



Product specification

Robot User Documentation

S4Cplus
M2000A



Product specification

Robot User Documentation

3HAC024792-001

Rev.-

S4Cplus

M2000A

The information in this manual is subject to change without notice and should not be construed as a commitment by ABB. ABB assumes no responsibility for any errors that may appear in this manual.

Except as may be expressly stated anywhere in this manual, nothing herein shall be construed as any kind of guarantee or warranty by ABB for losses, damages to persons or property, fitness for a specific purpose or the like.

In no event shall ABB be liable for incidental or consequential damages arising from use of this manual and products described herein.

This manual and parts thereof must not be reproduced or copied without ABB's written permission, and contents thereof must not be imparted to a third party nor be used for any unauthorized purpose. Contravention will be prosecuted.

Additional copies of this manual may be obtained from ABB at its then current charge.

©Copyright 2004 ABB All right reserved.

ABB Automation Technologies AB
Robotics
SE-721 68 Västerås
Sweden

1 Introduction	5
1.1 Easy to use Information Products	5
General	5
Key benefits	5
1.2 Ordering User documentation	5
CD-ROM	5
Paper format	5
ABB Library	6
Languages	6
Ordering User Documentation	6
Basic robot documentation package	6
1.3 Robotics manuals	7
CD documentation	7
Operating manuals	7
RAPID manuals	7
BaseWare option manuals	7
ProcessWare option manuals	7
Hardware option manuals	7
Product manuals	8
1.4 M2000A versus M2000	9
General	9
2 English	11
CD documentation	11
Operating manuals	11
RAPID manuals	11
BaseWare option manuals	11
ProcessWare option manuals	12
Hardware option manuals	12
Product manuals	12
Product specifications	13
3 Swedish	15
CD documentation	15
Operating manuals	15
RAPID manuals	15
BaseWare option manuals	15
ProcessWare option manuals	16
Hardware option manuals	16
Product manuals	16
Product specifications	17
4 German	19
CD documentation	19
Operating manuals	19
RAPID manuals	19
BaseWare option manuals	19
ProcessWare option manuals	20
Hardware option manuals	20
Product manuals	20
Product specifications	21
5 French	23
CD documentation	23
Operating manuals	23
RAPID manuals	23

Table of Contents

BaseWare option manuals	23
ProcessWare option manuals	24
Hardware option manuals	24
Product manuals	24
Product specifications	25
6 Spanish	27
CD documentation.	27
Operating manuals.	27
RAPID manuals.	27
BaseWare option manuals.	27
ProcessWare option manuals	28
Hardware option manuals	28
Product manuals	28
Product specifications	29
7 Portuguese	31
CD documentation.	31
Operating manuals.	31
RAPID manuals.	31
BaseWare option manuals.	31
ProcessWare option manuals	32
Hardware option manuals	32
Product manuals	32
Product specifications	33
8 Italian	35
CD documentation.	35
Operating manuals.	35
RAPID manuals.	35
BaseWare option manuals.	35
ProcessWare option manuals	36
Hardware option manuals	36
Product manuals	36
Product specifications	37
9 Danish	39
CD documentation.	39
Operating manuals.	39
RAPID manuals.	39
BaseWare option manuals.	39
ProcessWare option manuals	40
Hardware option manuals	40
Product manuals	40
Product specifications	41
10 Dutch	43
CD documentation.	43
Operating manuals.	43
RAPID manuals.	43
BaseWare option manuals.	43
ProcessWare option manuals	44
Hardware option manuals	44
Product manuals	44
Product specifications	45

1 Introduction

1.1 Easy to use Information Products

General

The Robot User Documentation is aimed at all robot users, providing easy to use information and guidelines as well as in-depth descriptions and detailed reference literature.

There is a robot user document for each stage of use, from installation and commissioning, through programming, operation and maintenance to troubleshooting and decommissioning of your robot system.

ABB's group of skilled editors provide professional user documentation, ensuring efficient communication of robot expertise, from our engineers to your personnel.

Key benefits

- Easy-to-use user documentation
- In-depth reference information
- Detailed product information
- Maintenance and service procedures

1.2 Ordering User documentation

CD-ROM

All robot user documentation can be ordered on a CD-ROM. The documentation browser appears automatically on your PC screen at startup of the CD. The CD format provides advantages, such as easy search, copy and paste, printing pages, etc. There is one CD per robot family in all languages, as specified on page 11 to page 45. Updates of the CD are released at every major product change (Robot, Controller and RobotWare).



Figure 1 CD-ROM interface.

Paper format

User documentation can be delivered in traditional paper format as specified on the robot specification form. User documentation for programmers is delivered in bound

format and user documentation for operators/service engineers is delivered as the more robust wire binding.

ABB Library

Updated versions of all user documentation can be found in English pdf format at Inside.ABB.com/library. ABB Library is a fast and easy way to find updated robot information and can be accessed by all ABB employees.

Languages

Robot documentation is translated into 9 languages, according to the EU machine directive.

Documents which are not translated will be delivered in English, when ordered, see the specification tables.

Ordering User Documentation

User documentation is ordered using the standard Robot Specification form. A single tick on the specification form will provide you with the basic robot package of documentation. Product manuals are delivered with the robots and controllers, respectively. Application manuals are included, when buying RobotWare options.

For more detailed information, please refer to the specification tables.

Basic robot documentation package

Art. no	Basic robot package of documentation
3HAC7793-1	User's Guide (English)
3HAC7783-1	RAPID Overview (English)
3HAC7774-1	RAPID Reference Instruction Datatypes and Functions (English)
3HAC022419-001	Product manual S4Cplus Automotive (English)
See page 12 for article number.	Product manual manipulator: IRB 140, 1400, 2400, 4400, 6600/6650, 6650S, 7600

1.3 Robotics manuals

CD documentation	There is one documentation CD per robot family. Every CD includes all robot user documentation in all languages, as specified in this document. A document browser makes it easy to find the document of your choice.
Operating manuals	These manuals are directed to persons with first hand contact with the robot system, i.e. production operators, programmers and service personnel.
RAPID manuals	<p>The RAPID manuals include syntax and detailed information on all instructions, functions and datatypes in the RAPID language and system parameters.</p> <p>For reference information on mechanics and electronics, please refer to the Product Manual, part: Reference Information.</p>
BaseWare option manuals	<p>The BaseWare option manuals describe BaseWare options. These options are aimed at optimizing a robot system towards your specific needs.</p> <p>The content includes:</p> <ul style="list-style-type: none">• Purpose of the option: For what is the option intended?• What is included in the option, e.g. RAPID instructions, system parameters• Which hardware is required, e.g. cables and I/O boards• Setup, programming and configuration examples
ProcessWare option manuals	<p>The ProcessWare option manuals describe ProcessWare options directed to specific applications, such as ArcWare, SpotWare and DispenceWare.</p> <p>The content includes:</p> <ul style="list-style-type: none">• Purpose of the option: For what is the option intended?• What is included in the option, e.g. RAPID instructions, system parameters• Which hardware is required, e.g. cables and I/O boards• Setup, programming and configuration examples
Hardware option manuals	The hardware option manuals describe hardware options, e.g. how to connect field-busses or external equipment of type additional axes to your robot.

