

SEU-3 and SEU-4 Emergency Stop

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1 Product Overview

Rugged design; easy installation with no assembly or individual wiring required

- Push-to-stop or pull-to-release operation per EN 60947-5-5
- Latching design complies with ISO 13850; direct (positive) opening operation per EN 60947-5-1
- Compliant with IEC/EN 60204-1, and ANSI B11.19, ANSI NFPA79 Emergency Stop requirements
- „Safe Break Action“ ensures OSSDs turn off if the contact block is separated from the actuator
- 8-pin M12/Euro-style quick disconnect
- Armed state indication options include YELLOW, GREEN or no indication (OFF), depending on model
- All models illuminate with flashing red when actuated (button pushed)
- „Emergency Stop“ legend included
- Two, solid-state, PNP current sourcing OSSD outputs
- Daisy Chain Diagnostic (DCD) for button health and status information when used with a compatible BERNSTEIN Safety Controller
- All models have a 40 mm „mushroom style“ push button

1.1 Models

Part Number	Description	Mounting Style	Local Resetfunction ¹⁾	Illumination colour ²⁾
6075689166	SEU-4/0/3-P86-C	30 mm	No	Yellow/Red
6075689167	SEU-4/0/1-P86-C			Off/Red
6075689168	SEU-4/0/2-P86-C			Green/Red
6075689172	SEU-4/3/3-P86-C		Yes	Yellow/Red
6075689173	SEU-4/3/1-P86-C			Off/Red
6075689174	SEU-4/3/2-P86-C			Green/Red
6075689169	SEU-3/0/3-P81-C	Flush	No	Yellow/Red
6075689170	SEU-3/0/1-P81-C			Off/Red
6075689171	SEU-3/0/2-P81-C			Green/Red
6075689175	SEU-3/3/3-P81-C		Yes	Yellow/Red
6075689176	SEU-3/3/1-P81-C			Off/Red
6075689177	SEU-3/3/2-P81-C			Green/Red

¹⁾ See chapter 2.6

²⁾ First colour indicate the armed State, second colour indicate the emergency state.

1.2 Important... Read this before proceeding!

The user is responsible for satisfying all local, state, and national laws, rules, codes, and regulations relating to the use of this product and its application. BERNSTEIN has made every effort to provide complete application, installation, operation, and maintenance instructions. Please contact a BERNSTEIN Technical Support with any questions regarding this product.

The user is responsible for making sure that all machine operators, maintenance personnel, electricians, and supervisors are thoroughly familiar with and understand all instructions regarding the installation, maintenance, and use of this product, and with the machinery it controls. The user and any personnel involved with the installation and use of this product must be thoroughly familiar with all applicable standards, some of which are listed within the specifications. BERNSTEIN AG makes no claim regarding a specific recommendation of any organization, the accuracy or effectiveness of any information provided, or the appropriateness of the provided information for a specific application.



WARNING:

- Not a safeguarding device
- Failure to follow these instructions could result in serious injury or death.
- This device is not considered a safeguarding device because it requires an overt action by an individual to stop machine motion or hazards. A safeguarding device limits or eliminates an individual's exposure to a hazard without action by the individual or others. This device cannot be substituted for required safeguarding. Refer to the applicable standards to determine those requirements.

1.3 Emergency Stop Considerations

IEC/EN 60204-1, ISO 13850 and ANSI NFPA 79, ANSI B11.19 specify emergency stop requirements, including the following:

- Emergency-stop push buttons shall be located at each operator control station and at other operating stations where emergency shutdown is required.
- Stop and emergency-stop push buttons shall be continuously operable and readily accessible from all control and operating stations where located. Do not mute or bypass E-stop buttons.
- Actuators of emergency-stop devices shall be colored red. The background immediately around the device actuator shall be colored yellow (where possible). The actuator of a push-button-operated device shall be of the palm or mushroom-head type.
- The emergency-stop actuator shall be a self-latching type.



WARNING:

- Do not mute or bypass any emergency stop device
- Muting or bypassing the safety outputs renders the emergency stop function ineffective.
- IEC/EN 60204-1 and ANSI B11.19, ANSI NFPA79 require that the emergency stop function remain active at all times.

1.4 Overview

The SEU-3 and-4 is a mushroom-style electro-mechanical emergency stop push button. When the button is armed and the device input requirements are satisfied, the two, solid-state PNP output signal switching devices (OSSDs) are on (conducting). When the button is pushed, the OSSDs are off (not conducting). The OSSDs remain in this condition until the push button is manually re-armed by pulling or twisting clockwise the red push button actuator. The SEU-4 series has a 30 mm mounting base for ease of mounting without requiring an additional enclosure. The SEU-3 series has a flat mounting base for ease of mounting without requiring an additional enclosure. The illumination provides easy identification of a pushed/actuated button. An armed button will light a steady yellow or green illumination or be OFF (depending on model). A pushed/actuated button is indicated by a red flashing illumination.

Internal or external faults are indicated by a double-flashing red illumination.

2 Installation Instructions

2.1 Mechanical Installation

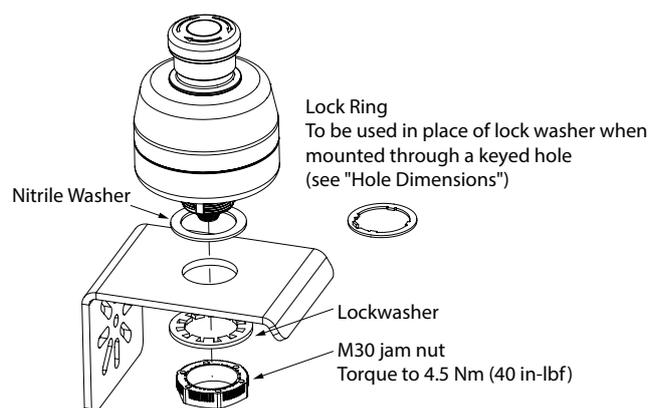
The SEU-3 and-4 is supplied with all necessary mounting hardware.

Important:

Install the emergency stop in a manner that discourages tampering or defeat. Mount emergency stops to prevent bypassing at the terminal chamber or quick disconnect (QD) connection.

The hardware supplied with the 30 mm mount SEU-4 series includes a jam nut, lock washer, lock ring, and seal washer. Use the lock ring to prevent rotation if a 5 mm keyway is provided in the 30 mm mounting hole. The threaded base contains external M30 threads for the supplied jam nut, as well as internal ½-14 NPSM threads for an alternate mounting option.

The hardware supplied with the flush mount SEU-3 series includes four M5 screws and nuts.



