

RAILOK

Applications for railway and signaling

Railway- And Rolling Stock Interlocks



- Type « S » Interlocks
- Railroad junction interlocks
- Electromechanical locks and key release units
- Triangle key switches
- Padlocking devices for controlswitch isolation
- Padlocks



- ↳ *Railway guarding for all applications*
- ↳ *Reliable and innovative solutions*
- ↳ *Adaptable and modular range*





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Please consult our SECULOK catalogue for the full range of interlocks for guarding solutions for all industries



SECUMS Interlocks

Created in 2004 and based in Neuilly Plaisance in the Paris area, SECUMS Interlocks designs and manufactures the complete range of SECULOK, RONIS and RAILOK products. SECUMS Trapped Key technology provides up to SIL 3 (EN/IEC 62061), Category 4 and PLe (EN/ISO 13849-1) use suitable mechanical and electro-mechanical safety Interlocking solutions for use in a wide range of heavy duty guarding applications. Our market leading recognition is the result of our continuous focus on the design of innovative on demand products.

Since our company permanently listens to your needs, and thanks to our product development cycle, we offer you an ever wider range of products.

Expertise

Our expertise covers a wide scope of safeguarding applications from machine guarding, power generation and -distribution system interlocking up to valve interlocking in all industries.

SECUMS offers one of the widest ranges of interlocks to safeguard control and signalling equipment for Railway and Rolling Stock. This includes solutions for rail-maintenance centres and -depots, HV and DC traction power substation, safety control systems for Railway Signalling equipment and track junctions, HV equipment on rolling stock and many other applications.

Recently developed products included in this catalogue as an example of our innovative design and engineering capabilities are:

-SWL-VLH: Triangle & EMKA key Switch Lock range, spring return, front of board version.

-BPC: Padlockable Pushbutton, with or without lockable position indicator and safety switch.

RAILOK range advantages

RAILOK Products are specially designed for railway applications. The products have a proven record of reliability and meet with the expectations of practical any user in the field.

The range includes many specific products for our customers, tailored to the specific requirements of our clients.

If your application is not available in this catalogue, please consult our SECULOK catalogue for the full range of interlocks for guarding solutions for all industries

Our Values

Client satisfaction is our top level priority.

We work in strict compliance with ecologic constraints by offering you products that can be 100% recycled and reused.

As to ensure long term development of the company, SECUMS Interlocks relies only on private investors who share our view of long term growth.

Type « S » Locks and Keys Applications



Keys and locks of the "S" series are intended for railway applications outside France. For national French railway applications, these products are sold by the SNCF.

- Locks for signaling
- Locks for catenary guarding
- Bronze locks type S1P1E, S1P2E, S1P3E,
In conformity with the recent SNCF specifications
- Approved and certified per AQF2 Foundries certification (supplier quality assurance)
for SNCF.
- Coding Type SNCF



Disconnector locks



Lock for Lever operated junction



Disconnector locks



Railblock locks



Locks for Railblocks

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For further informations: <http://www.secums-interlocks.com> - Tel.: 00 33 (0)1 43 08 65 31 Fax: 00 33 (0)1 43 08 97 20



Réf: CQ-S

General characteristics:

- Coding by cut outs, recesses and drilling

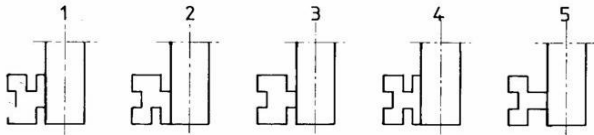
Material: Bronze

Principle:

- The keys are designated by three codes:
 - The first shows the profile of the cut outs, it uses the numbers 1 to 5.
 - The second shows the profile recesses, it uses the letters A to L (except I).
 - The third indicates the type of drilling, it uses the numbers 1 to 8
- Those codes are arranged side by side, from left to right in the order as listed below

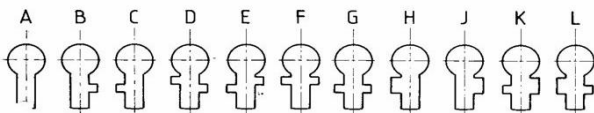
Cut out

Just as key bits cut out example (and key locking parts in the correspondents locks)



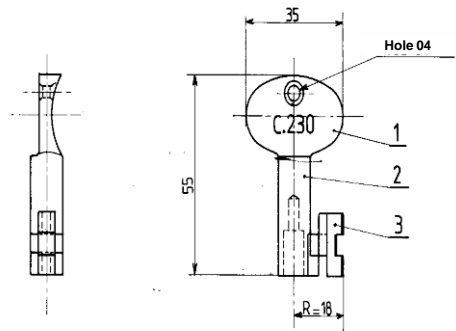
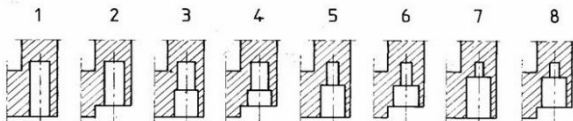
Recesses

Example projections of key cut outs of the pin side (and entries of corresponding locks)



Drilling

Drilling example of the pin sides (and corresponding pin positions in the locks)



Reference examples:

2 D 5 is a key profile having cut out 2, the recess profile D, and the drilling type 5
 The key code is stamped on the edge of the keycylinder.
 Different combinations of codes allow up to 440 different keys.

