

Installation Instructions

Resolver Option MCB 103

VLT[®] AutomationDrive FC 360

Resolver Option MCB 103 for FC 360 is used for interfacing 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

Table 1.1 Supported Resolver Types/Specifications

1.1.1 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!		

Table 1.2 Discharge Time

1.1.2 Items Supplied

- Resolver Option MCB 103

NOTICE

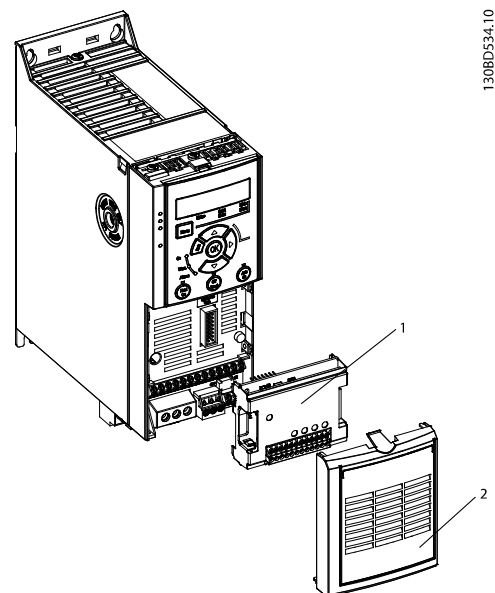
For J1-J5 enclosure types, a terminal cover must be ordered separately. For J6 and J7 enclosure types, no separate terminal covers are needed.

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

Table 1.3 Terminal Cover Ordering Numbers

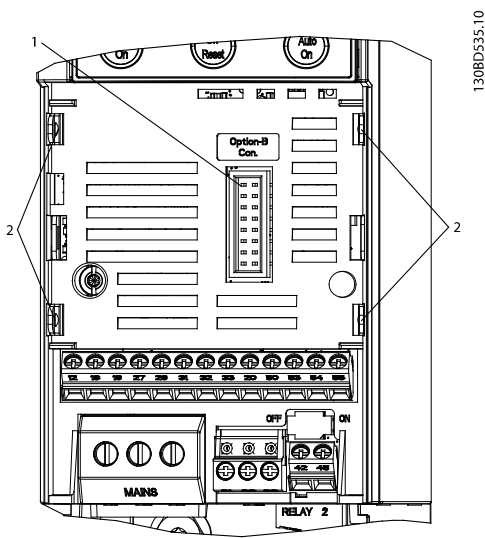
1.1.3 Mounting the Option

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



130BD535.10

1	Connector
2	Metal clamps

Illustration 1.2 Connector and Metal Clamps

1.1.4 Ambient Working Temperature

For ambient working temperature of 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

Table 1.4 Ambient Temperature

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

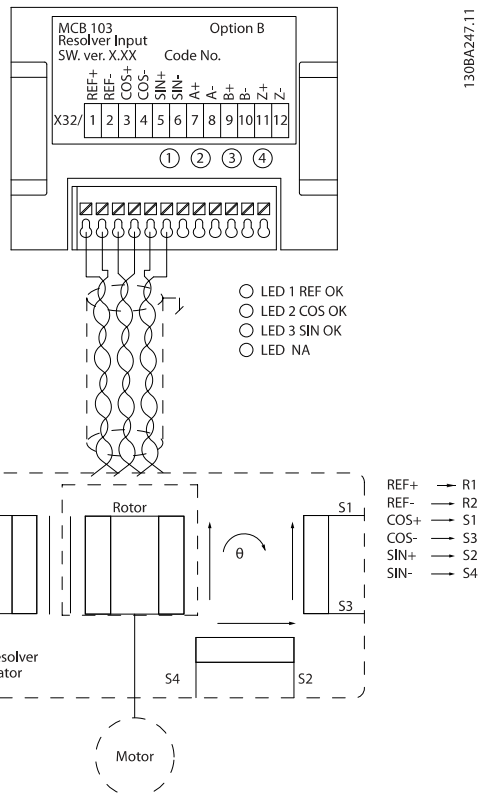
1.1.5 Electrical Installation

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 chassis (earth) on the motor side.



130BA247.11

Illustration 1.3 Resolver Input MCB 103

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