Product manuals

There is a Product Manual for each robot and controller. The Product Manual is divided in two parts, as described below:

Product Manual, Procedures:

- Safety information
- Installation and commissioning
- Maintenance (Service schedules and preventive maintenance routines)
- Repair (Lists of spare parts and repair procedures)
- Calibration procedures
- Decommissioning procedures

Product Manual, Reference Information:

- Reference Information
- Part list
- Foldouts or exploded views
- Circuit diagrams

1.4 M2000A versus M2000

General

There are no differences in the documentation structure between M2000A and M2000.

2 English

CD documentation

Art. no.	Manual	Option no.
3HAC020415-001	CD Documentation IRB 140, M2000A (All languages)	69-1
3HAC020414-001	CD Documentation IRB 1400, M2000A (All languages)	69-1
3HAC020413-001	CD Documentation IRB 2400, M2000A (All languages)	69-1
3HAC020412-001	CD Documentation IRB 4400, M2004 (All languages)	69-1
3HAC020408-001	CD Documentation IRB 6600/6650, M2000A (All languages)	69-1
3HAC020410-001	CD Documentation IRB 7600, M2000A (All languages)	69-1
3HAC023553-001	CD Documentation IRB 6650S, M2000A (All languages)	69-1

Operating manuals

Art. no.	Manual	Option no.
3HAC7793-1	User's Guide (English)	428-1

RAPID manuals

Art. no.	Manual	Option no.
3HAC7783-1	RAPID Overview (English)	428-1
3HAC7774-1	RAPID Reference Instruction Datatypes and Functions (English)	428-1

BaseWare option manuals

Art. no.	Manual	Option no.
3HAC16062-1	AbsAcc User's Guide (English)	428-1 and 2-1
3HAC7696-1	RAP Protocol Spec (English)	428-1 and 293-1
3HAC7697-1	RAP Service Spec (English)	428-1 and 293-1
3HAC7699-1	Sensor Interface (English)	428-1 and 246-1
3HAC7701-1	Discrete Applications (English)	428-1 and 114-1
3HAC7703-1	Developer's Functions (English)	428-1 and 107-1
3HAC12982-1	Sensor Sync User's Guide (English)	428-1 and 316-1
3HAC7832-1	LoadId&CollDetect (English)	428-1 and 207-1
3HAC7704-1	Advanced Motion (English)	428-1 and 11-1
3HAC7756-1	Conveyor Tracking (English)	428-1 and (83-1 or 257-1)
3HAC020397-001	Bosch v24 interface (English)	428-1 and 440-4
3HAC020398-001	Electr. Linked Motors (English)	428-1 and 124-1
3HAC18123-1	Servo Tool Control (English)	428-1 and 327-1

Art. no.	Manual	Option no.
3HAC16090-1	Absolute Accuracy CalibWare 2.0 (English)	428-1 and 2-1

ProcessWare option manuals

Art. no.	Manual	Option no.
3HAC7753-1	PalletWare Manual (English)	428-1 and 246-1
3HAC11854-1	PalletWizard (English)	428-1 and 246-1
3HAC7700-1	Weld timer interface (English)	428-1 and 440-4
3HAC12983-1	SpotWare Servo Options (English)	428-1 and (323-1 or 323-2 or 323-3 or 323-4 or 323-5 or 323-6)
3HAC7802-1	ProcessWare DispenseWare (English)	428-1 and 117-1
3HAC7714-1	ProcessWare ArcWare (English)	428-1 and 19-1
3HAC7727-1	ArcWare Plus (English)	428-1 and 19-3
3HAC7730-1	ProcessWare SpotWare (English)	428-1 and 341-2
3HAC7741-1	SpotWare Plus (English)	428-1 and 341-4

Hardware option manuals

Art. no.	Manual	Option no.
3HAC14426-1	I/O Plus User's Guide (English)	428-1 and 315-1
3HAC7844-1	Ethernet Services (English)	428-1 and (128-1 or 128-2)
3HAC12979-1	Interbus-S User's Guide (English)	428-1 and 285-1
3HAC10610-1	Profibus M/S User's Guide (English)	428-1 and 185-1
3HAC9299-1	External Axes (English)	428-1 and (52-1 or 52-2 or 52-3 or 52-4 or 52-5 or 52-6 or 52-7 or 52-8 or 52-9 or 53-5 or 53-6 or 53-7 or 53-8 or 283-16)

Product manuals

Art. no.	Manual	Option no.
3HAC023297-001	Product manual 140 (English)	428-1
3HAC021111-001	Product manual 1400 (English)	428-1
3HAC022031-001	Product manual 2400 (English)	428-1
3HAC022032-001	Product manual 4400 (English)	428-1
3HAC020938-001	Product manual 6600/6650 Type A (English)	428-1
3HAC023082-001	Product manual 6600/6650 Type B (English)	428-1
3HAC020993-001	Product manual 6650S (English)	428-1
3HAC022033-001	Product manual 7600 (English)	428-1

Art. no.	Manual	Option no.
3HAC022419-001	Product manual S4CPlus Automotive (English)	428-1
3HAC17667-1	Installation and Service (Dress-pack-Spotpack) (English)	428-1 and (467-1 or 538-1 or 476-1 or 468-1 or 468-2 or 477-1 or 477-2)
3HAC16578-1	Calibration Pendulum instruction (English)	
3HAC022907-001	Instruction for Levelmeter calibration (English)	

Product specifications

Art. no.	Manual	Option no.
3HAC9218-1	Product Specification - RobotWare 4.0 rev. 3	en
3HAC17710-1	Product Specification - Controller, S4Cplus Automotive	en
3HAC14064-1	Product specification - IRB 6600/6650	en
3HAC13491-1	Product specification - IRB 7600	en

3 Swedish

CD documentation

Art. no.	Manual	Option no.
3HAC020415-001	CD Documentation IRB 140, M2000A (All languages)	69-1
3HAC020414-001	CD Documentation IRB 1400, M2000A (All languages)	69-1
3HAC020413-001	CD Documentation IRB 2400, M2000A (All languages)	69-1
3HAC020412-001	CD Documentation IRB 4400, M2000A (All languages)	69-1
3HAC020408-001	CD Documentation IRB 6600/6650, M2000A (All languages)	69-1
3HAC020410-001	CD Documentation IRB 7600, M2000A (All languages)	69-1
3HAC023553-001	CD Documentation IRB 6650S, M2000A (All languages)	69-1