S1P1E
S1P2E
S1P3E

Boltlocks type « S » with 1 up to 3 Key entries



Réf: S1P1E

General characteristics:

- Number of keys: 1 up to 3
- Bolt diameter 15 mm
- 12 mm stroke
- Fastening with 3 holes with a diameter of 5 mm (rivets recommended)
- Plate with Marking screwed to the left of the keyentry
- Plate with designation riveted on the fields located above the keyentry.

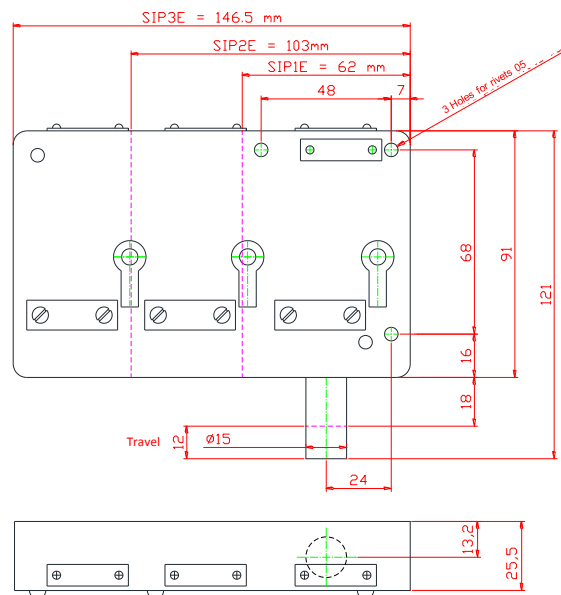
Material : Bronze

Principe:

Any key is provided with a marking identifying the "Transportation" function thereof. This marking, generally comprising a maximum of 5 letters or numbers is etched at the flat side of the keycylinder by the supplier workshop store.

Warning:

It is forbidden to open a lock "s" boltlock, even though it has given rise to an incident.



Reference examples:

S1P1E: key free and bolt shot, key trapped and bolt retracted

S1P2E: 2 free keys free and bolt shot, 2 keys trapped and bolt retracted

S1P2E conjugate: 1 key free bolts shot, 1 key trapped and bolt retracted

S1P3E: 3 keys free and bolts shot, 3 keys trapped and bolt retracted

S1P3E conjugate: 1 key free and bolt shot, 1 captive key and bolt retracted

S1P3E conjugate: 2 keys free and bolt shot, two keys captive bolt retracted



Réf : S1P1E-202F-AR



Réf : S1P2E-202F-AR

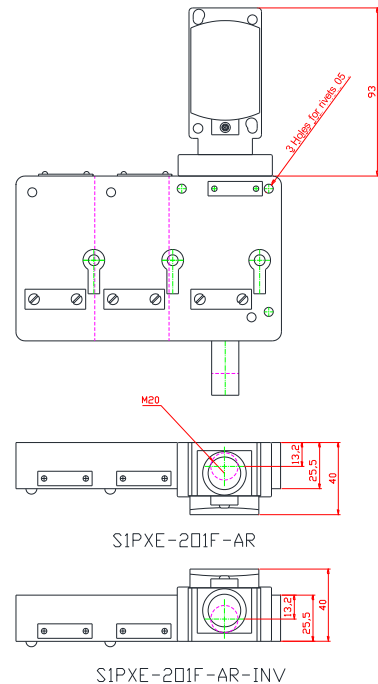
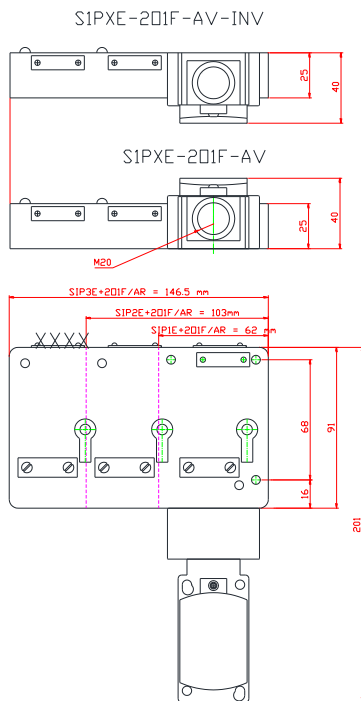
General characteristics:

- Lock with up to 3 key entries
- Contacts 2NO1NC double insulated/ positive opening/ 1 entry gland M20
- Temperature: -25 to +70 ° C
- Option with contact: -4NO on request
- Contact in reverse applies for mounting on the front face of the lock **Ref: INV**
- Contact at front bolt position **ref: AV**
- Contact at rear bolt position **ref: AR**

Electrical characteristics: Ith:10A

Material :

- Switch enclosure plastic IP65 réf: **2NO1NC**
- Switch enclosure metal IP 66 réf : **2NO1NVM**



Reference examples:

S1P1E-201F-AV: Lock 1 keyentry with 2NO1NC -switch on front

S1P1E-201F-AR: lock 1 keyentry 2NO1NC- switch on rear.

