

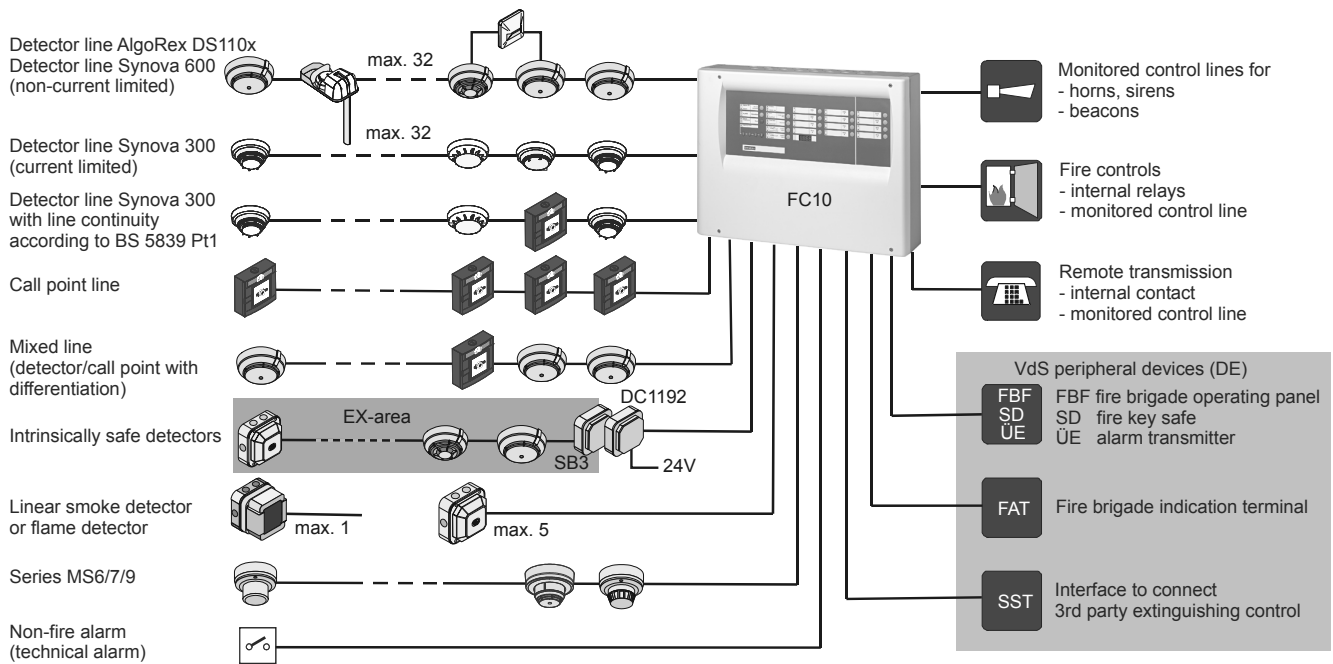
FC1008, FC1012

Fire detection control units



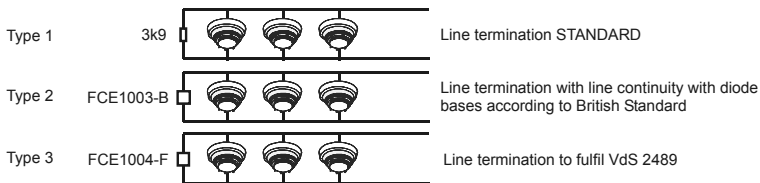
- 8, 12 or 24 zones
- Compatible with all conventional Siemens detector series
- 2 selectable detector line standards for a wide range of detector compatibility
- 2 or 6 monitored control lines for sirens, strobe lights etc.
- Programmable alarm organization for manned/unmanned operation
- Alarm verification
- Cross-zoning
- Suitable to collect non-fire related events with non-latching zone option
- Alarm counter
- 320 event memory with stamped date and time
- Display of alarm delay countdown
- Simple user controls with isolate/test button per zone
- Key code user access with optional key-switch alternative
- Easy on-site configuration
- Polling facility for service information
- Integral capacity for emergency power of up to 72 h
- Battery 7.2 Ah or 12 Ah or 17 Ah (2 x 12 V)
- Fulfills EN 54, VdS and BS requirements

1 System overview



EOL

Detector line termination with three different types, depending on type of control unit.



