To install the drive with screws
1. Make marks onto the surface for the mounting holes. Refer to Dimensions and weights. The R3 and R4 drives come with a mounting template.
2. Make the holes for the mounting screws and install suitable plugs or washers. Fit the plugs into the mounting holes.
3. Start to tighten the screws into the mounting holes.
4. Install the drive onto the mounting screws.
5. Tighten the mounting screws.

To install the drive to a DIN rail
1. Make marks onto the surface for the mounting holes. Refer to Dimensions and weights. The R3 and R4 drives come with a mounting template.
2. Make the holes for the mounting screws and install suitable plugs or washers. Fit the plugs into the mounting holes.
3. Start to tighten the screws into the mounting holes.
4. Install the drive onto the mounting screws.
5. Tighten the mounting screws.

WARNING! Read the safety instructions in the ACS480 Hardware manual. Do not install the drive with screws if you are not sure that it is correct to do so.

Installation requirements:
- The drive is intended for cabinet installation and has a degree of protection of IP20/UL open type.
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To install the communication module
1. Open the front cover.
2. Align the communication module contacts with the drive.
3. Carefully push the communication module into position.

3. Measure the insulation resistance
Drive: Do not use voltage tolerance or insulation resistance tests on the drive, because this can cause damage to the drive. 
Input power cable: Before you connect the input power cable, measure the insulation resistance of the input power cable. Obey the local regulations.

Motor and motor cables:
1. Make sure that the drive is correctly installed.
2. Use a flatted screwdriver to open the locking part.
3. Release the locking button.
4. Move the locking part to the right.
5. Make sure that the drive is correctly installed.

3. Measure the insulation resistance
Drive: Do not use voltage tolerance or insulation resistance tests on the drive, because this can cause damage to the drive. 
Input power cable: Before you connect the input power cable, measure the insulation resistance of the input power cable. Obey the local regulations.

Motor and motor cables:
1. Make sure that the drive is correctly installed.
2. Use a flatted screwdriver to open the locking part.
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3. Measure the insulation resistance
Drive: Do not use voltage tolerance or insulation resistance tests on the drive, because this can cause damage to the drive. 
Input power cable: Before you connect the input power cable, measure the insulation resistance of the input power cable. Obey the local regulations.

Motor and motor cables:
1. Make sure that the drive is correctly installed.
2. Use a flated screwdriver to open the locking part.
3. Release the locking button.
4. Move the locking part to the right.
5. Make sure that the drive is correctly installed.

3. Measure the insulation resistance
Drive: Do not use voltage tolerance or insulation resistance tests on the drive, because this can cause damage to the drive. 
Input power cable: Before you connect the input power cable, measure the insulation resistance of the input power cable. Obey the local regulations.

Motor and motor cables:
1. Make sure that the drive is correctly installed.
2. Use a flated screwdriver to open the locking part.
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Motor and motor cables:
1. Make sure that the drive is correctly installed.
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Input power cable: Before you connect the input power cable, measure the insulation resistance of the input power cable. Obey the local regulations.

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Input power cable: Before you connect the input power cable, measure the insulation resistance of the input power cable. Obey the local regulations.

Motor and motor cables:
1. Make sure that the drive is correctly installed.
2. Use a flated screwdriver to open the locking part.
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4. Move the locking part to the right.
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3. Measure the insulation resistance
Drive: Do not use voltage tolerance or insulation resistance tests on the drive, because this can cause damage to the drive. 
Input power cable: Before you connect the input power cable, measure the insulation resistance of the input power cable. Obey the local regulations.

Motor and motor cables:
1. Make sure that the drive is correctly installed.
2. Use a flated screwdriver to open the locking part.
3. Release the locking button.
4. Move the locking part to the right.
5. Make sure that the drive is correctly installed.
Connecting EIA-485 Modbus RTU terminal to the drive

Connect the Fieldbus to the EIA-485 Modbus RTU terminal on the RIIO-01 module which is attached to the control unit of the drive. The connection diagram is shown below.

8. Install the control panel
To install the control panel:
1. Close the front cover and tighten the locking screw.
2. Put the bottom edge of the control panel into position.
3. Push the top of the control panel until it locks into position.

9. Start up the drive
For information on the start-up and drive parameters, refer to the ACS480 Firmware manual (3AXD50000047392 [EN]).

WARNING! Before you start up the drive, make sure that the installation is complete. Make sure that the cover of the drive and the cable box, if included, are in place. Make sure that the motor does not cause danger when it starts. Disconnect the motor from other machinery, if there is a risk of damage or injury.

For information on the process parameters, refer to the ACS480 Hardware manual (3AXD50000047392 [EN]).

UL (NEC) ratings, \( U_L = 460 \) V (440-480 V) @ 60 Hz

### Ratings
For detailed technical information, refer to the ACS480 Hardware manual (3AXD50000047392 [EN]).

#### IEC ratings, \( U_E = 400 \) V

UL (NEC) ratings, \( U_L = 460 \) V (440-480 V) @ 60 Hz

### UL (NEC) ratings, \( U_L = 460 \) V (440-480 V) @ 60 Hz

### EU Declaration of Conformity

**Machine Directive 2006/42/EC**

- **Manufacturer:** ABB
- **Address:** Homerisa 13, 00380 Helsinki, Finland
- **Phone:** T: +358 (0)10 222 100

Note: declare our sole responsibility that the following products:

- **Frequency converter**
- with regard to thoroughly function
- in conformity with all the relevant safety component requirements of the Machinery Directive 2006/42/EC, when the latest safety function is used for safety component functionality.

- The following harmonized standards have been applied:

  - EN 61800-5-1
  - EN 61800-5-2
  - EN 61800-5-7
  - EN 61800-6-2
  - EN 61800-3
  - EN 60034-1
  - EN 60079-0
  - EN 60439-1
  - EN 60439-3
  - EN 60439-5

- The following other standards have been updated:

  - IEC 60724
  - IEC 60772
  - IEC 61400-1
  - IEC 61439
  - IEC 61800-2-1
  - IEC 61800-2-2
  - IEC 61800-5-1
  - IEC 61800-5-2
  - IEC 61800-5-7
  - IEC 61800-9

- The product(s) referred to in this Declaration of conformity [above] are the relevant positions of other European Union Directives which are notified in single (see) Declaration of conformity.

- Person authorized to complete the technical file:
  - Name and address: Risto Myyrmäen, Homessa 13, 00380 Helsinki, Finland

- Issued: 9-Feb-2018

- Manufacturer representative:
  - Hella UK Ltd
  - Manchester, UK

### Declaration of conformity