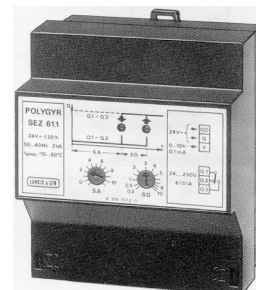


POLYGYR®

On/Off Switch

0...10 V d.c. control

SEZ61.1



Application

The SEZ61.1 on/off switch is used in POLYGYR controlled air conditioning, ventilating and heating installations for the control voltage or actuator position dependent on/off switching of various units. For example:

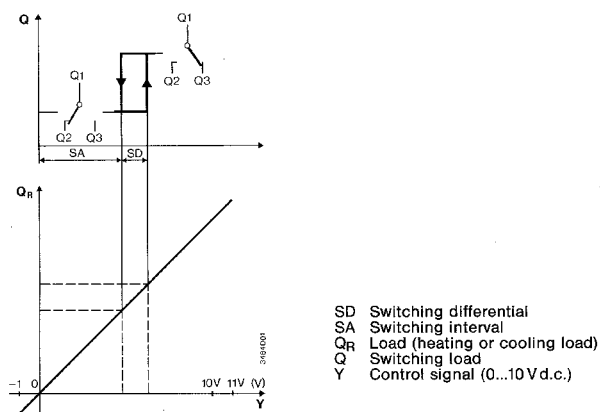
- Fans
- Pumps
- Relays
- Signal lamps
- Actuators and control motors with on/off control (single-wire control)

Voltages between 24 and 250 V a.c. can be switched.

Function

When the 0...10 V d.c. input signal reaches the set switching point, the SEZ61.1 switches over

- from Q2 to Q3 in the case of increasing control voltage
 - from Q3 to Q2 in the case of decreasing control voltage
- Above and below the 0...10 V d.c. nominal range there is an overrange of 1 V.



The switching interval SA refers to Q2. It can be set to any value within the range of -1...11 V d.c.

The switching differential SD can be set to any value within the range of 0,2...10 V d.c.

Design Features

The plastic casing consists of base and cover. It is suitable for wall or DIN rail mounting. The cover clips on. A screwdriver is required to open it. The casing contains a printed circuit board carrying the electronic circuit, the connecting terminals and the changeover relay. The connecting terminals are easily accessible after removal of the cover. Knockout holes (Pg11) for the cable entry are provided at the bottom and the rear of the unit. The setting controls are accessible from outside. Two LED's in the cover indicate the switching condition.

Technical Data

Operating voltage	24 V a.c. $\pm 20\%$
Frequency	50...60 Hz
Power consumption	1 VA
Control signal	
Voltage	0...10 V d.c.
Current rating	0,1 mA max.
Switching capacity of relay	
Voltage	24...250 V a.c.
Current	3A (ind.) 6A (res.)
Setting ranges	
Switching interval	-1...11 V d.c.
Switching differential	0,2...10 V d.c.
Permissible ambient temperature	
Operation	-10...+50°C
Transport and storage	-25...+65°C
Permissible ambient humidity	class F to DIN 40040
Protection standard of housing	IP41 to DIN 40050
Weight	0,032 kg

Application Advice

Data Sheet 3401 contains basic system data on POLYGYR. All hints and explanations given in this sheet must be observed. A transformer is required to generate the operating voltage of 24 V a.c. When sizing the transformer, the power consumption of the SEZ61.1 must be taken into consideration. The SEZ61.1 and the unit controlling it must be connected to the same system neutral (SN) (terminals G0).

When the power at terminal G is switched off or breaks down, the relay automatically reverts to its de-energised position.

Mounting Advice

Mounting location: Control panel or DIN rail
Mounting orientation: Optional

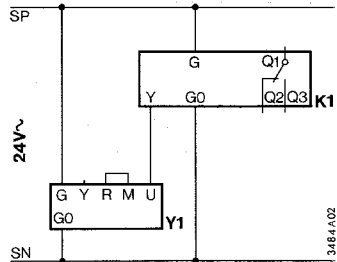
Commissioning Advice

When commissioning the installation, the wiring is to be checked and a function test is to be made.

The switching interval and the switching differential must be set.

Ordering Specification

When ordering, please give full type reference: **SEZ61.1**.

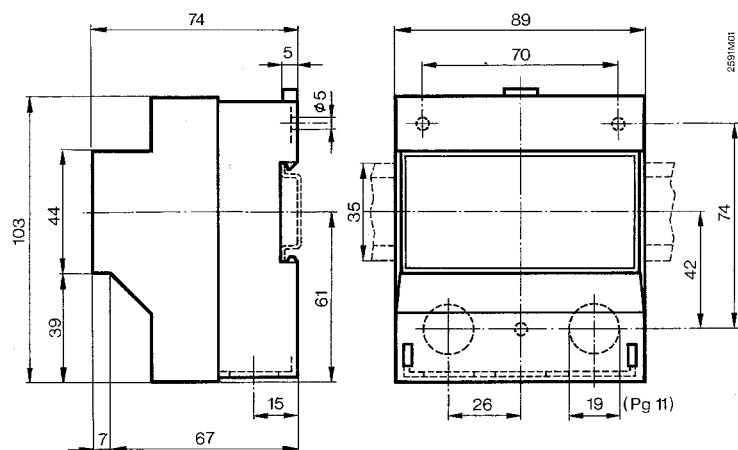


Units

K1	SEZ61.1 on/off switch
Y1	S...61... actuator

Connecting terminals

G, G0	Operating voltage 24V a.c. G System potential (SP) G0 System neutral (SN)
Q1	Control phase
Q2, Q3	Control phase, connected
Y	Control signal 0...10V d.c.



Dimensions in mm

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