of 50 addresses, max. 100 addresses
FCL2005-A1	Line card (AnalogPLUS)	4x loops each with a maximum of 128 addresses, max. of 512 addresses per line card
FCL2006-A1	Line card (interactive)	1x loop with max. 128 devices or 1 stub with 32 devices
FCL2007-A1	Line card (interactive, Ex)	1x stub with max. 32 devices
FCI2007-A1	I/O card (RT)	Outputs for alarm, fault, local alarm
FCI2008-A1	I/O card (programmable)	12x freely programmable inputs/outputs per I/O card
FCI2009-A1	I/O card (horn/monitored)	8x monitored horn outputs or monitored outputs

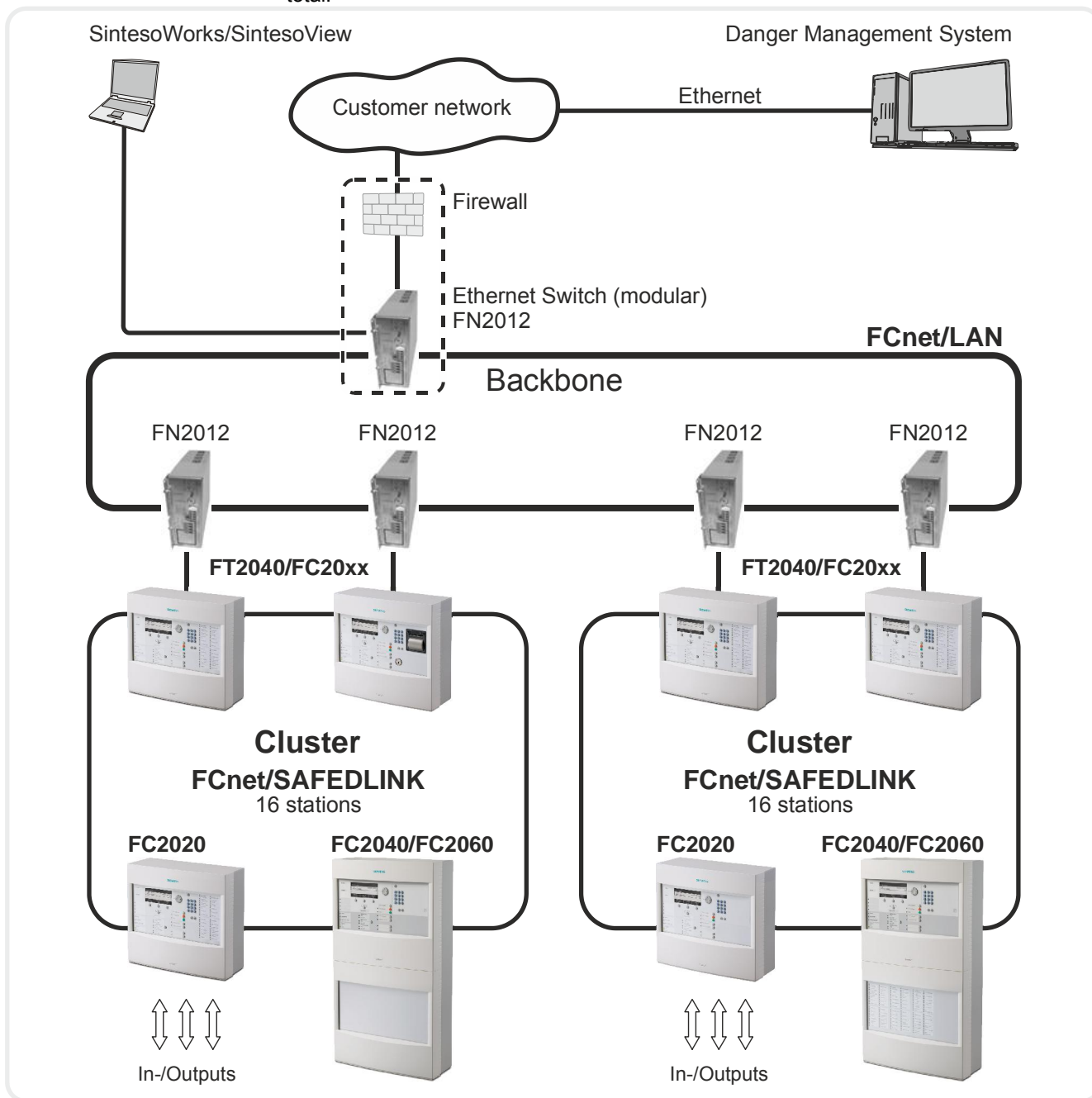
Mixed usage possible, but with a maximum total of 37 cards per control panel.