2 Various types with different features

Types	Zones	Control lines	Power supply	Battery size	7-segment display	Extension zone 13-24 connectable	VdS peripheral devices	EOL
FC1008-A/-H	8	2 (+4)	1.5 A (3.5A)	12/17 Ah	(x)	(x)	-	Type 1
FC1008-B	8	2 (+4)	1.5 A (3.5A)	12/17 Ah	(x)	(x)	-	Type 2
FC1008-C	8	2 (+4)	1.5 A (3.5A)	12/17 Ah	(x)	(x)	-	Type 1
FC1008-D	8	2 (+4)	1.5 A (3.5A)	* 7.2 Ah	(x)	-	-	Type 1
FC1008-E/-I	8	2 + 4 (EVAC)	3.5 A	12/17 Ah	x	-	-	Type 1
FC1008-F	8	2	1.5 A (3.5A)	17 Ah	x	-	x	Type 3
FC1012-A/-H	12	2 (+4)	1.5 A (3.5A)	12/17 Ah	(x)	(x)	-	Type 1
FC1012-B	12	2 (+4)	1.5 A (3.5A)	12/17 Ah	(x)	(x)	-	Type 2
FC1012-C	12	2 (+4)	1.5 A (3.5A)	12/17 Ah	(x)	(x)	-	Type 1
FC1012-D	12	2 (+4)	1.5 A (3.5A)	* 7.2 Ah	(x)	-	-	Type 1
FC1012-F	12	2	1.5 A (3.5A)	17 Ah	x	-	x	Type 3
FC1024-A/-H	12	2	1.5 A (3.5A)	12/17 Ah	-	-	-	Type 1

* if remote transmission card is used, only 7.2 Ah possible (x) = optional

Legend

Zones	number of detector lines (zones) for current limited or non-current limited detectors (selectable per line)	7-segment display	indication module for alarm counter, alarm delay count-down, clock, event memory, etc. factory-mounted or available as add-on (FCA1002)
Control lines	number of monitored control lines providing max. 500mA in state <i>alarm</i> , figure in brackets stands for optional number (FCA1003), state active programmable (steady/pulsating)	Extension zone 13-24 connectable	extension unit (slave), located below master unit, relies on infrastructure of master, own power supply
Power supply	max. available current on 24 V-side	VdS peripheral devices	facility to connect the VdS peripheral devices (FSB, FAT, SD, UE, SST)
Battery size	max. battery capacity (2 x 12 V) that fits into the cabinet, left figure stands for 30 h of emergency power operation (* = for 12 h)	EOL	type of <i>end-of-line</i> units as shipped with the control unit (detail see above)

The FC1008/12-xx is a compact 8 or 12 zone control unit that may be further extended by using the FC1024-A 12 zone expander. The control unit has been designed to be very simple to use while offering exceptional flexibility via a comprehensive feature list.

Detection

- Each line programmable for *current limited* or *non current limited* operation
- Detectors and call points on same line with functional differentiation (where allowed)
- Intrinsically safe detectors via line coupler DC1192 and safety barrier SB3
- Each line programmable for *non-latch* function and/or technical alarms

Inputs / Outputs

- Dry contacts for general alarm and fault
- 2 or 6 monitored control lines 24 V/500 mA for horns, external remote transm., etc.
- 1 to 6 fire control relays, rated 10 A/250 V
- Driver output per detector line
- 6 common driver control outputs
- 6 control inputs (1 programmable)

PMI

- Individual indicator labeling with inscription stripe sets in various languages
- Numeric display for alarm counter, clock, alarm delay count down, event memory
- Individual isolate/test buttons for clear and easy user operation

Commissioning

- Basic functions that can be adapted on-site if required without laptop
- Simple “out of the box” start up with 8 selectable default configurations
- Service function to poll date and time of last *test alarm* or last *configuration change*

