



Product specification Robot user documentation, IRC5 with RobotWare 6

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Product specification
Robot user documentation, IRC5 with RobotWare 6

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Overview of this specification

About this product specification

This specification lists all active user documentation for ABB Robotics products with RobotWare 6.

Revisions

Revision	Description
-	Released in October 2014, R14.2. First release.
A	Released in April 2015, R15.1.
B	Released in October 2015, R15.2.
C	Released in December 2015, R15.2.
D	Released in March 2016, R16.1.
E	Released in June 2016, R16.1+.
F	Released in October 2016, R16.2.
G	Released in March 2017, R17.1. The list of product specifications is removed. The product specifications are no longer part of the user documentation package.

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1 Introduction

1.1 Easy-to-use information products

Introduction to Robot User Documentation

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 Introduction

1.2 User documentation package

1.2 User documentation package

Introduction

The documentation package includes the user documentation for all standard robotics products. The robot user documentation is translated into 18 languages, including a number of Asian languages. Documents that are not translated are available in English.

Updates of the documentation package are released at every major product change (manipulators, controllers, and RobotWare).

The robot user documentation is available in RobotStudio for users with Premium license, and can be ordered on a DVD.

Updated versions of all user documentation can be found on the ABB intranet, in *ABB Library* (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. Some integrators and customers also have access to online documentation on MyABB (www.abb.com/myabb).

Ordering the DVD

The robot user documentation DVD is ordered using the standard Robot Specification form.



Note

There are three packages available. See [DVD documentation on page 15](#).

Help for searching the DVD faster

All files on the DVD can be searched in one operation in Adobe Acrobat. To search all files takes quite a long time, but you can create an index to make it faster to search the next time. How to set up an index is described in Adobe Acrobat Help (press F1 in Acrobat).

Printed manual

There is one manual that is delivered also as a printed version together with the robot system. The manual is *Operating manual - Emergency safety information*, which is translated into 18 languages.

1.3 Types of manuals

Operating manuals

The *operating manuals* are directed to persons with first hand contact with the robot system, that is production operators, programmers, and service personnel.

Technical reference manuals

The *technical reference manuals* include reference information for the products. The technical reference manuals for RAPID and system parameters describe the controller software. The manuals include syntax and detailed information on instructions, functions, and data types in the RAPID language and on system parameters.

Application manuals

The *application manuals* describe RobotWare base functionality and options, directed to specific applications, such as RobotWare Arc, Spot, Dispense, Integrated Vision. The content includes:

- Purpose of the option: For what is the option intended?
- What is included in the option, for example RAPID instructions, system parameters.
- Which hardware is required, for example cables and I/O boards.
- Setup, programming, and configuration examples.

Product manuals

There is a *product manual* for each robot and controller. The content includes:

- Safety information
- Installation and commissioning
- Maintenance (maintenance schedules and preventive maintenance routines)
- Repair (lists of spare parts and repair procedures)
- Calibration procedures
- Decommissioning procedures
- Reference information
- Part list or reference to separate spare part list
- Foldouts or exploded views
- References to circuit diagrams

Product specifications

There is a *product specification* for each product. The content varies depending type of product but usually includes:

- Description
- Variants and options

Continues on next page

1 Introduction

1.3 Types of manuals

Continued



Note

The product specifications are removed from the documentation package in release R17.1, RobotWare 6.05.

1.4 Languages and article numbers

Article numbers

The article number for a manual or the documentation DVD is the same for all languages except for the subnumber (language code).

Example:

Article number	Title
3HAC047136-001	<i>Product manual - IRC5</i>
3HAC047136-003	<i>Product manual - IRC5</i>
<i>Product manual - IRC5</i> IRC5 with main computer DSQC1000.	3HAC047136-001

Language codes

The manuals are available in the following languages (with matching subnumber).