2.2 Installation Requirements

The device is intended for indoor use only and must not be affected by environmental conditions. Install the device so that operation is not impeded, but protected against inadvertent operation (for example, accidental actuation by being bumped or leaned against). Do not operate the switch using a tool. Do not expose the switch to excessive shocks and vibrations, otherwise the switch may be deformed or damaged, causing malfunction or operation failure.

Electrical installation must be made by qualified personnel³⁾ and must comply with IEC/EN 60204-1, ANSI/NFPA 79 or NEC (National Electrical Code), and all applicable local standards. It is not possible to give exact wiring instructions for a device that interfaces to a multitude of machine control configurations. The following is general in nature; it is recommended to perform a risk assessment to ensure appropriate application, interfacing/connection, and risk reduction (see ISO 12100 or ANSI B11.0).



WARNING:

- Risk of electric shock
- Use extreme caution to avoid electrical shock. Serious injury or death could result.
- Always disconnect power from the safety system (for example, device, module, interfacing, etc.), guarded machine, and/or the machine being controlled before making any connections or replacing any component. Lockout/tagout procedures might be required. Refer to OSHA 29CFR1910.147, ANSI Z244-1, or the applicable standard for controlling hazardous energy.
- Make no more connections to the device or system than are described in this manual. Electrical installation and wiring must be made by a Qualified Person and must comply with the applicable electrical standards and wiring codes, such as the IEC 60204-1, ANSI NFPA79, or NEC (National Electrical Code), and all applicable local standards and codes.

2.3 Output Signal Switching Devices (OSSDs) and External Device Monitoring (EDM)

The SEU -3 and SEU-4 is able to detect faults on OSSD1 and OSSD2. These faults include short circuits to +24 V DC and 0 V, and between OSSD1 and OSSD2.

Both OSSD outputs must be connected to the machine control so that the machine's safety-related control system interrupts the circuit or power to the machine primary control element(s) (MPCE), resulting in a non-hazardous condition. Final switching devices (FSDs) typically accomplish this when the OSSDs go to an OFF state.

Refer to the output specifications and these warnings before making OSSD output connections and interfacing the SEU -3 or SEU-4 to the machine.



WARNING:

- Interfacing both output signal switching devices (OSSD)
- Failure to follow these instructions could result in serious injury or death.
- Unless the same degree of safety is maintained, never wire an intermediate device(s) (PLC, PES, PC) between the safety module outputs and the master stop control element it switches such that a failure causes a loss of the safety stop command or the failure allows the safety function to be suspended, overridden, or defeated.
- Connect both OSSD outputs to the machine control so that the machine's safety-related control system interrupts the circuit to the machine primary control element(s), resulting in a nonhazardous condition.



WARNING:

- Interfacing OSSD Outputs to Machine Inputs
- Failure to properly interface the OSSD Outputs to the guarded machine could result in serious injury or death.
- To ensure proper operation, the BERNSTEIN AG device output parameters and machine input parameters must be considered when interfacing the BERNSTEIN AG device OSSD outputs to machine inputs. Design the machine control circuitry so that the maximum load resistance value is not exceeded and the maximum specified OSSD Off-state voltage does not result in an On condition.

³⁾ A person who, by possession of a recognized degree or certificate of professional training, or who, by extensive knowledge, training and experience, has successfully demonstrated the ability to solve problems relating to the subject matter and work.

External device monitoring (EDM) is a function used to monitor the state of the external, positively guided (mechanically linked) machine control contacts (Final Switching Devices (FSD)). The SEU series does not include the EDM function. As a result, the SEU series should be used with an external safety monitoring device that monitors the status of the two SEU and is capable of providing the EDM function.

Examples of appropriate external safety monitoring devices include the SCR Safety Controller.

**WARNING:**

- The SEU series does not have external device monitoring (EDM).
- If EDM is required for the application, it must be implemented in the external control.

2.3.1 Fault-Tolerant Output Feature

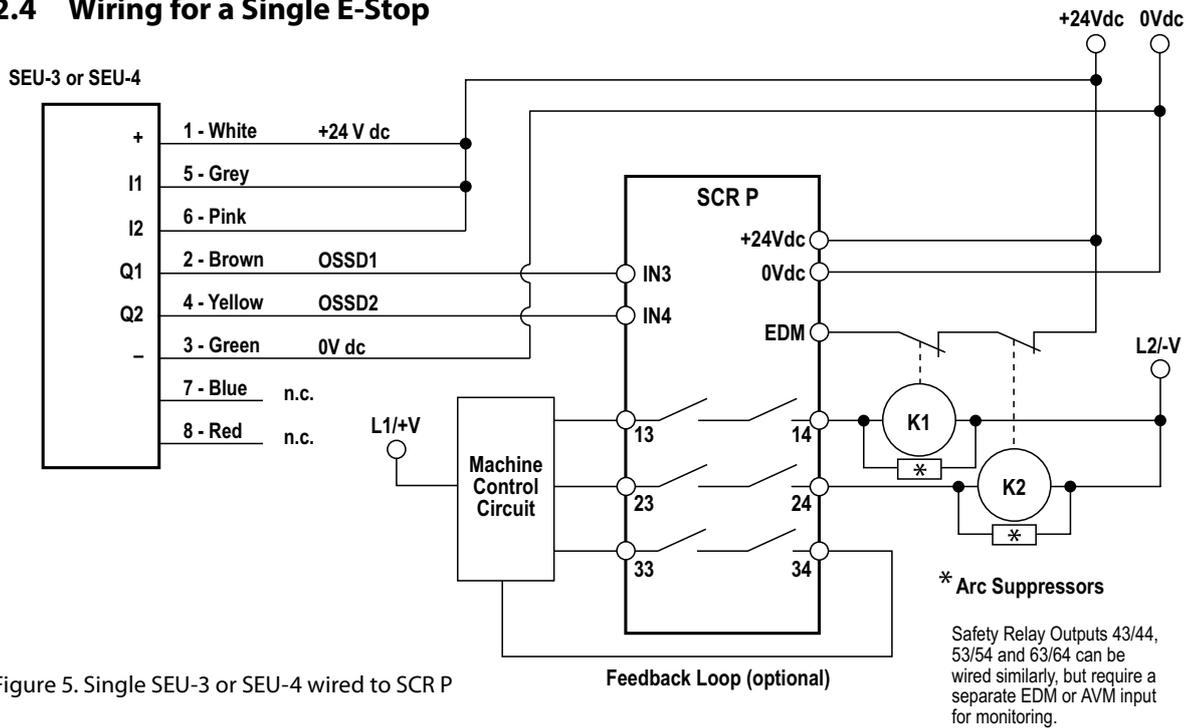
Faults that do not immediately compromise the safe operation of the SEU (for example safety output to external potential, crosswire short safety output) result in a delayed switch-off of the safety outputs.

