



SPB Switch-Potentiometer-Box
for controlling frequency inverters

Mounting instructions



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1 Description

These instructions describe the installation and handling of the switch potentiometer box SPB. It is only valid for units with the type plate designation SPB.

The switch potentiometer box SPB enables the setpoint setting for frequency inverters with analogue input as well as the switching of the „controller enable“ signal of an inverter via the built-in rotary switch.

It is also possible to change the direction of rotation of the inverter instead of switch „controller enable“ (left/0/right, or ccw/0/cw).

The switch potentiometer box can be used for all inverters that provide an internal voltage to supply the analogue input. Often this voltage is designed as a voltage output with +10V at the inverter.



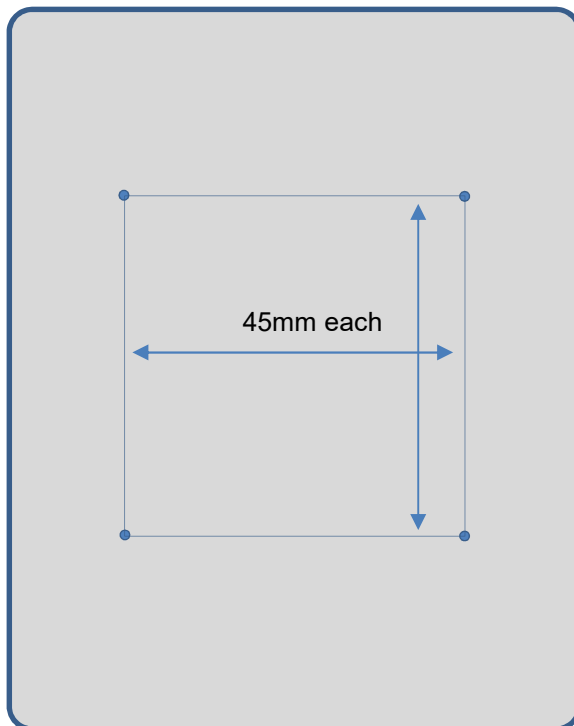
Picture 1-1: Overview

1.1 General technical data and operating conditions

Protection class	IP54
Dimensions	W67 x H100 x D78 mm
Assembly	Fastening with screws to a rear wall
Potentiometer	10kOhm, 2W, linear
Switch	max. load of the contacts: 4A
Cable length	approx. 2m

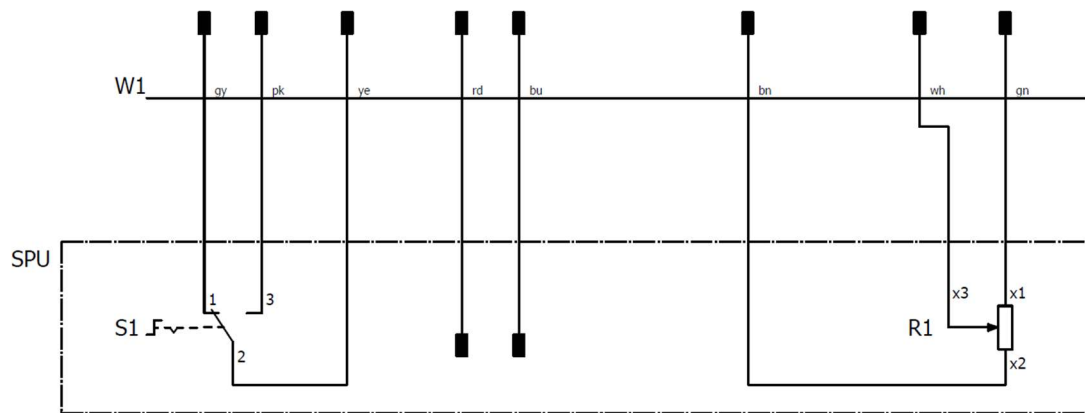
1.2 Mounting

Drilling template for rear wall mounting.



