


Danfoss
MCB 103
Resolver Option
Automation
Drive



Danfoss MCB 103 Resolver Option Automation Drive Installation Guide

[Home](#) » [Danfoss](#) » Danfoss MCB 103 Resolver Option Automation Drive Installation Guide 

Contents

- [1 Danfoss MCB 103 Resolver Option Automation Drive](#)
- [2 Product Information](#)
- [3 Product Usage Instructions](#)
- [4 Safety Instructions](#)
- [5 Items Supplied](#)
- [6 Mounting the Option](#)
- [7 Ambient Working Temperature](#)
- [8 Electrical Installation](#)
- [9 ABOUT COMPANY](#)
- [10 FAQ](#)
- [11 Documents / Resources](#)
 - [11.1 References](#)
- [12 Related Posts](#)



Danfoss MCB 103 Resolver Option Automation Drive



Product Information

Specifications

- Resolver Option MCB 103 for FC 360
- Used for interfacing the resolver motor feedback to the FC 360 frequency converters
- **Resolver poles:** 17-50 Poles – 2 * 2
- **Vrms:** *10.0 kHz
- **Transformation ratio:** Secondary input voltage Max. 4 Vrms
- **Secondary load:** App. 10 k

Product Usage Instructions

Safety Instructions

WARNING: DISCHARGE TIME

1. Stop the motor.
2. Disconnect AC mains, permanent magnet type motors, and remote DC-link power supplies, including battery back-ups, UPS, and DC-link connections to other frequency converters.
3. Wait for the capacitors to discharge fully before performing any service or repair work. The waiting time is specified in Table 1.2.

Items Supplied

For J1-J5 enclosure types, a terminal cover must be ordered separately. For J6 and J7 enclosure types, no separate terminal covers are needed.

Mounting the Option

Mount the option according to the provided illustrations.

Electrical Installation

NOTICE: Always use screened motor cables and brake chopper cables. Separate resolver cables from motor cables. Connect the screen of the resolver cable to the de-coupling plate on the frequency converter side, and connect to the chassis (earth) on the motor side.

Ambient Working Temperature

Refer to Table 1.4 for the ambient working temperature at full load.

Resolver Option MCB 103 for FC 360 is used for interfacing the resolver motor feedback to FC 360 frequency converters.

Resolver poles	17-50 Poles: 2 *2
Resolver input voltage	17-51 Input Voltage: 2.0–8.0 Vrms *7.0 Vrms
Resolver input frequency	17-52 Input Frequency: 2–15 kHz *10.0 kHz
Transformation ratio	17-53 Transformation Ratio: 0.1–1.1 *0.5
Secondary input voltage	Max. 4 Vrms
Secondary load	App. 10 kΩ

Safety Instructions

WARNING DISCHARGE TIME

The frequency converter contains DC-link capacitors, which can remain charged even when the frequency converter is not powered. Failure to wait the specified time after power has been removed before performing service or repair work could result in death or serious injury.

1. Stop the motor.
2. Disconnect AC mains, permanent magnet type motors, and remote DC-link power supplies, including battery back-ups, UPS, and DC-link connections to other frequency converters.
3. Wait for the capacitors to discharge fully before performing any service or repair work. The duration of waiting time is specified in Table 1.2.

Voltage [V]	Minimum waiting time (minutes)	
	4	15
380-480	0.37-7.5 kW	11-75 kW
High voltage may be present even when the warning LEDs are off!		

Items Supplied

Resolver Option MCB 103

NOTICE

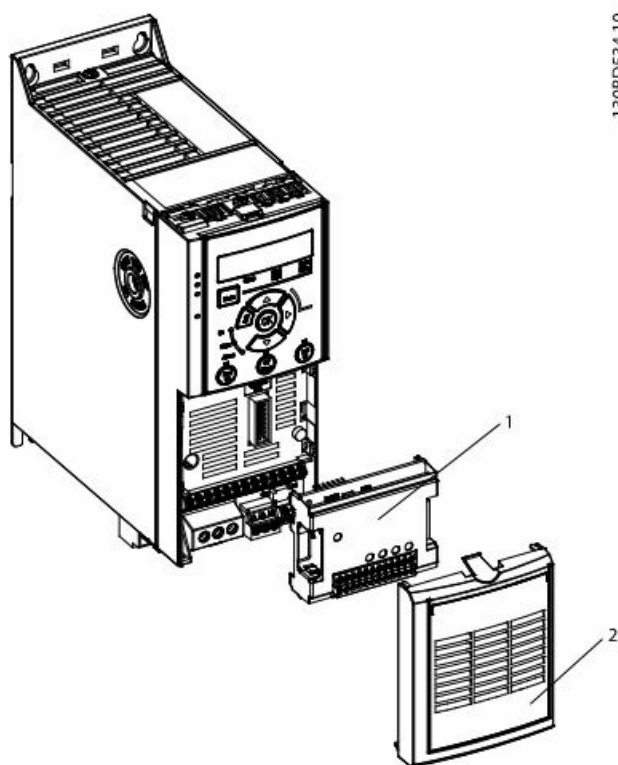
For J1-J5 enclosure types, a terminal cover must be ordered separately. For J6 and J7 enclosure types, no

separate terminal covers are needed.