The safety outputs switch off when the error warning exceeds 20 minutes. In case of error warning, the E-stop will doubleflash red.

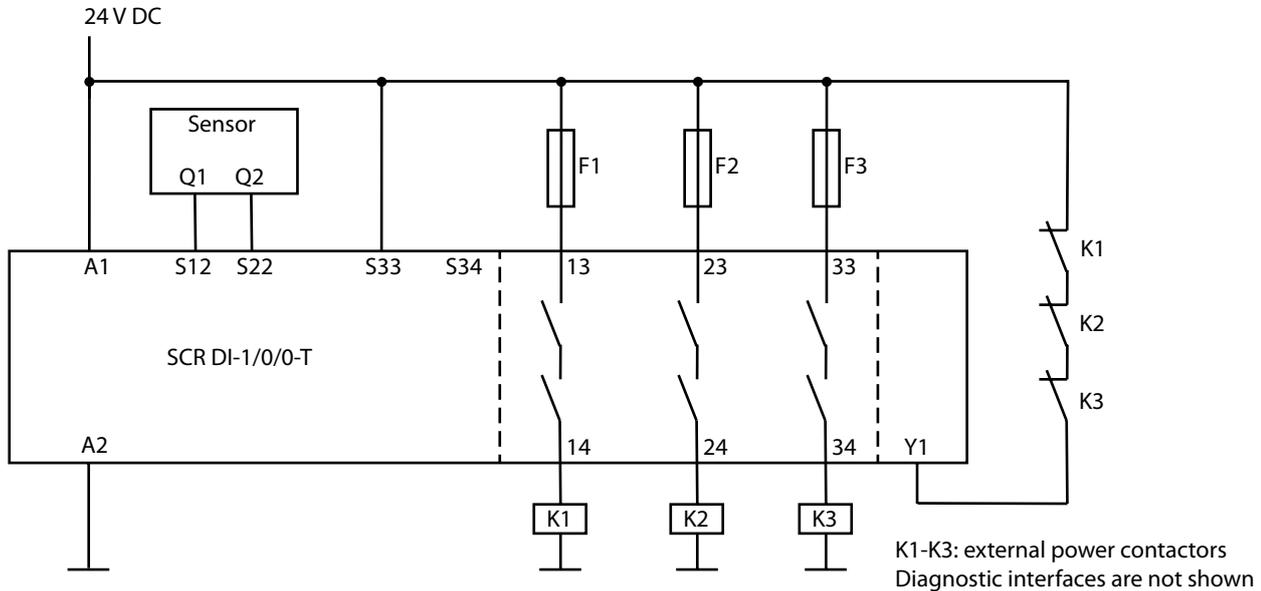
Use this fault-tolerant output feature to run down the machinery in a controlled manner. After fixing the fault, the error message is confirmed by a voltage reset. The safe outputs enable and allow a restart.

Faults that directly affect the safe operation of the emergency stop device immediately cause a lockout condition and the OSSDs turn off.

2.4 Wiring for a Single E-Stop



Wiring for SCR DI (Connection example with automatic reset and return circuit)



The SEU-3 and SEU-4 can be connected in series or individually to a compatible BERNSTEIN SCR ON (without diagnostic interface), SCR DI or SCR P Safety Controller. See the SCR ON, SCR DI/SCR P Safety Controller Instruction Manual for additional details regarding input terminal combinations compatible with DCD.

2.4.1 Wire the Device in Series

To connect two or more SEU-3 or SEU-4 buttons in series, follow these steps.

1. Connect the safety outputs of the last emergency stop device to a safety monitoring unit.
2. Connect the safety inputs of the first emergency stop device of the series to + 24 V DC.
3. Connect the safety outputs of the first emergency stop device to the safety inputs of the second emergency stop (and second to third, etc).
4. When all the emergency stop devices are armed, the last emergency stop device of the series connection will turn on its safety outputs.
5. If you are using an optional Daisy Chain Diagnostic (DCD) module (SRF DI), integrate the diagnostic module between the last emergency stop device and the safety monitoring module in the series connection. The status information can be retrieved from the diagnostic device.

Important:

Verify the SEU emergency stop device and the safety monitoring module are powered from the same power supply or the commons of the separate supplies are the same.

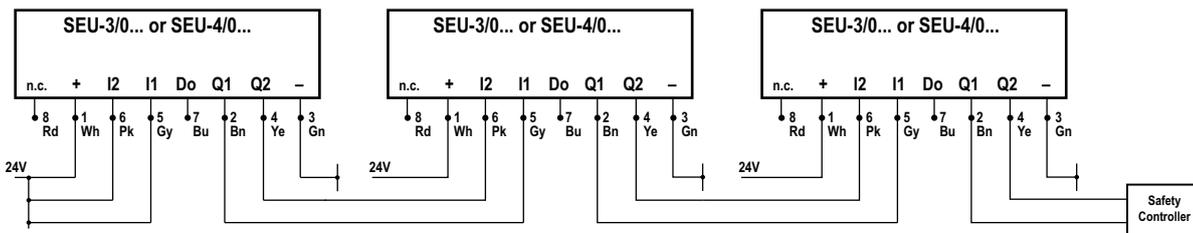


Figure 6. Series connection of multiple SEU-3/0... or SEU-4/0... without local reset function wiring diagram.

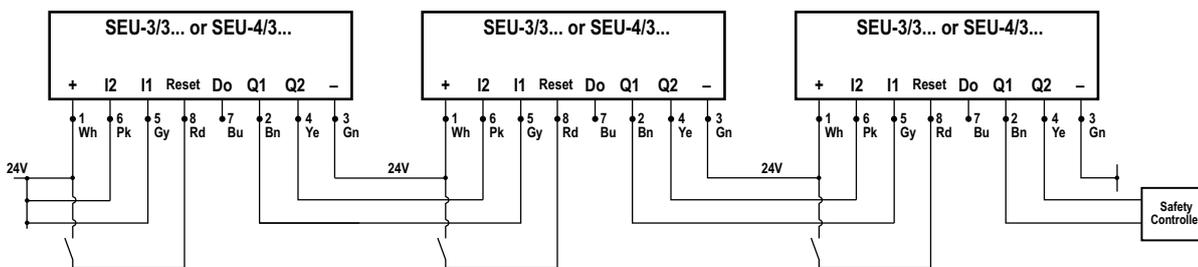


Figure 7. Series connection of multiple SEU-3/3... or SEU-4/3... with local reset function wiring diagram.

