SIEMENS

SIMATIC

BRAUMAT/SISTAR Classic
Block library basic

Function Manual

BRAUMAT/SISTAR Classic V6.0 SP2

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Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠ DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

⚠ WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠ CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

⚠ WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

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We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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Table of contents

Blocks in SIS_USR

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1.1 Preface

Purpose of the manual

This library contains both basic system blocks and project-specific interface blocks of BRAUMAT/SISTAR Classic V6.0. Only the interface blocks are described here.

This manual is intended for those responsible for configuring, commissioning and servicing automation systems.

Where is this manual valid?

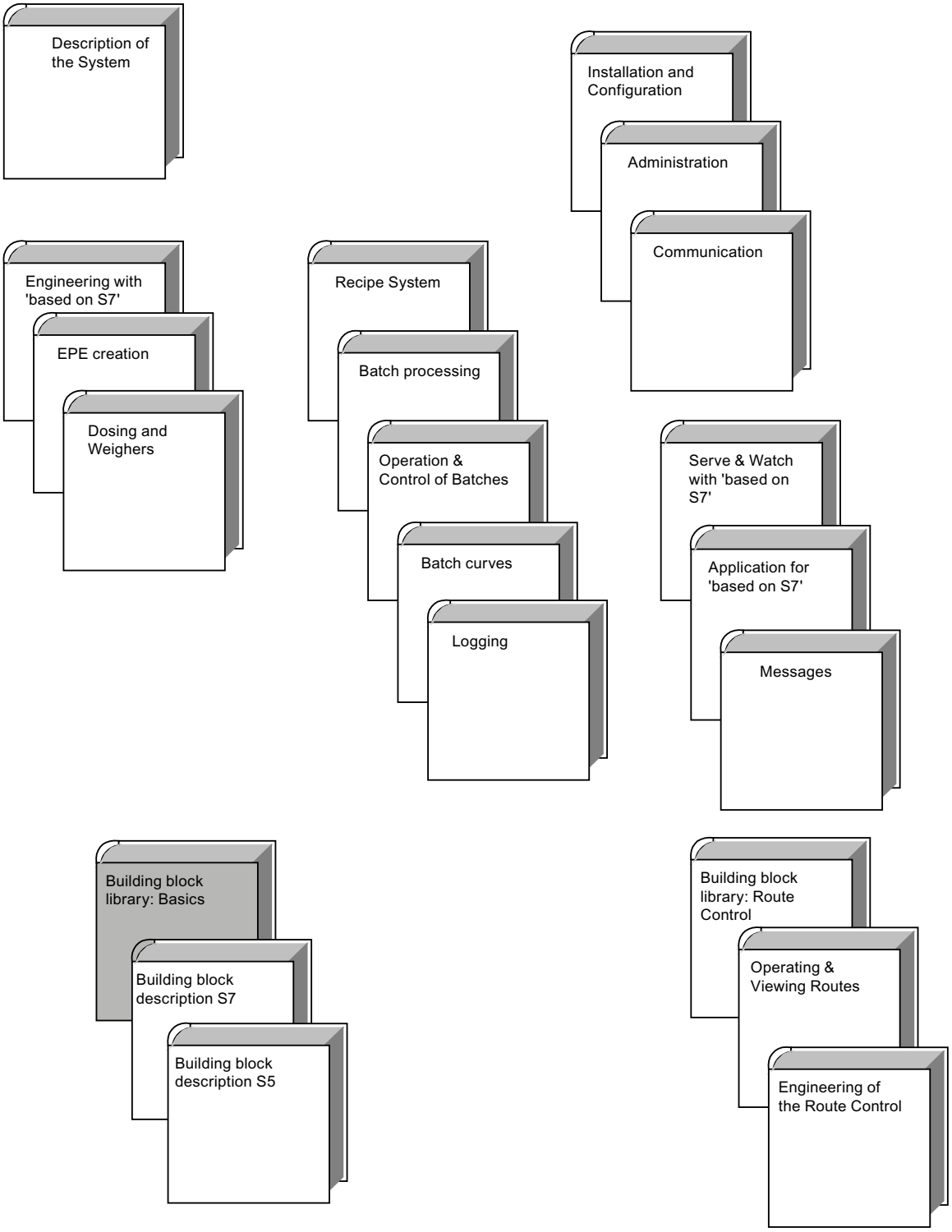
This manual is valid for the software package BRAUMAT/SISTAR Classic from version V6.0.

The offered electronic manual is most largely identical to the contents of the on-line help. Due to a technically necessary editorial deadline for the generation of electronic manuals, small deviations can occasionally occur in relation to the on-line helps. The statements in the on-line helps take priority over those of the manual.

Place of this documentation in the information environment

This manual forms part of the BRAUMAT/SISTAR Classic V6.0 documentation package. The following schematic of the document architecture shows the individual manuals as well as their thematic grouping within the entire program package.

Document structure



Further Support

If you have any technical questions, please get in touch with your Siemens representative or agent responsible.