Enclosure	Ordering number
J1	132B0263
J2	132B0265
J3	132B0266
J4	132B0267
J5	132B0268

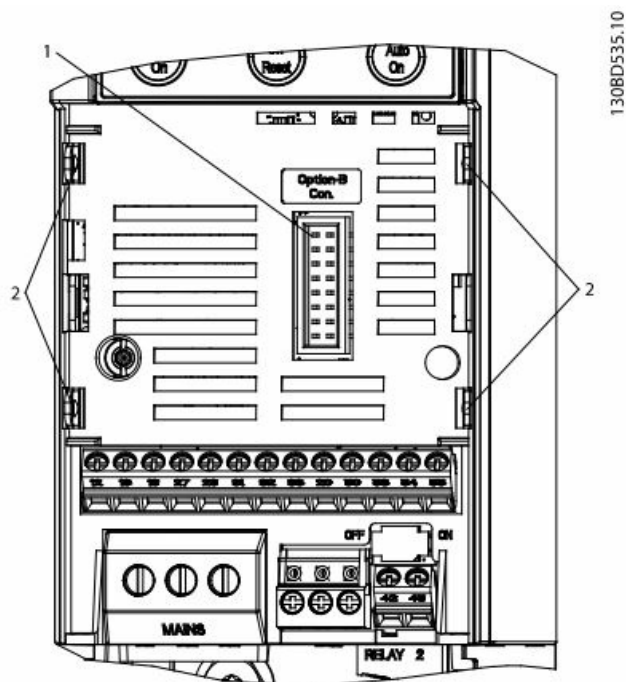
Mounting the Option

Mount the option according to Illustration 1.1 and Illustration 1.2.



1	Option
2	Terminal cover

Illustration 1.1 Frequency Converter, Option and Terminal Cover



1	Connector
2	Metal clamps

Illustration 1.2 Connector and Metal Clamps

Ambient Working Temperature

For ambient working temperature at full load, see Table 1.4.

	Without MCB	With MCB
Standard Control Card	45-50 °C*	45 °C
Profibus or ProfiNet	45 °C	40 °C

Some types can reach 50 °C, see VLT® AutomationDrive FC 360 Design Guide.

Electrical Installation

NOTICE

- Always use screened motor cables and brake chopper cables.
- Separate resolver cables from motor cables.
- Connect the screen of the resolver cable to the de-coupling plate on the frequency converter side, and connect to the chassis (earth) on the motor side.

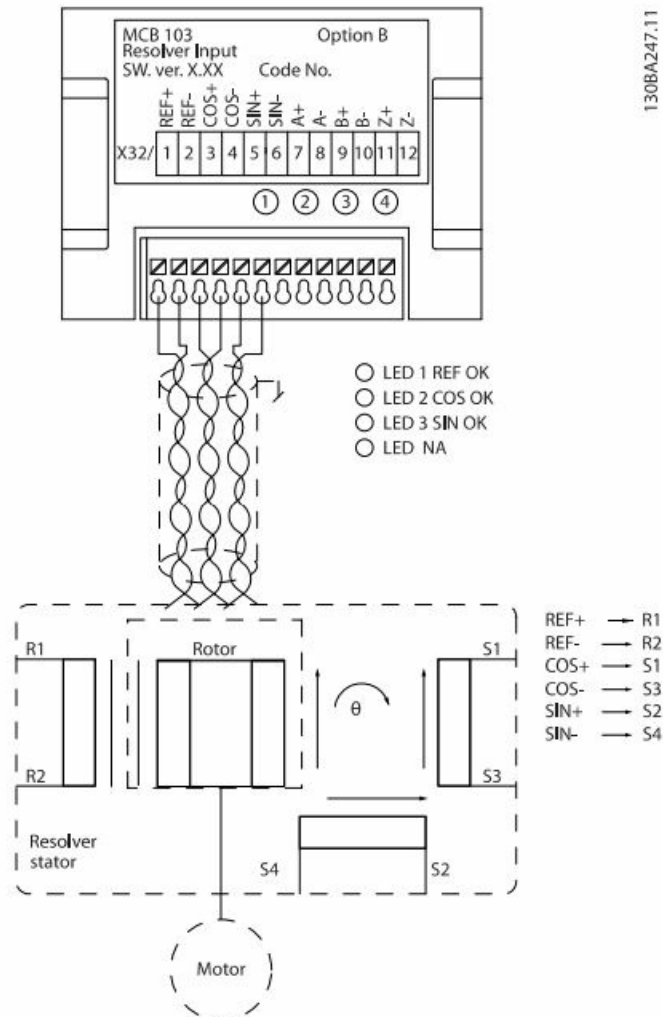


Illustration 1.3 Resolver Input MCB 103

ABOUT COMPANY

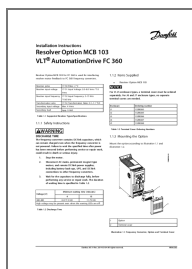
- Danfoss A/S
- Ulsnaes 1
- DK-6300 Graasten
- www.danfoss.com/drives

FAQ

What should I do if the warning LEDs are off but high voltage may still be present?

High voltage may still be present even when the warning LEDs are off. Follow safety protocols and refer to the provided instructions for proper discharge time before servicing or repair work.

Documents / Resources



[Danfoss MCB 103 Resolver Option Automation Drive](#) [pdf] Installation Guide
 MCB 103, MCB 103 Resolver Option Automation Drive, MCB 103, Resolver Option Automation Drive, Option Automation Drive, Automation Drive

References

-  [Danfoss Drives: World-leading drive manufacturer | Danfoss](#)
- [User Manual](#)

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