AREL

YOUR SAFETY PARTNER

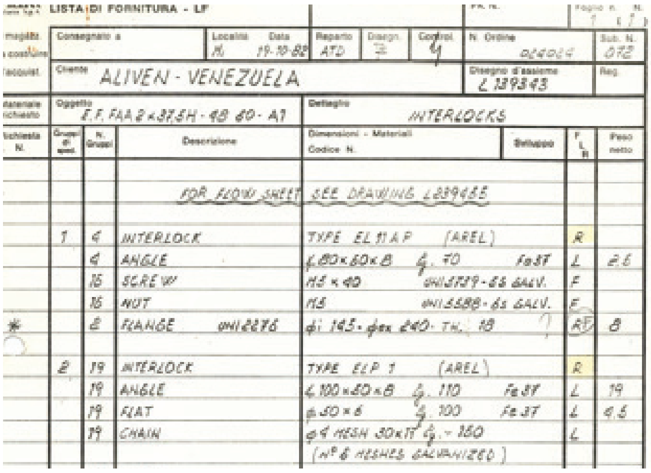
SAFETY INTERLOCKS

PRODUCT CATALOGUE 2025 - 2026


"It always seems impossible
until it's done."

The Company

The company, born in 1965, has over 60 years of experience in the market of handles, locks and mechanical interlocking systems production for MT/AT electric implants. The lock brand AREL® is largely recognized as the setting reference of mechanical and electromechanical interlocks. Quality and flexibility in the production of personalized solutions are strength points that gave us the opportunity to occupy a significant, and constantly growing, place in the market.



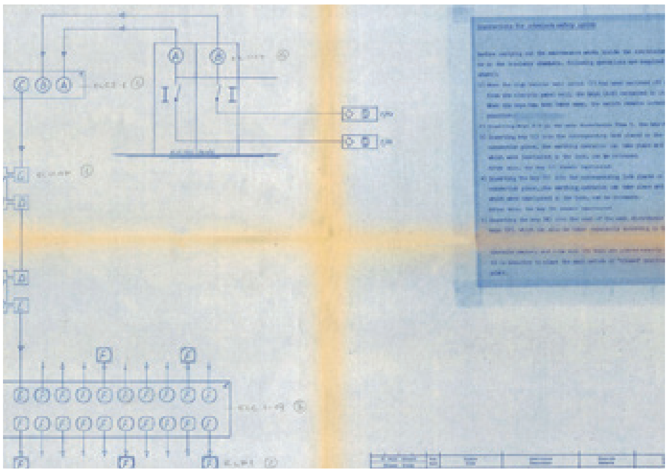
LISTA DI FORNITURA - LF

Consegnato a — Località: N. — Data: 19-10-82 — Reparto: ATD — N. Ordine: 02ε0ε4 — Sub. N.: 072

Cliente: ALIVEN - VENEZUELA — Disegno d'assieme: L 239343

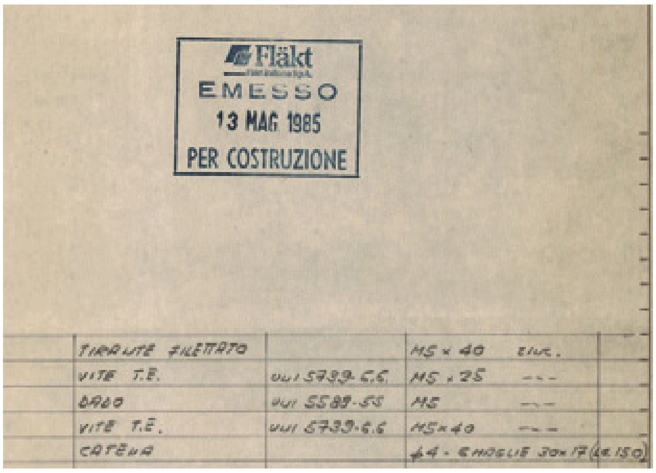
Oggetto: E.F. FAA 2×37,5H - 48 60 - A1 — Dettaglio: INTERLOCKS