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.



The use of 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 FC2080 is a modular fire control panel that is intended for large and demanding sites and also for modernizing existing large fire detection installations based on earlier systems.
- Flexible mechanical setup and expansion in 19" industrial cabinet
- The FC2080 processes signals from Sinteso devices, from addressable devices based on earlier systems, and from collective devices.
- Optionally available with redundant main processor
- For mounting in a 19" pedestal cabinet
- The FC2080 can be extended by adding up to 37 module bus cards in a maximum of seven card cages.

- **The card cages are designed to hold the following module bus cards:**
 - Line card (FDnet) FCL2001-A1
 - Line card (collective) FCL2002-A1
 - Line card (MS9i) FCL2003-A1
 - Line card (AnalogPLUS) FCL2005-A1
 - Line card (interactive) FCL2006-A1
 - Line card (interactive, Ex) FCL2007-A1
 - I/O card (programmable) FCI2008-A1
 - I/O card (horn/monitored) FCI2009A1
 - I/O card (RT) FCI2007-A1
- **Mixed use of all line and I/O cards possible**
- **The module bus cards can be installed or replaced without the control panel having to be powered down.**
- **Modular energy supply concept that relies on a maximum of two power supply modules with up to three 150 W power supplies; card cages can be connected to power supply modules however you like**
- **Separate batteries for each power supply modules (max. two)**
- **The line, I/O, and processor cards can all be replaced without having to restart the control panel.**
- **The control panel and the fire detection system are custom-configured using the SintesoWorks software.**
- **Control and operation via other control panels on the network**
- **Up to 2000 events with overwrite protection can be retrieved from the event memory based on various criteria.**
- **Automatic summer/winter time changeover**
- **Siemens danger management system can be connected**
- **An operating unit with up to two operating add-ons can be optionally installed; operated as a separate fire terminal**

Function elements

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)**

Card cage (5 slots)

Up to six additional card cages can be mounted for inserting up to five module bus cards.

Power supply unit 150 W, emergency power supply

The power supply feeds the hardware and charges the batteries. A maximum of two independent circuits can be operated with their own emergency batteries. Each power supply module has two 150 W power supplies connected in parallel and can be extended by adding an additional 150 W power supply.

Housing and mechanical components



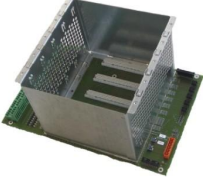

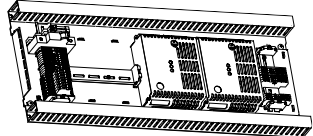


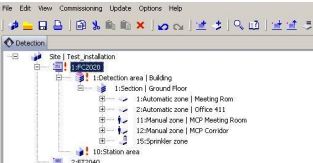
The housing consists of a 19" pedestal cabinet with a base that can accommodate FC2080 components. The housing is supplied with pre-fitted cable ducts and a cabinet door with three cut-outs for receiving the operating unit and operating add-ons. There are various support components for mounting electrical modules in accordance with your individual requirements.

Configuration

The FXS2002 SintesoWorks software allows the system to be customized.

Operating unit/operating add-ons

The operating unit and operating add-ons are optional, are installed in the door of the FC2080 pedestal cabinet, and function as a separate station.

	<p>Processor unit The FC2080 basic module is mounted on a 19" carrier. Contains one main processor and has slots for an optional second CPU and seven module bus cards of your choice.</p>
	<p>Operating unit For operating the FC2080 and other network devices. Can be integrated into the door of the FC2080 housing or can be operated remotely from the FC2080 via FCnet.</p>
	<p>Card cage (5 slots) Allows a maximum of five module bus cards to be used in any combination</p>
	<p>Module bus cards Line cards (FDnet, collective, MS9i) for incorporating peripheral devices or I/O cards (programmable, horn, remote transmission) for fire controls and integration with other systems.</p>
	<p>Power supply The power supply feeds the hardware and charges the batteries. Several 150 W power supplies can be cascaded. If necessary, multiple circuits can be created with their own power supply and battery.</p>
	<p>Housing 19" pedestal cabinet with a base that can accommodate the FC2080 components, with pre-fitted cable ducts. Scope of supply includes a cabinet door with cut-outs for receiving Person Machine Interfaces or PMI options.</p>
	<p>19" carrier For mounting card cages, power supplies, batteries, and options inside the 19" housing.</p>
	<p>Configuration tool The configuration tool (SintesoWorks) allows the system to be customized.</p>

Application ranges




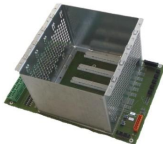









The FC2080 is suitable for applications with high redundancy requirements, e.g., airports, power supply equipment, and systems with extinguishing systems. The FC2080 is suitable for migrating large sites, such as industrial plants, office complexes, or factory halls, and it allows a seamless transition from older systems to Sinteso.