After the emergency device is rearmed, the optional local reset function requires a manual acknowledgement before the safety output of the device is switched on (only that individual emergency stop device, not the entire chain).

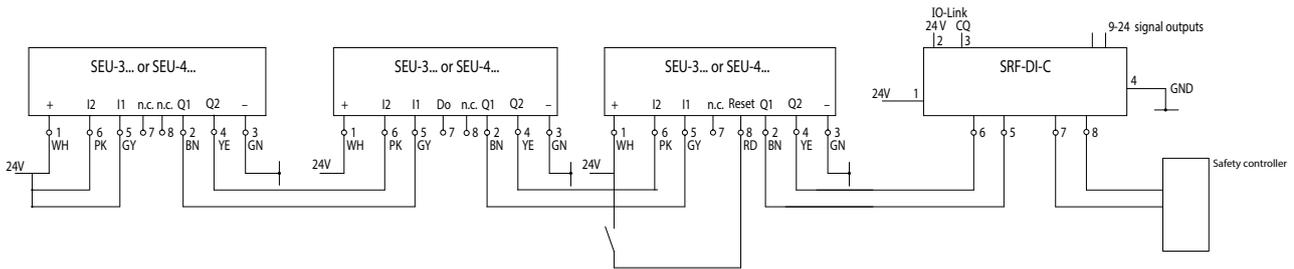


Figure 8. Series connection of multiple SEU-3... or SEU-4... and diagnostic module SRF-DI-C

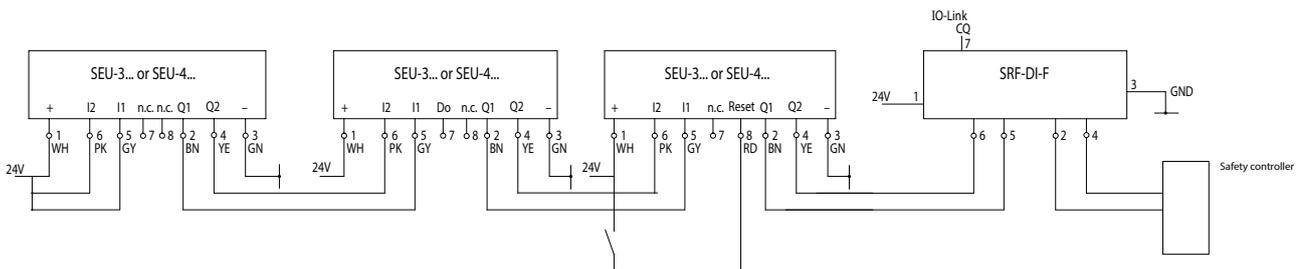


Figure 9. Series connection of multiple SEU-3... or SEU-4... and diagnostic module SRF-DI-F

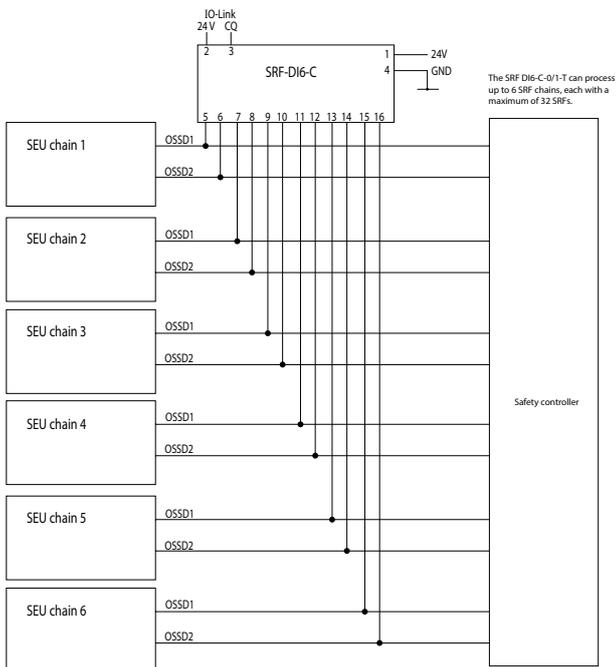


Figure 10. Series connection of multiple SEU-3... or SEU-4... and diagnostic module SRF-DI6-C

2.4.2 Wire the Device in Series Using the Quick Disconnect (QD)

When connecting units in series, simplify the wiring using special T-Adapters and low cost unshielded four-wire double-ended cables.

A similar configuration is shown except the connections are all made using quick disconnects. The SEU E-Stops and SRF switches can be combined in a single chain.

1. Connect the female 4-pin M12/Euro-style cable to the male 4-pin M12/Euro-style of the series connection T-Adapter (ATS-M12/4-M12/8).
2. If a manual reset model emergency stop device is used, connect the female 8-pin M12/Euro-style of the Reset T-Adapter (ATD-M12/8-M12/4) to the male 8-pin M12/Euro-style connector of the series connection T-Adapter. Connect a female 4-pin M12/Euro-Style cable to the male 4-pin M12/Euro-style QD of the T-Adapter for connected a reset switch.
3. Connect the SEU to the male 8-pin M12 connector of the T-Adapter. Use S1W-M12A8/BW extensions cables as needed.
4. Connect the male 4-pin M12 end of a double-ended cable to the female 4-pin M12 of the T-Adapter. Connect the female 4-pin M12 end of the double ended cable to the next series connection T-Adapter (ATS-M12/4-M12/8).
5. At the end of the line a terminating plug (AEP-M12/4) is required to properly truncate the system.
6. The wired end of the 4-pin M12 cable (from step 1) can be wired directly to a Safety Monitoring Module or can be wired through an Daisy Chain Diagnostic (DCD) module then to the Safety Monitoring device.

Verify that the SEU-3 or SEU-4 and the safety monitoring module are powered from the same power supply or the commons of the separate supplies are the same. Ensure that the voltage level at SEU-3 or SEU-4 (furthest from the power supply) is above 19.5 V for the system to operate properly.