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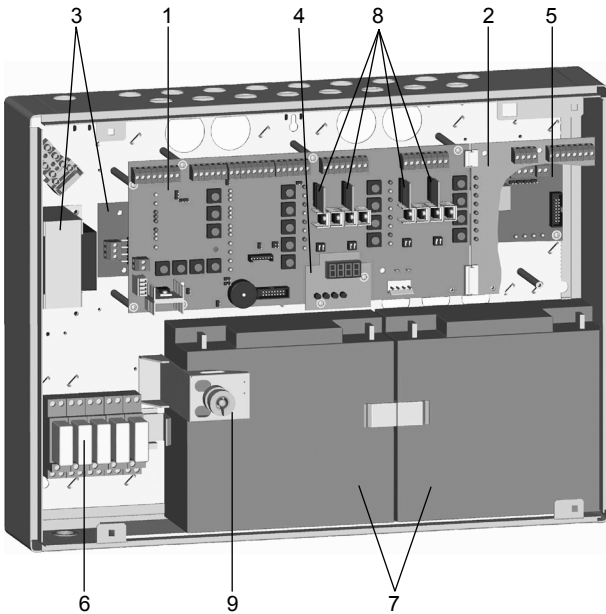
Types	Additional line card BS	Door contact	RT Isolation card	Fire control relays	Key switch	Special functions
FC1008-A/-H	-	-	(x)	(6)	(x)	(standard function according to EN 54)
FC1008-B	x	-	(x)	(6)	(x)	according to British Standard
FC1008-C	-	-	(x)	(6)	x	with Nordic fire key switch (Nordic countries)
FC1008-D	-	-	(x)	(6)	x	PMI with fire brigade terminal (Swiss standard)
FC1008-E/-I	-	-	(x)	(6)	(x)	with special EVAC control unit (Dutch standard)
FC1008-F	-	x	-	(6)	(x)	with interface for VdS peripherals (German standard)
FC1012-A/-H	-	-	(x)	(6)	(x)	(standard function according to EN 54)
FC1012-B	x	-	(x)	(6)	(x)	according to British Standard
FC1012-C	-	-	(x)	(6)	x	with Nordic fire key switch (Nordic countries)
FC1012-D	-	-	(x)	(6)	x	PMI with fire brigade terminal (Swiss standard)
FC1012-F	-	x	-	(6)	(x)	with interface for VdS peripherals (German standard)
FC1024-A/-H	(x)	-	-	(6)	-	zone extension unit (zones 23 – 24)

(x) = optional

Legend

Additional line card BS	To provide line continuity with diode bases according to British Standard	Fire control relays	Max. number of optional relay units (Z3B171) that can be mounted inside the cabinet
Door contact	Built in door contact to disable remote transmission Alarm if cover is removed	Key switch	Optional key switch (FCA1007) to provide operating access instead of access code
RT isolation card	Optional add-on card (FCA1005-D) to isolate the remote transmission hardware-wise		

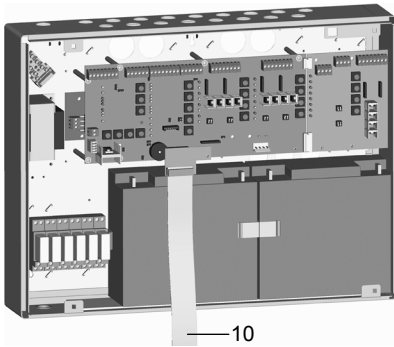
FC1008/12-A/-H, FC1008/12-B, FC1008/12-C



Basic components

- 1 Main board
- 2 Line extension card, with FC1012-x and FC1024-A only
- 3 Power supply card with transformer (1.5 A)
- 4 Display module (optional)
- 5 Control module (optional)
- 6 Fire control relays (optional)
- 7 Battery 17 Ah (2 x 12 V), also 12 Ah possible
- 8 Add-on card for line continuity British Standard (BS), only FC1008/12-B (optional with FC1024-A)
- 9 Key switch Nordic, only FC1008/12-C

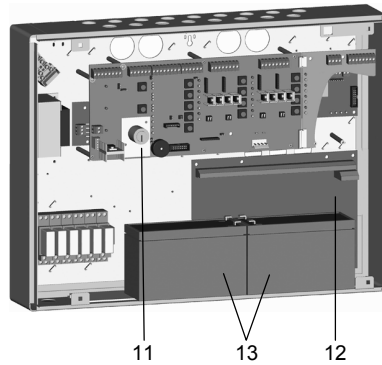
FC1024-A/-H



Additional

- 10 Connection cable set with adapter p.c.b.

