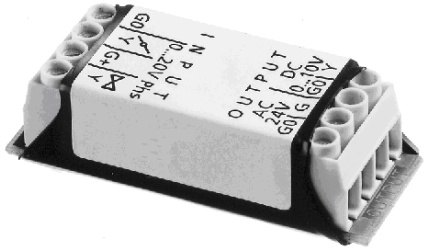
SIEMENS

5143



SEZ91.6

Interfaces SEZ91.6

Interface between phase cut controllers and valves or actuators

- **SEZ91.6 input : DC 0 ... 20 V phase cut**
- **SEZ91.6: Two operating ranges, for magnetic valves and damper actuators**
- **DC 0 ...10 V output**
- **Inputs and outputs short-circuit-proof and protected against polarity reversal**

Use

SEZ91.6

The interface is used when operating DC 0 ...10 V valves or damper actuators (e. g. magnetic valves or OpenAir damper actuators) in conjunction with controllers with a DC 0 ... 20 V phase cut output signal..

⚠ **Caution**

The SEZ91.6 interface is **NOT suitable** for use in systems incorporating the PU-K4 positioning potentiometer and/or any RDN2 or RDE2 controllers.

- The SEZ91.6 interface is used in retrofit projects.
- An operating voltage of AC 24 V is required for the interface.
- All terminal connections are short-circuit-proof and protected against polarity reversal.

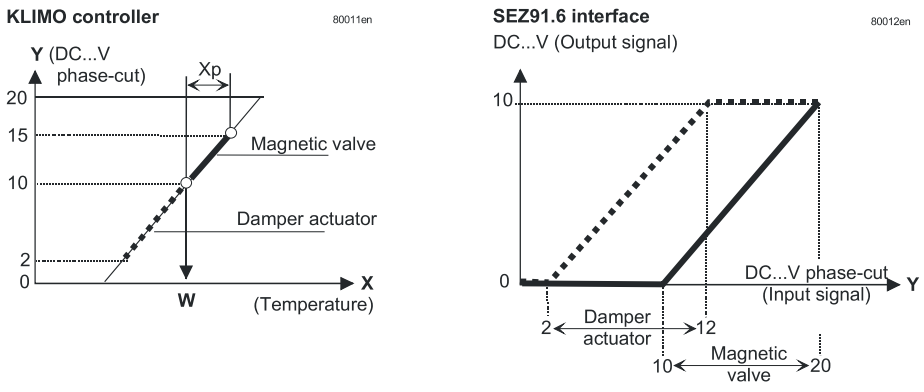
SEZ91.6

The SEZ91.6 is used as an interface between existing **phase-cut controllers** (e. g. KLIMO) and controlled devices with a standard DC 0 ...10 V signal.

The proportional DC 0 ... 20 V phase-cut signal from **the controller** is converted into a DC 0 ...10 V signal.

When used in conjunction with **magnetic valves,** the KLIMO controller has an operating range of DC 10 ...15 V phase-cut. In conjunction with **damper actuators,** the operating range is DC 2…10 V phase cut.

These two differing operating ranges are selected via the two separate input terminals "Y-Valve" and "Y-Damper actuator", eliminating the need to modify the controller parameters. The principle is the same for the position-controlled magnetic valves.



The effective operating range of the SEZ91.6 interface represents a slight adjustment in relation to the KLIMO controller data, but this does not affect the correct functioning of any of the devices involved.

Ordering

When ordering, please specify the quantity, product name and type code.

Example: **3 interfaces, type SEZ91.6**

Mechanical design

- The plastic housing accommodates the printed circuit board and the terminal connections.
- The housing is sealed with a shrink-on sleeve.
- The SEZ91.6 has a **white** type-code label.

SEZ91.6 only

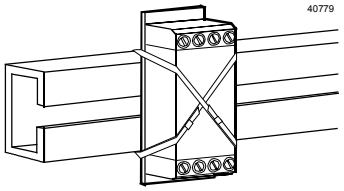
The two different operating ranges are selected by connection to the relevant input terminal.

Mounting

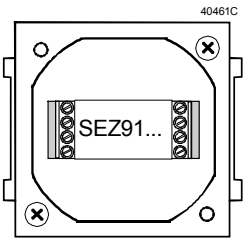
Provided the interface is mounted in a dry environment, it can be located wherever there is sufficient space and in any orientation

- In the control panel on DIN rails or in the trunking
- Unit-mounted
- In ceiling voids
- In remote distributor boxes

Mounting on DIN rails



Mounting in distributor boxes



Disposal

The devices are considered electronics devices for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic waste.