S1P2E-201F-AV: lock with 2 key entries 2NO1NC switch on front

S1P2E-201F-AR-INV: lock with 2 key entries 2NO1NC switch on the rear, inverted position



Réf: PKS



General characteristics:

- Lock type "S" with 1 to 3 key entries ref: 1E, 2E, 3E
- Contacts 2NO1NC on operating key position
- Protective cover per key, lock with square operating spindle ref SQ, with padlock device ref PL
- Pre-wired terminal block
- Protection IP65
- Operating temperature: -25 ° C to +70 ° C
- Box with 2 cable entries and terminal block 12 positions, housing cover with sealing device

Electrical characteristics: Ith 10 A

Material:

- Enclosure Stainless Steel 316L
- Lock: bronze

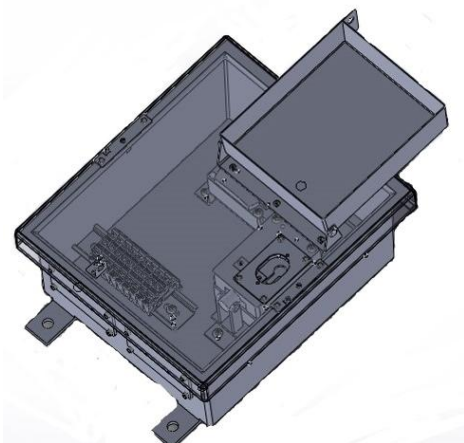
Equivalent SNCF Article codes:

Symbol(1 Keyentry): 7.944.0312

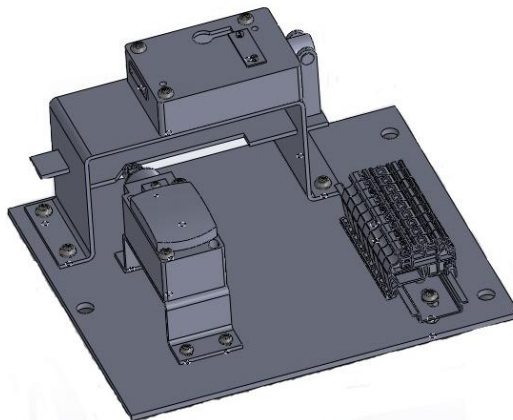
Symbol(2 Keyentries): 7.944.0314

Symbol(3 Keyentries): 7.944.0316

Switch, enclosure and internals



Internal plate



Solenoid controlled Key switch lock for keys "S" & "LOCO"



Ref: SCL-S-20F-24V-CE



Characteristics:

- 1 to 4 locks (keys), multiple key ref: **2E, 3E, 4E**
- 2NO+2NC contacts + 2 solenoid position control contacts (positive breaking safety contacts)
- 100% Solenoid Duty Cycle, LED, push button, override key
- Push Button with low energy consumption
- Mounting FOB (Front Of Board)
- Powersupply: dual voltage 24/48V
- CEM certified
- For key « S » ref: **S**
- For key « LOCO » ref: **LO**
- For key SECULOK (nothing to indicate)

