

INDUSTRIAL AUTOMATION PRODUCT

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.

IDENTITY	VERIFIED VALUE
Manufacturer	ABB
System family	ABB IRB 4600 industrial robot
Part number	3HAC043569-004
Product role	Restores the documented axis 3 actuation position in a Type C IRB 4600 configuration
Lifecycle	Installed product record

DOCUMENT SCOPE

Exact-article identity, technical data, host role, installation checks, applications, precautions and engineering verification.

MODEL-SPECIFIC ENGINEERING 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.

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3HAC043569-004

Technical Specifications

Technical values below are limited to the named ABB product record and directly applicable manufacturer documentation.

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

Verified Product Record

DATA GROUP	VERIFIED VALUE
Installed host / carrier	ABB IRB 4600 industrial robot
Primary system role	Restores the documented axis 3 actuation position in a Type C IRB 4600 configuration
Connection boundary	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.
Controlled acceptance duty	IRB 4600 axis 3 motor replacement

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.

Pre-Installation Checks

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.

Documented Service Record

RECORD ITEM	REQUIRED ENTRY
As-found article	3HAC043569-004
Installed host	ABB IRB 4600 industrial robot
Connection record	Capture before removal
Controlled release	Diagnostics and functional proof

System Role and Architecture

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

Matched System Components

NO.	DOCUMENTED COMPONENT / ROLE
1	ABB IRB 4600 industrial robot
2	IRB 4600
3	IRB 4600 axis 3 motor replacement
4	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.

System Integration Record

INTEGRATION ITEM	DOCUMENTED ROLE
Host identity	ABB IRB 4600 industrial robot
Interface role	Restores the documented axis 3 actuation position in a Type C IRB 4600 configuration
Field / power 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 evidence	Complete ABB calibration, diagnostics and a controlled movement test.

Installation and Connection Checks

- 1

Protect the pinion, O-ring, mating faces and disturbed connections.
- 2

Do not substitute another axis, position or motor execution.
- 3

Restore the documented Type C mechanical and electrical arrangement.
- 4

Complete ABB calibration, diagnostics and a controlled movement test.

MANUFACTURER SOURCE RECORD

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

Applications and Engineering Context

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.

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.

Model-Specific Acceptance Evidence

CHECK	ACCEPTANCE CONDITION
Identity	3HAC043569-004 recorded
Host / carrier	ABB IRB 4600 industrial robot
Physical interface	Restores the documented axis 3 actuation position in a Type C IRB 4600 configuration
Configuration	Restore the documented Type C mechanical and electrical arrangement.
Functional proof	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.

Controlled Release Summary

RELEASE ITEM	MODEL-SPECIFIC CONDITION
Article identity	3HAC043569-004
Approved role	IRB 4600 axis 3 motor replacement
Final validation	Complete ABB calibration, diagnostics and a controlled movement test.

Engineering 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.

Related Products on Apter Power

MODEL	SYSTEM ROLE	APTER POWER PAGE
3HAC17484-8	ABB robot servo motor	View 3HAC17484-8 page
DSQC332	ABB relay I/O unit	View DSQC332 page
3HNA006565-001	ABB robot component	View 3HNA006565-001 page
3HNA003882-001/02	ABB robot component	View 3HNA003882-001/02 page
3HAC029105-002	ABB robot component	View 3HAC029105-002 page
3HAC025466-001	ABB robot component	View 3HAC025466-001 page
3HAC058040-001	ABB robot component	View 3HAC058040-001 page
3HAC033388-001	ABB robot harness	View 3HAC033388-001 page

MANUFACTURER SOURCE RECORD

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

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