

# IP21/Type 1 Conversion Kit for MA01c/MA02c/ MA01a/MA02a/MA03a

## iC2-Micro Frequency Converters

### 1 Overview

#### 1.1 Description

This installation guide explains how to install the IP21/Type 1 conversion kit for enclosure sizes MA01c, MA02c, MA01a, MA02a, and MA03a of iC2-Micro Frequency Converters.

#### 1.2 Kit Numbers

Use these instructions with the following kits.

**Table 1: Kit Numbers for IP21/Type 1 Conversion Kit**

Kit number	Kit description
132G0188	IP21/Type 1 conversion kit, MA01c
132G0189	IP21/Type 1 conversion kit, MA02c
132G0190	IP21/Type 1 conversion kit, MA01a
132G0191	IP21/Type 1 conversion kit, MA02a
132G0192	IP21/Type 1 conversion kit, MA03a

#### 1.3 Items Supplied

The following parts are contained in the kit.

**Table 2: Items Supplied in IP21/Type 1 Conversion Kits**

Item	Quantity
Top cover	1
Metal plate	1
Rubber grommet	4–5 (depends on enclosure size)
Bottom cover	1
U-terminal	2–3 (depends on enclosure size)
M4x10 screw	3–4 (depends on enclosure size)

#### 1.4 Safety Information

Only qualified personnel are allowed to install the IP21/Type 1 conversion kit described in this installation guide.

For important information about safety precautions for installation, refer to the drive's operating guide.

### ⚠ WARNING ⚠

#### DISCHARGE TIME

The drive contains DC-link capacitors, which can remain charged even when the drive is not powered. High voltage can be present even when the warning indicator lights are off.

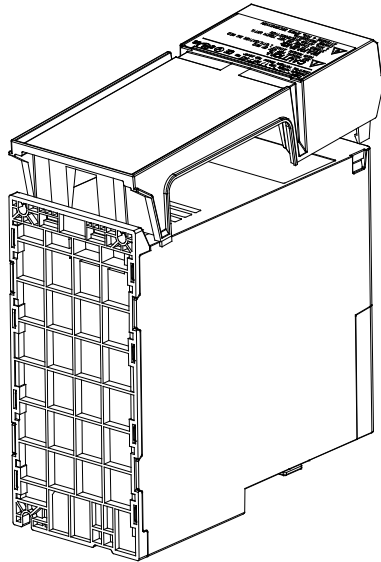
- Stop the motor, disconnect AC mains and permanent magnet type motors, and remove DC-link supplies, including battery back-ups, UPS, and DC-link connections to other drives.
- Wait for the capacitors to discharge fully and measure it before performing any service or repair work.
- The minimum waiting time is 4 minutes for MA01c, MA02c, MA01a, MA02a, and MA03a drives.

## 2 Installation

### 2.1 Mounting the IP21/Type 1 Conversion Kit

#### Procedure

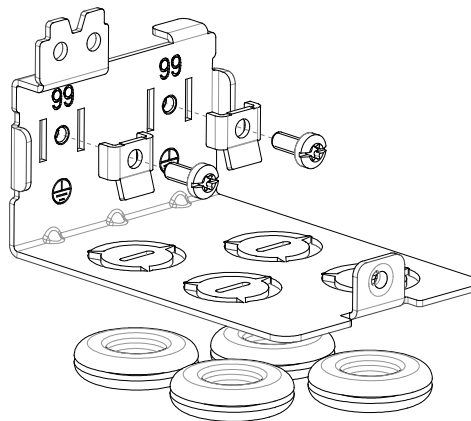
1. Fit top cover on the drive, see [Illustration 1](#).



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Illustration 1: Fitting Top Cover

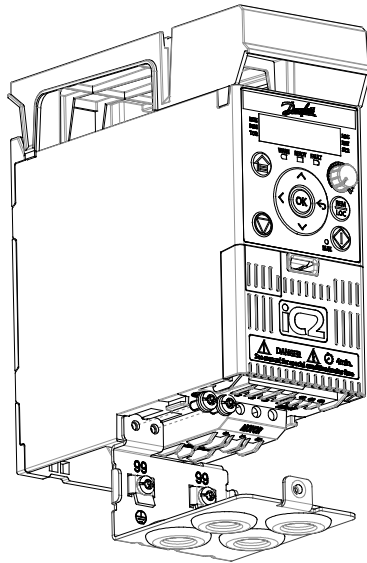
2. Mount U-terminals on the metal plate and tighten screws, see [Illustration 2](#). Maximum tightening torque: 2 Nm (17.7 in-lb).
3. Remove knockouts on the metal plate and fit rubber grommets, see [Illustration 2](#).



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Illustration 2: Mounting U-terminals and Fitting Rubber Grommets

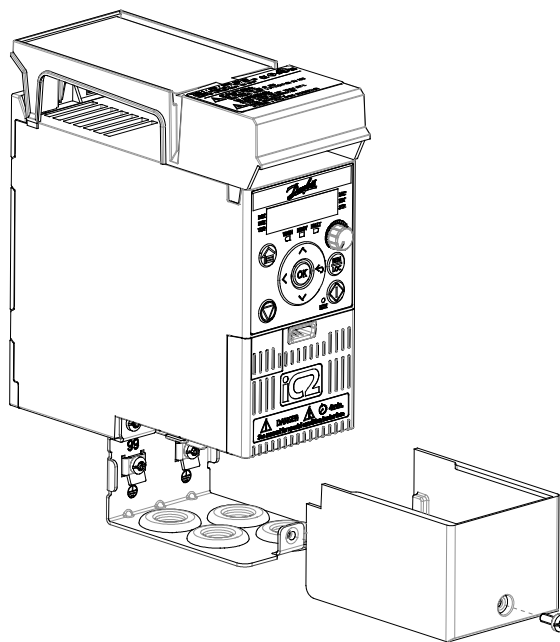
4. Mount metal plate on the drive and tighten screws, see [Illustration 3](#). Maximum tightening torque: 2 Nm (17.7 in-lb).



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**Illustration 3: Mounting Metal Plate**

5. Fit bottom cover on the drive and tighten screw, see [Illustration 4](#). Maximum tightening torque: 1.5 Nm (13.3 in-lb).



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**Illustration 4: Fitting Bottom Cover**

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