Material: Stainless steel 316L

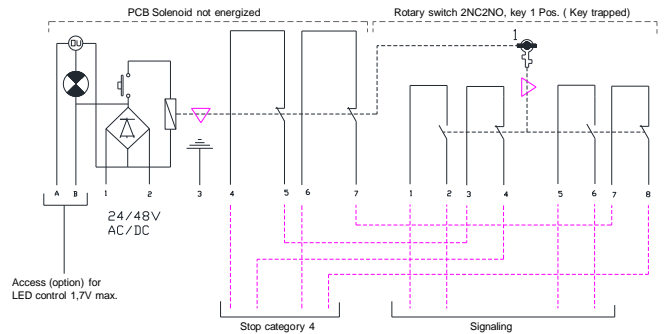
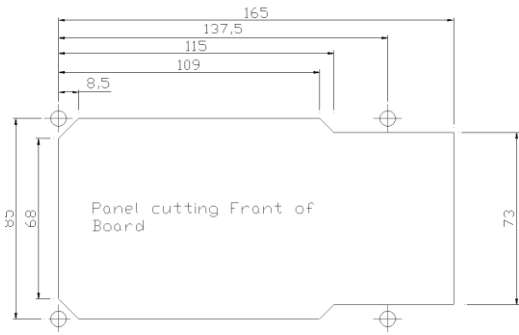
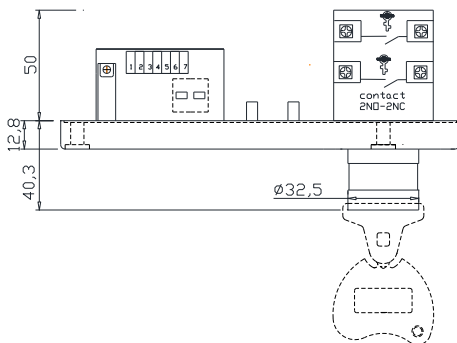
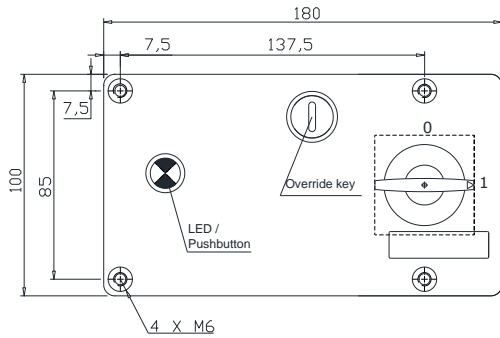
Electrical features:

- Contacts: 2O2F 4KW 400V, 2O4F 4KW400V

Options :

- Contact 4O, 4O4F or 3O1F
- 110V AC/DC power supply ref: **110VAC** ou **110VDC**
- 230Volt AC/DC power supply ref: **230 VAC** ou **230VDC**
- Lock dustcover ref: **CE** for key LOCO and SECULOK

DIMENSIONS



Approval for key removal = energising through contacts 1-2
The LED lights up and the LED button can be pressed to release the key.
By turning the key to the 2NO +2NC switch contacts are operated.
For equipment start insert the key again and turn to close the safety contacts and trap the key.

References examples:

SCL-S-3O1F-24V: solenoid control lock 1 key, 24 volts 3NO+1NC contacts for key « S »



Réf: TMC

Type Signalisation

General characteristics:

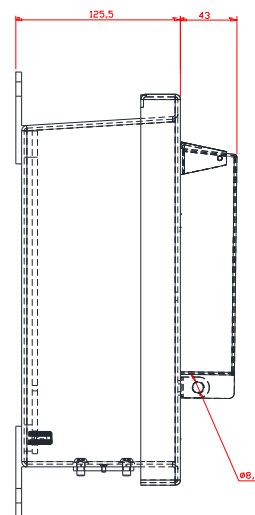
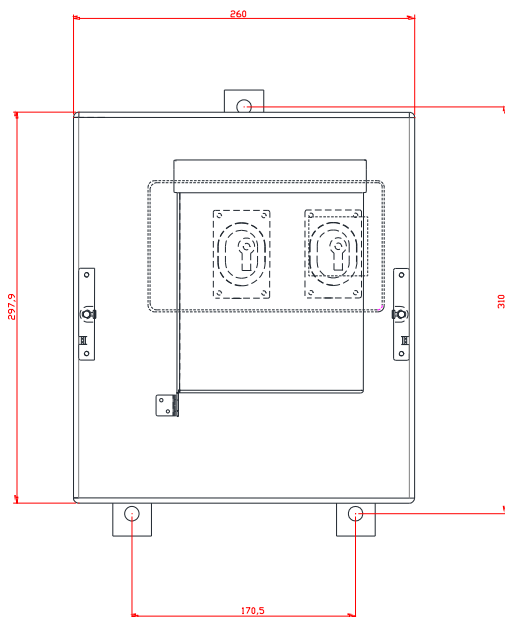
- Locking with 1 to 2 key entries
- Key release by voltage presence
- Contacts 2O-2F + 2NC to control electromechanical relocking.
- Supply voltage 24 and 48 V AC and DC
- Pre-wired terminal block, housing cover with device sealing
- Duty cycle 100%
- CEM Compatible

Options :

- Indicateur de position (Voyant LED)
- Tension alimentation 24V
- BP d'économie d'énergie
- Position indicator (LED- low energy consumption)
- Supply voltage 24V

Material:

- Enclosure and Lock Stainless Steel



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Triangle and EMKA Key Operated switch Back of Board Version



Réf: SDW-VLH1-OF-CE



Characteristics:

- Lock with 1NO+1NC 4 KW rotative switch. 45° rotation.
- Designed for use in emergency enclosure applications
- Automatic spring return mechanism for fail safe operation
- FOB mounting, fitted with water proof gaskets
- Indestructible by mechanical rotation stop
- Triangle key 8 mm Ø16.2 ref: **VLH1**
- Triangle key 7 mm Ø16.2 ref: **VLH1A**
- Triangle key 8 mm Ø18 ref: **VLH1B**
- EMKA key ref: **VLH2**

