



FC2080

Sinteso™

Fire control panel (modular)

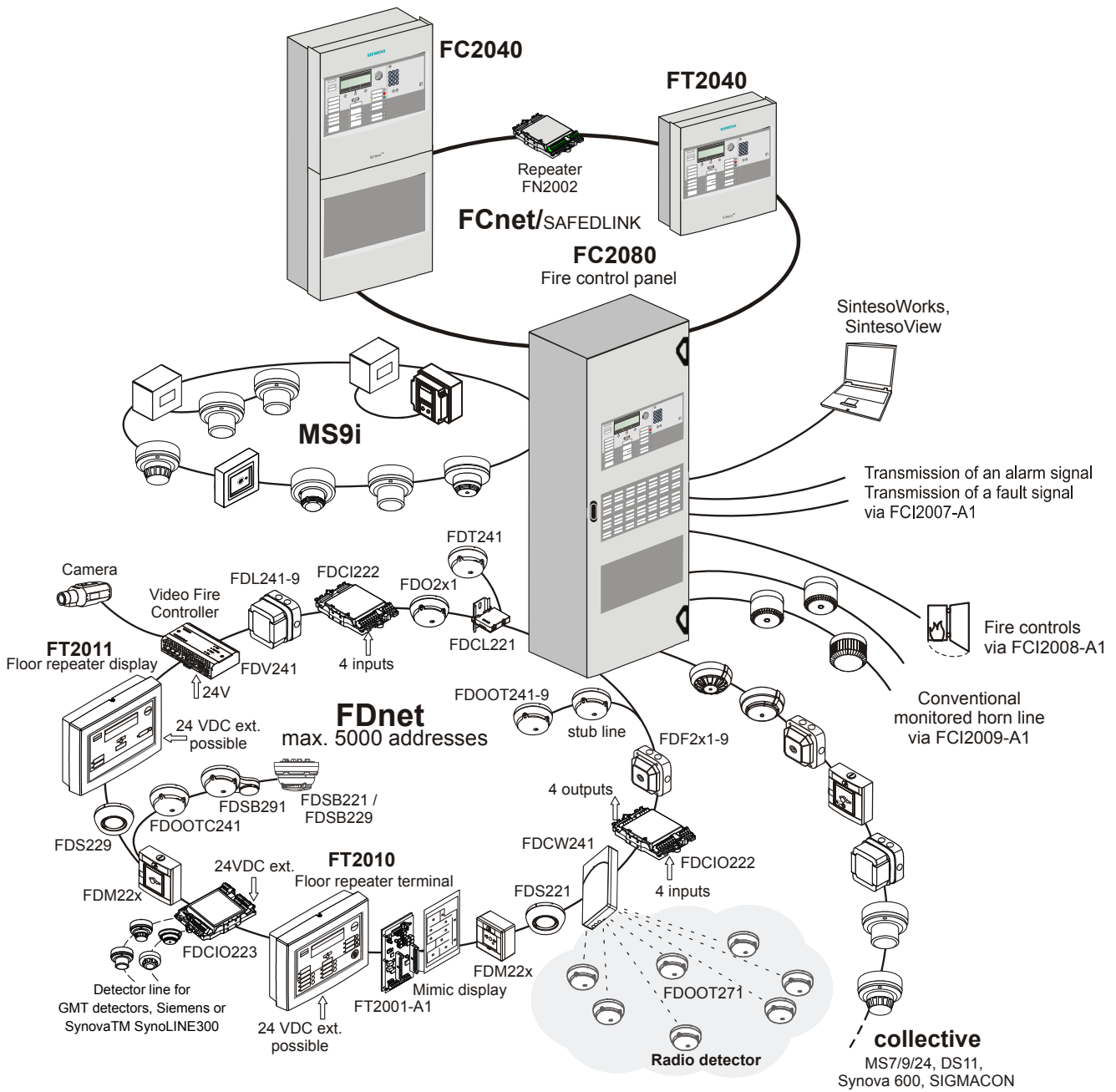


FS20 series (MP4.0)

- **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 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



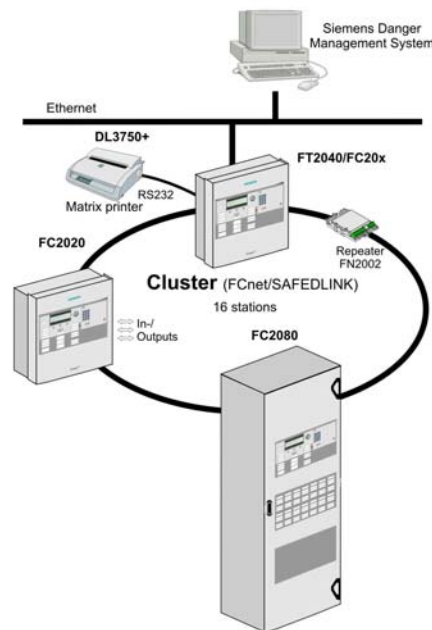
Module bus cards for extending the FC2080