Picture 1-2: drilling template

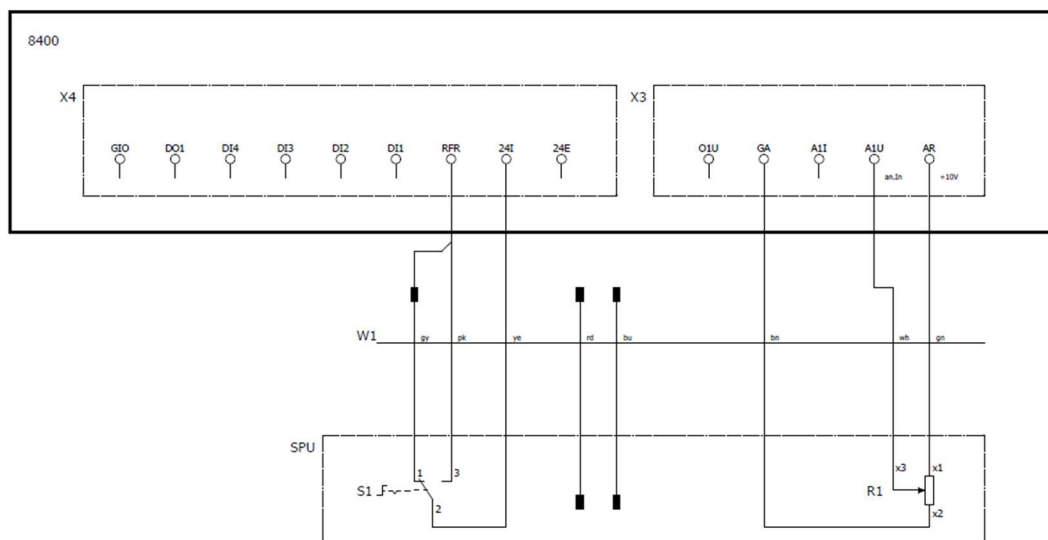
1.3 Wiring



Picture 1-3: Wiring design of the box

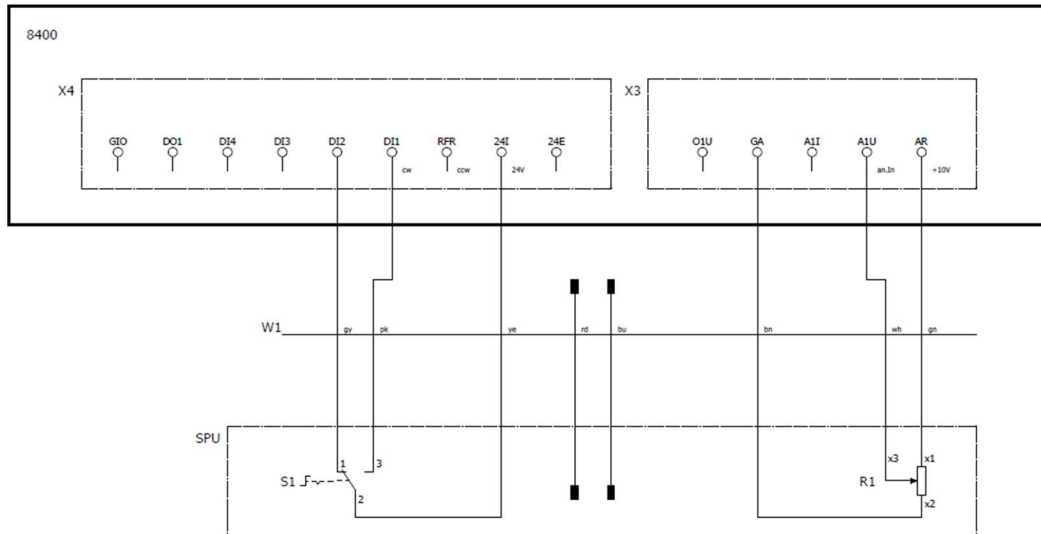
2 Wiring Examples

2.1 Use with Lenze Inverter 8400 (RFR resp. Start/Stop)