Operating manuals

Art. no.	Manual	Option no.
3HAC7794-1	User's Guide (Swedish)	358-1

RAPID manuals

Art. no.	Manual	Option no.
3HAC7784-1	RAPID Overview (Swedish)	358-1
3HAC7775-1	RAPID Reference Instruction Datatypes and Functions (Swedish)	358-1

BaseWare option manuals

Art. no.	Manual	Option no.
3HAC16062-1	AbsAcc User's Guide (English)	358-1 and 2-1
3HAC7696-1	RAP Protocol Spec (English)	358-1 and 293-1
3HAC7697-1	RAP Service Spec (English)	358-1 and 293-1
3HAC7699-1	Sensor Interface (English)	358-1 and 246-1
3HAC7701-1	Discrete Applications (English)	358-1 and 114-1
3HAC7703-1	Developer's Functions (English)	358-1 and 107-1
3HAC12982-1	Sensor Sync User's Guide (English)	358-1 and 316-1
3HAC7833-1	LoadId&CollDetect (Swedish)	358-1 and 207-1
3HAC7705-1	Advanced Motion (Swedish)	358-1 and 11-1
3HAC7756-1	Conveyor Tracking (English)	358-1 and (83-1 or 257-1)
3HAC020397-001	Bosch v24 interface (English)	358-1 and 440-4
3HAC020398-001	Electr. Linked Motors (English)	358-1 and 124-1
3HAC18123-1	Servo Tool Control (English)	358-1 and 327-1

3 Swedish

Art. no.	Manual	Option no.
3HAC16090-1	Absolute Accuracy CalibWare 2.0 (English)	358-1 and 2-1

ProcessWare option manuals

Art. no.	Manual	Option no.
3HAC7753-1	PalletWare Manual (English)	358-1 and 246-1
3HAC11854-1	PalletWizard (English)	358-1 and 246-1
3HAC7700-1	Weld timer interface (English)	358-1 and 440-4
3HAC12983-1	SpotWare Servo Options (English)	358-1 and (323-1 or 323-2 or 323-3 or 323-4 or 323-5 or 323-6)
3HAC7803-1	ProcessWare DispenseWare (Swedish)	358-1 and 117-1
3HAC7715-1	ProcessWare ArcWare (Swedish)	358-1 and 19-1
3HAC7727-1	ArcWare Plus (English)	358-1 and 19-3
3HAC7731-1	ProcessWare SpotWare (Swedish)	358-1 and 341-2
3HAC7741-1	SpotWare Plus (English)	358-1 and 341-4

Hardware option manuals

Art. no.	Manual	Option no.
3HAC14426-1	I/O Plus User's Guide (English)	358-1 and 315-1
3HAC7844-1	Ethernet Services (English)	358-1 and (128-1 or 128-2)
3HAC12979-1	Interbus-S User's Guide (English)	358-1 and 285-1
3HAC10610-1	Profibus M/S User's Guide (English)	358-1 and 185-1
3HAC9299-1	External Axes (English)	358-1 and (52-1 or 52-2 or 52-3 or 52-4 or 52-5 or 52-6 or 52-7 or 52-8 or 52-9 or 53-5 or 53-6 or 53-7 or 53-8 or 283-16)

Product manuals

Art. no.	Manual	Option no.
3HAC023297-001	Product manual 140 (English)	358-1
3HAC021111-001	Product manual 1400 (English)	358-1
3HAC022031-001	Product manual 2400 (English)	358-1
3HAC022032-001	Product manual 4400 (English)	358-1
3HAC020938-001	Product manual 6600/6650 Type A (English)	358-1
3HAC023082-001	Product manual 6600/6650 Type B (English)	358-1
3HAC020993-001	Product manual 6650S (English)	358-1

Art. no.	Manual	Option no.
3HAC022033-001	Product manual 7600 (English)	358-1
3HAC022419-001	Product manual S4Cplus A (English)	358-1
3HAC17667-1	Installation and Service (Dress-pack-Spotpack) (English)	358-1 and (467-1 or 538-1 or 476-1 or 468-1 or 468-2 or 477-1 or 477-2)
3HAC16578-1	Calibration Pendulum instruction (English)	
3HAC022907-001	Instruction for Levelmeter calibration (English)	

Product specifications

Art. no.	Manual	Option no.
3HAC9218-1	Product Specification - RobotWare 4.0 rev. 3	en
3HAC17710-1	Product Specification - Controller, S4Cplus Automotive	en
3HAC14064-1	Product specification - IRB 6600/6650	en
3HAC13491-1	Product specification - IRB 7600	en

4 German

CD documentation

Art. no.	Manual	Option no.
3HAC020415-001	CD Documentation IRB 140, M2000A (All languages)	69-1
3HAC020414-001	CD Documentation IRB 1400, M2000A (All languages)	69-1
3HAC020413-001	CD Documentation IRB 2400, M2000A (All languages)	69-1
3HAC020412-001	CD Documentation IRB 4400, M2000A (All languages)	69-1
3HAC020408-001	CD Documentation IRB 6600/6650, M2000A (All languages)	69-1
3HAC020410-001	CD Documentation IRB 7600, M2000A (All languages)	69-1
3HAC023553-001	CD Documentation IRB 6650S, M2000A (All languages)	69-1

Operating manuals

Art. no.	Manual	Option no.
3HAC7795-1	User's Guide (German)	165-1

RAPID manuals

Art. no.	Manual	Option no.
3HAC7785-1	RAPID Overview (German)	165-1
3HAC7776-1	RAPID Reference Instruction Datatypes and Functions (German)	165-1

BaseWare option manuals

Art. no.	Manual	Option no.
3HAC16062-1	AbsAcc User's Guide (English)	165-1 and 2-1
3HAC7696-1	RAP Protocol Spec (English)	165-1 and 293-1
3HAC7697-1	RAP Service Spec (English)	165-1 and 293-1
3HAC7699-1	Sensor Interface (English)	165-1 and 246-1
3HAC7701-1	Discrete Applications (English)	165-1 and 114-1
3HAC7703-1	Developer's Functions (English)	165-1 and 107-1
3HAC12982-1	Sensor Sync User's Guide (English)	165-1 and 316-1
3HAC7767-1	LoadId&CollDetect (German)	165-1 and 207-1
3HAC7706-1	Advanced Motion (German)	165-1 and 11-1
3HAC7758-1	Conveyor Tracking (German)	165-1 and (83-1 or 257-1)
3HAC020397-001	Bosch v24 interface (English)	165-1 and 440-4
3HAC020398-001	Electr. Linked Motors (English)	165-1 and 124-1
3HAC18123-1	Servo Tool Control (English)	165-1 and 327-1

Art. no.	Manual	Option no.
3HAC16090-1	Absolute Accuracy CalibWare 2.0 (English)	165-1 and 2-1

