



FC2080

Sinteso™

Fire control panel (modular)

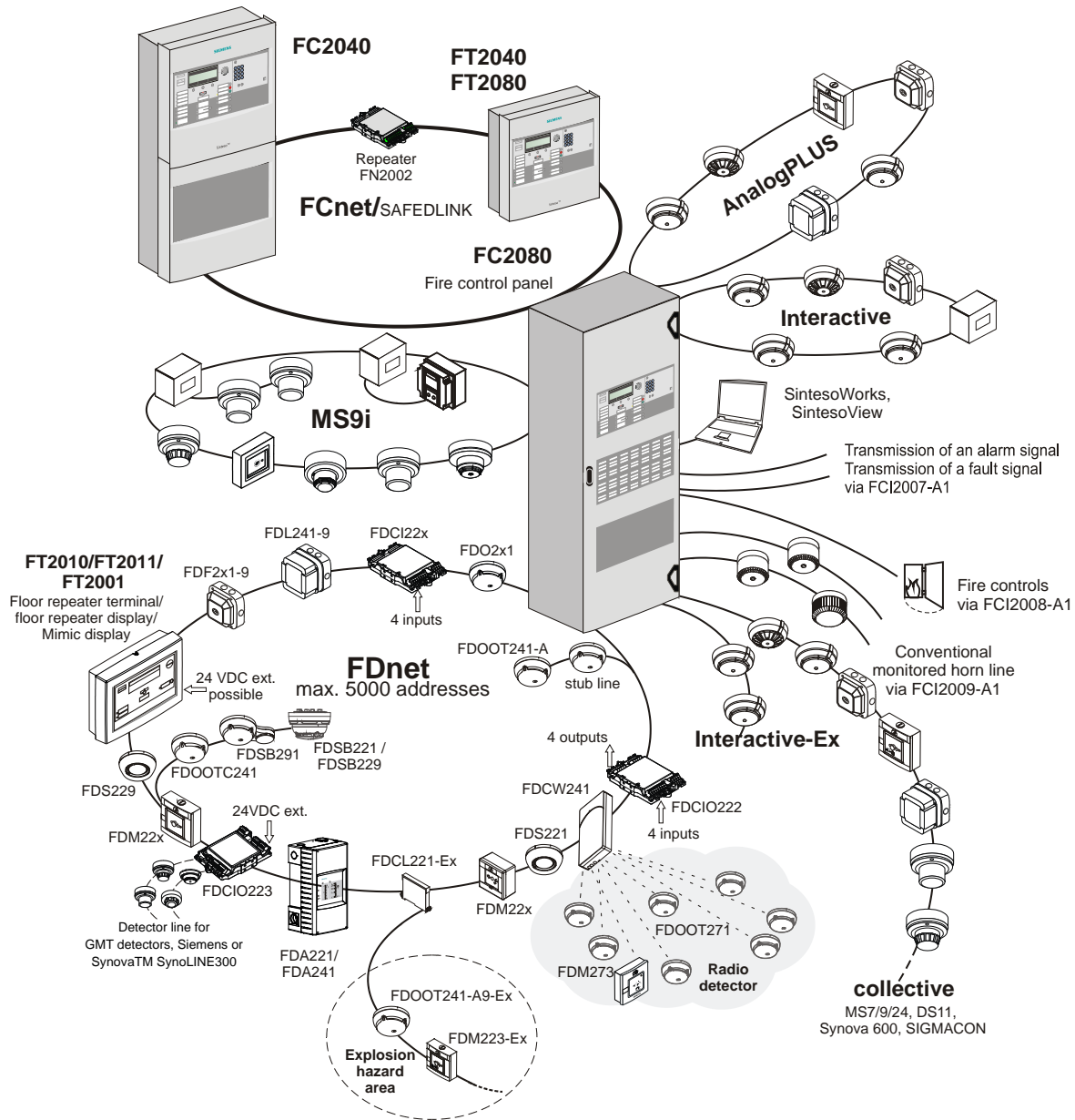


FS20 series (MP5.0)