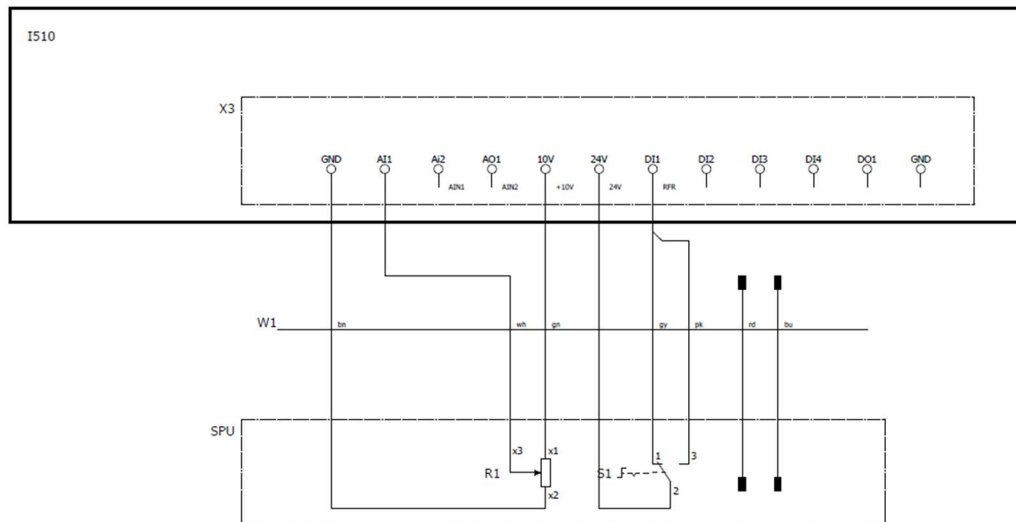
Picture 2-1: Circuit for inverter 8400 (Start/Stop)

2.2 Use with Lenze Inverter 8400 (CW/CCW)



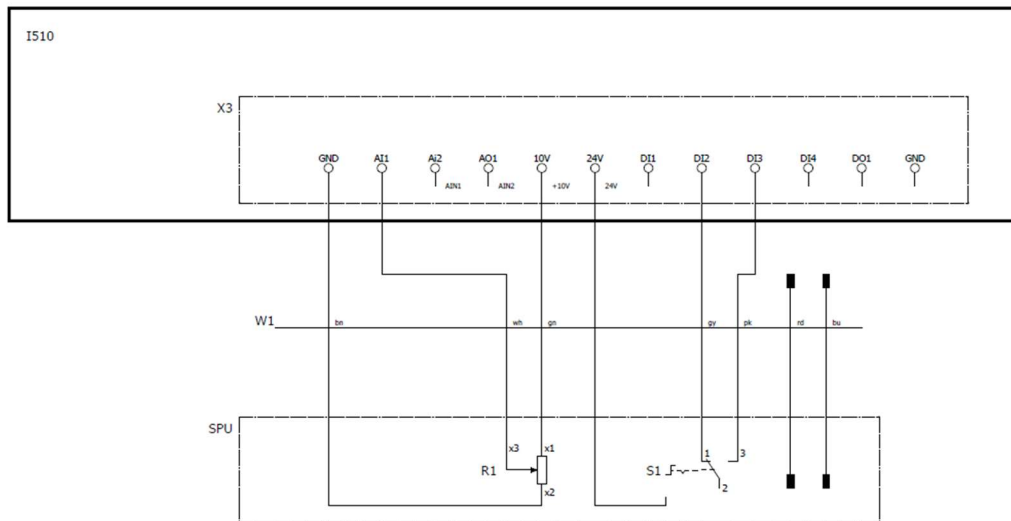
Picture 2-2: Circuit for inverter 8400 (Change of direction of rotation)

