

Technical Information / Datasheet

SK POT1-1

Part number: 278 910 120

Control Box / Manual control unit

Scope of supply

1 x	Control box	SK POT1-1
	Incl. connection cable	open cable ends
1 x	Cable gland	M16



Field of use

Manual control unit (wall mounting possible) for the control of NORD frequency inverters with an enable signal and setpoint value. It is designed for permanent connection to the frequency inverter. According to the inverter type, appropriate interfaces are available, or are available as options.

Technical Data

Temperature range	0 °C ... 40 °C
Protection class	IP66
Direction selector switch	Left - OFF - Right
Potentiometer	0 ... 100 % (0 ... 10 V)




Connection cables	approx. 3 m long
Weight	approx. 1.0 kg
Dimensions [mm]*	L x W x H: 120 x 80 x 80

Control box				SK POT1-1	
1.0	Erstausgabe / first issue	3313	Rck	TI 278910120	GB
version	reason for change(s)	issue	name	document	speech

Installation

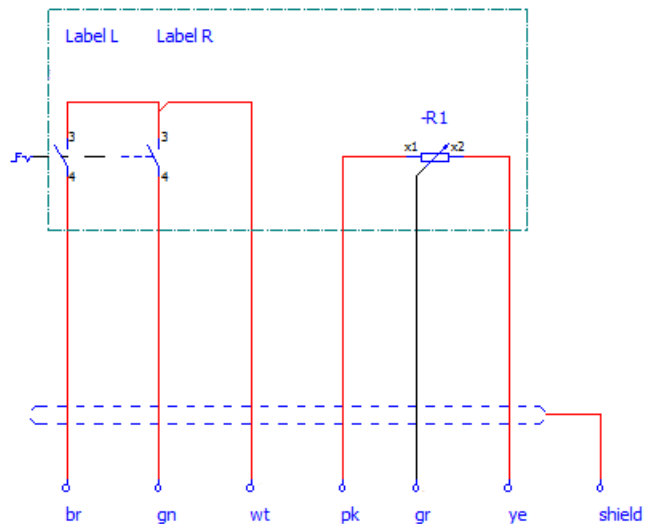
The control box is designed as a handheld version, but it can also be permanently installed in the vicinity of the frequency inverter.

Installation location	Wall surface near to the inverter
Mounting	4 screws on the mounting surface (fastening material not included in the scope of delivery)

1.	Unscrew the screws on the front side and remove the cover.	
2.	Mount the lower section of the housing at the required location with suitable fastening material. Spacing of the fastening holes: X-axis (horizontal): approx. 106.5 mm Y-axis (vertical): approx. 66.5 mm	
3.	Reassemble the control unit and fasten it to the lower section of the housing using the 4 screws (pay attention to the seal).	

Connections

The control box is designed for permanent connection to the frequency inverter. For this, the open cable ends of the control box must be connected directly to the appropriate terminals of the frequency inverter. If there is a cable shield (not SK POT1-1), this must be connected to the Analog Ground (AGND) of the frequency inverter. If necessary, use double wire end sleeves.