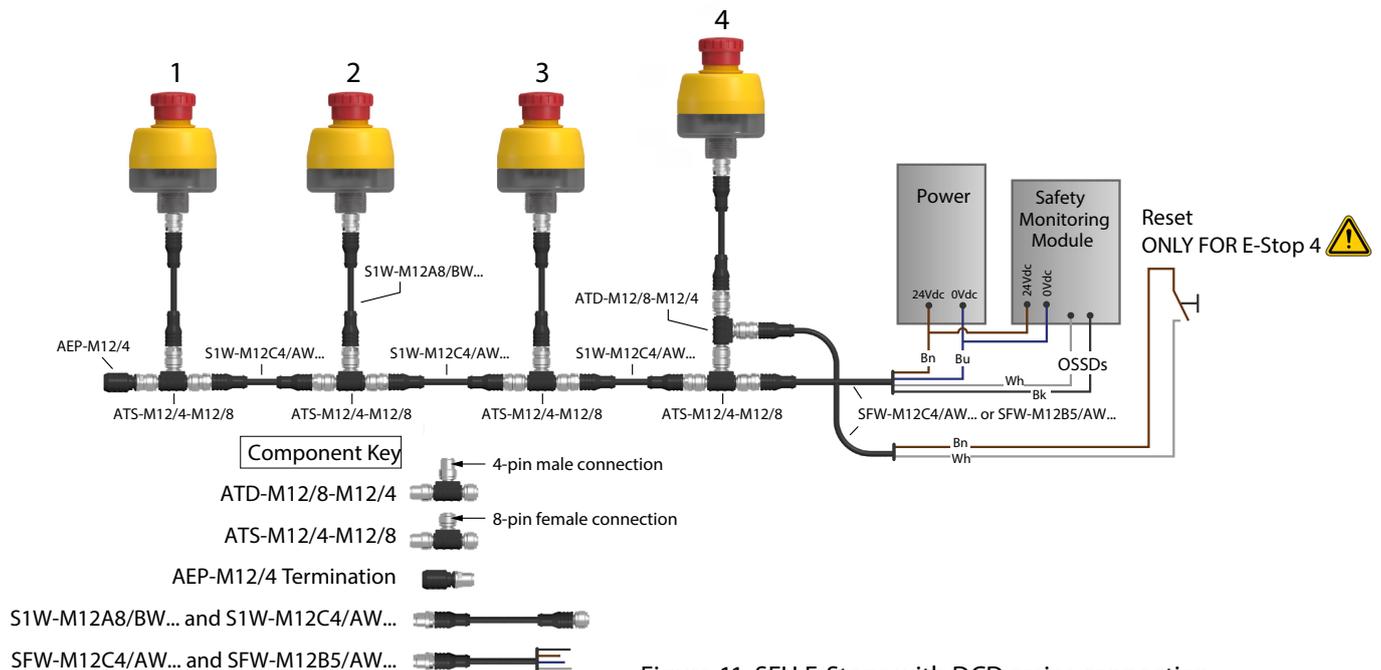


Figure 11. SEU E-Stops with DCD series connection

In a long series or series with many DCD devices, the voltage at all devices must stay above 19.5 V for proper operation. An additional power supply may be required to maintain a minimum of 19.5 V at all devices. For examples of how to properly connect a second power supply, refer to Figure 12 on p. 10 and Figure 13 on p. 10. For guidance on maximum total cable length and maximum number of devices before an additional power supply may be needed, refer to Figure 14 on p. 10. For using DCD information to monitor the individual device voltages, see Information on p. 11. There are two options to connect an additional power supply.



Figure 12. Option 1: Use a ATD-M12/8-M12/4 Connector in series with DCD device. If available, set the power supplies for parallel output.



Figure 13. Option 2: Replace the terminator with a power supply. The OSSD1 and OSSD2 wires at power supply #2 must be connected to +24 V DC. If available, set the power supplies for parallel output.

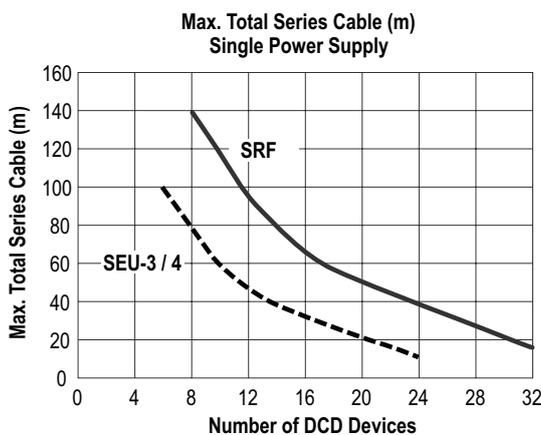


Figure 14.



WARNING:

- Safety devices with OSSDs and without DCD, such as safety light curtains, are not compatible.
- Failure to follow these instructions could result in serious injury or death.

2.5 Checkout

At machine set up, a Designated Person⁴⁾ should test each safety point for proper machine shutdown response. A Designated Person should check the safety point for proper operation, physical damage, button looseness, and excessive environmental contamination. This should take place on a periodic schedule determined by the user, based on the severity of the operating environment and the frequency of switch actuations.

Adjust, repair, or replace components as needed. If inspection reveals contamination on the switch, thoroughly clean the switch and eliminate the cause of the contamination. Replace the switch and/or appropriate components when any parts or assemblies are damaged, broken, deformed, or badly worn; or if the electrical/mechanical specifications (for the environment and operating conditions) have been exceeded.

Always test the control system for proper functioning under machine control conditions after performing maintenance, replacing the safety point, or replacing any component of the device.

2.6 Local Reset Function

The local reset function forces a local confirmation that the safety outputs are switched on after resetting the individual emergency stop button.

If an emergency stop button with a local reset function is actuated and then armed/re-armed (pulled out), close and open the external reset switch within 0.25 seconds (minimum) to 1 second (maximum) to turn the e-stop buttons outputs on (assuming its inputs are satisfied).

The reset function only applies to the emergency stop button models with the local reset functionality. This reset feature allows for a local reset at a given emergency stop button but does not allow for an entire safety system reset.

If a chain of DCD devices are cascaded (see Wire the Device in Series on p. 7), the reset function only applies to the individual emergency stop button (1, 2, or 3 but not the series). If emergency stop button 2 is actuated then armed/rearmed, engaging the external reset switch of emergency stop buttons 1 or 3 will have no effect. Only engaging the external reset switch of emergency stop button 2 switches the chain's outputs on.



CAUTION:

When power is switched on and the emergency stop buttons are in the on (armed) position, the safety outputs of the emergency stop buttons with the local reset function will switch on without activating the reset button.



WARNING:

- Use of Auto or Manual Restart
- Failure to follow these instructions could result in serious injury or death.
- Applying power to the BERNSTEIN device, returning the emergency stop to the armed position, or resetting a manual restart condition **MUST NOT** initiate dangerous machine motion.
- Design the machine control circuitry so that one or more initiation devices must be engaged (in a conscious act) and the BERNSTEIN device must be in Run mode to start the machine.