Operation

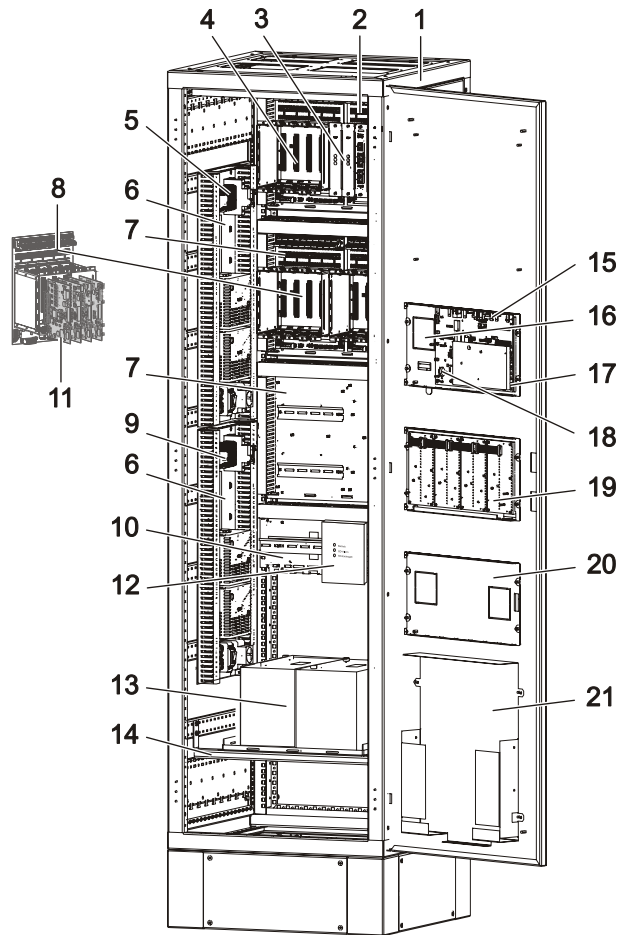
The control panel is operated via an FT2040 operating terminal. The operating terminal can be integrated into the cabinet door or operated remotely. The FC2080 can also be operated via another FC20 control panel on the network.

You will find details and more information in product data sheet 009386.

Overview of FC2080-AA fire control panel (modular)

Control panel		Extensions	
FH2080-AA 19" pedestal cabinet 	FCC2002-A1 Processor unit (19", FC2080) 	FCC2004-A1 CPU card (FC2080) 	FCA2008-A1 Card cage (5 slots) 
Expandable up to 37 module bus cards and 5000 addresses for FDnet, MS9, and collective protocols		FCL2005-A1 Line card (AnalogPLUS)	FCL2006-A1 Line card (interactive)
		FCL2007-A1 Line card (interactive, Ex)	
		FCL2001-A1 Line card (FDnet)	FCL2002-A1 Line card (collective)
			
Printer FTO2001-A1 Event printer 	Operating units FCM2028-A2 Operating unit 	Operating units FCM2037-A2 Operating unit (+LED indicator) 	Operating units FCM2030-C2 Operating unit (+FBA term.) 
RS232 module must be ordered separately	For retrofitting	For retrofitting	For retrofitting
External printer DL3750+ Matrix printer (external) RS232 interface 	Operating accessories FCM2038-A2 48 display groups with one red/green + one yellow LED each 	Operating accessories FCM2036-A2 96 indicator groups with one red/green + one yellow LED each 	

Layout of FC2080 inside 19" housing





Basic components	Designation	Comment
1 Housing (19" pedestal cabinet)	FH2080-AA	19" pedestal cabinet for accommodating FC2080 components
2 Processor unit (19", FC2080)	FCC2002-A1	Basic module incl. 1x CPU card and 1x communication card (FC2080), 2x network modules, and 1x card cage (5 slots)
3 2x free slots for module bus cards	--	In card cage (CPU) of processor unit to allow extension through the addition of any two module bus cards
4 5x slots for module bus cards	--	In card cage (5 slots) of processor unit to allow extension through the addition of any five module bus cards
5 Carrier (19", power supply)	FHA2022-A1	Power supply module incl. 2x 150 W power supplies