- **Modular microprocessor-controlled fire control panel for up to 5000 addresses**
- **System designed for multiple redundancy**
- **Can be equipped as an option with a second CPU with automatic changeover in the event of an error**
- **Equipped with integrated degraded function (degraded mode) as standard**
- **Processes signals from various detector systems such as:**
 - 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, AnalogPLUS, Interactive series
- **Can be installed in a 19" free-standing cabinet**
- **Can be extended through the use of modules with up to 37 module bus cards (line and I/O cards)**
- **Up to 64 stations, such as control panels and terminals, can be networked**
- **Equipped with the following interfaces:**
 - 3 x Ethernet for networking and remote access
 - 1 x RS485
 - 1 x RS232
- **Emergency power supply for emergency operating time of up to 72 hours**
- **Floor repeater terminals, alarm devices and mimic displays supplied directly via detector loop (FDnet)**
- **Time and situation-dependent changeover of detector parameter sets**
- **Turbo-isolation in the event of short-circuit for uninterrupted availability of the FD20 devices**

- Freely programmable control using Boolean algebra
- Configuration data can be uploaded/downloaded via remote access
- Firmware update possible for all processor-controlled components of the control panel

System overview



FCL2001-A1 (FDnet/C-NET)

- 4 loops (with a total of max. 252 addresses)

FCL2002-A1 (collective)

- 8 lines (with up to 32 devices)

FCL2003-A1 (MS9i)

- 2 loops (with a total of max. 100 addresses)

FCL2005 line card (AnalogPLUS)

- 4 loops per line card (with max. 512 addresses per line card)

FCL2006 line card (Interactive)

- 1 loop per line card (with max. 128 addresses per line card)

FCL2007 line card (Interactive-Ex)

- 1 stub line per line card (with max. 32 addresses per line card)

FCI2008-A1 (programmed)

- 12 freely programmable inputs/outputs per I/O card

FCI2009-A1 (horn/monitored)

- 8 monitored horn lines or monitored outputs

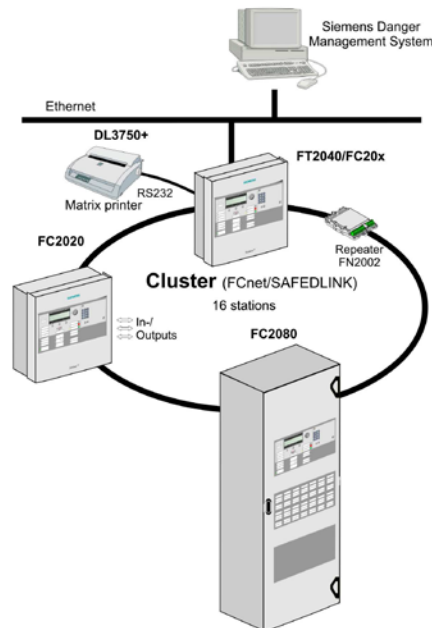
FCI2007-A1 (RT)