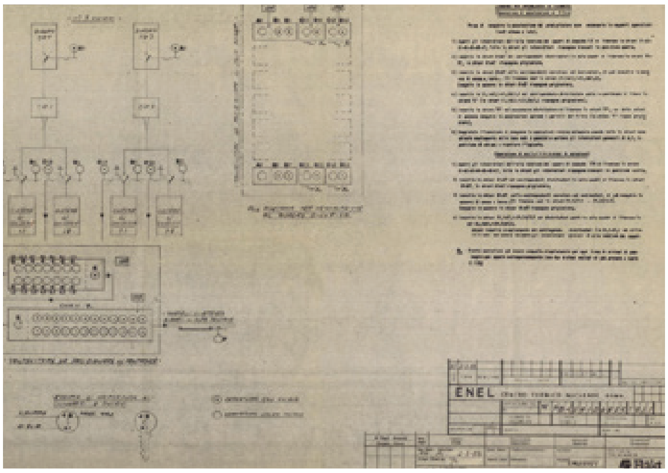
Gruppi di spedi.	N. Gruppi	Descrizione	Dimensioni - Materiali Codice N.	F L R	Peso netto
		FOR FLOW SHEET	SEE DRAWING L239455		
1	4	INTERLOCK	TYPE EL 11 A P (AREL)	R	
	4	ANGLE	L 80×80×8 lg. 70 Fe37	L	2.6
	16	SCREW	M5×40 UNI5739-65 GALV.	F	
	16	NUT	M5 UNI5588-65 GALV.	F	
	2	FLANGE UNI2276	ϕi 145 - ϕex 240 - TH. 18	RF	8
2	19	INTERLOCK	TYPE ELP 1 (AREL)	R	
	19	ANGLE	L 100×50×8 lg. 110 Fe37	L	19
	19	FLAT	ϕ 50×6 lg. 100 Fe37	L	4.5
	19	CHAIN	ϕ4 MESH 30×17 lg. ~ 180 (Nº 6 MESHES GALVANIZED)	L	



Project of 1982, made in Venezuela. Arel interlocks are included in the design specification.

Frigo Tullio has founded **NEW AREL Srl** in April 2013 as a natural evolution of a multiannial leadership. Such leadership was already established by the **AREL®** brand, reference point in the design of interlock systems. New Arel, following the know-how mastered during the course of years, today can count on the professionalism of its highly qualified collaborators. From designers to technicians, from testers to operators, the company operates with competence and expertise with the objective to guarantee systems capable of preventing accidents caused by human errors. We are qualified as suppliers of the main producers of plants for the production and the distribution of electric energy and of the rail sector.





Project of 1985, made for Enel. Arel is again specifically requested in the safety specification.

History

1965

The beginning of a wonderful entrepreneurial journey in our first location, a basement on Via Telesio in Milan.

1969

AREL introduces for the first time in Italy the installation of high-voltage cables using the “pre-corded” cable system, an innovative technology that increases capacity and speeds up installation times. The pilot project was carried out in Pavia.

1971

AREL distributes Ronis France mechanical interlocks in Italy.

‘70

Copper-aluminum cable lugs, hinges, and enclosures locks are just some of the products through which AREL strengthens its presence on the national market.

‘70

A safety interlocking system requires targeted solutions and customized products for specific applications and installations. AREL begins manufacturing interlocks in-house.

1980

The relocation of the headquarters to Via Carnevali, with a total area of 500 m², marks a significant step in AREL’s growth. The company becomes the leading reference in Italy for mechanical interlocking safety systems, and the term “Arel lock” begins to spread throughout the electromechanical sector.

‘90

AREL goes beyond national borders and becomes one of the first Italian companies to invest in the web, launching its website arelfrigo.it. Its reputation grows to the point that international players entrust it with the design and supply of interlocking systems for major industrial plants.