- Dispose of the device via the channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

Technical data

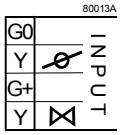
Supply voltage	Operating voltage	AC 24 V ± 20 %, (SELV)
	– Frequency	50 / 60 Hz
	Power consumption excluding field devices	0.5 VA
	External supply line protection (EU)	Fuse slow max. 10 A or Circuit breaker max. 13 A Characteristic B, C, D according to EN 60898 or Power source with current limitation of max. 10 A
Inputs	DC 0 ... 20 V phase cut **for magnetic valves**	
SEZ91.6	– Load impedance	2 kOhm
	– Max. Voltage (phase cut)	DC 30 V
	– Operating range	DC 10 ... 20 V phase cut
	DC 0 ... 20 V phase cut **for damper actuators**	
	– Load impedance	2 kOhm
	– Max. voltage (phase cut)	DC 30 V
	– Operating range	DC 2 ...12 V phase cut
Outputs	DC 0 ...10 V	
	– Min. load impedance	5 kOhm
	– Max. output voltage	DC 12 V
Connections	Connection terminals	Screw terminals for max. 2 x 1,5 mm²
Weight / Dimensions	Weight (including packaging)	0,06 kg
	Dimensions (L x B x H)	57 x 22 x 18 mm
Ambient conditions	Operation	To IEC 721-3-3
	– Climatic conditions	Classe 3K5
	– Ambient temperature	0 ... 50 °C
	– Humidity	Max. 85 % rh
	Transport	To IEC 721-3-2
	– Climatic conditions	Classe 2K3
	– Ambient temperature	– 25 ... 65 °C
	– Humidity	Max. 95 % rh
Degree of protection	Protection degree of housing	IP20 according to EN 60529
	Protection class	III according to EN 60730-1
Standards, directives and approvals	Product standard	EN 60730-1 Automatic electrical controls for household and similar use
	Electromagnetic compatibility (Applications)	For use in residential, commercial, light-industrial and industrial environments
	EU conformity (CE)	CA1T5143xx *)
	EAC conformity	Eurasia conformity

*) The documents can be downloaded from http://siemens.com/bt/download.

Connection terminals

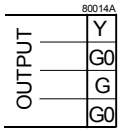
Input side

SEZ91.6



System neutral
Control signal DC 0 ... 20 V phase cut for damper actuators
Control signal "Plus“ (for phase cut, 100 Hz half-wave)
Control signal DC 0 ... 20 V phase cut for magnetic valves

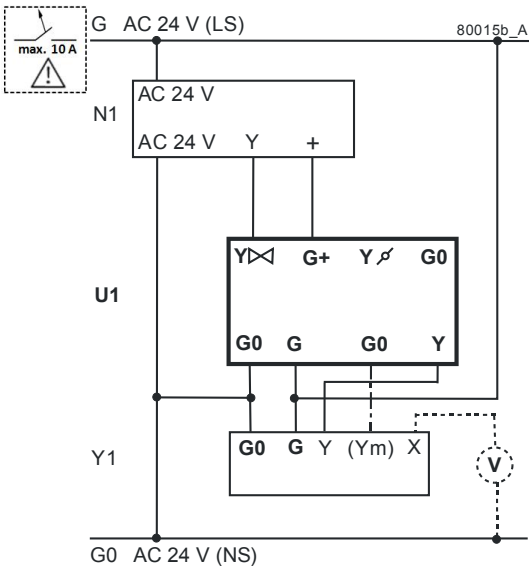
Output side



Control signal DC 0 ...10 V
System neutral
System voltage AC 24 V
System neutral

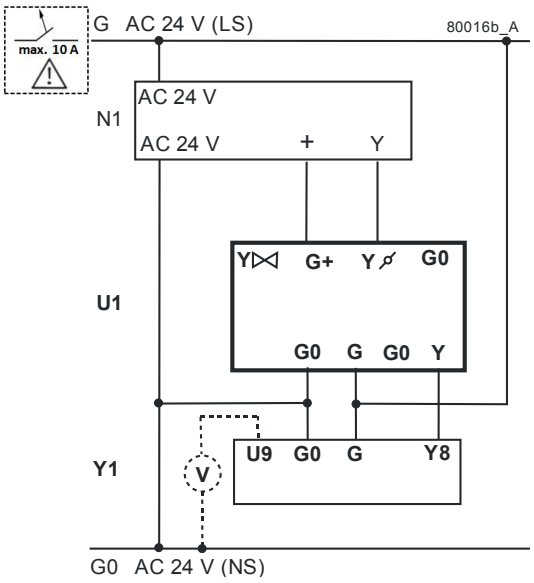
Connection diagrams SEZ91.6

SEZ91.6 interface



N1 Controller, e.g. KLIMO RDK99
U1 **SEZ91.6 interface**
Y1 Magnetic valve,
e.g. MX...461..., M2H...FY
V Position feedback

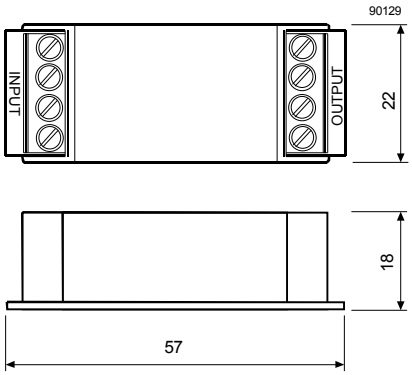
G0 – (Ym) recommended for MX...461...



N1 Controller, e.g. KLIMO RDK99
U1 **SEZ91.6 interface**
Y1 OpenAir damper actuator:
e.g. GBB161.1E
V Position feedback

Dimensions

All dimensions in mm



Published by:
Siemens Switzerland Ltd.
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