FCL2001-A1 line card (FDnet/C-NET) 4 loops (with a total of max. 252 addresses)	FCL2002-A1 line card (collective) 8 lines (with up to 32 devices)	FCL2003-A1 line card (MS9i) 2 loops (with a total of max. 100 addresses)
FCI2008-A1 I/O card (programmed) 12 freely programmable inputs/outputs per I/O card	FCI2009-A1 I/O card (horn/monitored) 8 monitored horn lines or monitored outputs	FCI2007-A1 I/O card (RT) Alarm, fault, local alarm

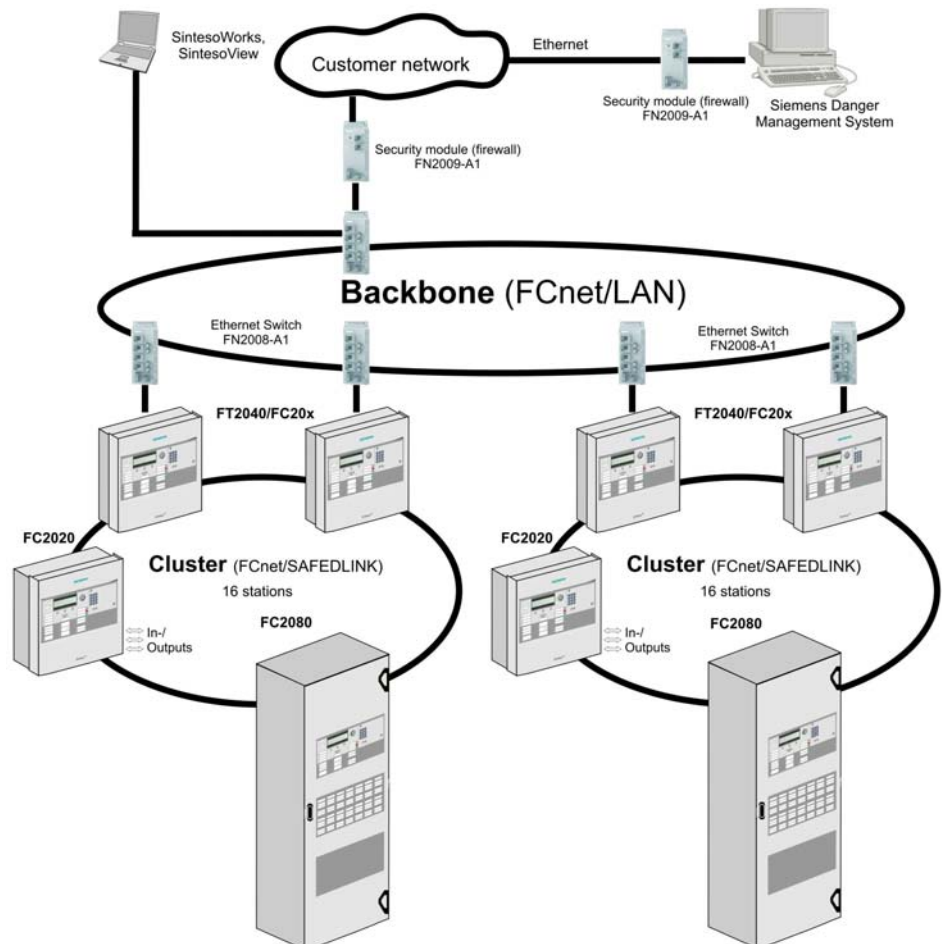
Mixed usage possible, but a total of max. 37 cards per control panel.

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).




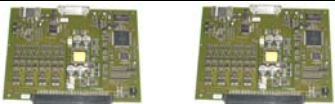



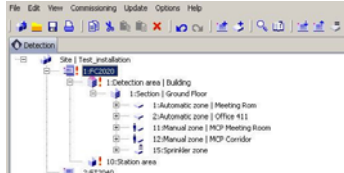


→ Please refer to product data sheet 008955 for details of system networking.

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 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 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) Enables use of max. 5 module bus cards in any combination</p>
	<p>Module bus cards 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 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 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 For installing card cages, power supplies, batteries and options in the 19" housing.</p>
	<p>Configuration tool 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.