⁴⁾ A Designated Person is identified in writing by the employer as being appropriately trained to perform a specified checkout procedure. A Qualified Person possesses a recognized degree or certificate or has extensive knowledge, training, and experience to solve problems relating to the emergency stop installation.

2.7 Daisy Chain Diagnostic (DCD) Information



The information transmitted via the Daisy Chain Diagnostic (DCD) interface is not safety related. The diagnostic technology allows a wide range of device information to be loaded into the machine control system.

To interpret this information, BERNSTEIN diagnostic modules are available, including the SRF-DI Diagnostic Module and the SCR DI and SCR P Safety Controller. Refer to the instruction manuals for detailed information on the diagnostic devices. By means of diagnostics, the following information can be transmitted, among others:

- Button Status (armed, off, faulted)
- Under-voltages in the series connection (chain)
- Attempts to remove buttons from the chain

At this time this information can be refined using the following interfaces:

- USB—Displays device information on the PC (requires using an SRF DI, SCR DI or SCR P)
- NFC Displays device information on a mobile phone (requires SRF DI or SCR DI, a mobile phone and the BERNSTEIN DCD APP).
- IO-Link—Bus independent data reading into the control system (requires using the SRF DI or SCR DI and an IO-Link master)
- Industrial Ethernet Protocols—Bus data reading into the control system (requires using the SCR P Safety Controller)

2.8 Information Available Using Daisy Chain Diagnostic (DCD)



A variety of information can be retrieved from the Emergency Stop devices via the DCD series connection and a diagnostic unit or a safety controller with DCD interface.

A description of the information can be found under the following link:

https://www.bernstein.eu/fileadmin/downloads/schaltertechnik/Konstruktionsdaten/SRF/0800000857_en.pdf

2.9 Installing the Silicone Washdown Cover SEU-WDC

To properly install the FDA-grade silicone cover and achieve an IEC IP69 rating, follow these instructions.

1. Turn the cover inside-out, except for the top portion the button fits into.
2. Place the cover on top of the emergency stop unit.
3. Roll the cover onto the e-stop unit.
4. Continue rolling the cover down, around the base of the e-stop unit, until the entire unit is covered.
5. Mount the e-stop and cover assembly to a bracket wide enough to cover the base of the assembly. The cover should be clamped firmly between the e-stop button and the bracket.
6. The degree of protection at the M12 connection is equal to that of the M12 coupling or the connection must be protected according to the degree of protection.



3 Specifications



Important:

Connect the SEU only to a SELV (Safety Extra-Low Voltage) for circuits without earth ground or a PELV (Protected Extra-Low Voltage) for circuits with earth ground power supply.

Rated operational voltage (U_e)

24 V dc +15, -20% (SELV / PELV power supply)
The external voltage supply must be capable of buffering brief mains interruptions of 20 ms, as specified in IEC/EN 60204-1.

Rated insulation voltage (U_i)

75 V DC

Rated impulse withstand voltage (U_{imp})

500 V

Rated conditional short-circuit current

100 A

No-load current I₀

100 mA at 24 V DC; 120 mA maximum at 19,2 V DC

Time delay before availability t_v

≤ 2 s

Switch-off

40 ms maximum + (7 ms × number of following Smart Safety devices)

Housing/Button (SEU 3)

Polycarbonate / Polyamide or M5 (M5 hardware included);
Max. tightening torque: 0,56 Nm (5 in lbf)

EMC

According to EN 61326-1 and EN 61326-3-1

Safety data

SIL 3 (IEC 61508)

SIL CL 3 (EN 62061)

Category 4, PL e (EN ISO 13849-1)

PFHD: $6,9 \times 10^{-9}$ 1/h according to EN 62061

With 1000 actuation cycles during service life

Service Life: 20 years

B10d: 100.000 cycles

Certifications

TÜV, CE, cULus

OSSD Outputs Q1, Q2

Two, solid-state, current sourcing PNP outputs

Switching element function: PNP, NO

Voltage level: according type 3 EN 61131-2

Rated operational current: 30 mA

Off-state current: ≤ 1 mA DC

Voltage drop: ≥ U_e – 3 V

Protection: Sustained short-circuit and overload protection;
thermal / digital (clocking)

Reset Input (specific models)

High Signal: 10 to 30 V DC

Low Signal: 0 to 3 V DC

Housing/Button SEU-4

Polycarbonate / Polyamide Threaded base has M30 by 1.5 external threads Max. tightening torque: 4,5 Nm (40 in lbf)

Indication

(varies with model)

Yellow (590 nm) Green (525 nm) Red (618 nm)

Maximum Cable Length Between E-Stops

30 m

Operating Conditions

–25 °C to +50 °C (–13 °F to +122 °F)

45% to 85% relative humidity (no condensation)

Vibration Resistance

Operating extremes: 10 Hz to 500 Hz, amplitude 0,35 mm acceleration 50 m/s²

Environmental Ratings

For Indoor Use Only

IEC IP65 (EN 60529)

For the SEU-4 models only with SEU-WDC installed:

IEC IP67, IEC IP69 (EN 60529)

The degree of protection at the M12 connection is equal to that of the M12 coupling or the connection must be protected according to the degree of protection.

ZVEI Interface Informations

The OSSD interface corresponds to Interface Type C Class 3 according to the ZVEI position paper CB24I Ed. 2.0.

Source

Safety switch /safety outputs: C3

Drain

Safety monitoring unit (e.g. safety controller): C1, C2, C3

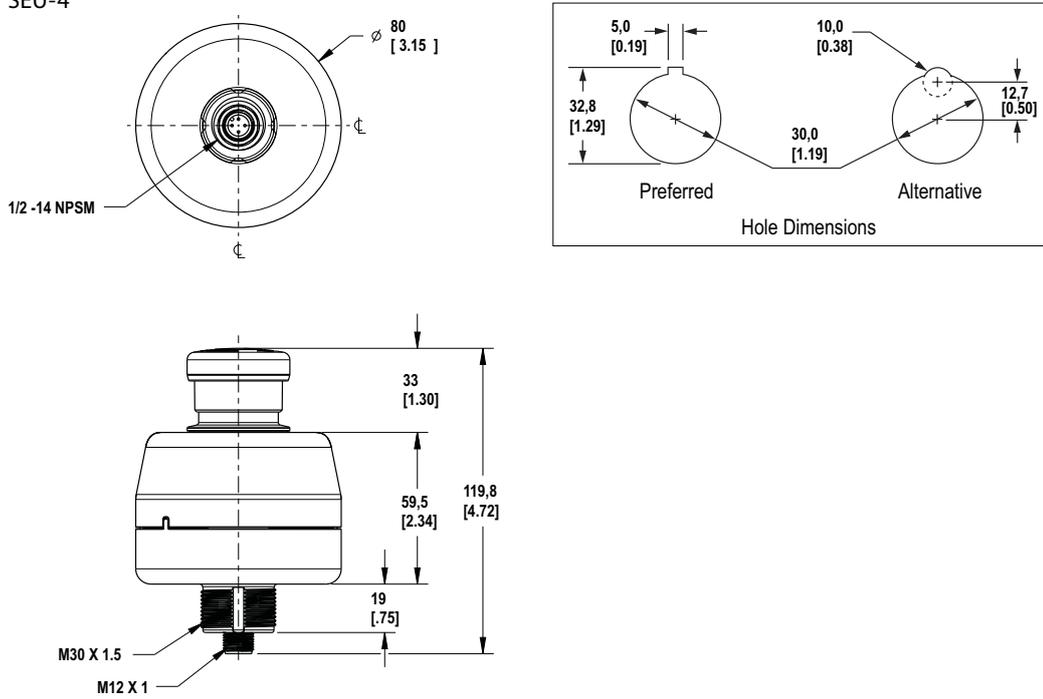
Interface Type C Source (Table 4.32)