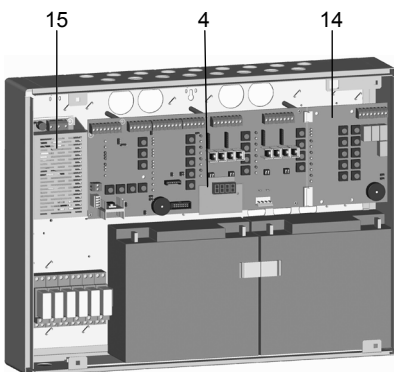
FC1008/12-D



Additional

- 11 Key switch type KABA on main board
- 12 Remote transmission card CH
- 13 Battery 7.2 Ah

FC1008-E/-I



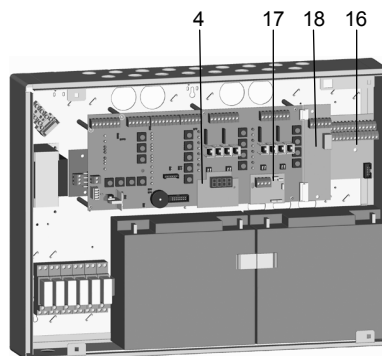
Additional

- 14 EVAC control card
- 15 Switched power supply (3.5 A), can also be used with all other control unit types as alternative

Factory equipped

- 4 Display module

FC1008/12-F

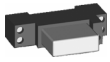


Additional

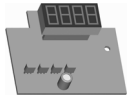
- 16 VdS card
- 17 RS 232 adapter card (optional for FAT)
- 18 SST interface card or line extension card with SST (optional)

Factory equipped

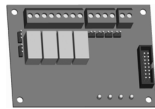
- 4 Display module



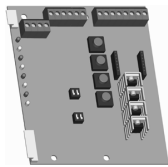
Relay module Z3B171
 1 changeover contact 250 VAC/10 A for the connection of fire control installations such as fire doors.
 Accessory for all control unit types.



Display unit FCA1002
 To provide alarm counter, clock, 320 event memory, delay countdown.
 – Factory equipped with: FC1008-E, FC1008-F, FC1012-F
 – Optional with: FC1008-A/-B/-C/-D, FC1012-A/-B/-C/-D
 Quiescent current:
 – mains operation 33.5 mA
 – battery operation 7.5 mA

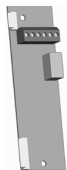


Control card FCA1003
 To provide 4 additional monitored control lines rated 24 V/500 mA.
 Not possible with: FC1008-F, FC1012-F
 Quiescent current: 84 mA



For VdS only

Line extension card FCA1004-F
 Combined with interface SST (VdS). Provides 4 additional detection lines and connecting facility for external extinguishing control.
 Accessory for FC1012-F only
 Quiescent current: 42.5 mA



For VdS only

Interface card SST (VdS) FCA1000-FF
 To provide connecting facility to external extinguishing control.
 Accessory for FC1008-F only.
 Quiescent current: 2.5 mA



For BS 5839 Pt1 only

Add-on line card FCA1007-B BS
 To provide line continuity with diode bases according to British Standard BS5839 Pt1. One unit per 2 lines.
 Accessory for FC1024-A if used with FC1008/12-B
 Quiescent current: 0 mA



RT-isolation card FCA1005-D
 To provide hardware disconnecting facility for the remote transmission channels.
 Accessory for all control unit types.
 Quiescent current: 0 mA



For VdS only

RS232 adapter FCA1006-F
 to provide connecting facility to FAT (VdS).
 Accessory for FC1008-F, FC1012-F
 Quiescent current: 47 mA including FAT

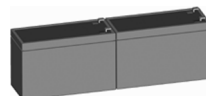


Key switch FCA1007
 To provide operating access via key switch instead of password.
 Accessory for all control unit types.
 Not possible with FC1008/12-C, FC1008/12-D

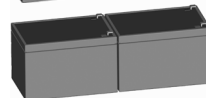


Power supply unit 3.5A FCP1004-E
 Alternative to power additional sounder control lines, air-sampling systems, etc. Provides 3.5A instead of 1.5A.
 Accessory for all control unit types (standard with FC1008-E) .