ProcessWare option manuals

Art. no.	Manual	Option no.
3HAC7753-1	PalletWare Manual (English)	165-1 and 246-1
3HAC11854-1	PalletWizard (English)	165-1 and 246-1
3HAC7700-1	Weld timer interface (English)	165-1 and 440-4
3HAC12983-1	SpotWare Servo Options (English)	165-1 and (323-1 or 323-2 or 323-3 or 323-4 or 323-5 or 323-6)
3HAC7804-1	ProcessWare DispenseWare (German)	165-1 and 117-1
3HAC7716-1	ProcessWare ArcWare (German)	165-1 and 19-1
3HAC7728-1	ArcWare Plus (German)	165-1 and 19-3
3HAC7733-1	ProcessWare SpotWare (German)	165-1 and 341-2
3HAC7742-1	SpotWare Plus (German)	165-1 and 341-4

Hardware option manuals

Art. no.	Manual	Option no.
3HAC14426-1	I/O Plus User's Guide (English)	165-1 and 315-1
3HAC7844-1	Ethernet Services (English)	165-1 and (128-1 or 128-2)
3HAC12979-1	Interbus-S User's Guide (English)	165-1 and 285-1
3HAC10611-1	Profibus M/S User's Guide (German)	165-1 and 185-1
3HAC9299-1	External Axes (English)	165-1 and (52-1 or 52-2 or 52-3 or 52-4 or 52-5 or 52-6 or 52-7 or 52-8 or 52-9 or 53-5 or 53-6 or 53-7 or 53-8 or 283-16)

Product manuals

Art. no.	Manual	Option no.
3HAC023297-003	Product manual 140 (German)	165-1
3HAC7919-1	Product manual 1400 (German)	165-1
3HAC022031-003	Product manual 2400 (German)	165-1
3HAC022032-003	Product manual 4400 (German)	165-1
3HAC020938-003	Product manual 6600/6650 Type A (German)	165-1
3HAC023082-003	Product manual 6600/6650 Type B (German)	165-1
3HAC020993-003	Product manual 6650S (German)	165-1

Art. no.	Manual	Option no.
3HAC022033-003	Product manual 7600 (German)	165-1
3HAC17667-3	Installation and Service (Dress-pack-Spotpack) (German)	165-1 and (467-1 or 538-1 or 476-1 or 468-1 or 468-2 or 477-1 or 477-2)
3HAC022419-001	Product manual S4Cplus A (English)	165-1
3HAC16578-3	Calibration Pendulum instruction (German)	
3HAC022907-003	Instruction for Levelmeter calibration (German)	

Product specifications

Art. no.	Manual	Option no.
3HAC16960-1	Produktspezifikation - IRB 6600/6650	ge
3HAC14312-1	Produktspezifikation - IRB7600	ge

5 French

CD documentation

Art. no.	Manual	Option no.
3HAC020415-001	CD Documentation IRB 140, M2000A (All languages)	69-1
3HAC020414-001	CD Documentation IRB 1400, M2000A (All languages)	69-1
3HAC020413-001	CD Documentation IRB 2400, M2000A (All languages)	69-1
3HAC020412-001	CD Documentation IRB 4400, M2000A (All languages)	69-1
3HAC020408-001	CD Documentation IRB 6600/6650, M2000A (All languages)	69-1
3HAC020410-001	CD Documentation IRB 7600, M2000A (All languages)	69-1
3HAC023553-001	CD Documentation IRB 6650S, M2000A (All languages)	69-1

Operating manuals

Art. no.	Manual	Option no.
3HAC7796-1	User's Guide (French)	162-1

RAPID manuals

Art. no.	Manual	Option no.
3HAC7786-1	RAPID Overview (French)	162-1
3HAC7777-1	RAPID Reference Instruction Datatypes and Functions (French)	162-1

BaseWare option manuals

Art. no.	Manual	Option no.
3HAC16062-1	AbsAcc User's Guide (English)	162-1 and 2-1
3HAC7696-1	RAP Protocol Spec (English)	162-1 and 293-1
3HAC7697-1	RAP Service Spec (English)	162-1 and 293-1
3HAC7699-1	Sensor Interface (English)	162-1 and 246-1
3HAC7701-1	Discrete Applications (English)	162-1 and 114-1
3HAC7703-1	Developer's Functions (English)	162-1 and 107-1
3HAC12982-1	Sensor Sync User's Guide (English)	162-1 and 316-1
3HAC7768-1	LoadId&CollDetect (French)	162-1 and 207-1
3HAC7707-1	Advanced Motion (French)	162-1 and 11-1
3HAC7759-1	Conveyor Tracking (French)	162-1 and (83-1 or 257-1)
3HAC020397-001	Bosch v24 interface (English)	162-1 and 440-4
3HAC020398-001	Electr. Linked Motors (English)	162-1 and 124-1
3HAC18123-1	Servo Tool Control (English)	162-1 and 327-1

Art. no.	Manual	Option no.
3HAC16090-1	Absolute Accuracy CalibWare 2.0 (English)	162-1 and 2-1

ProcessWare option manuals

Art. no.	Manual	Option no.
3HAC7753-1	PalletWare Manual (English)	162-1 and 246-1
3HAC11854-1	PalletWizard (English)	162-1 and 246-1
3HAC7700-1	Weld timer interface (English)	162-1 and 440-4
3HAC12983-1	SpotWare Servo Options (English)	162-1 and (323-1 or 323-2 or 323-3 or 323-4 or 323-5 or 323-6)
3HAC7805-1	ProcessWare DispenseWare (French)	162-1 and 117-1
3HAC7717-1	ProcessWare ArcWare (French)	162-1 and 19-1
3HAC7729-1	ArcWare Plus (French)	162-1 and 19-3
3HAC7734-1	ProcessWare SpotWare (French)	162-1 and 341-2
3HAC7741-1	SpotWare Plus (English)	162-1 and 341-4

Hardware option manuals

Art. no.	Manual	Option no.
3HAC14426-1	I/O Plus User's Guide (English)	162-1 and 315-1
3HAC7844-1	Ethernet Services (English)	162-1 and (128-1 or 128-2)
3HAC12981-1	Interbus-S User's Guide (French)	162-1 and 285-1
3HAC10610-1	Profibus M/S User's Guide (English)	162-1 and 185-1
3HAC9299-1	External Axes (English)	162-1 and (52-1 or 52-2 or 52-3 or 52-4 or 52-5 or 52-6 or 52-7 or 52-8 or 52-9 or 53-5 or 53-6 or 53-7 or 53-8 or 283-16)