Language	Language code	Subnumber	
English	en	1	001
Swedish	sv	2	002
German	de	3	003
French	fr	4	004
Spanish	es	5	005
Portuguese	pt	6	006
Italian	it	7	007
Danish	da	8	008
Dutch	nl	9	009
Chinese (simplified)	zh or zh-cn	10	010
Korean	ko	11	011
Japanese	ja	12	012
Finnish	fi	13	013
Czech	cs or cz	14	014
Polish	pl	15	015
Russian	ru	16	016
Hungarian	hu	17	017
Turkish	tr	18	018
Slovenian	sl	19	019

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2 Robotics user manuals

2.1 DVD documentation

Article numbers

The documentation DVD contains all languages.

Title	Article number	Option number
DVD documentation, DSQC 639 with RobotWare 5.15.xx ⁱ	3HAC032875-001	808-1
DVD documentation, DSQC1000 with RobotWare 5.6x ⁱ	3HAC048193-001	808-1
DVD documentation, DSQC1000 with RobotWare 6	3HAC052153-001	808-1

ⁱ The user documentation for RobotWare 5 is described in *Product specification - Robot user documentation, IRC5 with RobotWare 5*.

2 Robotics user manuals

2.2 Operating manuals

2.2 Operating manuals

Article numbers

Title	Article number
<i>Operating manual - Emergency safety information</i> (English, Swedish, German, French, Spanish, Portuguese, Italian, Danish, Dutch, Chinese, Korean, Japanese, Finnish, Czech, Polish, Russian, Hungarian, Turkish, Slovenian)	3HAC027098-001
<i>Operating manual - General safety information</i> (English, Swedish, German, French, Spanish, Portuguese, Italian, Danish, Dutch, Chinese, Korean, Japanese, Finnish, Czech, Polish, Russian, Turkish, Slovenian)	3HAC031045-001
<i>Operating manual - Getting started, IRC5 and RobotStudio</i> (English, Swedish, German, French, Spanish, Portuguese, Italian, Danish, Dutch, Chinese, Korean, Japanese, Finnish, Czech, Polish, Russian, Turkish, Slovenian)	3HAC027097-001
<i>Operating manual - IRC5 with FlexPendant</i> (English, Swedish, German, French, Spanish, Portuguese, Italian, Danish, Dutch, Chinese, Korean, Japanese, Finnish, Czech, Polish, Russian, Turkish, Slovenian)	3HAC050941-001
<i>Operating manual - IRC5 with T10</i> (English, Swedish, German, French, Spanish, Portuguese, Italian, Danish, Dutch, Chinese, Korean, Japanese, Finnish, Czech, Polish, Russian, Turkish, Slovenian)	3HAC050943-001
<i>Operating manual - IRC5 Integrator's guide</i> (English)	3HAC050940-001
<i>Operating manual - RobotStudio</i> (English, German, French, Spanish, Italian, Chinese, Japanese)	3HAC032104-001
<i>Operating manual - Trouble shooting IRC5</i> (English, Swedish, German, French, Spanish, Portuguese, Italian, Danish, Dutch, Chinese, Korean, Japanese, Finnish, Czech, Polish, Russian, Turkish, Slovenian)	3HAC020738-001
<i>Operating manual - Calibration Pendulum</i> (English, German, French, Spanish, Italian, Chinese, Korean)	3HAC16578-1
<i>Operating manual - IRB 14000</i> (English, German, French, Spanish, Italian, Chinese, Japanese)	3HAC052986-001
<i>Operating manual - Service Information System</i> (English, German, French, Spanish, Italian)	3HAC050944-001
<i>Operating manual - IRBP /D2009</i> (English, German, French, Spanish, Italian)	3HAC038435-001
<i>Introduction and Safety - Arc Welding Products</i> (English, Swedish, German, French, Spanish, Italian, Dutch)	3HEA801212-001
<i>Operating manual - Seam tracking with Weldguide III and MultiPass</i> (English, German, French, Spanish, Italian)	3HEA802921-001