Parameter	min.	typ.	max.
Test pulse duration t _i		70 μs	
Test pulse rate T		1 s	
Current rating I _N	-	30 mA	Output current I _N
Capacitive loads	-	50 nF	Maximum capacitive load C _{L,max.}
Inductive load(*)	-	-	Maximum inductive load L _{L,max.}

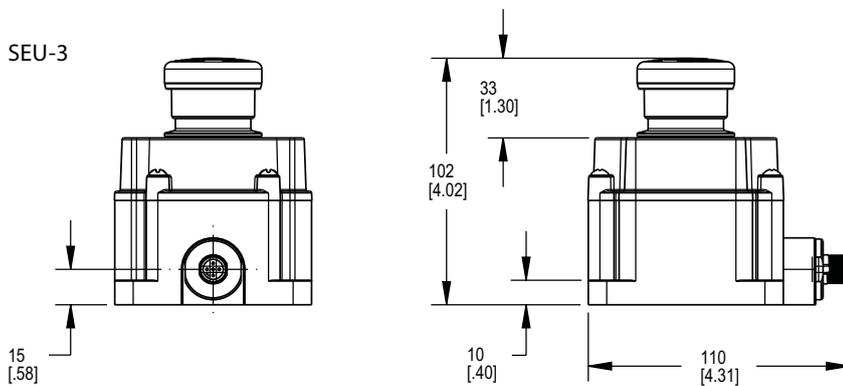
(*) Optional indication of the manufacturer.

3.1 Dimensions (All measurements are listed in millimeters, unless noted otherwise. Dimensions in []: inch)

SEU-4

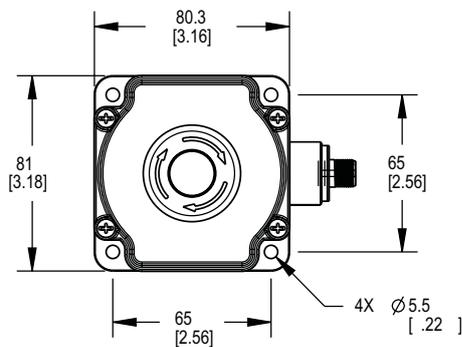
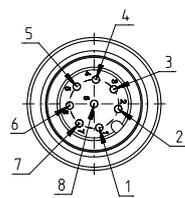


SEU-3

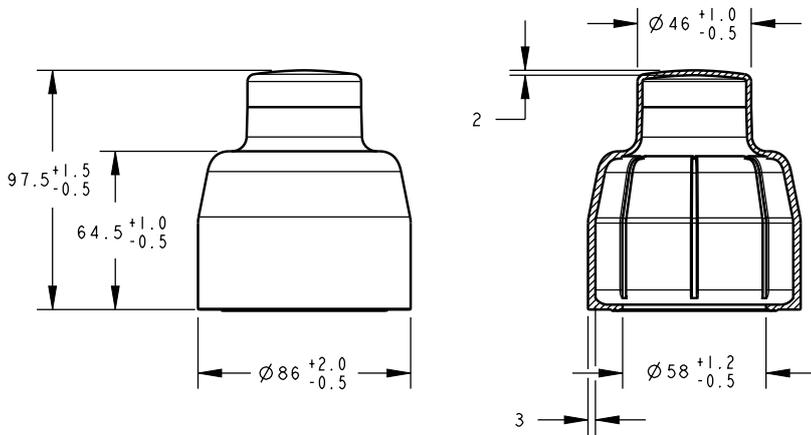


Connection for SEU-3 and SEU-4

- Pin1: +
- Pin2: Q1
- Pin3: -
- Pin4: Q2
- Pin5: I1
- Pin6: I2
- Pin7: n. c.
- Pin8: Local Reset (if applicable)



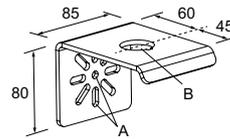
Silicone Washdown Cover SEU-WDC



4 Brackets

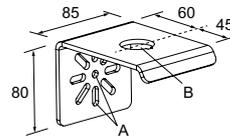
SEU-MB1H

- Single 30 mm hole
- 8 gauge steel, black finish (powder coat)
- Front surface for customer applied labels



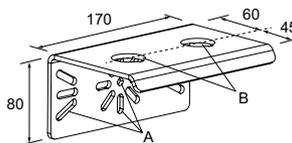
SEU-MB1H-S

- Single 30 mm hole
- 8 gauge stainless steel
- Front surface for customer applied labels



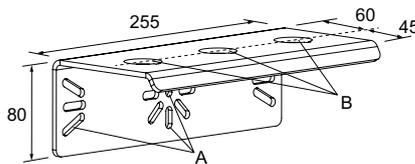
SEU-MB2H

- Two 30 mm holes
- 8 gauge steel, black finish (powder coat)
- Front surface for customer applied labels



SEU-MB3H

- Three 30 mm holes
- 8 gauge steel, black finish (powder coat)
- Front surface for customer applied labels



Hole size: A = \varnothing 7 , B = \varnothing 30

5 Product Support and Maintenance

5.1 Maintenance and Service

Do not use alcoholic cleaning agents.

The SEU-3 and SEU-4 is maintenance-free.

For long-term and trouble-free operation, please periodically check the following points:

- solid fit of all components
- reliable switching function
- if damage occurs, please exchange the relevant components

Liability disclaimer— By breach of the given instructions (concerning the intended use, the safety instructions, the installation and connection through qualified personnel and the testing of the safety function) manufacturer's liability expires.