Material: Stainless Steel 316

Electrical features:

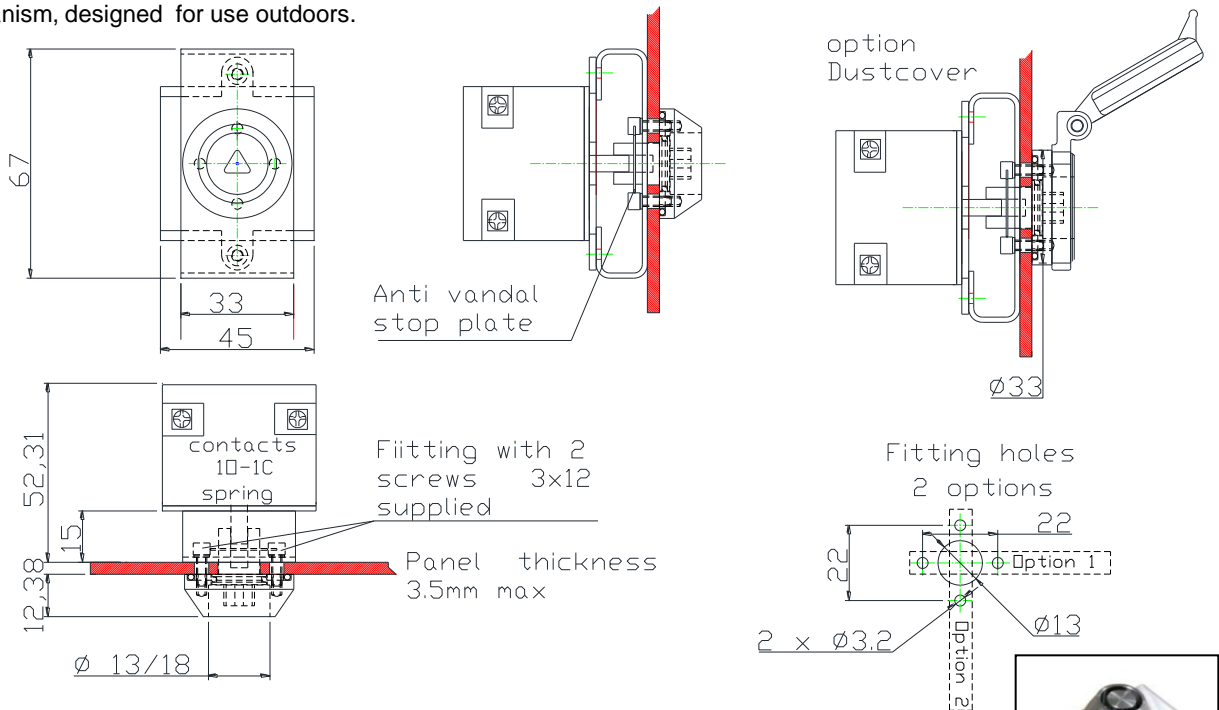
Contacts: 1NO+1NC AC21 16A, AC23 4kW/230V, 7.5/ 400V, AC3 3kW/ 230V, 4 kW/ 400V, spring return operation

Options:

- IP55 enclosure ref: **IP55**
- 2NO+2NC contacts ref: **2O2F**
- Lock dustcover ref : **CE**

Operating Principle:

For both triangle and EMKA switches key free in all positions, spring return operating mechanism, designed for use outdoors.



References examples:

SWL-VLH1-OF: Lock for triangle key 8 mm Ø16.2 with 1NO+1NC contacts, spring return

SWL-VLH2-OF: Lock 1 for EMKA key with 1NO+1NC contacts, spring return

SWL-VLH2-2O2F-IP55: Lock 1 for EMKA key with 2NO+2NC contacts, IP55 enclosure



Ref: SDW-VLH2-OF

Triangle & Emka key Switch lock Front of board version



Ref: SWL-VLH1-OF

Characteristics:

- Lock with 1NO+1NC 4 KW rotative switch. 45° rotation.
- Automatic spring return mechanism for fail safe operation
- FOB mounting, fitted with water proof gaskets
- Indestructible by mechanical rotation stop
- Triangle key 8 mm Ø16.2 ref: VLH1
- Triangle key 7 mm Ø16.2 ref: VLH1A
- Triangle key 8 mm Ø18 ref: VLH1B
- EMKA key ref: VLH2

Material: Stainless Steel 316

Electrical features:

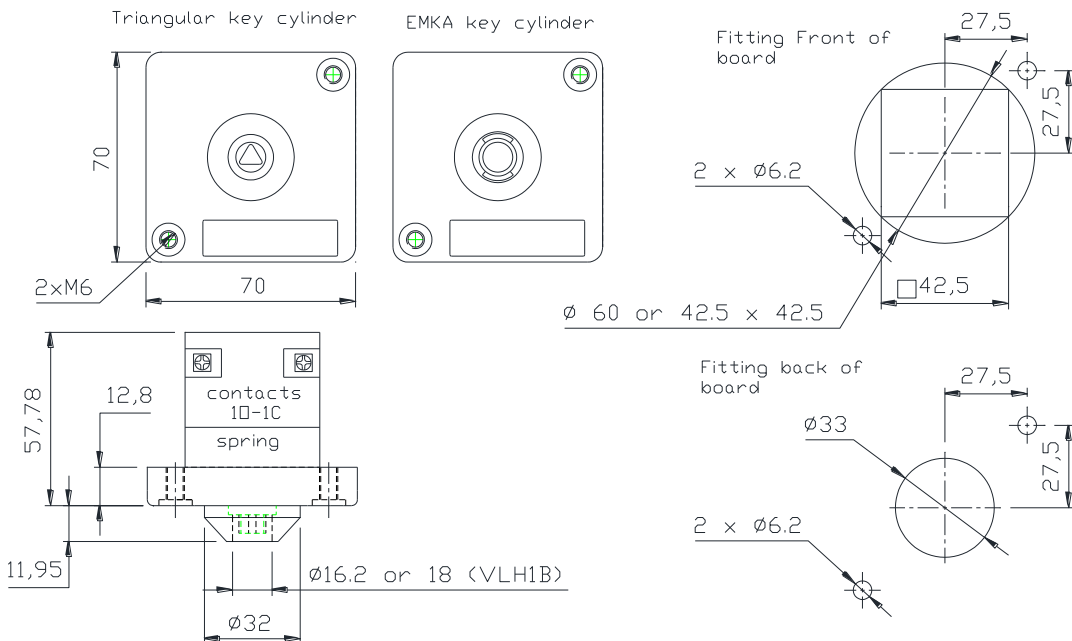
Contacts: 1NO+1NC AC21 16A, AC23 4kW/230V, 7.5/ 400V, AC3 3kW/ 230V, 4 kW/ 400V, spring return operation

Options:

- IP55 enclosure ref: IP55
- 2NO+2NC contacts ref: 2O2F
- For BOB version see ref : SDW VLH1
- For any non-standard requirement, please do contact us

Operating Principle:

For both triangle and EMKA switches key free in all positions, spring return operating mechanism, designed for use outdoors.



References examples:

- SWL-VLH1-OF:** Lock for triangle key 8 mm Ø16.2 with 1NO+1NC contacts, spring return
- SWL-VLH2-OF:** Lock 1 for EMKA key with 1NO+1NC contacts, spring return
- SWL-VLH2-2O2F-IP55:** Lock 1 for EMKA key with 2NO+2NC contacts, IP55 enclosure
- SWL-VLH1B-OF:** Lock for triangle key 8mm Ø 18 with No+NC contact, spring return