Continues on next page

Title	Article number
<i>Operating manual - Seam tracking with Weldguide IV and MultiPass</i> (English, German, French, Spanish, Italian)	3HAC054886-001
<i>Operating Manual - ArcWelding PowerPac</i> (English)	3HAC028931-001
<i>Operating manual - Machining PowerPac - CAM Converter Functionality</i> (English)	3HAC050262-001
<i>Operating manual - Machining PowerPac</i> (English)	3HAC030420-001
<i>Operating manual - Machining PowerPac - Machining Functionality</i> (English)	3HAC054781-001
<i>Operating manual - Palletizing PowerPac</i> (English)	3HAC042340 -1
<i>Operating manual - RobotWare Machine Tending</i> (English)	3HAC044397-001
<i>Operating manual - RobotWare Machine Tending</i> (English)	3HAC044397-001
<i>Operating manual - Tracking and searching with optical sensors</i> (English)	3HAC055269-001

2 Robotics user manuals

2.3 Technical reference manuals

2.3 Technical reference manuals

Article numbers

Title	Article number
<i>Technical reference manual - RAPID Instructions, Functions and Data types</i> (English, German, French, Spanish, Italian, Chinese)	3HAC050917-001
<i>Technical reference manual - RAPID kernel</i> (English, Chinese)	3HAC050946-001
<i>Technical reference manual - RAPID overview</i> (English, German, French, Spanish, Italian, Chinese)	3HAC050947-001
<i>Technical reference manual - System parameters</i> (English, German, French, Spanish, Italian, Chinese)	3HAC050948-001
<i>Technical reference manual - Lubrication in gearboxes</i> (English, German, French)	3HAC042927-001

2.4 Application manuals

Hardware options

Title	Article number
<i>Application manual - Additional axes and stand alone controller</i> (English)	3HAC051016-001
<i>Application manual - Electronic Position Switches</i> (English, German, French, Spanish, Italian)	3HAC050996-001
<i>Application manual - Functional safety and SafeMove</i> (English, German, French, Spanish, Italian)	3HAC052610-001
<i>Application manual - SafeMove</i> (English, German, French, Spanish, Italian)	3HAC050974-001

Fieldbus and industrial network options

Title	Article number
<i>Application manual - DeviceNet Master/Slave</i> (English, German)	3HAC050992-001
<i>Application manual - DeviceNet Anybus Slave</i> (English, German)	3HAC050993-001
<i>Application manual - EtherNet/IP Anybus Adapter</i> (English, German)	3HAC050997-001
<i>Application manual - EtherNet/IP Scanner/Adapter</i> (English, German)	3HAC050998-001
<i>Application manual - Local I/O</i> (English, German)	3HAC059109-001
<i>Application manual - PROFIBUS Anybus Device</i> (English, German)	3HAC050965-001
<i>Application manual - PROFIBUS Controller</i> (English, German)	3HAC050966-001
<i>Application manual - PROFinergy Device</i> (English, German)	3HAC050967-001
<i>Application manual - PROFINET Anybus Device</i> (English, German)	3HAC050968-001
<i>Application manual - PROFINET Controller/Device</i> (English, German)	3HAC050969-001

RobotWare options

Title	Article number
<i>Application manual - Continuous Application Platform</i> (English)	3HAC050990-001
<i>Application manual - Controller software IRC5</i> (English, German, Chinese)	3HAC050798-001

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2 Robotics user manuals

2.4 Application manuals

Continued

Title	Article number
<i>Application manual - Conveyor tracking</i> (English, German)	3HAC050991-001
<i>Application manual - Discrete application platform</i> (English)	3HAC050994-001
<i>Application manual - Force Control</i> (English)	3HAC050377-001
<i>Application manual - Integrated Vision</i> (English, German, French, Spanish, Chinese, Japanese)	3HAC044251-001
<i>Application manual - MultiMove</i> (English, German, French, Spanish, Italian, Chinese)	3HAC050961-001
<i>Application manual - PickMT</i> (English, Swedish)	3HAC051771-001
<i>Application manual - PickMT FeedLine Light</i> (English, Swedish)	3HAC052311-001
<i>Application manual - PickMT integration with ABB robot</i> (English, Swedish)	3HAC051770-001
<i>Application manual - SoftMove</i> (English)	3HAC050977-001
<i>Application manual - Production Screen</i> (English)	3HAC050964-001
<i>Application manual - Tool change support</i> (English)	3HAC050980-001

