



**Flamco**



# **Flamcomat, Flexcon M-K Installation and operating instructions**

**ENG SPC Extension Modul, SD-Card**





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## Contents

1. Appropriate use.....	4
2. Equipment, installation of module.....	4
3. Commissioning, use.....	5
4. Recommendations .....	6
5. Configuration file, examples. ....	6
6. De-commissioning, disposal.....	7

This document is a supplement to the Installation and Operating instructions: Flamcomat, Doc.-No.: MC00018/08-2012/eng; Flexco M-K, Doc.-No.: MC00019/11-2010/eng and must be used in conjunction with these basic documents only. The general safety instructions contained herein apply to the equipment, use and function.  
In each case, the most recent version is valid (information, tel. +49 (0) 2052 887 69).

## 1. Appropriate use

Electronic components form a licensed addition to an SPCx-lw / hw control unit, to provide an SD / MMC card interface for the requirements of SPC data transfer. The declaration of conformity in the basic document is applicable.

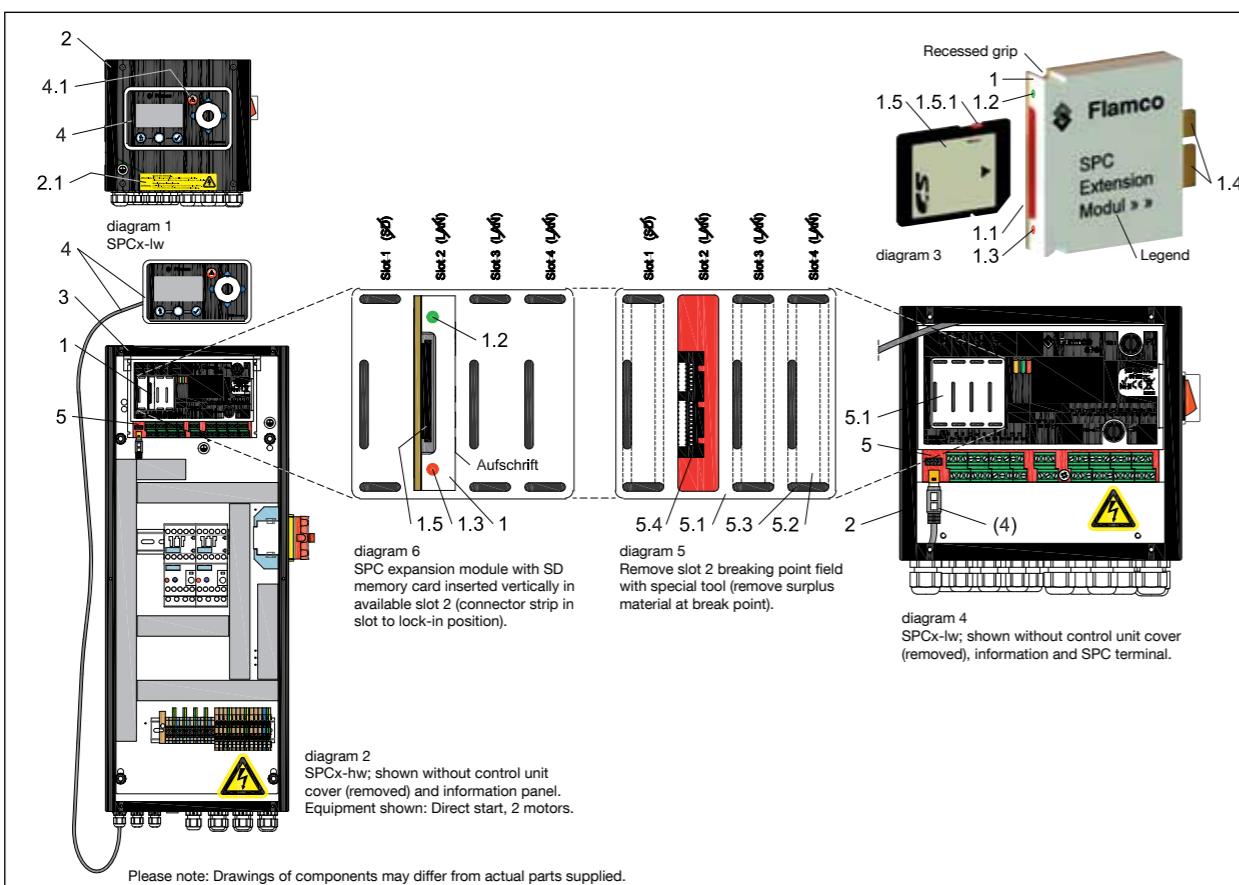
Use: to process an available SPC configuration file\*, save it (to other data carriers), use it for analytical purposes (evaluation, tracing etc.) or communications (distribution, forwarding). File use for making changes or for Support / Service to create an identically-configured control unit subject to specific instructions.