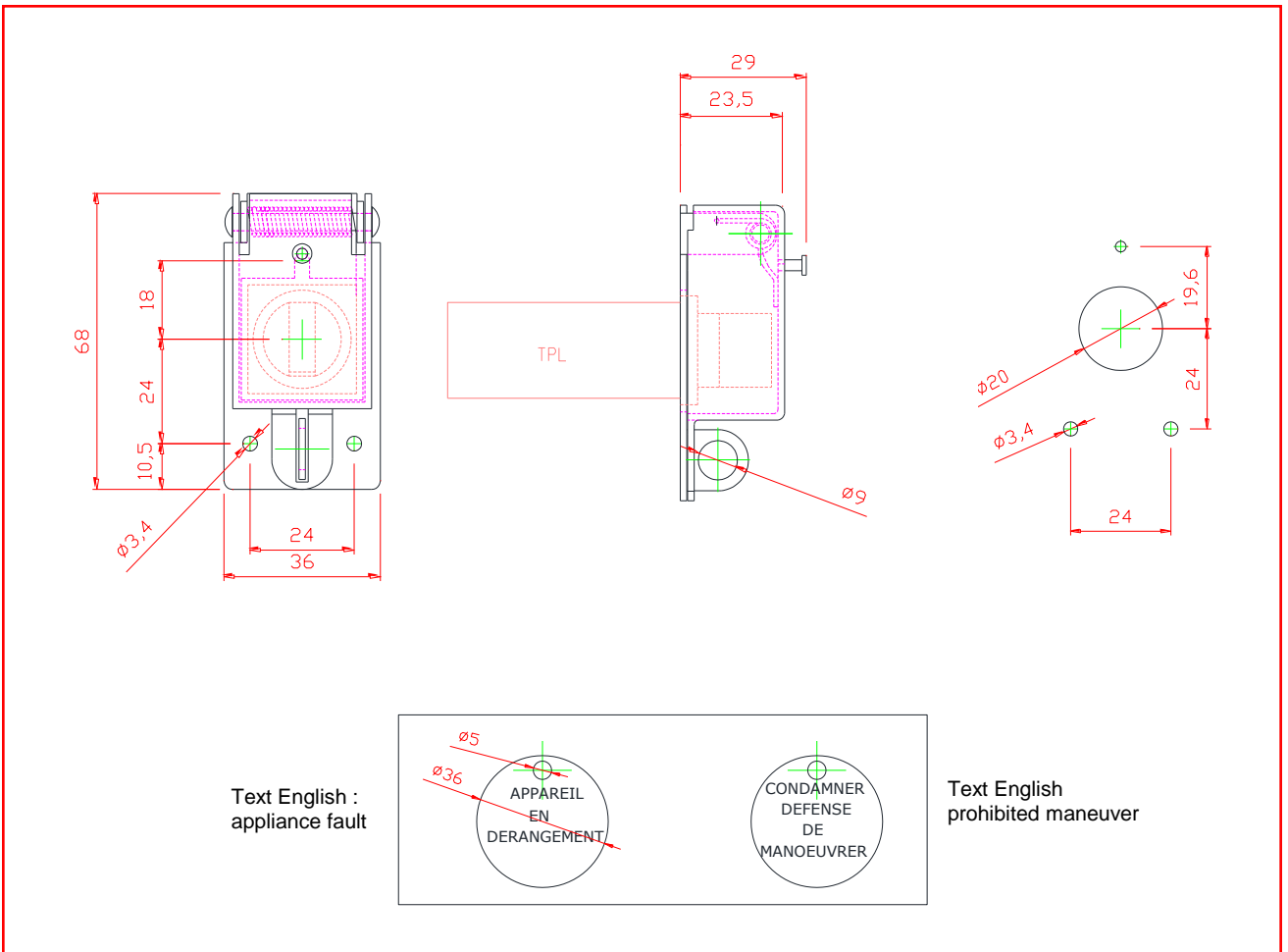
Réf: ES154

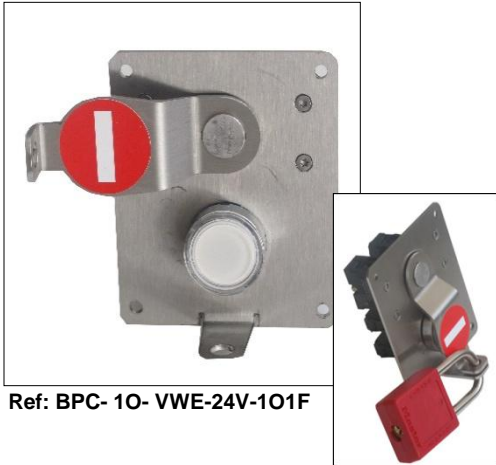
General characteristics:

- Padlock system for TPL 1
- Lockable both positions
- 3 Fixing rivets 3.2 mm in diameter and 8 mm long
- Open lid position by spring return
- Warning plate- diameter 40 mm, thickness 1.5 mm

Material:

- 304L stainless steel cover- epoxycoated red
- Baseplate Platinum 304 L stainless steel brushed
- Fixing with 3 304L brushed rivets, POP aluminum / steel
- Warning Plate – alu- white background/ red Text





Ref: BPC- 10- VWE-24V-101F

General characteristics :

- Safety padlocking device for push button diameter 22, with or without LED, in standard version lock control with 1NO contact ref: **10**.
- Push button contact 1NO ref: **10** , padlock shackle diameter 8mm maximum.
- Color standard: PB without LED : black ref: **BK**, PB with LED white ref: **VWE**.

Electrical characteristics :