PC software

Title	Article number
<i>Application manual - PickMaster 3</i> (English, German, French, Spanish, Italian, Japanese)	3HAC031978-001
<i>Application manual - PickMaster 5</i> (English)	3HAC025829-001
<i>Application manual - IRC5 OPC Server help</i> (English)	3HAC023113-001

Arc welding

Title	Article number
<i>Application manual - Arc and Arc Sensor</i> (English, German)	3HAC050988-001
<i>Application manual - BullsEye</i> (English, German)	3HAC050989-001
<i>Application manual - Laser Tracker Calibration Interface</i> (English)	3HAC050957-001
<i>Application manual - Lincoln ArcLink Interface and Weld Editor</i> (English)	3HAC049194-001

Continues on next page

Title	Article number
<i>Application manual - Miller Ethernet I/P Interface and Weld Editor</i> (English)	3HAC054885-001
<i>Application manual - Navigator</i> (English)	3HAC050962-001
<i>Application manual - Production Manager</i> (English)	3HAC052855-001
<i>Application manual - Production Monitor</i> (English)	3HAC026810-001
<i>Application manual - Programming Integrated Power Source</i> (English)	3HAC050972-001
<i>Application manual - Programming ABB RPC S-series Integrated Power Source</i> (English, Chinese)	3HAC050970-001
<i>Application manual - Programming Fronius power source</i> (English)	3HAC050971-001
<i>Application manual - Signal description for arc welding products</i> (English)	3HAC050975-001
<i>Application manual - SKS Interface with Feldbus 5</i> (English, German)	3HAC054884-001
<i>Application manual - SmarTac</i> (English, German)	3HAC024845-001
<i>Application manual - Torch services</i> (English)	3HAC050981-001
<i>Application manual - Weld Data Monitor</i> (English)	3HAC050983-001

Spot welding

Title	Article number
<i>Application manual - Mechanical Unit Manager</i> (English)	3HAC050959-001
<i>Application manual - Servo gun tuning</i> (English)	3HAC026820-001
<i>Application manual - Spot options</i> (English, German)	3HAC050979-001
<i>Application manual - Tool change support</i> (English)	3HAC050980-001

Dispense

Title	Article number
<i>Application manual - Dispense</i> (English, German)	3HAC050995-001

2 Robotics user manuals

2.5 Product manuals

2.5 Product manuals

Controllers

Title	Article number
<i>Product manual - IRC5</i> (English, German, French, Spanish, Italian, Japanese, Russian)	<i>3HAC047136-001</i> IRC5 of design 14, main computer DSQC1000/1018
<i>Product manual - IRC5 Compact</i> (English, German, French, Spanish, Italian, Chinese)	<i>3HAC047138-001</i> IRC5 of design 14, main computer DSQC1000/1018
<i>Product manual - IRC5 Panel Mounted Controller</i> (English, German, French, Spanish, Italian)	<i>3HAC047137-001</i> IRC5 of design 14, main computer DSQC1000/1018