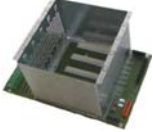









Operation

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

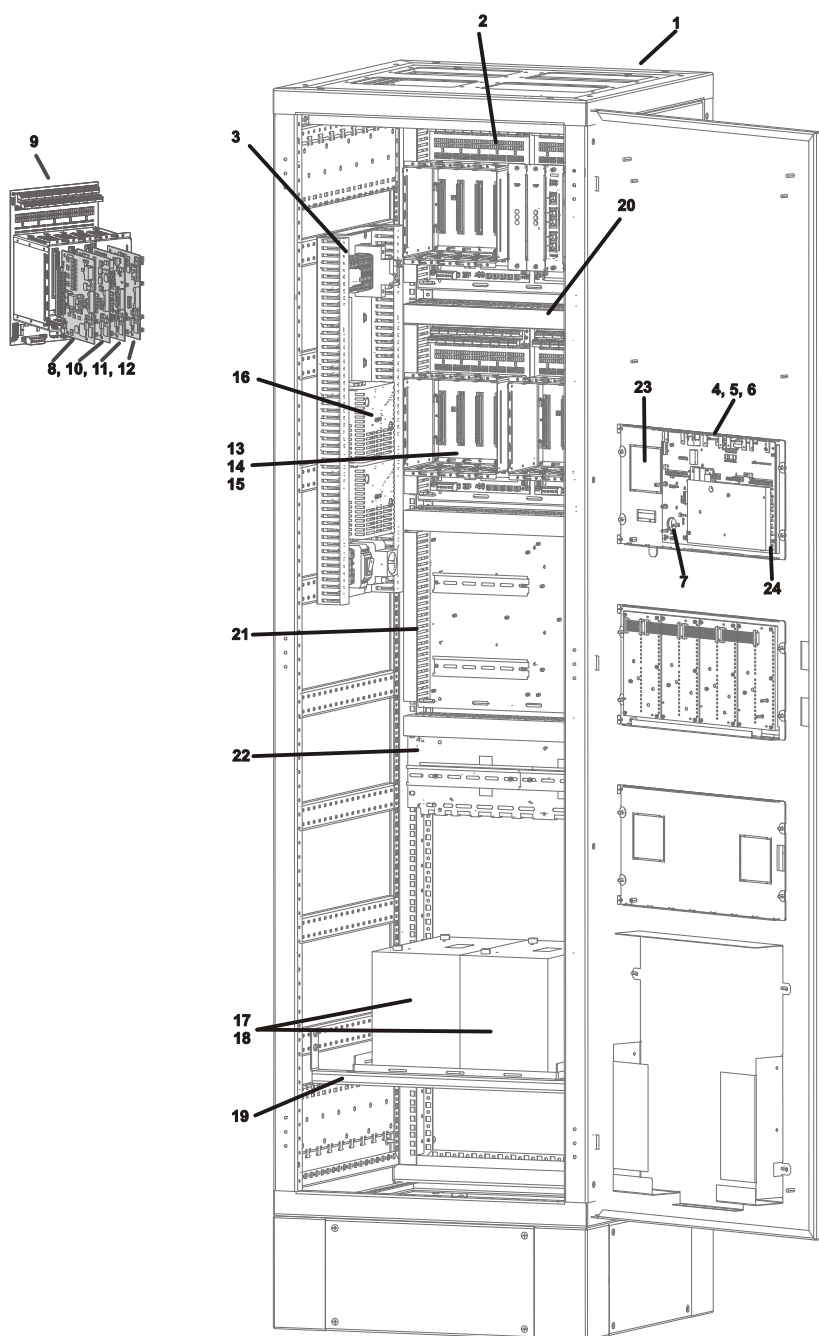
FC20 control panel in the network.

→ 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		FCL2001-A1 Line card (FDnet) 	FCL2002-A1 Line card (collective) 
Printer FTO2001-A1 Event printer can be fitted 	Operating units FCM2028-A2 Operating unit 	FCM2029-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 	Operating accessories FCM2006-A1 48 display groups with one red + one yellow LED 	FCM2007-A1 96 display groups with one red + 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)	FCM2029-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
Power supply			
16	Power supply kit (150 W, B)	FP2005-A1	For boosting performance
17	Battery (12 V, 65 Ah, VDS)	FA2008-A1	for the emergency power supply
18	Battery (12 V, 100 Ah, VDS)	FA2009-A1	for the emergency power supply
19" carriers			
19	Battery tray (19")	FHA2021-A1	For holding batteries in the 19" cabinet
20	Carrier (19", card cage)	FHA2023-A1	For installing the card cage in the 19" cabinet
21	Carrier (19", option)	FHA2024-A1	For installing options (e.g. FDCIOxxx, relay) in the 19" cabinet
Miscellaneous			
22	Key repository adapter	SDA 3000	For controlling the fire brigade key repository (available by the company IFAM)
23	Event printer (internal)	FTO2001-A1	For logging system events
24	Event printer (external)	DL3750+	For logging system events
25	License key (L1) or License key (L2)	FCA2012-A1 FCA2013-A1	for SintesoView (visualizer) for BACnet and SintesoView (visualizer)

Technical data

 Siemens Schweiz AG, CH-6301 Zug Date: see manufacturing date on the product 0786-CPD-21148 EN54-2, EN54-4 Fire control panel, Safety in case of fire FC2080 Technical data see Doc. 008836	Mains voltage	AC 230 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
	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	

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
	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
	FCM2029-A2	S54400-F84-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	
FCM2006-A1	A5Q00021771	Operating add-on (2xLED display)	2.600 kg	
FCM2007-A1	A5Q00021772	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	
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 Batteries	FP2005-A1	A5Q00018779	Power supply kit (150 W, B) for cascading	1.100 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	Color ribbon for matrix printer DL3750+	0.078 kg