

3HAC043569-004

IRB 4600 Axis 3 Type C Spare-Part Motor with Pinion and O-ring

ABB 3HAC043569-004 is the Type C spare-part motor assigned to axis 3, position C, of the IRB 4600 variants listed in ABB document 3HAC049108-001. It restores the documented axis 3 motor position and is supplied as a spare motor with a pinion and O-ring.

BRAND	ABB	FAMILY	ABB IRB 4600 industrial robot
PART	3HAC043569-004	SYSTEM ROLE	Restores the documented axis 3 actuation position in a Type C IRB 4600 configuration

APTER POWER SALES
TEAM

WHATSAPP / PHONE
+86 180 3023 5313
EMAIL sales13@apterp
ower.com
WEBSITE
www.apterpower.com



3HAC043569-004

MANUFACTURER SOURCE RECORD

Product manual, spare parts - IRB 4600
ABB document 3HAC049108-001, Revision R, 2024

Product Overview

SYSTEM FUNCTION

ABB 3HAC043569-004 is the Type C spare-part motor assigned to axis 3, position C, of the IRB 4600 variants listed in ABB document 3HAC049108-001. It restores the documented axis 3 motor position and is supplied as a spare motor with a pinion and O-ring.

FUNCTION 1

Restores the documented axis 3 actuation position in a Type C IRB 4600 configuration

FUNCTION 2

Preserves ABB's position-C motor assignment in the manipulator drive chain

FUNCTION 3

Supports maintenance and repair across the four IRB 4600 variants listed for this motor

FUNCTION 4

Integrates the supplied pinion and sealing interface into the replacement assembly

System Components

COMPONENT	DOCUMENTED ROLE
Host / carrier	ABB IRB 4600 industrial robot
Primary interface	Restores the documented axis 3 actuation position in a Type C IRB 4600 configuration
Engineering context	Use the exact ABB part identity at IRB 4600 axis 3 position C; preserve the Type C arrangement and complete the applicable ABB calibration and movement checks.
Commissioning duty	Complete ABB calibration, diagnostics and a controlled movement test.

TECHNICAL NOTE

Confirm the exact IRB 4600 variant, axis 3 position C and installed Type C execution. Follow the applicable ABB motor-replacement, calibration and controlled movement-test procedures.

Technical Data

PARAMETER	VALUE	PARAMETER	VALUE
Spare part number	3HAC043569-004	Supported robot variants	IRB 4600-60/2.05; -45/2.05; -40/2.55; -20/2.50
Robot family	IRB 4600	Documented controllers	IRC5; OmniCore
Component	Spare-part motor	Included mechanical part	Pinion
Robot axis	Axis 3	Included sealing part	O-ring
Motor type	Type C	Official document ID	3HAC049108-001
Spare-parts position	C	Official document revision	R

Related Products on Apter Power

MODEL	SYSTEM ROLE	APTER POWER PAGE
DSQC323	3HAB5956-1 ABB robot memory board	View DSQC323 page
3HAC021799-003	ABB motor with pinion	View 3HAC021799-003 page
DSQC223	YB560103-BD/4 ABB robot board	View DSQC223 page
DATX100	3ASC25H208 ABB robot module	View DATX100 page
DSQC679	3HAC028357-001 ABB robot interface	View DSQC679 page
DSQC662	3HAC026254-001 ABB robot I/O unit	View DSQC662 page
3HAC5954-1	ABB IRB 4400 motor unit	View 3HAC5954-1 page
3HAC14551-2	ABB robot capacitor unit	View 3HAC14551-2 page

ENGINEERING BOUNDARY

Confirm 3HAC043569-004, the IRB 4600 variant, IRC5 or OmniCore controller context, axis 3 position C, Type C execution, pinion and O-ring condition, mechanical supports, cable restoration, grounding, applicable product-manual revision, calibration status and controlled movement-test results before release.

Applications and Precautions

Common Applications

IRB 4600 axis 3 motor replacement

Restores axis 3 movement after the installed Type C motor has been diagnosed for replacement.

Type C manipulator refurbishment

Maintains the documented position-C drive arrangement during a controlled IRB 4600 overhaul.

IRB 4600 drivetrain reassembly

Uses the ABB-listed spare motor, supplied pinion and O-ring at the axis 3 mechanical interface.

Multi-variant IRB 4600 service planning

Provides one exact spare-part identity for the four robot variants marked in ABB's motor table.

Product Precautions

- 1

Confirm 3HAC043569-004 and the IRB 4600 variant before removal.
- 2

Verify axis 3, spare-parts position C and the installed Type C motor.
- 3

Isolate the robot and control stored energy with the ABB procedure.
- 4

Support the mechanism and document the as-found installation.
- 5

Protect the pinion, O-ring, mating faces and disturbed connections.
- 6

Do not substitute another axis, position or motor execution.
- 7

Restore the documented Type C mechanical and electrical arrangement.
- 8

Complete ABB calibration, diagnostics and a controlled movement test.

IMPORTANT NOTICE

Confirm 3HAC043569-004, the IRB 4600 variant, IRC5 or OmniCore controller context, axis 3 position C, Type C execution, pinion and O-ring condition, mechanical supports, cable restoration, grounding, applicable product-manual revision, calibration status and controlled movement-test results before release.

ACCEPTANCE CHECK	REQUIRED EVIDENCE
Identity	3HAC043569-004
Configuration	Restore the documented Type C mechanical and electrical arrangement.
Functional release	Complete ABB calibration, diagnostics and a controlled movement test.

Engineer FAQ

Q1 What is ABB 3HAC043569-004 in the IRB 4600 spare-parts structure?

ABB document 3HAC049108-001 identifies it as the Type C motor for axis 3 at spare-parts position C in the IRB 4600 motor table.

Q3 Can ABB 3HAC043569-004 be selected without checking the installed motor type?

No. Confirm the complete spare-part marking, axis 3 position and installed Type C execution before ordering or replacement.

Q5 Which controller contexts does the ABB manual list for ABB 3HAC043569-004?

The manual applies to IRB 4600 robots documented with IRC5 and OmniCore controller contexts; the installed controller and robot configuration must still be checked.

Q7 How should the pinion and O-ring supplied with ABB 3HAC043569-004 be handled?

Keep the pinion, O-ring, mating faces and sealing surfaces clean and protected from impact or contamination throughout the replacement work.

Q2 Which IRB 4600 variants are listed for ABB 3HAC043569-004?

The ABB motor table marks this part for IRB 4600-60/2.05, -45/2.05, -40/2.55 and -20/2.50.

Q4 What is supplied with ABB 3HAC043569-004 as a spare motor?

The ABB manual states that spare-part motors are delivered with a pinion and an O-ring.

Q6 What should be recorded before removing ABB 3HAC043569-004?

Record the IRB 4600 variant, axis 3 position, Type C motor identity, as-found mechanical arrangement and every disturbed connection required by the applicable ABB repair procedure.

Q8 What verification is required after installing ABB 3HAC043569-004?

Restore the documented mechanical and electrical arrangement, complete the applicable ABB calibration procedure, review axis diagnostics and perform a controlled movement test before production release.

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