ABB

Product manual, spare parts
Motor Units and Gear Units

Product manual, spare parts

MU 80, MU 100, MU 200, MU 250, MU 300, MU 400
MTD 250, MTD 500, MTD 750, MTD 2000, MTD 5000
MID 500, MID 1000

OmniCore

Document ID: 3HAC090256-001

Revision: A

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Overview of this manual

About this manual

This manual describes the spare parts for motor units and gear units.

- MU 100, MU 200, MU 250, MU 300, MU 400
- MTD 250, MTD 500, MTD 750, MTD 2000, MTD 5000, MID 500, MID 1000

Who should read this manual?

This manual is intended for:

- Installation personnel.
- Maintenance personnel.
- Repair personnel.

Prerequisites

Maintenance/repair/installation personnel working with an ABB Robot must be trained by ABB and have the required knowledge of mechanical and electrical installation/repair/maintenance work.

References

Reference	Document ID
Product manual - Motor Units and Gear Units	*Document.ID-1*
Product specification - Motor Units and Gear Units	*Document.ID-1*
Circuit diagram - Motor Units and Gear Units	*3HAC039887-001*

Revisions

Revision	Description
-	First edition
A	Spare parts updated based on the OmniCore controller

Product documentation

Categories for user documentation from ABB Robotics

> The user documentation from ABB Robotics is divided into a number of categories. This listing is based on the type of information in the documents, regardless of whether the products are standard or optional.

> 💡 **Tip**
>
> All documents can be found via myABB Business Portal, *www.abb.com/myABB*.

Product manuals

> Manipulators, controllers, DressPack, and most other hardware is delivered with a **Product manual** that generally contains:
>
> - Safety information.
> - Installation and commissioning (descriptions of mechanical installation or electrical connections).
> - Maintenance (descriptions of all required preventive maintenance procedures including intervals and expected life time of parts).
> - Repair (descriptions of all recommended repair procedures including spare parts).
> - Calibration.
> - Troubleshooting.
> - Decommissioning.
> - Reference information (safety standards, unit conversions, screw joints, lists of tools).
> - Spare parts list with corresponding figures (or references to separate spare parts lists).
> - References to circuit diagrams.

Technical reference manuals

> The technical reference manuals describe reference information for robotics products, for example lubrication, the RAPID language, and system parameters.

Application manuals

> Specific applications (for example software or hardware options) are described in **Application manuals**. An application manual can describe one or several applications.

> An application manual generally contains information about:
>
> - The purpose of the application (what it does and when it is useful).
> - What is included (for example cables, I/O boards, RAPID instructions, system parameters, software).
> - How to install included or required hardware.
> - How to use the application.

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> • Examples of how to use the application.

Operating manuals

The operating manuals describe hands-on handling of the products. The manuals are aimed at those having first-hand operational contact with the product, that is production cell operators, programmers, and troubleshooters.

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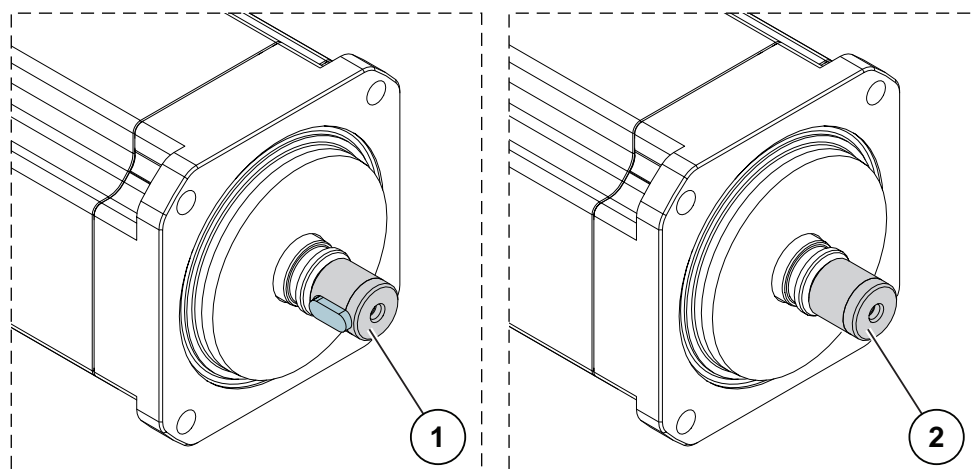
1 Spare parts