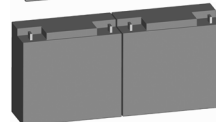
Note:
 The FCP1004-E cannot be used with the former series BC10 and FC500C.



Battery AX1204, AX1210, AX1212
 Gas-tight lead battery 12V.
 Capacity according to required emergency supply bridging time.
 AX1204: 7.2 Ah



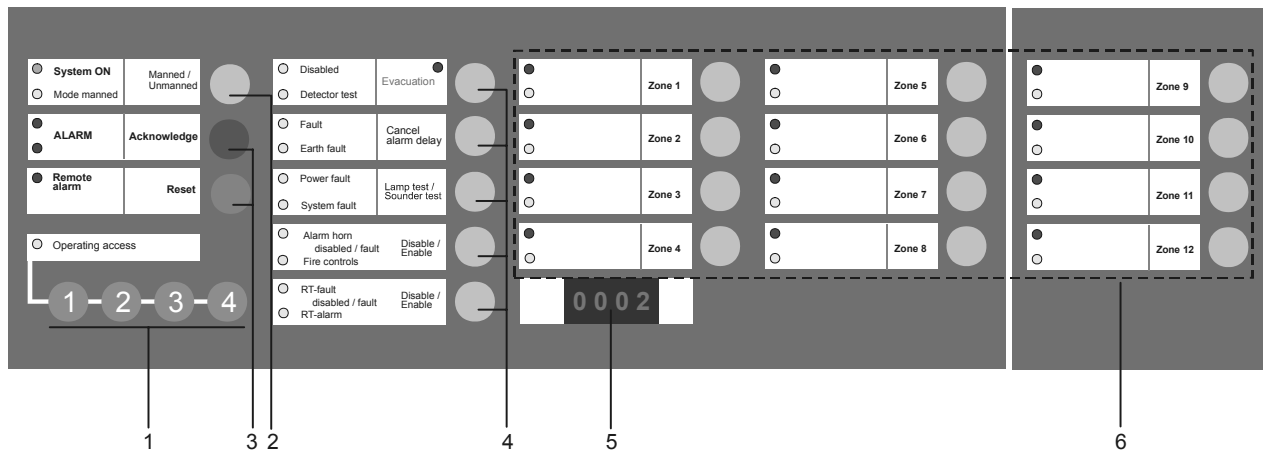
AX1212: 12 Ah



AX1210: 17 Ah

7 Operating panels

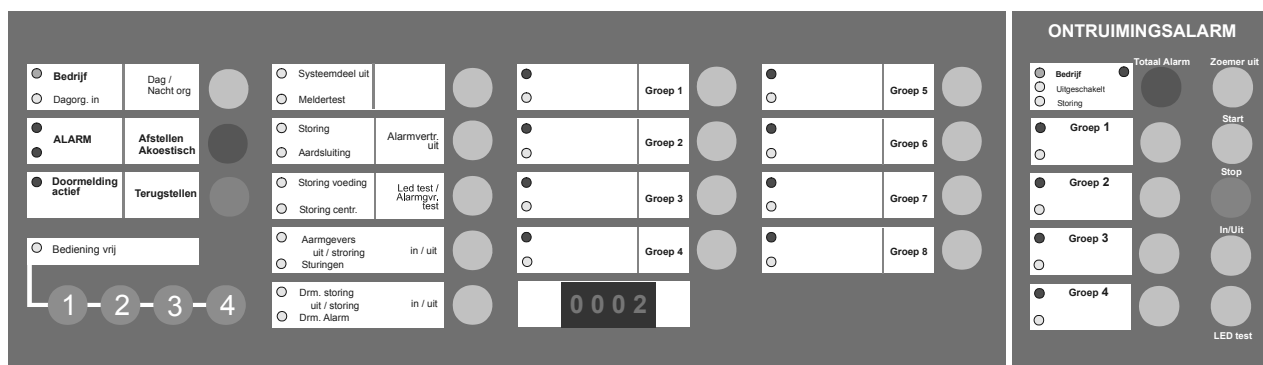
FC1008/12-A /-B/ -C/-H (Standard/Great Britain/Nordic countries), 8 or 12 zones, with optional 7-segment display