Manipulators

Title	Article number
<i>Product manual - IRB 120</i> (English, German, French, Spanish, Italian, Chinese, Japanese)	<i>3HAC035728-001</i>
<i>Product manual, spare parts - IRB 120</i> (English)	<i>3HAC049098-001</i>
<i>Product manual - IRB 140</i> (English, German, French, Spanish, Italian, Japanese)	<i>3HAC027400-001</i>
<i>Product manual, spare parts - IRB 140</i> (English)	<i>3HAC049099-001</i>
<i>Product manual - IRB 260</i> (English, German, French, Spanish, Italian)	<i>3HAC026048-001</i>
<i>Product manual, spare parts - IRB 260</i> (English)	<i>3HAC049100-001</i>
<i>Product manual - IRB 360</i> (English, German, French, Spanish, Italian)	<i>3HAC030005-001</i>
<i>Product manual, spare parts - IRB 360</i> (English)	<i>3HAC049101-001</i>
<i>Product manual - IRB 460</i> (English, German, French, Spanish, Italian, Chinese)	<i>3HAC039842-001</i>
<i>Product manual, spare parts - IRB 460</i> (English)	<i>3HAC040628-001</i>
<i>Product manual - IRB 660</i> (English, German, French, Spanish, Italian, Russian)	<i>3HAC025755-001</i>
<i>Product manual, spare parts - IRB 660</i> (English)	<i>3HAC049102-001</i>
<i>Product manual - IRB 760</i> (English, German, French, Spanish, Italian)	<i>3HAC039838-001</i>
<i>Product manual, spare parts - IRB 760</i> (English)	<i>3HAC040446-001</i>

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Title	Article number
<i>Product manual - IRB 1200</i> (English, German, French, Spanish, Italian, Chinese)	<i>3HAC046983-001</i>
<i>Product manual, spare parts - IRB 1200</i> (English)	<i>3HAC046984-001</i>
<i>Product manual - IRB 1410</i> (English, German, French, Spanish, Italian, Chinese, Korean)	<i>3HAC026320-001</i>
<i>Product manual, spare parts - IRB 1410</i> (English)	<i>3HAC049103-001</i>
<i>Product manual - IRB 1520</i> (English, German, French, Spanish, Italian, Chinese)	<i>3HAC043435-001</i>
<i>Product manual, spare parts - IRB 1520</i> (English)	<i>3HAC043436-001</i>
<i>Product manual - IRB 1600/1660</i> (English, German, French, Spanish, Italian, Polish)	<i>3HAC026660-001</i>
<i>Product manual, spare parts - IRB 1600/1660</i> (English)	<i>3HAC049104-001</i>
<i>Product manual - IRB 2400</i> (English, German, French, Spanish, Italian)	<i>3HAC022031-001</i>
<i>Product manual, spare parts - IRB 2400</i> (English)	<i>3HAC049105-001</i>
<i>Product manual - IRB 2600</i> (English, German, French, Spanish, Italian)	<i>3HAC035504-001</i>
<i>Product manual, spare parts - IRB 2600</i> (English)	<i>3HAC049106-001</i>
<i>Product manual - IRB 4400</i> (English, German, French, Spanish, Italian)	<i>3HAC022032-001</i>
<i>Product manual, spare parts - IRB 4400</i> (English)	<i>3HAC049107-001</i>
<i>Product manual - IRB 4600</i> (English, German, French, Spanish, Italian, Japanese)	<i>3HAC033453-001</i>
<i>Product manual - IRB 4600 Foundry Prime</i> (English, German, French, Spanish, Italian)	<i>3HAC040585-001</i>
<i>Product manual, spare parts - IRB 4600</i> (English)	<i>3HAC049108-001</i>
<i>Product manual - IRB 6620</i> (English, German, French, Spanish, Italian)	<i>3HAC027151-001</i>
<i>Product manual, spare parts - IRB 6620</i> (English)	<i>3HAC049109-001</i>
<i>Product manual - IRB 6620LX</i> (English, German, French, Spanish, Italian)	<i>3HAC035737-001</i>
<i>Product manual, spare parts - IRB 6620LX</i> (English)	<i>3HAC049110-001</i>