Extensions	Designation	Comment
(2) CPU card (FC2080)	FCC2004-A1	For extension to redundant CPU operation
6 Power supply kit (150 W, B)	FP2005-A1	For extension as a 3rd power supply operating in parallel
7 Carrier (19", card cage)	FHA2023-A1	For mounting a maximum of two card cages or other modules in the 19" cabinet
8 Card cage (5 slots)	FCA2008-A1	For mounting on carrier (19", card cage) to allow extension through the addition of any five module bus cards
9 Carrier (19", power supply)	FHA2022-A1	For use as an additional 2nd power supply module with separate batteries
10 Carrier (19", option)	FHA2024-A1	For mounting options (e.g., FDCIOxxx, relays) in the 19" cabinet
11 Module bus cards:		
Line card (FDnet)	FCL2001-A1	For four FDnet lines (max. 252 addresses per card)
Line card (collective)	FCL2002-A1	For eight MS7/9/24, DS11, Synova 600, SIGMACON collective lines
Line card (MS9i)	FCL2003-A1	For two addressable MS9i detector lines (max. 100 addresses)
Line card (AnalogPLUS)	FCL2005-A1	For four addressed AnalogPLUS lines
Line card (interactive)	FCL2006-A1	For one addressed interactive line
Line card (interactive, Ex)	FCL2007-A1	For one addressed interactive Ex line
I/O card (RT)	FCI2007-A1	For transmission of alarms and faults
I/O card (programmable)	FCI2008-A1	Twelve programmable inputs/outputs
I/O card (horn/monitored)	FCI2009-A1	Eight sounders
12 Key safe adapter	SDA 3000	For controlling the fire brigade key depot (available from IFAM)
13 Battery (12 V, 65 Ah, VDS)	FA2008-A1	For the emergency power supply
Battery (12 V, 100 Ah, VDS)	FA2009-A1	For the emergency power supply
14 Battery tray (19")	FHA2021-A1	For holding batteries inside 19" cabinet, max. of two per cabinet
15 Optional operating unit		Forms a separate station in conjunction with the operating add-ons
Operating unit	FCM2028-A2	Standard operating unit
Operating unit (+ LED indicator)	FCM2037-A2	Operating unit with 24x LED groups
Operating unit (+ Nord. key switch)	FCM2028-B2	Operating unit with key switch (Nordic)
Operating unit (+ EVAC term.)	FCM2030-N2	Operating unit incl. 10x evacuation zones
Operating unit	FCM2028-F2	Operating unit for France only
Operating unit (+ FBA terminal)	FCM2030-C2	Operating unit for Switzerland only
16 Event printer (internal)	FTO2001-A1	For logging system events
Event printer (external)	DL3750+	For logging system events
17 License key Sx	FCA20xx	For special functions
18 Key switch (Kaba)	FTO2005-C1	For operating access authorization
Key switch (nordic)	FTO2006-B1	
19 Optional operating add-ons:		Maximum of 2 operating add-ons per FC2080
20 Operating add-on (2xLED indicator)	FCM2038-A1	With 2 LED modules
Operating add-on (4xLED indicator)	FCM2036-A1	With 4 LED modules
20 Plan compartment A3	--	Installed in door

Technical data

Mains voltage	AC 115 / 230 V +10/-15 %
Power supply	>150 W
Operating voltage	DC 21...28.4 V
Operating current (per circuit)	>3 A
Capacity of batteries (per circuit)	2x 12 V, max. 100 Ah
Battery monitoring / mains monitoring	Yes / yes
Connectable detector series	Sinteso, collective, MS9i, DS11
Number of FDnet addresses	Max. 5000
Number of lines with maximum configuration	
FDnet (4 per line card)	Max. 120
Collective (8 per line card)	Max. 240
MS9i (2 per line card)	Max. 60
Interactive (1 per line card)	Max. 30
Interactive, Ex (1 per line card)	Max. 30
AnalogPLUS (4 per line card)	Max. 120
Input/output cards	
- I/Os (programmable)	12 (per FCI2008-A1)
- I/Os (horn)	8 (per FCI2009-A1)
- I/Os (RT)	
- RT alarm (monitored and relay)	1 + 1 (per FCI2007-A1)
- RT fault (monitored and relay)	1 + 1 (per FCI2007-A1)
- Local alarm	1 (per FCI2007-A1)
RS232, RS485 serial interfaces	1 + 1 (integrated)
Ethernet interfaces	3
Slots for SAFEDLINK network modules (on CPU and COM cards)	1 per FCC2004-A1 (Main) 1 per FCC2005-A1 (Degrade)
Slots for line cards or I/O cards	Max. 37
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)	
Pedestal cabinet (incl. base)	600 x 2200 x 600 mm
Color	~RAL 7035, light gray
Protection category (IEC 60529)	IP30
Standards	EN 54-2, EN 54-4, VDS 2095
Approvals	G212027