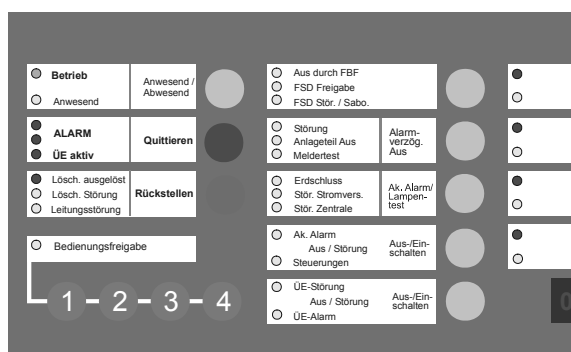
Legend

- 1 Access code entry – Separate user and engineer code access.
- 2 Manual selection of manned / unmanned operation. Automatic switching to unmanned mode.
- 3 Acknowledge & reset keys.
- 4 Evacuate, alarm delay cancel, lamp / sounder test, sounder / control disable and disable remote transmission.
- 5 Optional display providing - Clock / counter – Provides current time, time of switching to unmanned, alarm counter, event memory and remaining alarm delay time.
- 6 Individual zone test / isolate controls.

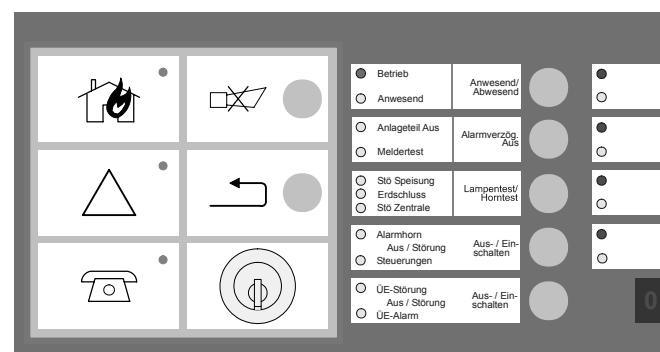
FC1008-E/-I (Netherlands), 8 zones, with 7-segment display and special evacuation module



FC1008/12-F (Germany), 8 or 12 zones, with 7-segment display and additional indicators



FC1008/12-D (Switzerland), 8 or 12 zones, with fire brigade control (FBA)



8 Technical data

Mains supply voltage	115/230 V _{AC} , +10 %/-15 %, 50/60 Hz
Power consumption	
– FC1008/12-A/-B/-C/-D/-F/-H	25 ... 45 VA / optional 20 ... 110 VA
– FC1008-E/-I	20 ... 110 VA
Quiescent current	
– FC1008-A/-B/-C/-D/-H	125 mA
– FC1008-E/-I	170 mA
– FC1008-F	180 mA
– FC1012-A/-B/-C/-D/-H	155 mA
– FC1012-F	220 mA
Emergency power operating	... 12 h / ... 30 h / ... 72 h
Outputs	
– Dry contact Alarm	30 V/1 A, NO/NC
– Dry contact Fault	30 V/1 A, NO/NC
– Fire control relays (optional, 1...6)	250 V/10 A, NO/NC
– Monitored control lines (2 or 6)	24 V/500 mA
– Driver outputs (14 or 18)	24 V/40 mA
Control inputs (6)	Positive potential via dry contact
Interfaces	VdS peripherals (only FC1008/12-F)
Operating temperature	0 ...+50 °C
Storage temperature	-20 ...+60 °C
Humidity (no condensation permitted)	
at T = 25 ±3 °C	≥95 % rel.
at T = 40 ±2 °C	93 % rel.
Cabinet	
– Dimension (W x H x D)	506 x 378 x 125 mm
– Color metal chassis	grey, RAL 9006
– Color cover FC10xx-A/-B/-C/-D/-E/-F	white, RAL 9003
FC10xx-H/-I	black, RAL 7016
Protection category (IEC 60529)	IP40
Standards	EN 54 / BS
Approvals VdS	G204012

