Quick Installation Guide
SINAMICS S210 1AC 230 V FSA - FSC
Edition 03/20

**Warning:**
Life-threatening dangers can result in death or serious injury. Be sure to observe the safety instructions in the associated operating instructions and safety data sheets.

**Dimensions**

<table>
<thead>
<tr>
<th>Frame size</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Depth (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSA</td>
<td>53</td>
<td>170</td>
<td>170</td>
<td>1.6</td>
</tr>
<tr>
<td>FSA</td>
<td>50</td>
<td>170</td>
<td>170</td>
<td>1.3</td>
</tr>
<tr>
<td>FSB</td>
<td>50</td>
<td>170</td>
<td>170</td>
<td>1.9</td>
</tr>
</tbody>
</table>

**System overview**

- **Speed and circuit breaker**
- **Line contactor (optional)**
- **Line filter (optional)**
- **External braking resistor (optional)**
- **Shading plate**
- **Motor wiring ring for I²P (optional)**
- **Internal braking resistor**

**Error display**

- SD card slot
- Error acknowledge

**Cables and connections**

- X1: Line connection and connection for external braking resistor
- X2: Power connections for the motor
- X10: Siemens IX connector: Encoder connection
- X107: Motor holding brake
- X124: 24 VDC control voltage
- X130: Connector for digital inputs

**Technical data**

- **Rated voltage:** 1 AC 230 V ±10 %
- **Rated frequency:** 50 Hz / 60 Hz
- **Input power:** A
- **Rated current:** A
- **Current, max:** A
- **Input frequency:** 6 SL3210-
- **Rated power:**...

**Connections and operator controls on the converter**

- Digital inputs:
  - 24 V supply and relay outputs
  - X1: ERROR acknowledge, X2: STOP acknowledge, X3: EXTERNAL ENCODER

**Error acknowledge**

- SD card slot
- Error acknowledge

**Protection and monitoring equipment**

- To provide protection against system faults, use the overcurrent devices listed in the Technical data (fuses, circuit breakers etc.).
- To provide protection against short-circuit, use the overcurrent devices listed in the Technical data (fuses, circuit breakers etc.).

**Notes**

- Shielding clamp: RXP
- Shielding clamp: RXN

**Dimensions**

- Frame size: Width (mm) Height (mm) Depth (mm) Weight (kg)
- PSA: 53 170 170 1.6
- FSA: 50 170 170 1.3
- FSB: 50 170 170 1.9

**Connections**

- Frame size: X123, X107, X130
- Motor connection: X107: Motor holding brake
- X107: Motor holding brake
- X124: 24 VDC control voltage
- X130: Connector for digital inputs

**System overview (cont’d)**

- **System connections**
  - X1: Line connection and connection for external braking resistor
  - X2: Power connections for the motor
  - X10: Siemens IX connector: Encoder connection
  - X107: Motor holding brake
  - X124: 24 VDC control voltage
  - X130: Connector for digital inputs
### Additional functions

Further adjustments can be made by selecting the menu item "Parameters".

You can also view the parameter settings and notes for later by opening the converter via the web interface.

Note:

- The "System" menu can also be accessed by clicking on the "System" icon in the footer.

**Saving changes**

In order to save the changes permanently click on the floppy disk icon in the footer.

**Messages**

- In the menu choose Diagnostic and Messages to display the Warnings and Alarms including information concerning causes and remedy.

A detailed description of the events is available in the manual.

### Correcting faults of the motor

#### Fault causes

- Motor starts slowly
- Uneven running
- Grinding sound, running noise
- Radial vibrations

#### Remedial measures

- Remove the reason for the blocking and ensure that the cooling air can flow in and out unimpeded
- Replace the motor after consultation with the manufacturer, if required,
- Measure the winding resistances and insulation resistances, repair after consultation with manufacturer.

### Further information

- The products are cULus listed under File 1 / 0.
- The products are CE marked and correspond with EN 61800-3, E355661 Vol. 3 Sec. 8.

### Security information

- In order to protect technical infrastructures, systems, machines and networks against cyber threats, it is necessary to use encryption and integrity mechanisms – a holistic view of cyber security is recommended.
- Siemens products and solutions contain the same element of such concept. For more information about cyber security please visit:

  - [https://www.siemens.com/datasheet/0190](https://www.siemens.com/datasheet/0190)

### Safety functions

A detailed description of the Safety commissioning can be found in the S210 instruction manual.

[https://www.siemens.com/sinamics-s210](https://www.siemens.com/sinamics-s210)