5.2 Status Indicators

Operating Mode	OSSD Inputs	Indication	OSSD Outputs
Power-up	X	Armed color (yellow, green or off, depending on the model) on for 0.5 s Red on for 0.5 s Off for 0.5 s minimum	OFF
Armed (button not pressed)	ON	Yellow, green, or off (depending on the model)	ON
Actuated (button pressed)	X	Flashing red	OFF
Re-armed, local reset needed (specific models)	ON	Red	OFF
Armed	OFF	Armed indication (yellow, green or off, depending on the model)	OFF
Fault detected (non-critical)	X	Double flash red	ON
Fault detected (critical)	X	Double flash red	OFF

5.3 Contact Us

International Headquarters

BERNSTEIN AG

Hans-Bernstein-Straße 1
32457 Porta Westfalica
Fon +49 571 793-0
Fax +49 571 793-555
info@de.bernstein.eu
www.bernstein.eu

Hungary

BERNSTEIN Kft.

Fon +36 1 4342295
Fax +36 1 4342299
info@hu.bernstein.eu

China

BERNSTEIN Safe Solutions (Taicang) Co., Ltd.

Fon +86 512 81608180
Fax +86 512 81608181
info@bernstein-safesolutions.cn

Denmark

BERNSTEIN A/S

Fon +45 7020 0522
Fax +45 7020 0177
info@dk.bernstein.eu

Italy

BERNSTEIN S.r.l.

Fon +39 035 4549037
Fax +39 035 4549647
info@it.bernstein.eu

Austria

BERNSTEIN GmbH

Fon +43 2256 62070-0
Fax +43 2256 62618
info@at.bernstein.eu

France

BERNSTEIN S.A.R.L.

Fon +33 1 64 66 32 50
Fax +33 1 64 66 10 02
info@fr.bernstein.eu

United Kingdom

BERNSTEIN Ltd

Fon +44 1922 744999
Fax +44 1922 457555
info@uk.bernstein.eu

Switzerland

BERNSTEIN (Schweiz) AG

Fon +41 44 775 71-71
Fax +41 44 775 71-72
info@ch.bernstein.eu

5.4 BERNSTEIN AG Limited Warranty

If the instructions (proper use, safety instructions, installation and connection by trained personnel, testing for safe operation) are violated, the manufacturer's liability expires.

5.5 EU Declaration of Conformity (DoC)



EU-Konformitätserklärung / EU Declaration of Conformity / Déclaration UE de conformité

Diese Konformitätserklärung entspricht der europäischen Norm DIN EN ISO/IEC 17050-1: Konformitätsbewertung – Konformitätserklärung von Anbietern – Teil 1: Allgemeine Anforderungen. Die Grundlage der Kriterien sind internationale Dokumente, insbesondere ISO/IEC-Leitfaden 22, 1982, Informations on manufacturer's declaration of conformity with standards or other technical specifications. Die deutsche Sprachfassung ist die Originalkonformitätserklärung. Bei anderen Sprachen handelt es sich um die Übersetzung der Originalkonformitätserklärung.

This Declaration of Conformity is suitable to the European Standard EN ISO/IEC 17050-1: Conformity assessment – Supplier's declaration of conformity – Part 1: General requirements. The basis for the criteria has been found in international documentation, particularly in: ISO/IEC Guide 22, 1982, Informations on manufacturer's declaration of conformity with standards or other technical specifications. The original Declaration of Conformity is the German language version. Other languages are a translation of the original Declaration of Conformity.

Cette déclaration de conformité correspond au Norme Européenne EN ISO/IEC 17050-1 : Évaluation de la conformité – Déclaration de conformité du fournisseur – Partie 1 : Exigences générales. La base des directives sont des documents internationaux répondant à ISO/IEC-Guide 22, 1982, Informations on manufacturer's declaration of conformity with standards or other technical specifications. La version allemande est la langue d'origine de la déclaration de conformité. Les autres langues ne sont qu'une traduction de la déclaration de conformité en langue allemande.

Wir / We / Nous

BERNSTEIN AG

(Name des Anbieters) / (Supplier's name) / (Nom du fournisseur)

**Hans-Bernstein-Straße 1
D-32457 Porta Westfalica**

(Anschrift) / (Address) / (Adresse)

erklären in alleiniger Verantwortung, dass das (die) Produkt(e):

declare under our sole responsibility that the product(s):

déclarons sous notre seule responsabilité que le(s) produit(s) :

NOT HALT / emergency stop: Typ / Type: SEU-3; SEU-4

...(siehe Betriebs- und Montageanleitung / refer to Installation and Operating Instructions / voir Instructions de service et de montage)

(Bezeichnung, Typ oder Modell, Los-, Chargen- oder Serien-Nr., möglichst Herkunft und Stückzahl)
(Name, type or model, batch or serial number, possibly sources and number of items)
(Nom, type ou modèle, n° de lot, d'échantillon ou de série, éventuellement les sources et le nombre d'exemplaires)

mit folgenden Europäischen Richtlinien übereinstimmt (übereinstimmen):

is (are) in conformity with the following directives:

est (sont) conforme(s) aux directives européennes :

**Maschinenrichtlinie / Machinery-Directive 2006/42/EC
EMV Richtlinie / EMC Directive 2014/30/EU
RoHSII 2011/65/EU**

Dies wird nachgewiesen durch die Einhaltung folgender Norm(en):

This is documented by the accordance with the following standard(s):

Notre justification est l'observation de la (des) norme(s) suivante(s):

**EN 60947-5-5:1997+A1:2005+A2:2016;
EN ISO 13849-1:2015
IEC 62061:2005+A1:2012+A2:2015; IEC 61508 Parts 1-7:2010
IEC 61326-3-1:2017**

Benannte Stelle / Notified Body / Organisme Notifié

**NB 0035
TÜV Rheinland Industrie Services GmbH, Am Grauen Stein, 51105 Köln
EG Baumusterprüfbescheinigung Reg.-No.: 01/205/5836.00/21**

Name und Anschrift Bevollmächtigter Dokumentation:

Name and address of authorized agent documentation:

Nom et adresse de la documentation autorisée :

Herr Wolfgang Vogt

D-32457 Porta Westfalica, Hans-Bernstein-Straße 1



i.V. Wolfgang Vogt

Porta Westfalica, 03.05.2021

Compliance Officer Product

(Ort und Datum der Ausstellung):

(place and date of issue):

(date et lieu d'établissement) :

(Name, Funktion) (Unterschrift):

(name, function) (signature):

(nom, fonction) (signature):