- Alarm, fault, local alarm

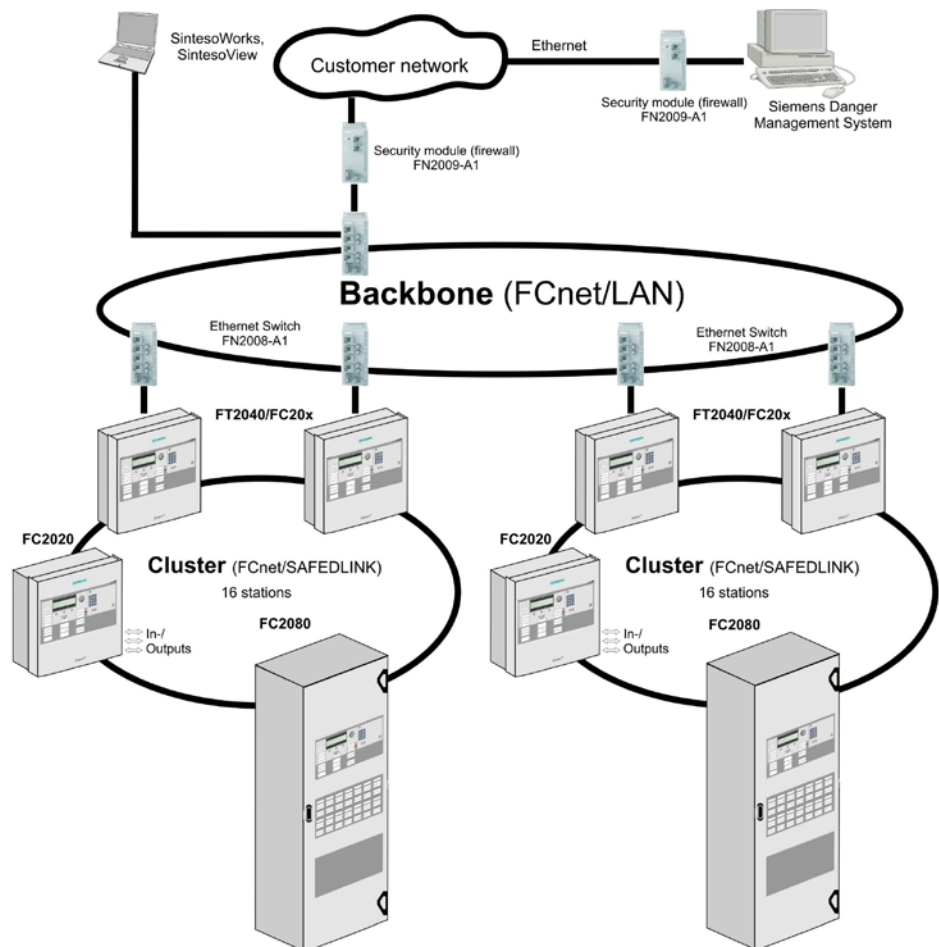
Mixed usage possible, but a total of max. 37 cards per control panel.

Networking of several fire control panels

Up to 32 control panels and terminals can be connected to form a single cluster (FCnet/SAFEDLINK network). If the cluster is connected to a danger management system, max. 16 stations are possible.



By using a fiber-optic backbone (FCnet/LAN), up to 14 clusters each with 16 stations can be operated in one network (total of max. 64 stations).



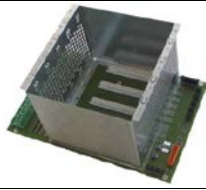
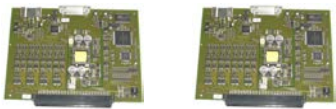
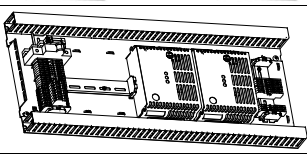


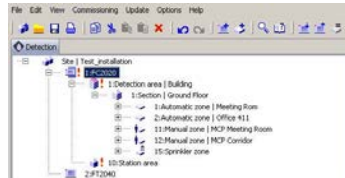


→ Please refer to product data sheet 008955 for details of system networking.

Function features

- The FC2080 is a modular fire control panel for large and challenging sites
- With redundant main processor as an option
- Installation in 19" free-standing cabinet
- Can be extended through the use of up to 37 module bus cards in max. 7 card cages
- Mixed use of all line and I/O cards possible.
- Line, I/O and processor cards can be replaced without having to restart the control panel.
- Full integration of control and operation with other control panels in the network
- Event memory with overwrite protection for up to 2000 messages.
- Automatic summer/winter time changeover.

Function elements

	<p>Processor unit</p> <p>Basic module of FC2080 is installed on 19" carrier. Includes a main processor and slots for the optional second CPU and 7 module bus cards (any).</p>
	<p>Operating unit</p> <p>For operation of the FC2080 and other network participants. Can be integrated in the door of the FC2080 housing or also used remotely from the FC2080 via FCnet.</p>
	<p>Card cage (5 slots)</p> <p>Enables use of max. 5 module bus cards in any combination</p>
	<p>Module bus cards</p> <p>Line cards (FDnet, collective, MS9i) for integrating periphery devices or I/O cards (programmable, horn, RT) for fire controls and integration with other systems.</p>
	<p>Power supply</p> <p>The power supply feeds the hardware and charges the batteries. It is possible to cascade several 150W power supplies. If necessary, it is possible to create several electric circuits with their own power supply and battery.</p>
	<p>Housing</p> <p>19" free-standing cabinet with base for holding the FC2080 components, equipped with cable ducts. Delivery includes cabinet door with sections for holding Person Machine Interfaces or Person Machine Interface options.</p>
	<p>19" carriers</p> <p>For installing card cages, power supplies, batteries and options in the 19" housing.</p>
	<p>Configuration tool</p> <p>The configuration tool (SintesoWorks) enables the system to be adapted to the customer's individual requirements</p>