\*) For correct use of available or required records in an SPC control unit.

## **2. Equipment, installation of module**

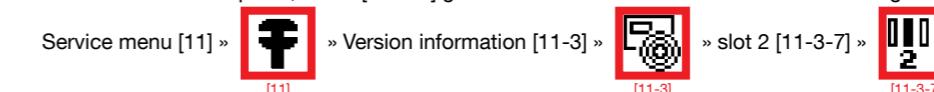
Original equipment: The module is an integral part of the control unit for external pressure (Fig. 1; 2; 6). Supplementary equipment: The packaging contains item 1 (fig. 3), the actions involved in fig. 2 and 4 - 6 can only be carried out on switching off the power supply.

1.	SPC Extension module, SD card	2.1	Information, note: Dangerous voltage! To be opened by qualified personnel only. Disconnect from power supply before opening the unit.
1.1	Version type, back: “SPC_SD_V(..) .(..)”. 1.2 LED green, illuminated (functioning).	3	SPCx-hw control unit
1.3	LED red, illuminated (error).	4	SPC Terminal
1.4	Connector strip.	4.1	Sensor key: “Error message display”, active on backlighting red on.
1.5	Secure Digital Memory Card (SD) 2GB memory card, alternatively Multimedia Card (MMC) up to 8GB; Secure Digital Memory Card High Capacity (SDHC) up to 32GB; File formats: FAT12; 16; 32.	5	SPCx control unit
		5.1	Slots 1...4.
		5.2	Predetermined breaking point field
1.5.1	Write-protect slide (Lock).	5.3	Breaking point field opening.
2	SPCx-lw control unit	5.4	Slot 2.

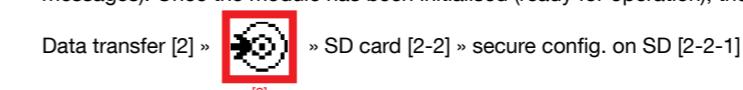


### **3. Commissioning, use**

With the expansion module in position, the card inserted and the control-unit cover that allows the power supply and control unit to be switched "On" in place, menu [11-3-7] gives access to the version view of the following extension:

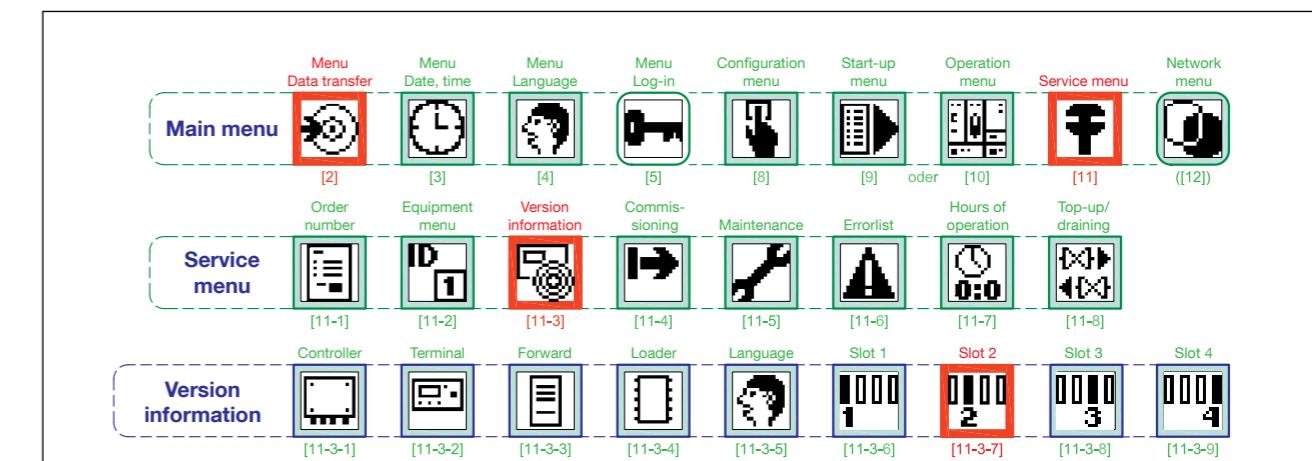


If the version number under [11-3-7] is missing, the module is not ready for operation (see pages 5 and 6 - Internal and external error messages). Once the module has been initialised (ready for operation), the save function enables the following configuration:



» Carry out action » Enter. The back-up operation does not prevent any control functions relating to pressure. Examples of saved records are shown on pages 6 and 7.

#### **Location of data in menu:**



#### **Internal messages: LED displays on the module (no. 1.2 and 1.3):**

Status	Description	Action
Green "Off"	Module not recognised, not available, no access (version number under [11-3-7] not available).	Control unit, power supply; use indicated slot; clean contact surfaces of the connector strip.
Green "On"	Module recognised.	Access, function possible.
Green "flashing"	Data transfer	Do not remove module or SD card!
Red "Off"	No errors.	-
Red "On"	Use of module blocked (Licensing of headings).	Use module on one of three previously used control units.
Red "intermittent"	Last action resulted in error.	Repeat process under initial conditions (see also: "External error message", 60 module)

**External error message: applicable error message after going to message display on terminal if error message shown:**

Display	Description	Measures
60 Module	<p>Last external module action resulted in error (identical to LED red, flashing intermittently; no. 1.3).</p> <p>Important: Error not saved, not contained in menu [11-6] (Error history, analysis).</p>	<p>Acknowledgement deactivates the error message and the flashing red LED. (no consequences for not acknowledging)</p> <p>Repeat process under initial conditions.</p>

**External error messages on display of the SPC terminal; accurate, automatic error messages:**

Error No.	Display	Legend	Description	Action
1			The expansion module is not available or not completely inserted (version number not shown).	Insert expansion module correctly, push card to lock-in position.
2		Back-up failed.	The write-protect is activated (lock on).	Remove card, deactivate write protect (lock off) and insert card to the lock-in position. Repeat process under initial conditions.
3		Back-up failed.	The card has not been formatted.	Use a formatted card. Repeat process under initial conditions.
5		Back-up failed.	Card does not have enough space to write data.	Use a card with at least 200 Kb of available memory (storage record). Repeat process under initial conditions.
6		Back-up failed.	Error while reading one of the files.	Repeat process under initial conditions.
7		Back-up failed.	Error when closing one of the files.	Repeat process under initial conditions.
20		Back-up failed.	General error, e.g.: Time out as a result of lack of card or card not in lock-in position.	Repeat process under initial conditions.

#### 4. Recommendations

Configuration files relate to both equipment and use and as such are not transferable. Do not misuse, transfer to third parties or handle carelessly. Stored files or other storage media must be archived properly so that they can be easily traced without leaving them open to misuse. If there are any requirements relating to analysis, correction, compensation etc., files containing the updated data in question must be transferred to Flamco Support or Service as an attachment to an e-mail message. Flamco Service or the qualified representative will make any changes on-site only. If a more recent version of the software is available, this change may also cover a software update (as part of a general update). Any data written on the card is permanent, i.e. it remains if the control unit is switched off or the power supply is interrupted in any way.

#### 5. Configuration file, examples.

Name	Änderungsdatum	Typ	Große
SPC_Konfig.xml	23.11.2012 12:03	XML-Dokument	21 kB

**Readout 1**

Open folder on a removable drive.

Software version up to 1.1.5 (Menu [11-3-1]\*):

Saving will overwrite an open file.

This means that there will only be a storage record of the last saving.

Name	Änderungsdatum	Typ	Große
SPC-011-00002	22.11.2012 09:45	Dateiordner	
SPC_Konfig.xml	22.11.2012 15:06	XML-Dokument	21 kB

**Readout 2**

Open folder on a removable drive.