9 Reference documents

Doc. No. 007994_--	FC10 2/4 zone	Data sheet
Doc. No. 007991_--	FC1008/12-A/-B/-C	Technical manual
Doc. No. 007991_CH	FC1008/12-D	Technical manual
Doc. No. 009786_--	FC1008/12-H	Technical manual
Doc. No. 007991_NL	FC1008-E	Technical manual
Doc. No. 009787_--	FC1008-I	Technical manual
Doc. No. 007991_DE	FC1008/12-F	Technical manual
Doc. No. 007993_--	FC1024-A	Technical manual
Doc. No. 009788_--	FC1024-I	Technical manual
Doc. No. 007995_--	FC10	Operating manual

10 Details for ordering

	Type	Part no	Designation	Weight
Control units	FC1008-A	A6E60500007	Control unit conventional 8 zone	8.200 kg
	FC1008-B	A6E60500008	Control unit conventional 8 zone GB	8.100 kg
	FC1008-C	A6E60500009	Control unit conventional 8 zone Nordic	8.300 kg
	FC1008-D	A6E60500010	Control unit conventional 8 zone CH	8.300 kg
	FC1008-E	A6E60500011	Control unit conventional 8 zone NL	7.600 kg
	FC1008-F	A6E60500012	Control unit conventional 8 zone DE	8.300 kg
	FC1008-H	A5Q00020250	Control unit conventional 8 zone (OEM)	8.200 kg
	FC1008-I	A5Q00020251	Control unit conventional 8 zone NL (OEM)	7.600 kg
	FC1012-A	A6E60500014	Control unit conventional 12 zone	8.350 kg
	FC1012-B	A6E60500015	Control unit conventional 12 zone GB	8.250 kg
	FC1012-C	A6E60500016	Control unit conventional 12 zone Nordic	8.450 kg
	FC1012-D	A6E60500017	Control unit conventional 12 zone CH	8.450 kg
	FC1012-F	A6E60500018	Control unit conventional 12 zone DE	8.500 kg
	FC1012-H	A5Q00020252	Control unit conventional 12 zone (OEM)	8.350 kg
	FC1024-A	A6E60500019	Control unit conventional zone 13-24	8.300 kg
	FC1024-H	A5Q00020253	Control unit conventional zone 13-24 (OEM)	8.300 kg
	Accessories	FCA1002	A6E60500021	Display unit
FCA1003		A6E60500022	Control card (sounder)	0.137 kg
FCA1004-F		A6E60500023	Line extension card SST	0.257 kg
FCA1000-FF		A6E60500055	Interface card SST	0.103 kg
FCA1007-B		A6E60500027	Add-on line card GB	0.003 kg
FCA1005-D		A6E60500024	RT-isolation card	0.039 kg
FCA1006-F		A6E60500025	RS232 adapter	0.084 kg
FCA1007		A6E60500026	Kit key switch standard	0.175 kg
Z3B171		4843830001	Fire control relay	0.040 kg
FCP1004-E		A6E60500054	Power supply charger unit 3.5 A	0.769 kg
AX1204		2522560001	Battery 12 V/7.2 Ah	2.481 kg
AX1212		4843250001	Battery 12 V/12 Ah	4.188 kg
AX1210		4755700001	Battery 12 V/17 Ah	5.674 kg
Inscription stripes shipped with each control unit	Control unit type	Language of inscription stripes		-
	FC1008/12-A	English, French, German, Italian, Spanish, Flemish, Portuguese, Polish, Czech, Slovakian *)		-
	FC1008/12-B	English		-
	FC1008/12-C	Swedish, Danish, Norwegian, Finnish		-
	FC1008/12-D	German, French, Italian		-
	FC1008-E/-H/-I	Dutch		-
	FC1008/12-F	German		-
	FC1012/24-H	Dutch		-
FC1024-A	English *)		-	

*) Inscription stripes for other languages can be generated using a special Word template (available at Hotline)