Application ranges

The FC2080 can be used for applications with high redundancy requirements, such as airports, energy supply equipment and systems with extinguishing equipment. The FC2080 is also ideally suited to migrating large applications, such as industrial plants, office complexes, chemicals, manufacturing etc. It enables seamless transition of older systems to Sinteso.




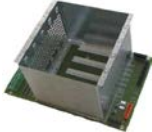









Operation

The control panel is operated using an operating terminal FT2040. This can be integrated in the cabinet door or used remotely. The FC2080 can also be operated via another

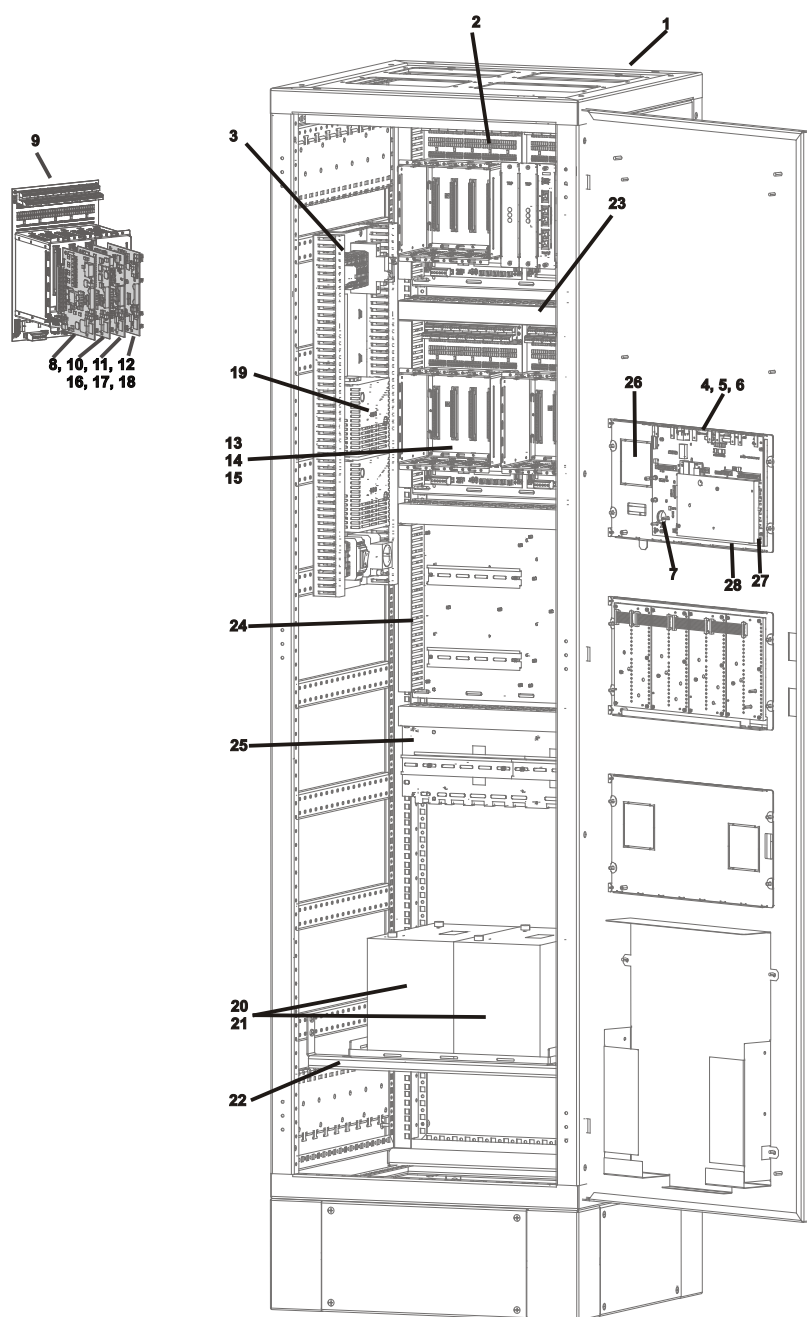
FC20 control panel in the network.