Product manuals

Art. no.	Manual	Option no.
3HAC023297-004	Product manual 140 (French)	162-1
3HAC021111-004	Product manual 1400 (French)	162-1
3HAC022031-004	Product manual 2400 (French)	162-1
3HAC022032-004	Product manual 4400 (French)	162-1
3HAC020938-004	Product manual 6600/6650 Type A (French)	162-1
3HAC023082-004	Product manual 6600/6650 Type B (French)	162-1
3HAC020993-004	Product manual 6650S (French)	162-1
3HAC022033-004	Product manual 7600 (French)	162-1

Art. no.	Manual	Option no.
3HAC17667-4	Installation and Service (Dress-pack-Spotpack) (French)	162-1 and (467-1 or 538-1 or 476-1 or 468-1 or 468-2 or 477-1 or 477-2)
3HAC022419-001	Product manual S4Cplus A (English)	162-1
3HAC16578-4	Calibration Pendulum instruction (French)	
3HAC022907-004	Instruction for Levelmeter calibration (French)	

Product specifications

Art. no.	Manual	Option no.
3HAC10339-1	Caractéristiques du produit - Système de commande de robot, S4Cplus Automotive	fr
3HAC16959-1	Caracteristiques du produit - IRB 6600/6650	fr
3HAC14569-1	Caracteristiques du produit - IRB 7600	fr

6 Spanish

CD documentation

Art. no.	Manual	Option no.
3HAC020415-001	CD Documentation IRB 140, M2000A (All languages)	69-1
3HAC020414-001	CD Documentation IRB 1400, M2000A (All languages)	69-1
3HAC020413-001	CD Documentation IRB 2400, M2000A (All languages)	69-1
3HAC020412-001	CD Documentation IRB 4400, M2000A (All languages)	69-1
3HAC020408-001	CD Documentation IRB 6600/6650, M2000A (All languages)	69-1
3HAC020410-001	CD Documentation IRB 7600, M2000A (All languages)	69-1
3HAC023553-001	CD Documentation IRB 6650S, M2000A (All languages)	69-1

Operating manuals

Art. no.	Manual	Option no.
3HAC7797-1	User's Guide (Spanish)	336-1

RAPID manuals

Art. no.	Manual	Option no.
3HAC7787-1	RAPID Overview (Spanish)	336-1
3HAC7778-1	RAPID Reference Instruction Datatypes and Functions (Spanish)	336-1

BaseWare option manuals

Art. no.	Manual	Option no.
3HAC16062-1	AbsAcc User's Guide (English)	336-1 and 2-1
3HAC7696-1	RAP Protocol Spec (English)	336-1 and 293-1
3HAC7697-1	RAP Service Spec (English)	336-1 and 293-1
3HAC7699-1	Sensor Interface (English)	336-1 and 246-1
3HAC7701-1	Discrete Applications (English)	336-1 and 114-1
3HAC7703-1	Developer's Functions (English)	336-1 and 107-1
3HAC12982-1	Sensor Sync User's Guide (English)	336-1 and 316-1
3HAC7769-1	LoadId&CollDetect (Spanish)	336-1 and 207-1
3HAC7708-1	Advanced Motion (Spanish)	336-1 and 11-1
3HAC7756-1	Conveyor Tracking (English)	336-1 and (83-1 or 257-1)
3HAC020397-001	Bosch v24 interface (English)	336-1 and 440-4
3HAC020398-001	Electr. Linked Motors (English)	336-1 and 124-1
3HAC18123-1	Servo Tool Control (English)	336-1 and 327-1

Art. no.	Manual	Option no.
3HAC16090-1	Absolute Accuracy CalibWare 2.0 (English)	336-1 and

ProcessWare option manuals

Art. no.	Manual	Option no.
3HAC7753-1	PalletWare Manual (English)	336-1 and 246-1
3HAC11854-1	PalletWizard (English)	336-1 and 246-1
3HAC7700-1	Weld timer interface (English)	336-1 and 440-4
3HAC12983-1	SpotWare Servo Options (English)	336-1 and (323-1 or 323-2 or 323-3 or 323-4 or 323-5 or 323-6)
3HAC7806-1	ProcessWare DispenseWare (Spanish)	336-1 and 117-1
3HAC7718-1	ProcessWare ArcWare (Spanish)	336-1 and 19-1
3HAC7727-1	ArcWare Plus (English)	336-1 and 19-3
3HAC7735-1	ProcessWare SpotWare (Spanish)	336-1 and 341-2
3HAC7741-1	SpotWare Plus (English)	336-1 and 341-4

Hardware option manuals

Art. no.	Manual	Option no.
3HAC14426-1	I/O Plus User's Guide (English)	336-1 and 315-1
3HAC7844-1	Ethernet Services (English)	336-1 and (128-1 or 128-2)
3HAC15872-1	Interbus-S User's Guide (Spanish)	336-1 and 285-1
3HAC10610-1	Profibus M/S User's Guide (English)	336-1 and 185-1
3HAC9299-1	External Axes (English)	336-1 and (52-1 or 52-2 or 52-3 or 52-4 or 52-5 or 52-6 or 52-7 or 52-8 or 52-9 or 53-5 or 53-6 or 53-7 or 53-8 or 283-16)

Product manuals

Art. no.	Manual	Option no.
3HAC023297-005	Product manual 140 (Spanish)	336-1
3HAC022031-005	Product manual 2400 (Spanish)	336-1
3HAC7621-1	Product manual 1400 (Spanish)	336-1
3HAC022032-005	Product manual 4400 (Spanish)	336-1
3HAC020938-005	Product manual 6600/6650 Type A (Spanish)	336-1
3HAC023082-005	Product manual 6600/6650 Type B (Spanish)	336-1
3HAC020993-005	Product manual 6650S (Spanish)	336-1
3HAC022033-005	Product manual 7600 (Spanish)	336-1

Art. no.	Manual	Option no.
3HAC17667-5	Installation and Service (Dress-pack-Spotpack) (Spanish)	336-1 and (467-1 or 538-1 or 476-1 or 468-1 or 468-2 or 477-1 or 477-2)
3HAC022419-001	Product manual S4Cplus A (English)	336-1
3HAC16578-5	Calibration Pendulum instruction (Spanish)	
3HAC022907-005	Instruction for Levelmeter calibration (Spanish)	

Product specifications

Art. no.	Manual	Option no.
3HAC16838-1	Especificaciones del producto - Controlador del robot, S4Cplus Automotive	sp
3HAC16961-1	Especificaciones del producto - IRB 6600/6650	sp
3HAC14568-1	Especificaciones del producto - IRB 7600	sp

7 Portuguese

CD documentation

Art. no.	Manual	Option no.
3HAC020415-001	CD Documentation IRB 140, M2000A (All languages)	69-1
3HAC020414-001	CD Documentation IRB 1400, M2000A (All languages)	69-1
3HAC020413-001	CD Documentation IRB 2400, M2000A (All languages)	69-1
3HAC020412-001	CD Documentation IRB 4400, M2000A (All languages)	69-1
3HAC020408-001	CD Documentation IRB 6600/6650, M2000A (All languages)	69-1
3HAC020410-001	CD Documentation IRB 7600, M2000A (All languages)	69-1
3HAC023553-001	CD Documentation IRB 6650S, M2000A (All languages)	69-1