2.3 Use with Lenze Inverter i510 (Start/Stop)



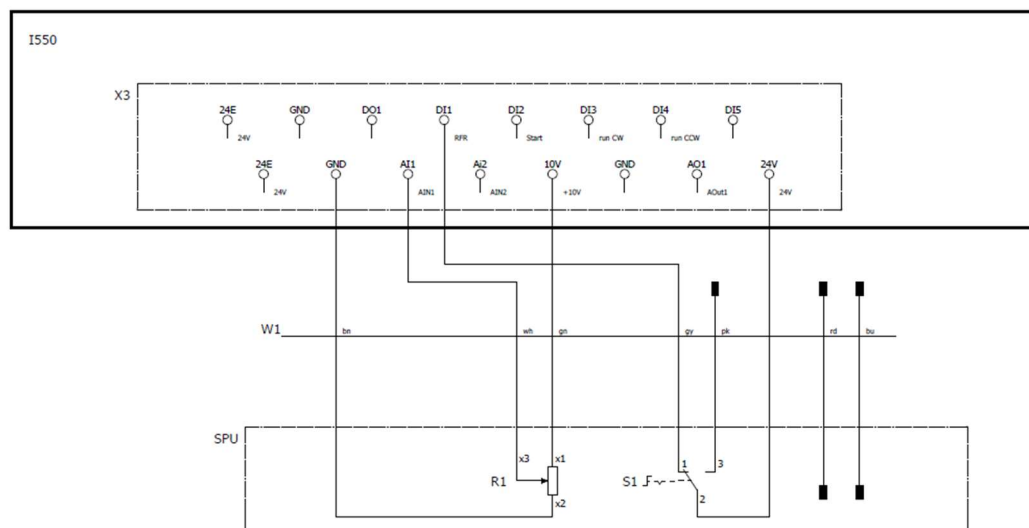
Picture 2-3: Circuit for inverter i510 (Start/Stop)

2.4 Use with Lenze Inverter i510 (CW/CCW)



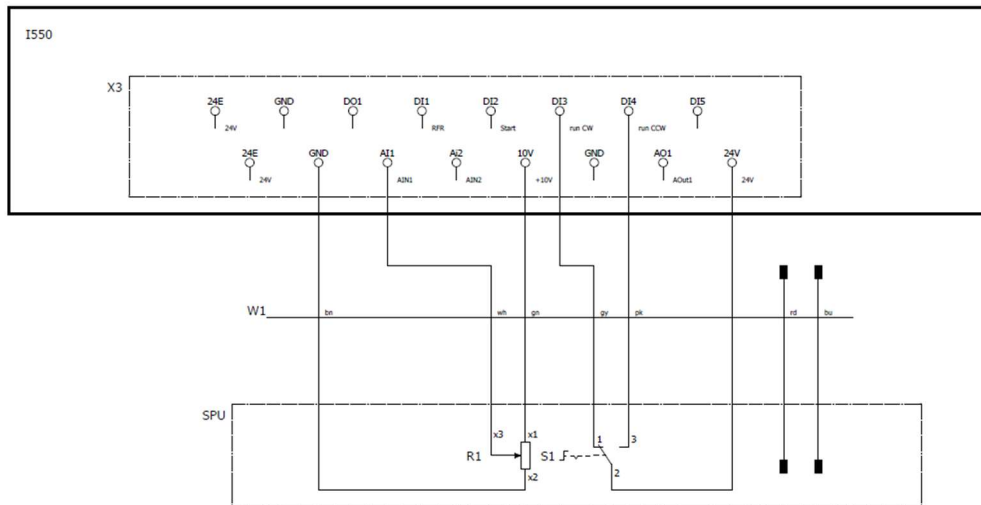
Picture 2-4: Circuit for inverter i510 (Change of direction of rotation)

2.5 Use with Lenze Inverter i550 (Start/Stop)



Picture 2-5: Circuit for inverter i550 (Start/Stop)

2.6 Use with Lenze Inverter i550 (CW/CCW)



Picture 2-6: Circuit for inverter i550 (Change of direction of rotation)