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

Overview of the fire control panel FC2080-AA (modular)

Control panel		Extensions	
FH2080-AA 19" free-standing cabinet	FCC2002-A1 Processor unit (19", FC2080)	FCC2004-A1 CPU card (FC2080)	FCA2008-A1 Card cage (5 slots)
			
Can be extended through the use of 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 can be fitted	FCM2028-A2 Operating unit	Operating units FCM2037-A2 Operating unit (+LED display)	FCM2030-C2 Operating unit (+FBA term.)
			
R module must be ordered separately	for retrofitting	for retrofitting	For retrofitting
External printer DL3750+ Matrix printer (external) RS232 interface	FCM2038-A2 48 display groups with one red/green + one yellow LED	Operating accessories FCM2036-A2 96 display groups with one red/green + one yellow LED	
			

Configuration of FC2080 in the 19" housing





Processor unit		Designation	Notes
1	Housing (19" free-standing cabinet)	FH2080-AA	19" free-standing cabinet for holding the FC2080 components
2	Processor unit (19", FC2080)	FCC2002-A1	Basic module incl. 1 x CPU, 2nd CPU as an option and 7x module bus cards
3	Carrier (19", power supply)	FHA2022-A1	19" installation incl. 2 x 150W, 3 x 150W possible as an option
Extensions			
CPU cards			
8	CPU card (FC2080)	FCC2004-A1	For extension to redundant operation
Operating unit			
4	Operating unit	FCM2028-A2	Standard operating unit
5	Operating unit (+LED display)	FCM2037-A2	Operating unit with 24 x LED zones
6	Operating unit (+Nord. key switch)	FCM2028-B2	Operating unit with Nordic key switch
	Operating unit (+EVAC term.)	FCM2030-N2	Operating unit with incl. 10 x evacuation zones
	Operating unit	FCM2028-F2	Operating unit for France only
	Operating unit (+FBA terminal)	FCM2030-C2	Operating unit for Switzerland only
7	Key switch (Kaba)	FTO2005-C1	for operating access authorization

	Key switch (nordic)	FTO2006-B1	
	Card cage		
9	Card cage (5 slots)	FCA2008-A1	For expansion with 5 module bus cards (any)
	Module bus cards		
10	Line card (FDnet)	FCL2001-A1	for 4FDnet lines, (max. 252 addresses per card)
11	Line card (collective)	FCL2002-A1	for 8 collective lines MS7/9/24, DS11, Synova 600, SIGMACON
12	Line card (MS9i)	FCL2003-A1	for 2 addressable MS9i lines (max. 100 addresses)
13	I/O card (RT)	FCI2007-A1	For transmission of alarms and faults
14	I/O card (programmable)	FCI2008-A1	12 programmable inputs/outputs
15	I/O card (horn/monitored)	FCI2009-A1	8 horn lines
16	Line card (AnalogPLUS)	FCL2005-A1	For 4 addressable AnalogPLUS lines
17	Line card (Interactive)	FCL2006-A1	For 1 addressable Interactive line
18	Line card (Interactive-Ex)	FCL2007-A1	For 1 addressable Interactive-Ex line
	Power supply		
19	Power supply kit (150 W, B)	FP2005-A1	For boosting performance
20	Battery (12 V, 65 Ah, VDS)	FA2008-A1	for the emergency power supply
21	Battery (12 V, 100 Ah, VDS)	FA2009-A1	for the emergency power supply
	19" carriers		
22	Battery tray (19")	FHA2021-A1	For holding batteries in the 19" cabinet
23	Carrier (19", card cage)	FHA2023-A1	For installing the card cage in the 19" cabinet
24	Carrier (19", option)	FHA2024-A1	For installing options (e.g. FDCIOxxx, relay) in the 19" cabinet
	Miscellaneous		
25	Key repository adapter	SDA 3000	For controlling the fire brigade key repository (available by the company IFAM)
26	Event printer (internal)	FTO2001-A1	For logging system events
27	Event printer (external)	DL3750+	For logging system events
28	License key Sx	FCA20xx	for specific functions

