

## Safety information for inverters AC20

Please read the instructions contained here carefully BEFORE installing the device.

### User target group

This manual is intended for all persons who have to install, configure or operate the device described or who have to fulfil associated tasks. This chapter contains safety instructions and EMC regulations and is intended to ensure optimum operation of the device for the user. Enter all relevant information on the installation and use of the device in the table below for future reference. This chapter contains safety instructions and is intended to ensure optimum operation of the device for the user.

<b>DANGER! - Failure to observe the following instructions may result in personal injury.</b>
This appliance can be life-threatening due to contact with freely rotating appliance parts and high voltage.
Due to the high earth fault current, the appliance must be permanently earthed and the drive motor must be connected to a suitable protective earth.
Check that all voltage connections are properly insulated before working on the appliance. Do not forget that the drive may have several voltage connections.
The current terminals (motor output, voltage inputs, DC bus and brake, if applicable) may still be live even when the motor is at a standstill or stopped.
Only use a measuring device in accordance with IEC 61010 (from CAT III) for measurements. Always start with the highest range. Measuring devices of Cat. I and II measuring devices must not be used for this product.
Wait at least 5 minutes (20 minutes for over 30 kW) until the drive capacitors have been sufficiently discharged to a safe voltage level (< 50 V). Use the specified meter, which must support measurements up to 1000 VDC/VAC RMS, to verify that less than 50 V is present between all power sources and earth ground.
Unless otherwise specified, DO NOT disassemble this appliance. In the event of a malfunction, the drive must be returned.

<b>WARNING - Failure to observe the following instructions may result in personal injury or damage to the appliance.</b>
Never carry out high-voltage resistance tests on cables without first disconnecting the drive from the circuit to be tested.
While ensuring adequate ventilation, make sure that sufficient protective devices and/or additional safety systems are in place to prevent personal injury and equipment damage.
When replacing a drive in an application and before recommissioning, always ensure that all user-defined operating parameters have been properly installed.
Frequency inverters are not a safety component or a safety-related product
All control and signal terminals guarantee safety extra-low voltages (SELV), i.e. they are protected by double insulation. Ensure that all external wiring is approved for the highest system voltage.
At least basic insulation must be ensured for thermal sensors contained in the motor.
All exposed metal parts in the inverter are protected by basic insulation and connected to protective earth
The use of residual current circuit breakers (RCD) in conjunction with this device is not recommended. However, if they are required, only a type B RCD should be used.

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<b>EMC</b>
This appliance may cause radio interference in residential areas. In this case, additional protective measures must be taken.
This device contains parts that are sensitive to electrostatic discharge (ESD). Precautions must therefore be taken to limit the build-up of electrostatic charge when handling, installing and maintaining this device.
This device belongs to the product class for restricted distribution according to IEC 61800-3. It is labelled as a 'professional device' in accordance with EN 61000-3-2. Before connecting to a

<b>Danger for the application</b>
The technical data, processes and circuits described in this document are intended as a general guide only and may not be suitable for the user's specific application. Under no circumstances can we guarantee the suitability of the device described in this manual for specific applications.

<b>Risk assessment</b>
<p>In the event of a fault, power failure or the occurrence of unintended operating conditions, the inverter may not respond as intended.</p> <p>Possible cases:</p> <ul style="list-style-type: none"> <li>- Stored energy is not yet discharged to a safe level as quickly as expected and may still be present even if the inverter appears to be switched off.</li> <li>- The direction of rotation of the motor has not been checked</li> <li>- The motor speed has not yet been checked</li> <li>- The motor can still be supplied with energy</li> </ul> <p>An inverter is a component within a drive system that can affect its operation or the effects in a fault condition. The following must be specified:</p> <ul style="list-style-type: none"> <li>- Stored energy</li> <li>- Supply disconnects</li> <li>- Sequence logic</li> <li>- Unintended operation</li> </ul>