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2 Robotics user manuals

2.5 Product manuals

Continued

Title	Article number
<i>Product manual - IRB 6640 Foundry Prime</i> (English, German, French, Spanish, Italian)	3HAC040586-001
<i>Product manual, spare parts - IRB 6640</i> (English, German)	3HAC038330-001
<i>Product manual - IRB 6650S</i> (English, German, French, Spanish, Italian)	3HAC020993-001
<i>Product manual, spare parts - IRB 6650S</i> (English)	3HAC049111-001
<i>Product manual - IRB 6660</i> (English, German, French, Spanish, Italian)	3HAC028197-001
<i>Product manual, spare parts - IRB 6660</i> (English)	3HAC049112-001
<i>Product manual - IRB 6700</i> (English, German, French, Spanish, Italian)	3HAC044266-001
<i>Product manual - IRB 6700Inv</i> (English, German, French, Spanish, Italian)	3HAC058254-001
<i>Product manual, spare parts - IRB 6700</i> (English, German, French, Spanish, Italian)	3HAC044268-001
<i>Product manual - IRB 7600</i> (English, German, French, Spanish, Italian)	3HAC022033-001
<i>Product manual, spare parts - IRB 7600</i> (English)	3HAC049113-001
<i>Product manual - IRB 8700</i> (English, German, French, Spanish, Italian)	3HAC052853-001
<i>Product manual, spare parts - IRB 8700</i> (English, German, French, Spanish, Italian)	3HAC052854-001
<i>Product manual - IRB 910SC</i> (English)	3HAC056430-001
<i>Product manual, spare parts - IRB 910SC</i> (English)	3HAC056433-001
<i>Product manual - IRB 14000</i> (English, German, French, Spanish, Italian, Chinese, Japanese)	3HAC052983-001
<i>Product manual, spare parts - IRB 14000</i> (English, German, French, Spanish, Italian, Chinese, Japanese)	3HAC052984-001
<i>Product manual - Gripper IRB 14000</i> (English, German, French, Spanish, Italian, Chinese)	3HAC054949-001
<i>Product manual - IRBP /D2009</i> (English, German, French, Spanish, Italian)	3HAC037731-001
<i>Product manual, spare parts - IRBP /D2009</i> (English)	3HAC038416-001
<i>Product manual - IRBT 2005</i> (English, German, French, Spanish, Italian, Chinese)	

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Title	Article number
<i>Product manual, spare parts - IRBT 2005</i> (English)	
<i>Product manual - IRBT 4004/6004/7004/IRT 104</i> (English, German, French, Spanish, Italian)	3HAC028506-001
<i>Product manual, spare parts - IRBT 4004/6004/7004</i> (English, German, French, Spanish, Italian)	3HAC042864-001

Other hardware

Title	Article number
<i>Product manual - DressPack/SpotPack IRB 6620</i> (English, German, French, Spanish, Italian)	3HAC027309-001
<i>Product manual - DressPack/SpotPack IRB 6620LX</i> (English, German, French, Spanish, Italian)	3HAC055327-001
<i>Product manual - DressPack/SpotPack IRB 6640</i> (English, German, French, Spanish, Italian)	3HAC028638-001
<i>Product manual - DressPack/SpotPack IRB 6650S</i> (English, German, French, Spanish, Italian)	3HAC055424-001
<i>Product manual - DressPack/SpotPack IRB 6700</i> (English, German, French, Spanish, Italian)	3HAC044270-001
<i>Product manual - DressPack/SpotPack IRB 7600</i> (English, German, French, Spanish, Italian)	3HAC056372-001
<i>Product manual - DressPack/SpotPack IRB 8700</i> (English, German, French, Spanish, Italian)	3HAC055802-001
<i>Product manual - FlexMT</i> (English)	3HAC051768-001
<i>Product manual - FlexPLP IRPLP220</i> (English)	3HAW050041018-001
<i>Product manual - Safety center for FlexMT</i> (English)	3HAC051769-001
<i>Product manual - Arc welding equipment for IRB 1520ID</i> (English, German, French, Spanish, Italian, Chinese)	3HAC043438-001
<i>Product manual - Motor Units and Gear Units</i> (English, German, French, Spanish, Italian, Chinese)	3HAC040148-001
<i>Assembly Instructions - Torch Cleaner (TC 2013) / Torch Service Centre (TSC 2013)</i> (English, German)	3HDA000057A8519-001

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