1.1 Spare parts for motor units

Motor units	Article number
	Graphite White
MU 80 [i]	3HAC063505-005
MU 100 [ii]	3HAC040655-002
MU 200 [ii]	3HAC040656-002 (type A)
MU 200 with smooth shaft adaptor [iii]	3HAC061548-003
MU 250 [ii]	3HAC061305-004
MU 300 [ii]	3HAC040657-002 (type A)
MU 400 [ii]	3HAC040658-002

[i]   Use shaft adaptor with key.
[ii] Use shaft adaptor with key.
[iii] Use smooth shaft adaptor.

Confirm the type of the shaft adaptor.

xx1700000589

1   Shaft adaptor with key

2   Smooth shaft adaptor

1.2 Spare parts for gear units

Gear units

Gear units	Article number	
	Graphite White	**Dark grey**
Gearbox MTD 250, including motor	3HAC035434-005	-
Gearbox MTD 500, including motor	3HAC035436-005	-
Gearbox MTD 750, including motor	3HAC035398-008	-
Gearbox MTD 2000, including motor	3HAC035406-008	-
Gearbox MTD 5000, including motor	3HAC035444-004	-
Gearbox MID 1.1, including motor	-	3HAC035480-004
Gearbox MID 1.2, including motor	3HAC035398-007	-
Gearbox MID 2.1, including motor	3HAC035406-007	-
Gearbox MID 500, including motor	-	3HAC040682-002
Gearbox MID 1000, including motor	3HAC040683-002	-

Motors

Motor units	Article number
	Graphite White
Motor for MTD 250	3HAC038187-003
Motor for MTD 500	3HAC038210-010
Motor for MTD 750	3HAC038210-010
Motor for MTD 2000	3HAC038210-009
Motor for MTD 5000	3HAC038212-003
Motor for MID 1.2	3HAC038210-007
Motor for MID 2.1	3HAC038210-008
Motor for MID 2.2	3HAC038210-008

Connection boxes

Connection boxes	Article number		
	Graphite White	**Dark grey**	**Black**
Connection Box MTD 250	3HAC038188-003	-	-
Connection Box MTD 500, MTD 750, MTD 2000, and MTD 5000	3HAC038209-003	-	-

Isolation kits

Isolation kits	Article number
Isolation kit MTD 250	3HAC038213-002
Isolation kit MTD 500 - MTD 2000	3HAC038214-002

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Isolation kits	Article number
Isolation kit MTD 5000	3HAC038215-002

1.3 Spare parts for cables

Motor cables

Flex cable from OmniCore controller to motor unit.

Power cables	Article number	Length
OmniCore - MU/GU, power	3HAC090151-001	7 m
OmniCore - MU/GU, power	3HAC090151-004	15 m
OmniCore - MU/GU, power	3HAC090151-005	30 m

Flex cable from motor connection box to motor unit or gear unit.

Power cables	Article number	Length
Motor connection box - MU/GU, power	3HAC039603-001	3 m
Motor connection box - MU/GU, power	3HAC039603-002	7 m
Motor connection box - MU/GU, power	3HAC039603-003	15 m

Resolver cables

Flex cable from motor connection box to motor unit or gear unit or from IRB to motor unit.

FB cables	Article number	Length
Motor connection box - MU/GU, signal	3HAC039602-001	3 m
Motor connection box - MU/GU, signal	3HAC039602-002	7 m
Motor connection box - MU/GU, signal	3HAC039602-003	15 m

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