Software version from 1.1.6 (Menu [11-3-1]\*):

File will be saved in a subdirectory. The folder will be named with the serial number of the control unit.

Name	Änderungsdatum	Typ	Große
SPC-011-00002	22.11.2012 09:45	Dateiordner	
SPC_Konfig.xml	22.11.2012 15:06	XML-Dokument	21 kB

**Readout 2.1**

The highlighted file contains the data record of the last time the configuration file was saved (updated).

<?xml version="1.0"?>
- <SPC_Austauschdaten>
<!--Austauschdaten SPC-Steuerung, Parameter, Listen-->
<!--ID Aggregat: DP1-3-50 -->
<!--Auftragsnummer: 2004109050-->
<Version> 1.12 </Version>
<Datum> 22.11.12 </Datum>
<Uhrzeit> 15:06:58 </Uhrzeit>
<Seriennummer> SPC-011-00002 </Seriennummer>
+ <Parameterliste>
+ <MeldungsHistorienliste>
+ <Nachspiseilliste>
</SPC_Austauschdaten>

**Readout 2.2**

It is possible to open a file with a suitable editor (XML Notepad). If data in this file is changed it will become invalid and not suitable for re-use. The data record shown is that of the file highlighted in readout 2.1.

Aggregate ID: Menu [11-2-1]\*  
Order no.: Menu [11-1-1]\*  
Version: Menu [11-3-3]\*

Date and time of saving: Menu [3]\*  
Actual value of entry under: Menu [11-3-1]\*  
Serial no.: Menu [11-6-1]\*  
Error history: Menu [11-8-3]\*

Top-up list (topping-up/draining): Menu [11-8-3]\*

Name	Änderungsdatum	Typ	Große
SPC-011-00002	22.11.2012 09:45	Dateiordner	
SPC_Konfig.xml	22.11.2012 15:06	XML-Dokument	21 kB

**Readout 2.3**

Highlighted subdirectory contains historical configuration files.

Name	Änderungsdatum	Typ	Große
KonfIndex.idx	22.11.2012 15:06	SQL Server Replicat...	1 kB
SPC1.xml	22.11.2012 09:45	XML-Dokument	20 kB
SPC2.xml	22.11.2012 12:07	XML-Dokument	30 kB
SPC3.xml	22.11.2012 15:00	XML-Dokument	21 kB
SPC4.xml	22.11.2012 15:06	XML-Dokument	21 kB

**Readout 2.4**

Open subdirectory.

Name	Änderungsdatum	Typ	Große
KonfIndex.idx	22.11.2012 15:06	SQL Server Replicat...	1 kB
SPC1.xml	22.11.2012 09:45	XML-Dokument	20 kB
SPC2.xml	22.11.2012 12:07	XML-Dokument	20 kB
SPC3.xml	22.11.2012 15:00	XML-Dokument	21 kB
SPC4.xml	22.11.2012 15:06	XML-Dokument	21 kB

**Readout 2.5**

The highlighted file contains the data record of the first time the configuration file was saved (eldest file).

Name	Änderungsdatum	Typ	Große
KonfIndex.idx	22.11.2012 15:06	SQL Server Replicat...	1 kB
SPC1.xml	22.11.2012 09:45	XML-Dokument	20 kB
SPC2.xml	22.11.2012 12:07	XML-Dokument	20 kB
SPC3.xml	22.11.2012 15:00	XML-Dokument	21 kB
SPC4.xml	22.11.2012 15:06	XML-Dokument	21 kB

**Readout 2.6**

The highlighted file contains the data record of the penultimate time the configuration file was saved.

Name	Änderungsdatum	Typ	Große
SPC-011-00002	02.12.2012 12:15	Dateiordner	
B469.jpg	23.11.2012 14:28	JPEG-Bild	102 kB
SPC_Konfig.xml	02.12.2012 12:15	XML-Dokument	30 kB

**Readout 3**

The data carrier contains an inaccessible file (example highlighted). Important note: Configuration files must not include third-party files.

#### 6. De-commissioning, disposal.

Removing the module from the slot prevents the "save configuration to SD" function (error No. 1; see page 6). If this electronic component is to be disposed of, this must be performed in line with the requirements of the waste-disposal company in question.

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