

## SINAMICS S120 drive system

Chassis format

### Supplementary system components for chassis format > Safe Brake Adapter SBA

#### Overview



For SINAMICS S120, S150, G130 and G150 units, a Safe Brake Adapter SBA is required to safely control a motor holding brake via the Safe Brake Control (SBC) safety function according to IEC 61800-5-2.

The Safe Brake Adapter is available for a 230 V AC brake control voltage.

It can be ordered as supplementary component for SINAMICS S120 chassis format units as well as for SINAMICS G130 units.

#### Note:

The SBA is approved for the IEC area. Safe Brake Adapter with UL approval are available on request. The UL approval is valid for a maximum permissible current consumption of 1.5 A (inductive).

#### Design

The Safe Brake Adapter SBA has the following connections and interfaces:

- 1 connection for the connecting cable to the Power Module/Motor Module
- 1 connection for the external 230 V AC supply
- 1 connection for motor holding brake
- 1 connection for fast de-excitation

#### Selection and ordering data

Description	Article No.
<b>Safe Brake Adapter</b>	
• 230 V AC/2 A	<b>6SL3355-2DX00-1AA0</b>
<b>Accessories</b>	
<b>Pre-assembled interface cable to connect the SBA to the electronics module (4 m/13.1 ft)</b>	<b>6SL3060-4DX04-0AA0</b>

#### Technical specifications

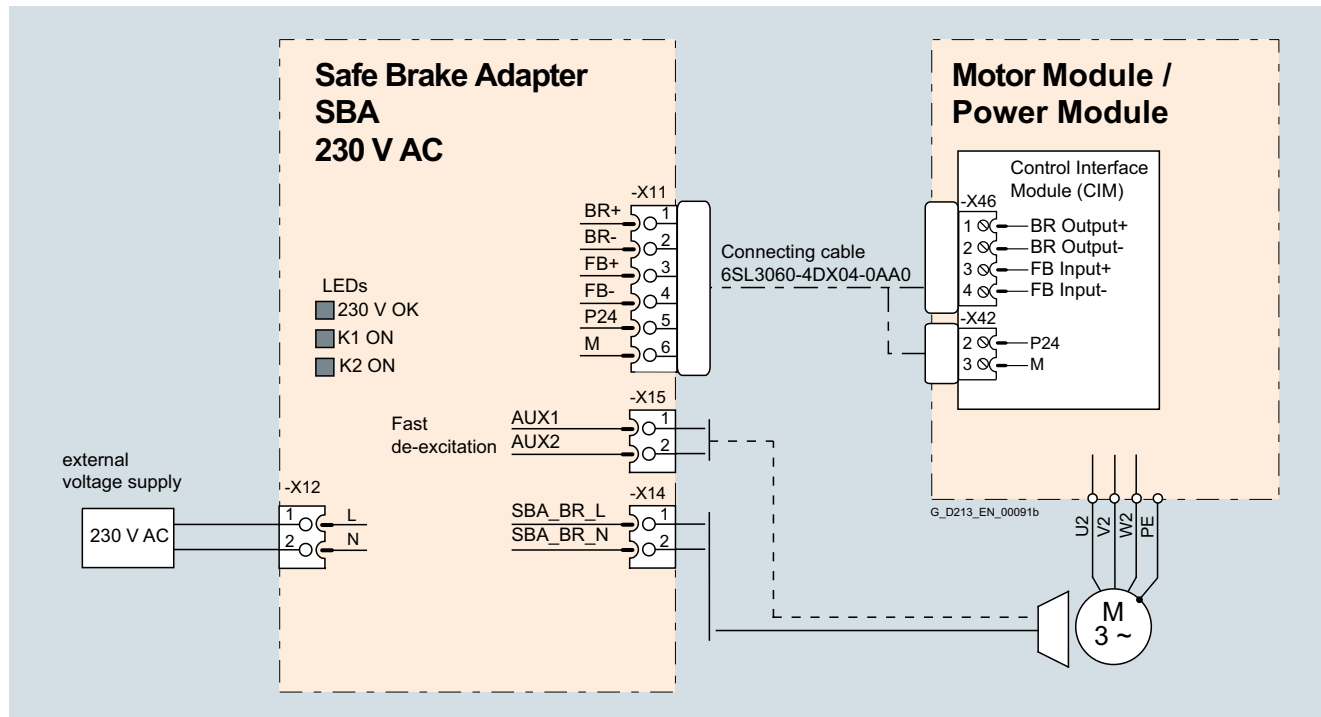
Safe Brake Adapter	
6SL3355-2DX00-1AA0	
<b>Electronics power supply</b>	
Supply voltage (via the Control Interface Module)	24 V DC (20.4 ... 28.8 V DC)
<b>Supply voltage of the motor holding brake</b>	230 V AC
<b>Max. permissible current consumption <sup>1)</sup></b>	
• Motor holding brake	2 A
• Fast de-energization	2 A
<b>Max. permissible cable lengths</b>	
• to the Control Interface Module	10 m (32.8 ft)
• to the brake	300 m (984 ft)
<b>Max. conductor cross section</b>	2.5 mm <sup>2</sup>
<b>Dimensions</b>	
• Width	75 mm (2.95 in)
• Height	111 mm (4.37 in)
• Depth	89 mm (3.50 in)
<b>Weight, approx.</b>	0.25 kg (0.55 lb)
<b>Safety Integrated</b>	Safety Integrity Level 2 (SIL2) acc. to IEC 61508, Performance Level d (PLd) acc. to ISO 13849-1 and Control Category 3 acc. to EN ISO 13849-1

<sup>1)</sup> The UL approval is valid for a maximum permissible current consumption of 1.5 A (inductive).

**Integration**

The control and feedback signal regarding the switching state of the SBA relay is realized via terminals of the Control Interface Module (CIM). The excitation coil of the holding brake is connected directly at the SBA.

For the SINAMICS S120 units, chassis format, the brake supply voltage must be connected externally at the SBA.



Connection example of a Safe Brake Adapter