Operating manuals

Art. no.	Manual	Option no.
3HAC7798-1	User's Guide (Portuguese)	270-1

RAPID manuals

Art. no.	Manual	Option no.
3HAC7788-1	RAPID Overview (Portuguese)	270-1
3HAC7779-1	RAPID Reference Instruction Datatypes and Functions (Portuguese)	270-1

BaseWare option manuals

Art. no.	Manual	Option no.
3HAC16062-1	AbsAcc User's Guide (English)	270-1 and 2-1
3HAC7696-1	RAP Protocol Spec (English)	270-1 and 293-1
3HAC7697-1	RAP Service Spec (English)	270-1 and 293-1
3HAC7699-1	Sensor Interface (English)	270-1 and 246-1
3HAC7701-1	Discrete Applications (English)	270-1 and 114-1
3HAC7703-1	Developer's Functions (English)	270-1 and 107-1
3HAC12982-1	Sensor Sync User's Guide (English)	270-1 and 316-1
3HAC7770-1	LoadId&CollDetect (Portuguese)	270-1 and 207-1
3HAC7709-1	Advanced Motion (Portuguese)	270-1 and 11-1
3HAC7756-1	Conveyor Tracking (English)	270-1 and (83-1 or 257-1)
3HAC020397-001	Bosch v24 interface (English)	270-1 and 440-4
3HAC020398-001	Electr. Linked Motors (English)	270-1 and 124-1
3HAC18123-1	Servo Tool Control (English)	270-1 and 327-1

Art. no.	Manual	Option no.
3HAC16090-1	Absolute Accuracy CalibWare 2.0 (English)	270-1 and 2-1

ProcessWare option manuals

Art. no.	Manual	Option no.
3HAC7753-1	PalletWare Manual (English)	270-1 and 246-1
3HAC11854-1	PalletWizard (English)	270-1 and 246-1
3HAC7700-1	Weld timer interface (English)	270-1 and 440-4
3HAC12983-1	SpotWare Servo Options (English)	270-1 and (323-1 or 323-2 or 323-3 or 323-4 or 323-5 or 323-6)
3HAC7807-1	ProcessWare DispenseWare (Portuguese)	270-1 and 117-1
3HAC7719-1	ProcessWare ArcWare (Portuguese)	270-1 and 19-1
3HAC7727-1	ArcWare Plus (English)	270-1 and 19-3
3HAC7737-1	ProcessWare SpotWare (Portuguese)	270-1 and 341-2
3HAC7741-1	SpotWare Plus (English)	270-1 and 341-4

Hardware option manuals

Art. no.	Manual	Option no.
3HAC14426-1	I/O Plus User's Guide (English)	270-1 and 315-1
3HAC7844-1	Ethernet Services (English)	270-1 and (128-1 or 128-2)
3HAC12979-1	Interbus-S User's Guide (English)	270-1 and 285-1
3HAC10610-1	Profibus M/S User's Guide (English)	270-1 and 185-1
3HAC9299-1	External Axes (English)	270-1 and (52-1 or 52-2 or 52-3 or 52-4 or 52-5 or 52-6 or 52-7 or 52-8 or 52-9 or 53-5 or 53-6 or 53-7 or 53-8 or 283-16)

Product manuals

Art. no.	Manual	Option no.
3HAC023297-001	Product manual 140 (English)	270-1
3HAC021111-001	Product manual 1400 (English)	270-1
3HAC022031-001	Product manual 2400 (English)	270-1
3HAC022032-001	Product manual 4400 (English)	270-1
3HAC020938-001	Product manual 6600/6650 Type A (English)	270-1
3HAC023082-001	Product manual 6600/6650 Type B (English)	270-1

Art. no.	Manual	Option no.
3HAC020993-001	Product manual 6650S (English)	270-1
3HAC022033-001	Product manual 7600 (English)	270-1
3HAC022546-006	Product manual 340 (Portuguese)	270-1
3HAC022419-001	Product manual S4CPlus A (English)	270-1
3HAC17667-1	Installation and Service (Dress-pack-Spotpack) (English)	270-1 and (467-1 or 538-1 or 476-1 or 468-1 or 468-2 or 477-1 or 477-2)
3HAC16578-1	Calibration Pendulum instruction (English)	
3HAC022907-001	Instruction for Levelmeter calibration (English)	

Product specifications

Art. no.	Manual	Option no.
3HAC9218-1	Product Specification - RobotWare 4.0 rev. 3	en
3HAC14064-1	Product specification - IRB 6600/6650	en
3HAC13491-1	Product specification - IRB 7600	en

8 Italian

CD documentation

Art. no.	Manual	Option no.
3HAC020415-001	CD Documentation IRB 140, M2000A (All languages)	69-1
3HAC020414-001	CD Documentation IRB 1400, M2000A (All languages)	69-1
3HAC020413-001	CD Documentation IRB 2400, M2000A (All languages)	69-1
3HAC020412-001	CD Documentation IRB 4400, M2000A (All languages)	69-1
3HAC020408-001	CD Documentation IRB 6600/6650, M2000A (All languages)	69-1
3HAC020410-001	CD Documentation IRB 7600, M2000A (All languages)	69-1
3HAC023553-001	CD Documentation IRB 6650S, M2000A (All languages)	69-1

Operating manuals

Art. no.	Manual	Option no.
3HAC7799-1	User's Guide (Italian)	195-1

RAPID manuals

Art. no.	Manual	Option no.
3HAC7789-1	RAPID Overview (Italian)	195-1
3HAC7780-1	RAPID Reference Instruction Datatypes and Functions (Italian)	195-1

BaseWare option manuals

Art. no.	Manual	Option no.
3HAC16062-1	AbsAcc User's Guide (English)	195-1 and 2-1
3HAC7696-1	RAP Protocol Spec (English)	195-1 and 293-1
3HAC7697-1	RAP Service Spec (English)	195-1 and 293-1
3HAC7699-1	Sensor Interface (English)	195-1 and 246-1
3HAC7701-1	Discrete Applications (English)	195-1 and 114-1
3HAC7703-1	Developer's Functions (English)	195-1 and 107-1
3HAC12982-1	Sensor Sync User's Guide (English)	195-1 and 316-1
3HAC7771-1	LoadId&CollDetect (Italian)	195-1 and 207-1
3HAC7710-1	Advanced Motion (Italian)	195-1 and 11-1
3HAC7756-1	Conveyor Tracking (English)	195-1 and (83-1 or 257-1)
3HAC020397-001	Bosch v24 interface (English)	195-1 and 440-4
3HAC020398-001	Electr. Linked Motors (English)	195-1 and 124-1
3HAC18123-1	Servo Tool Control (English)	195-1 and 327-1

