

Bosch Rexroth Frequency Converter

VFC x610 Demo System

Safety Instructions

R912006538
Edition 01

Introduction to the Demo System

The Demo System has been designed **ONLY** for demonstration the basic control means of Frequency Converter VFC x610. Prerequisites for appropriate and safe use of the Demo System are proper transport, storage, connection, careful operation and maintenance.

Transport

Check the Demo System for transport damages, e.g. deformation or loose parts, **immediately** after receipt / unpacking. In case of damage, contact the forwarder at once and arrange for a thorough review of the situation. Start-up of damaged equipment is not allowed.

Storage

Store the Demo System in their original package at a dry, dust free, vibration free and light protected place without direct solar radiation.

⚠ CAUTION

Damage to components by long storage periods!

The Demo System contains electrolytic capacitors which may deteriorate during storage. When storing these components for a long period of time, operate them once a year for at least 1 hour with power on.

Safety Instructions

Protection against Contact with High Voltage Parts

⚠ WARNING

High electrical voltage! Danger to life, risk of injury due to electric shock.

- ▶ Only those trained and qualified personnel are permitted to operate the Demo System.
- ▶ Do not operate the Demo System, even for brief measurements or tests, if the grounding conductor is not permanently connected to the grounding terminal.

- ▶ Before working with the Demo System with voltage potentials higher than 50 V, it must be disconnected from the mains voltage. For safety concern, observe following instructions:
 - Wait for 5 minutes after switching off power supply to allow capacitors to discharge before operation.
 - Measure the voltage on the capacitors before operation to make sure that the Demo System is safe to touch.
- ▶ Do not open covers during operation.
- ▶ Never connect or disconnect connections under load.

Protection against Contact with Hot Parts

⚠ CAUTION

Risk of burns! Hot surfaces with temperatures over 60 °C or 140 °F!

- ▶ Do not touch surfaces of device housings in the proximity of heat sources! Danger of burns!
- ▶ Before accessing hot surfaces after having switched off the Demo System, let it cool down for at least 15 minutes.
- ▶ Wear safety gloves or do not work at hot surfaces.
- ▶ The end user has the obligation to take measures to avoid injuries caused by burns. These measures can be, for example, warnings, guards (shielding or barrier), technical documentation, etc.

⚠ CAUTION

The Demo System must be sufficiently ventilated to avoid overheating.

- ▶ Avoid moveable items from ventilation holes.
- ▶ Keep the air inlets and outlets clean.

Protection against Electromagnetic Fields during Operation

⚠ WARNING

Electromagnetic / magnetic fields! Health risk for persons with pacemaker, metallic implants and hearing devices!

- ▶ Danger by magnetic and electromagnetic fields on live conductors or permanent magnets of motors.
- ▶ Access to areas in which such drive components are assembled and operated, is forbidden for persons with pacemakers and metallic implants or only allowed after consulting a doctor.

⚠ WARNING

Material damage!

Keep watches, credit cards, check cards and identity cards with magnetic strips away from magnetic fields.

Protection against Handling Hazard

NOTICE

Never touch the connection points of electrostatic sensitive devices!

The Demo System contains electrostatic sensitive devices (ESD). Take the ESD protective measures.

NOTICE

Damage due to ingress of liquids!

Prevent penetration of liquid into the Demo System.

Protection against Mechanical Hazard

⚠ WARNING

Risk of injury by improper handling!

- ▶ Before working, secure the Demo System against accidental movements and against unauthorized operation.
- ▶ Immediately clean up any spilled liquids to avoid the danger of skidding.

⚠ WARNING

Bodily injury by scratching, jamming or bruising!

- ▶ Move the Demo System only by holding the handle on the top. Never move it by holding the sides to avoid scratching by the metal edge of the frequency converter mounting plate.
- ▶ Avoid jamming and bruising by the rotating parts.

Electrical Connection

Check and ensure that:

- ▶ All the control and power terminals of the frequency converter are securely connected.
- ▶ The mains cable is securely connected.
- ▶ No foreign bodies, dirt and humidity are allowed to exist in terminal boxes and connectors.

Switch off the Demo System immediately if any of the following cases, which deviates from the normal operation, occurs:

- ▶ Increased temperature
- ▶ Exceptional noise
- ▶ Increased vibration

If any of the above cases occurs, analyze and find out the cause. Never run the Demo System before the counter measures have been carried out. Contact Bosch Rexroth if necessary.



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