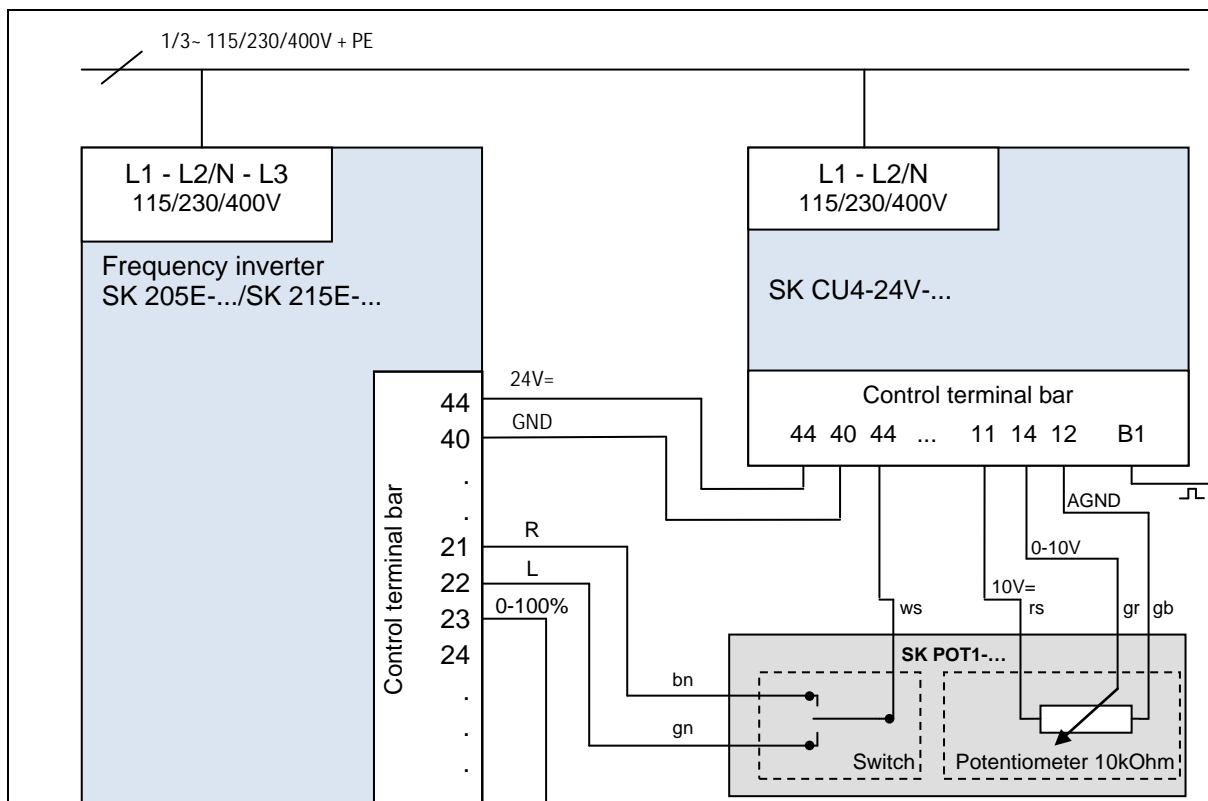
Frequency inverter interfaces

Frequency inverter SK POT1-...	SK 180E SK 190E SK 2x0E	SK 2x5E with		SK 5xxE	Function
		SK CU4-IOE	SK TU4-IOE		
Connector terminal					
white	43	44	23	X5:42 or 44	VI (+15 V or +24 V)
brown	21	C1	19	X5:21	ON right
green	22	C2	25	X5:22	ON left
yellow	12	12+13	5+7	X4:12	AGND
grey	14	14	3	X4:14	Analog +
pink	11	11	1	X4:11	Analog Ref. +10 V
black *	12	12	8	X4:12	Shield *

* not with SK POT1-1

*Only for SK 2x5E:

Alternative connection of the control box to an SK CU4-24V-... mains unit



If this connection method is used, one of the following variants must be selected for the configuration of the control box. The configuration is carried out on the frequency inverter.

Version	Configuration via	Setting	
1	DIP switch	DIP3	Off
		DIP4	On
		DIP5	Off
2	Parameterisation	P400 [-07]	1
		P420 [-01]	1
		P400 [-02]	2
		P400 [-03]	26

Parameters

For the correct function of the control box, the following frequency inverter parameters must be modified (for details, please refer to the frequency inverter manual).

Parameter [-Array]			Meaning	Setting / Remarks
SK 180E, SK 190E, SK 2x0E, SK 54xE	SK 2x5E with SK xU4-IOE	SK 500E ... SK 535E		
P400 [-01]	P400 [-03]	P400	Analog input function	"01" = Setpoint frequency
P420 [-01]	P480 [-05]	P420	Digital input (1)	"01" = Enable right
P420 [-02]	P480 [-06]	P421	Digital input (2)	"02" = Enable left
Optional (if required)				
P428	P428	P428	Automatic start with "Mains On"	"01" = On (automatic start enabled)

Further Documentation and Software (www.nord.com)

Software	Name
NORD CON	Parameterisation and diagnostic software

Software	Meaning

Document	Name
BU 0000	Description of the NORD CON software
BU 0040	ParameterBox manual
BU 0190	Frequency inverter manual SK 180E, SK 190E

Document	Meaning
BU 0200	SK 2xxE frequency inverter manual
BU 0500	SK 500E – SK 535E frequency inverter manual
BU 0505	SK 540E – SK 545E frequency inverter manual