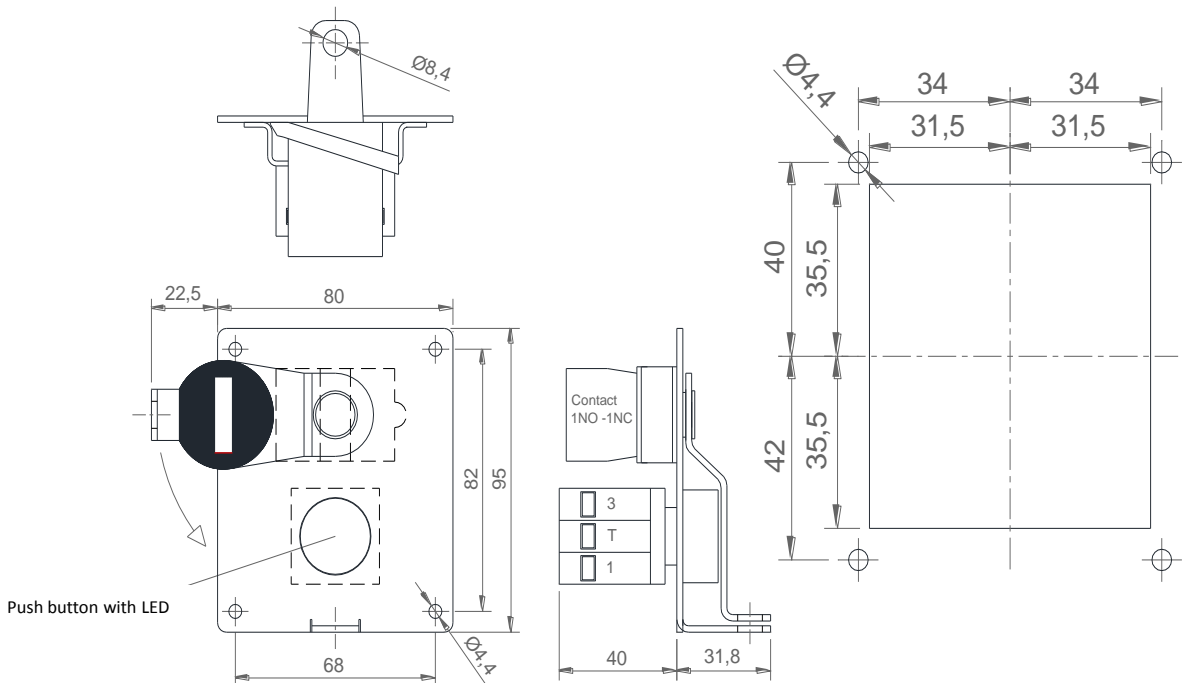
- LED power supply : 24V ref: **2 4V**, 110 volts AC ref: **110V**
- 240VAC ref: **240V**
- Lock contact, Ith: 10A AC15-240V: 3A, DC13-240V/0.27A
- PB contact : DC13-24V: 0.5A, AC15-24V=4A, AC15-240V: 1A
- Operating temperature: - 20° C to 70°C

Options :

- PB without LED: red: **RD**, blue: **BL**, green: **GR**, yellow: **YE**
- PB with LED : red : **VRD**, blue: **VBE**, green: **VGN** , yellow: **VYW**
- Lock contact : without ref: **SC**, 1NO1NC ref: **101F**, **2NO** ref: **20**
- PB contact : 1NO1NC ref: **101F**, **2NO** ref: **20**

Operating principle:

To prevent the use of the push button, turn the lock in the vertical position (contact closed position), install the padlock through the 8 mm diameter holes.



Reference examples:

BPC-10-1F-BK-20: black push button, lock contact 2NO(lock open) , contacts PB 2NO

BPC-SC-VWE-240V-101F-: White push button with LED power supply 240Volts , lock without switch , PB contacts 1NO-1NC



Ref: 406REDLFR

Characteristics:

- Designed exclusively for Lockout/Tagout (LOTO) applications
- Plastic shackle helps prevent electrocution and arc flashing, also prevents electrical current from shackle to key
- Key retaining-ensures that padlock is not left unlocked
- 1-1/2" (3.8cm) wide 1-3/4" (4.4cm) tall Thermoplastic red body, plastic shackle w/1-1/2" (3.8cm) clearance



Ref: 410REDLFR

Characteristics:

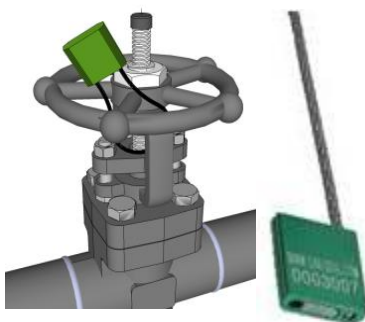
- Designed exclusively for Lockout/Tagout (LOTO) applications
- 1-1/2" (3.8cm) wide 1-3/4" (4.4cm) tall Thermoplastic red body, shackle w/1-1/2" (3.8cm) clearance
- Durable, lightweight, non-conductive Thermoplastic lock body
- Customize on-site with permanent, write-on labels
- Key retaining-ensures that padlock is not left unlocked



Ref: CAD-ROn

Characteristics:

- Solid brass body
- Hardened Steel shackle – Double locking
- Replaceable cylinder
- Quick installation
- Brass Key
- Shackle diameter 8 mm -hight 56mm
- Body 47 x 50 x 27 mm



Ref: CLO-1000/3.5PTGRN

Carseals (Only for valves)

Characteristics:

- Car seals are a simple device for locking valves in the OPEN or CLOSED positions.
- Ideal for long term uses, each car seal is self locking so once the cable passes through the body, the only way to remove it's by cutting.
- All seals are individually numbered to allow easy identification.
- Supplied in packs of 10.

SECULOK – Trapped Key & Safety Gate Switch

Ref: ASCL-1E
Solenoid controlled access lock



Ref: SWL-202F
Key switch lock



Ref: EXL4E-1/3
Key exchange unit



Ref: BLT-HC-CE
Consignation lock with padlock

RONIS – For safeguarding HV/MV equipment Switchgear-Breakers-Transformers



Ref: EL11AP
Bolt lock



Ref: ELP1
Access lock



Ref: ELC
Key exchange unit



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