12  0786	FC2080	Siemens Switzerland Ltd; Gubelstrasse 22 CH-6301 Zug Technical data: see doc. 008836
		FC2080 - 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-21148; DoC No.: CED-FC2080
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
	FH2080-AA	S54400-C103-A1	Housing (19" pedestal cabinet)	120.000 kg
	FCC2002-A1	S54400-B17-A1	Processor unit (19", FC2080) incl. CPU card (FC2080) and Communication card (FC2080)	4.600 kg
	FHA2022-A1	S54400-B24-A1	Carrier (19", power supply) incl. 2x power supplies (150 W)	1.600 kg
Extensions	FCC2004-A1	S54400-A18-A1	CPU card (FC2080)	0.200 kg
	FCA2008-A1	S54400-B28-A1	Card cage (5 slots)	1.479 kg
	FCL2001-A1	A5Q00009875	Line card (FDnet/C-NET)	0.120 kg
	FCL2002-A1	A5Q00010502	Line card (collective)	0.120 kg
	FCL2003-A1	A5Q00010044	Line card (MS9i)	0.120 kg
	FCL2005-A1	S54400-A107-A1	Line card (AnalogPLUS)	0.120 kg
	FCL2006-A1	S54400-A108-A1	Line card (interactive)	0.120 kg
	FCL2007-A1	S54400-A134-A1	Line card (interactive, Ex)	0.120 kg
	FCI2007-A1	S54400-A20-A1	I/O card (RT)	0.119 kg
	FCI2008-A1	S54400-A6-A1	I/O card (programmable)	0.120 kg
	FCI2009-A1	S54400-A21-A1	I/O card (horn/monitored)	0.200 kg
	SDA 3000	IFAM (9102.0648)	Key safe adapter (for DE only)	1.500 kg
	FHA2021-A1	S54400-B23-A1	Battery tray (19")	2.000 kg
	FHA2023-A1	S54400-B25-A1	Carrier (19", card cage)	1.600 kg
	FHA2024-A1	S54400-B26-A1	Carrier (19", option)	1.600 kg
	FCM2028-A2	S54400-F83-A1	Operating unit	3.220 kg
	FCM2037-A2	S54400-B148-A1	Operating unit (+LED indicator)	3.340 kg
	FCM2028-B2	S54400-F83-A2	Operating unit (+nord. key switch)	3.280 kg
	FCM2028-F2	S54400-F83-A3	Operating unit, FR only	3.220 kg
	FCM2030-C2	S54400-F93-A1	Operating unit (+ FBA terminal), CH only	3.420 kg
	FCM2030-N2	S54400-F93-A2	Operating unit (+ EVAC terminal), NL only	3.400 kg
	FTO2001-A1	A5Q00010126	Event printer	0.250 kg
	FTO2005-C1	A5Q00010113	Key switch (Kaba)	0.013 kg
	FTO2006-B1	A5Q00010129	Key switch (nordic)	0.050 kg
	-	A5Q00017619	Spare printer reels (10 reels)	0.090 kg
	FHA2007-A1	A5Q00010151	Mounting plate	0.800 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	
FN2006-A1	S54400-A109-A1	Fiber network module (SM)	0.770 kg	
FN2007-A1	S54400-A110-A1	Fiber network module (MM)	0.770 kg	

Network (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
Auxiliary power supply	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
	FHA2022-A1	S54400-B24-A1	Carrier (19", power supply)	1.600 kg
	FP2005-A1	A5Q00018779	Power supply kit (150 W, B) for parallel connection	1.100 kg
	Batteries	FA2008-A1	A5Q00019357	Battery (12 V, 65 Ah, VDS)
FA2009-A1		A5Q00023101	Battery (12 V, 100 Ah, VDS)	32.360 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 Spare part	DL3750+	A5Q00023962	Matrix printer (external)	7.300 kg
	–	A5Q00023963	Color ribbon for matrix printer DL3750+	0.078 kg

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