SVA-/S4 - Operating instructions

V11, 31.05.2023 Ref. No.: 615409920



(Translation of the original instructions)

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- The product properties and technical data stated therein do not represent any warranty -

About safety

- 1.1 A Safety regulations: These operating instructions must be provided to the person who installs the emegency-stop enclosure. Please read it carefully and keep it for future reference. For customised types the information in the data sheet has to be considered as well.
- 1.2 **Application**: The Schlegel emergency-stop enclosure is an electromechanical switching device to protect persons working with machinery or close to it. It is used to stop or switch off machinery and equipments in order to avert impending or minimize existing dangers to persons or damages on machines / material.

The following (inter)national statutory provisions apply to installation, commissioning and regular technical inspections:

- Machinery directive 2006/42/EG
- Low-voltage directive 2006/95/EG
- Safety regulations as well as
- Regulations of the accident prevention / safety rules

Manufacturers and operators of machines using emergency stops or switch-off devices should retain the responsibility for the adherence of these instructions as well as for compliance with the relevant safety regulations and rules.

For the application of emergency stops / switch-off devices as directed the respective requirements for installation and operation must be observed:

- EN60204-1
- EN13849-1
- EN ISO 13850

Contact blocks are suitable for applications up to PL e acc. to EN ISO 13849-1 and up to SIL CL 3 acc. to EN IEC 62061.

- ▲ Disconnect equipment and device from the mains before installation!
- ▲ Emergency-stops fulfil a function of human protection. Improper installation or unauthorised modifications may lead to severe personal injuries!
- A Emergency-stops should not be bypassed, removed or otherwise disabled!
- ▲ The switching operation should only be triggered by means of appropriate emergency-stop button which is securely connected to the contact block!
- ▲ Suitable connectors to be used with the contact blocks.
- (!) Improper assembly or tampering may result in machinery and material damage!
- (!) The emergency stop function should not replace the applicable safety precautions or other safety functions but should rather be used as a back-up safeguarding measure.
- (!) The emergency stop function should not impair the effectiveness of other safety devices or equipment with other safety functions.
- (!) Based on the hazard analysis the design engineer must ensure that in combination with the control system the emerency-stop meets the required safety category.
- (!) The key of emergency-stops with key release must only be inserted during the release procedure.

1.3 Technical data and connection:

Refer to the catalogue information of the respective emergency-stop and contact block in the catalogue, the data sheet resp. the product configurator under www.schlegel.biz. See data sheet *¹⁾615403500/615403501/special types

2 Product Description

 2.1 Construction: The emergency-stop enclosure is designed for cable entries M16 (lateral) and for M12 connectors. The button is operated by pushing and reset by turning in either direction.

Features: The emergency-stop heads differ in

- their mode of release: turning in either direction or

- only to the right; key release by turning to the right;
- pull release, twist/pull release.
- the shape of the protective shroud/anti-lock collar (also illuminated option)
 illumination: illuminated / non-illuminated
- the degree of protection: emergency-stops for standard applications and for the hygiene-critical area acc. to DIN EN 1672-2 and DIN ISO 14159.

The contact blocks are modular or in monoblock design and can be supplied with different connection types (screw type, spring cage, push-in, Faston and PCB-mount terminals).

2.2 Product references:

Type no.	Connection type	Ag /Au	⊗*2)	Note
SVAB_123064_01	M12	Ag(N)/Au(T)	T	
SVAB_125375_001	MTZ	Ag		
SVA40_126084_01	cable entry M16x1.5	Ag	T	
SVA40_121851_02	coble entry MT0x1.5	Ag	Т	
S41_01S43_03	M12	Au		
S44_04S46_06	cable entry M16x1.5	Ag		
\$43_07, \$42_08, \$44_09, \$45_10 \$46_11	cable entry M16x1.5	Ag	Т	*3)
S43_V002	cable entry M16x1.5	Ag	Т	
S4x_Vyyy, S4x_Byyy	M12	Ag/Au		*3)
S4x_Vyyy, S4x_Byyy	cable entry M16x1.5	Ag/Au		*3)
S4x_yyyyyy_zzz	M12	Ag/Au		*3)
S4x_yyyyyy_zzz	cable entry M16x1.5	Ag/Au		*3)

3 Assembly and commissioning

3.1 Remarks

In order to guarantee the degree of protection stated in the data sheet the enclosures "SVAB..." may not be opened.

- A Make sure that the emergency-stop is always easily accessible.
- ▲ Before mounting the closure plate (bottom) make sure that one of the two enclosed washers is inserted into the round cut-out of the inside closure plate (contact with the upper part of the enclosure).
- Partially or all insulated Faston clamps to be used. The operator has to make sure that the contact blocks used in the enclosure are connected correctly in order to comply with the clearance and creepage distance requirements for insulated enclosures on proper use.
- $\underline{\Lambda}$ On the versions with cable gland please take care that the protective earth connection is properly connected.
- $\underline{\Lambda}$ In the final control a protective conductor test acc. to EN 60204-1 must be performed. $^{*4)}$

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Recommended tightening torque (enclosure screws): 0.5 Nm ^{*4)} Recommended tightening torque (protective earth connection): 0.5 Nm ^{*4)}

4 Testing before first operation:

Mechanical test: emergency-stop latches when operated Electrical test: machine stops / switches off when operated

5 Regular technical inspection

- A Repair work may only be conducted by the manufacturer.
 Based on the risk assessment, the machine designer has to determine the inspection interval. It is, however, recommended that the competent safety officer activates and tests the emergency-stop at least once a year to ensure its proper function.
- mechanical and electrical functional testing acc. to paragraph 4
- secure mounting
- no visible unauthorised modifications or damages
- no loose connections

6 Dismounting:

 $\underline{\wedge}$ Before dismounting disconnect equipment and device from the mains!

7 Incident operating instructions:

▲ Mechanical overload or external damage may impair the function of the emergency-stop. Make functional tests as mentioned under 5.

8 EC Declaration of Conformity:

Manufacturer's name and address:		Georg Schlegel GmbH & Co. KG,		
		Kapellenweg 4, 88525 Dürmentingen,		
Authorised person for documentation:		Georg Schlegel GmbH & Co.KG		
		Kapellenweg 4, 88525 Dürmentingen		
Product description Type numbers:		emergency-stop in SVA or SVA40 enclosures refer to above table 2.2		
The specified products comply with the provisions of the following directives:				
Directive:	of:	applied norms:		
2006/42/EG	17.05.2006	EN 60947-5-5:1997/A2:2017		
		EN ISO 13850:2015 (D)		

*1) M12 versions

*2) N...emergency-stop, M...pilot light, T...pushbutton
*3) customised types are equipped with the following products Shortron variants, emergency-stop FRVK / emergency-stop variants

*4) S4 enclosures

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