You will find your contact person at:

http://www.siemens.com/automation/partner (http://www.siemens.com/automation/partner)

You will find a guide to the technical documentation offered for the individual SIMATIC Products and Systems here at:

http://www.siemens.com/simatic-tech-doku-portal (http://www.siemens.com/simatic-tech-doku-portal)

The online catalog and order system can be found under:

http://mall.automation.siemens.com/ (http://mall.automation.siemens.com/)

Training Centers

Siemens offers a number of training courses designed to familiarize you with the SIMATIC S7 automation system. Please contact your regional training center or our central training center in D 90026 Nuremberg, Germany for details:

http://www.sitrain.com (http://www.sitrain.com)

Technical Support

You can reach the Technical Support for all A&D products

- Via the Web form for the Support Request
  http://www.siemens.com/automation/support-request (http://www.siemens.com/automation/support-request)

Additional information about our Technical Support can be found on the Internet pages http://www.siemens.com/automation/service (http://www.siemens.com/automation/service)

Service & Support on the Internet

In addition to our documentation, we offer our know-how online on the Internet at:

http://www.siemens.com/automation/service&support (http://www.siemens.com/automation/service&support)

where you will find the following:

- The newsletter, which constantly provides you with up-to-date information on your products.
- The right documents via our Search function in Service & Support.
- A forum, where users and experts from all over the world exchange their experiences.
- Your local representative for Automation & Drives.
- Information on field service, repairs, spare parts and more under "Services".

1.2 Overview

Block	Symbol	Function	Use
FB1001-1064	Ta xx_GOP_FB	Sequence function block	User
FB1200	CRST_USR_FB	User instructions and calls, running at cold start	User
FB1201	WRST_USR_FB	User instructions and calls, running at cold start	User
FB1205	CAS_USR_FB	Batch job start user interface Start batch job from PCU. User may locate batch job data and the associated unit by data set number handed over	User
FB1209, FB1210	CAS_CB1_FB CAS_CB2_FB	Batch Job Start user interface	User
FB1220, FB1221	CYCLE_BEGIN_USR_FB CYCLE_END_USR_FB	User instructions and calls running at beginning/end of OB1 cycle	User
FB1222, FB1223, FB1224	TIMER_100MS_BEG_USR_FB TIMER_100MS_END_USR_FB TIMER_100MS_USR_FB	User instructions and calls for beginning/end or once during 100ms cycle	User
FB1225	TIMER_1S_USR_FB	User instructions and calls running once during 1s cycle	User
FC700	INPUT_FC	Connection of input interfaces (E/M)	User
FC701	OUTPUT_FC	Connection of output interfaces (A/M)	User

1.3 TA xx_GOP_FB (FB1001-1064)

Number

FB1001-1064

Description

Unit FB.

See manual “#26-Bst-S7”

1.4 CRST_USR_FB (FB1200)

Number

FB1200

Cold Restart user Interface FB

Description

In this FB the user transmits commands and calls which should be executed in the cold restart of the AS.

1.5 WRST_USR_FB (FB1201)

Number

FB1201

Warm restart user Interface FB

Description

In this FB the user transmits commands and calls which should be executed in the cold restart of the AS.

1.6 CAS_USR_FB (FB1205)

Number

FB1205

Batch job start in the PCU

Description

Link on #26_Bst_S7\CAS - batch job start in the PCU#

1.7 CAS_CB1_FB/CAS_CB2_FB (FB1209/FB1210)

Number

FB1209 User open batch data

FB1210 observe batch data

Description

The block is called from the routing block, if new batch data from the PC arrived.

The user receives information via a data interface about these batch data and can program more functions in this FB. Among other things the user should provide data for the distribution of the batch himself. The information as to where to find the batch data can be found in DBW10/12/14.

Transfer parameters

ACCUMULATOR 1 = 0 ---> NEW BATCH DATA

DBB	0	YEAR
DBB	1	RECIPE TYPE
DBW	2	RECIPE NUMBER
DBW	4	JOB NUMBER
DBW	6	BATCH NUMBER
DBW	8	MESSAGE SECTION NUMBER
DBW	10	CAS DATA RECORD
DBW	12	ERROR: DBX 12.7 = 1 ERROR, = 0 NO ERROR
DBW	14	DB number
DBW	16	DW NUMBER (S5 information! -> S7=Amount * 2)
DBW	18	DW-NUMBER (Information in WORDs!)

1.8 CYCLE_BEGIN_USR_FB; CYCLE_END_USR_FB

Number

FB1220.1221

Cyclical call in the OB1

Description

The user can program calls and commands here that should be transmitted at the beginning (FB1220) or at the end (FB1221) of the OB1 cycle.

1.9 TIMER_100MS_BEG_USR_FB; TIMER_100MS_END_USR_FB; TIMER_100MS_USR_FB (FB1222, 1223, 1224)

Number

FB1222,1223,1224

Cyclical call in the time alarm OB 100 ms

Description

The user can program calls and commands here, which should be run at the beginning (FB1222) or at the end (FB1223) or during (FB1224) the 100 ms time alarm.

1.10 TIMER_1S_USR_FB (FB1225)

Number

FB1225

Cyclical call in the time alarm of 1 s

Description

The user can program calls and instructions that are supposed to be set down during the 1000ms watchdog timer alarm.

1.11 INPUT_FC (FC700)

Number

FC700

Connection of input interfaces (E/M)

Description

Combined input connection of the different technological function blocks.

The user may place program statements and calls here, which have to run before and after the individual input connection of the functions.

1.12 OUTPUT_FC (FC701)

Number

FC701

Connection of output interfaces (A/M)

Description

Combined output connection of the different technological function blocks. The user may place program statements and calls here, which have to run before and after the individual output connection of the functions.