Technical data

Mains voltage	AC 98...127 V / AC 196...253 V
Power supply	>150 W
Operating voltage	DC 21...28.6 V
Operating current (per electric circuit)	> 3 A
Capacity of batteries (per electric circuit)	2 x 12 V, max. 100 Ah
Battery monitoring / mains monitoring	yes / yes
Connectable detector series	Sinteso, collective, MS9i
Number of FDnet addresses	max. 5000
Number of lines (configuration max.)	
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)
Serial interfaces RS232, RS485	1 + 1 (integrated)
Ethernet interfaces	3
Slots for network modules SafeDlink (on CPU and COM cards)	1 per FCC2004-A1 (Main) 1 per FCC2005-A1 (Degrade)
Slots for Line or I/O cards	max. 37
Operating temperature	-8...+42 °C
Storage temperature	-20...+60 °C
Humidity (no condensation permitted)	≤95 % rel.
Dimensions (W x H x D)	
Free-standing cabinet (incl. base)	600 x 2200 x 600 mm
Color	gray, ~RAL 7035
Protection category (IEC 60529)	IP30
Standards	EN54-2, EN54-4, 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 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3 ; 2006/95/EC (LVD): EN 60950-1 ; 2011/65/EU (RoHS): EN 50581 ;				
Declared performance and conformity can be seen in the Declaration of Performance and the EC Declaration of Conformity, 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 Technical data: see doc. 008837
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 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3 ; 2006/95/EC (LVD): EN 60950-1 ; 2011/65/EU (RoHS): EN 50581 ;				
Declared performance and conformity can be seen in the Declaration of Performance and the EC Declaration of Conformity, 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
Extensions	FCC2002-A1	S54400-B17-A1	Processor unit (19", FC2080)	4.600 kg
	FH2080-AA	S54400-C103-A1	Housing (19" free-standing cabinet)	120.00 kg
	FCC2004-A1	S54400-A18-A1	CPU card (FC2080)	0.200 kg
	FCC2005-A1	S54400-A91-A1	Communication card (FC2080)	0.200 kg
	FCA2008-A1	S54400-B28-A1	Card cage (5 slots)	1.479 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
	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)	0.200 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 repository adapter (for DE only)	1.500 kg
	FHA2021-A1	S54400-B23-A1	Battery tray (19")	2.000 kg
	FHA2022-A1	S54400-B24-A1	Carrier (19", power supply)	1.600 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 display)	3.340 kg
	FCM2028-B2	S54400-F83-A2	Operating unit (+Nordic 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 display)	2.600 kg
	FCM2036-A2	S54400-B147-A1	Operating add-on (4xLED display)	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

	Type	Art. no.	Designation	Weight
Network (backbone)	FN2008-A1	S54400-F94-A1	Ethernet switch	0.800 kg
	FN2009-A1	S54400-F95-A1	Safety module	0.800 kg
	FHA2029-A1	S54400-B79-A1	Installation kit for Ethernet switch (Comfort)	0.500 kg
	FHA2030-A1	S54400-B81-A1	Installation kit for Ethernet switch (Large Ext.)	0.500 kg
Auxiliary power supply	FP2005-A1	A5Q00018779	Power supply kit (150 W, B) for cascading	1.100 kg
Batteries	FA2008-A1	A5Q00019357	Battery (12 V, 65 Ah, VDS)	22.000 kg
	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
	FCA2036-A1	S54400-P157-A1	License key (S4)	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

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FS20 Manual
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