Art. no.	Manual	Option no.
3HAC16090-1	Absolute Accuracy CalibWare 2.0 (English)	195-1 and 2-1

ProcessWare option manuals

Art. no.	Manual	Option no.
3HAC7753-1	PalletWare Manual (English)	195-1 and 246-1
3HAC11854-1	PalletWizard (English)	195-1 and 246-1
3HAC7700-1	Weld timer interface (English)	195-1 and 440-4
3HAC12983-1	SpotWare Servo Options (English)	195-1 and (323-1 or 323-2 or 323-3 or 323-4 or 323-5 or 323-6)
3HAC7808-1	ProcessWare DispenseWare (Italian)	195-1 and 117-1
3HAC7720-1	ProcessWare ArcWare (Italian)	195-1 and 19-1
3HAC7727-1	ArcWare Plus (English)	195-1 and 19-3
3HAC7738-1	ProcessWare SpotWare (Italian)	195-1 and 341-2
3HAC7741-1	SpotWare Plus (English)	195-1 and 341-4

Hardware option manuals

Art. no.	Manual	Option no.
3HAC14426-1	I/O Plus User's Guide (English)	195-1 and 315-1
3HAC7844-1	Ethernet Services (English)	195-1 and (128-1 or 128-2)
3HAC12979-1	Interbus-S User's Guide (English)	195-1 and 285-1
3HAC10610-1	Profibus M/S User's Guide (English)	195-1 and 185-1
3HAC9299-1	External Axes (English)	195-1 and (52-1 or 52-2 or 52-3 or 52-4 or 52-5 or 52-6 or 52-7 or 52-8 or 52-9 or 53-5 or 53-6 or 53-7 or 53-8 or 283-16)

Product manuals

Art. no.	Manual	Option no.
3HAC023297-007	Product manual 140 (Italian)	195-1
3HAC7623	Product manual 1400 (Italian)	195-1
3HAC022031-007	Product manual 2400 (Italian)	195-1
3HAC022032-007	Product manual 4400 (Italian)	195-1
3HAC020938-007	Product manual 6600/6650 Type A (Italian)	195-1
3HAC023082-007	Product manual 6600/6650 Type B (Italian)	195-1
3HAC020993-007	Product manual 6650S (Italian)	195-1
3HAC022033-007	Product manual 7600 (Italian)	195-1

Art. no.	Manual	Option no.
3HAC17667-7	Installation and Service (Dress-pack-Spotpack) (Italian)	195-1 and (467-1 or 538-1 or 476-1 or 468-1 or 468-2 or 477-1 or 477-2)
3HAC022419-001	Product manual S4Cplus A (English)	195-1
3HAC16578-7	Calibration Pendulum instruction (Italian)	
3HAC022907-007	Instruction for Levelmeter calibration (Italian)	

Product specifications

Art. no.	Manual	Option no.
3HAC020099-001	Dati tecnici del prodotto - IRB 6600/6650	ita
3HAC14561-1	Dati tecnici del prodotto - IRB 7600	ita

9 Danish

CD documentation

Art. no.	Manual	Option no.
3HAC020415-001	CD Documentation IRB 140, M2000A (All languages)	69-1
3HAC020414-001	CD Documentation IRB 1400, M2000A (All languages)	69-1
3HAC020413-001	CD Documentation IRB 2400, M2000A (All languages)	69-1
3HAC020412-001	CD Documentation IRB 4400, M2000A (All languages)	69-1
3HAC020408-001	CD Documentation IRB 6600/6650, M2000A (All languages)	69-1
3HAC020410-001	CD Documentation IRB 7600, M2000A (All languages)	69-1
3HAC023553-001	CD Documentation IRB 6650S, M2000A (All languages)	69-1

Operating manuals

Art. no.	Manual	Option no.
3HAC7800-1	User's Guide (Danish)	97-1

RAPID manuals

Art. no.	Manual	Option no.
3HAC020995-001	RAPID Overview (Danish)	97-1
3HAC020996-001	RAPID Reference Instruction Datatypes and Functions (Danish)	97-1

BaseWare option manuals

Art. no.	Manual	Option no.
3HAC16062-1	AbsAcc User's Guide (English)	97-1 and 2-1
3HAC7696-1	RAP Protocol Spec (English)	97-1 and 293-1
3HAC7697-1	RAP Service Spec (English)	97-1 and 293-1
3HAC7699-1	Sensor Interface (English)	97-1 and 246-1
3HAC7701-1	Discrete Applications (English)	97-1 and 114-1
3HAC7703-1	Developer's Functions (English)	97-1 and 107-1
3HAC12982-1	Sensor Sync User's Guide (English)	97-1 and 316-1
3HAC7832-1	LoadId&CollDetect (English)	97-1 and 207-1
3HAC7704-1	Advanced Motion (English)	97-1 and 11-1
3HAC7756-1	Conveyor Tracking (English)	97-1 and (83-1 or 257-1)
3HAC020397-001	Bosch v24 interface (English)	97-1 and 440-4
3HAC020398-001	Electr. Linked Motors (English)	97-1 and 124-1
3HAC18123-1	Servo Tool Control (English)	97-1 and 327-1

Art. no.	Manual	Option no.
3HAC16090-1	Absolute Accuracy CalibWare 2.0 (English)	97-1 and 2-1

ProcessWare option manuals

Art. no.	Manual	Option no.
3HAC7753-1	PalletWare Manual (English)	97-1 and 246-1
3HAC11854-1	PalletWizard (English)	97-1 and 246-1
3HAC7700-1	Weld timer interface (English)	97-1 and 440-4
3HAC12983-1	SpotWare Servo Options (English)	97-1 and (323-1 or 323-2 or 323-3 or 323-4 or 323-5 or 323-6)
3HAC7802-1	ProcessWare DispenseWare (English)	97-1 and 117-1
3HAC7714-1	ProcessWare ArcWare (English)	97-1 and 19-1
3HAC7727-1	ArcWare Plus (English)	97-1 and 19-3
3HAC7730-1	ProcessWare SpotWare (English)	97-1 and 341-2
3HAC7741-1	SpotWare Plus (English)	97-1 and 341-4

Hardware option manuals

Art. no.	Manual	Option no.
3HAC14426-1	I/O Plus User's Guide (English)	97-1 and 315-1
3HAC7844-1	Ethernet Services (English)	97-1 and (128-1 or 128-2)
3HAC12979-1	Interbus-S User's Guide (English)	97-1 and 285-1
3HAC10610-1	Profibus M/S User's Guide (English)	97-1 and 185-1
3HAC9299-1	External Axes (English)	97-1 and (52-1 or 52-2 or 52-3 or 52-4 or 52-5 or 52-6 or 52-7 or 52-8 or 52-9 or 53-5 or 53-6 or 53-7 or 53-8 or 283-16)

Product manuals

Art. no.	Manual	Option no.
3HAC023297-001	Product manual 140 (English)	97-1
3HAC021111-001	Product manual 1400 (English)	97-1
3HAC022031-001	Product manual 2400 (English)	97-1
3HAC022032-001	Product manual 4400 (English)	97-1
3HAC020938-001	Product manual 6600/6650 Type A (English)	97-1
3HAC023082-001	Product manual 6600/6650 Type B (English)	97-1
3HAC020993-001	Product manual 6650S (English)	97-1
3HAC022033-001	Product manual 7600 (English)	97-1

Art. no.	Manual	Option no.
3HAC022419-001	Product manual S4CPlusA (English)	97-1
3HAC17667-1	Installation and Service (Dress-pack-Spotpack) (English)	97-1 and (467-1 or 538-1 or 476-1 or 468-1 or 468-2 or 477-1 or 477-2)
3HAC16578-1	Calibration Pendulum instruction (English)	
3HAC022907-001	Instruction for Levelmeter calibration (English)	

Product specifications

Art. no.	Manual	Option no.
3HAC17710-1	Product Specification - Controller, S4Cplus Automotive	en
3HAC14064-1	Product specification - IRB 6600/6650	en
3HAC13491-1	Product specification - IRB 7600	en

10 Dutch

CD documentation

Art. no.	Manual	Option no.
3HAC020415-001	CD Documentation IRB 140, M2000A (All languages)	69-1
3HAC020414-001	CD Documentation IRB 1400, M2000A (All languages)	69-1
3HAC020413-001	CD Documentation IRB 2400, M2000A (All languages)	69-1
3HAC020412-001	CD Documentation IRB 4400, M2000A (All languages)	69-1
3HAC020408-001	CD Documentation IRB 6600/6650, M2000A (All languages)	69-1
3HAC020410-001	CD Documentation IRB 7600, M2000A (All languages)	69-1
3HAC023553-001	CD Documentation IRB 6650S, M2000A (All languages)	69-1

Operating manuals

Art. no.	Manual	Option no.
3HAC7801-1	User's Guide (Dutch)	234-1

RAPID manuals

Art. no.	Manual	Option no.
3HAC7791-1	RAPID Overview (Dutch)	234-1
3HAC7782-1	RAPID Reference Instruction Datatypes and Functions (Dutch)	234-1

BaseWare option manuals

Art. no.	Manual	Option no.
3HAC16062-1	AbsAcc User's Guide (English)	234-1 and 2-1
3HAC7696-1	RAP Protocol Spec (English)	234-1 and 293-1
3HAC7697-1	RAP Service Spec (English)	234-1 and 293-1
3HAC7699-1	Sensor Interface (English)	234-1 and 246-1
3HAC7701-1	Discrete Applications (English)	234-1 and 114-1
3HAC7703-1	Developer's Functions (English)	234-1 and 107-1
3HAC12982-1	Sensor Sync User's Guide (English)	234-1 and 316-1
3HAC7773-1	LoadId&CollDetect (Dutch)	234-1 and 207-1
3HAC7712-1	Advanced Motion (Dutch)	234-1 and 11-1
3HAC7756-1	Conveyor Tracking (English)	234-1 and (83-1 or 257-1)
3HAC020397-001	Bosch v24 interface (English)	234-1 and 440-4
3HAC020398-001	Electr. Linked Motors (English)	234-1 and 124-1
3HAC18123-1	Servo Tool Control (English)	234-1 and 327-1

Art. no.	Manual	Option no.
3HAC16090-1	Absolute Accuracy CalibWare 2.0 (English)	234-1 and 2-1

ProcessWare option manuals

Art. no.	Manual	Option no.
3HAC7753-1	PalletWare Manual (English)	234-1 and 246-1
3HAC11854-1	PalletWizard (English)	234-1 and 246-1
3HAC7700-1	Weld timer interface (English)	234-1 and 440-4
3HAC12983-1	SpotWare Servo Options (English)	234-1 and (323-1 or 323-2 or 323-3 or 323-4 or 323-5 or 323-6)
3HAC7809-1	ProcessWare DispenseWare (Dutch)	234-1 and 117-1
3HAC7722-1	ProcessWare ArcWare (Dutch)	234-1 and 19-1
3HAC7727-1	ArcWare Plus (English)	234-1 and 19-3
3HAC7740-1	ProcessWare SpotWare (Dutch)	234-1 and 341-2
3HAC7741-1	SpotWare Plus (English)	234-1 and 341-4

Hardware option manuals

Art. no.	Manual	Option no.
3HAC14426-1	I/O Plus User's Guide (English)	234-1 and 315-1
3HAC7844-1	Ethernet Services (English)	234-1 and (128-1 or 128-2)
3HAC12979-1	Interbus-S User's Guide (English)	234-1 and 285-1
3HAC10610-1	Profibus M/S User's Guide (English)	234-1 and 185-1
3HAC9299-1	External Axes (English)	234-1 and (52-1 or 52-2 or 52-3 or 52-4 or 52-5 or 52-6 or 52-7 or 52-8 or 52-9 or 53-5 or 53-6 or 53-7 or 53-8 or 283-16)

Product manuals

Art. no.	Manual	Option no.
3HAC023297-001	Product manual 140 (English)	234-1
3HAC021111-001	Product manual 1400 (English)	234-1
3HAC022031-001	Product manual 2400 (English)	234-1
3HAC022032-001	Product manual 4400 (English)	234-1
3HAC020938-001	Product manual 6600/6650 Type A (English)	234-1
3HAC023082-001	Product manual 6600/6650 Type B (English)	234-1
3HAC020993-001	Product manual 6650S (English)	234-1
3HAC022033-001	Product manual 7600 (English)	234-1

Art. no.	Manual	Option no.
3HAC022419-001	Product manual S4CPlus A (English)	234-1
3HAC17667-1	Installation and Service (Dress-pack-Spotpack) (English)	234-1 and (467-1 or 538-1 or 476-1 or 468-1 or 468-2 or 477-1 or 477-2)
3HAC16578-1	Calibration Pendulum instruction (English)	
3HAC022907-001	Instruction for Levelmeter calibration (English)	

Product specifications

Art. no.	Manual	Option no.
3HAC17710-1	Product Specification - Controller, S4Cplus Automotive	en
3HAC14064-1	Product specification - IRB 6600/6650	en
3HAC13491-1	Product specification - IRB 7600	en



ABB Automation Technologies AB
Robotics
S-721 68 VÄSTERÅS
SWEDEN
Telephone: +46 (0) 21 344000
Telefax: +46 (0) 21 132592

3HAC 024792-001 , Revision -, en