2013

NEW AREL SRL is established through the transfer of a business branch from AREL di Frigo Tullio. A period of strong international growth begins, leading to the development of commercial partnerships with agencies in America, China, and the USA.

2014

AREL® is a registered trademark that can proudly claim to have reached and sold in all five continents.

2016

New investments in technology, including the introduction of laser marking, demonstrate AREL's commitment to offering the highest level of customization to its customers. The "Tailor Made" approach and the "AREL way" become synonymous, highlighting the company's dedication to providing bespoke solutions and a distinctive approach within the industry.

2018

The complete renewal of the brand image and product range is an important step to maintain competitiveness and market relevance. In addition, the establishment of the "Safety Engineering" department highlights AREL®'s ongoing commitment to providing advanced and reliable safety solutions.

'00

It is clear that AREL's products are widely used and recognized as a benchmark in the Italian market: some items have become so strongly associated with the company that, in technical jargon, they are referred to by the company's name itself, for example, "Serratura Arel" for a door interlock and "Chiaviere Arel" for a key distributor.

2015

AREL® celebrates its 50th anniversary and obtains ISO 9001 certification.

2017

AREL®'s entry into the Heavy Duty interlock market marks a significant step in completing its product range and meeting the needs of the international market. This move demonstrates AREL®'s ability to adapt to industry demands and expand its presence in the safety systems sector.

2023

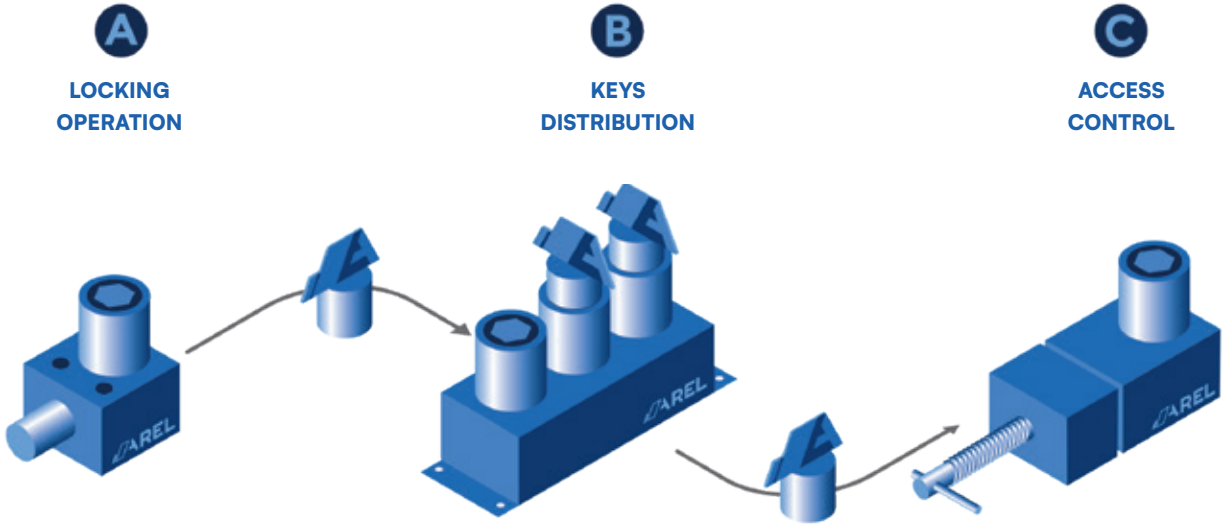
A new relocation takes place with the move to Novate Milanese, into a 1,000 m² facility.

2025

AREL® celebrates its 60th anniversary.

Safety interlocks

An interlock is a closed and interconnected system of locks and elements for the sequential distribution of keys.



Description

The fundamental element of the word “interlock” is the prefix “inter”, through which the idea of interconnection of elements and sequentiality of the key distribution is conveyed. Without interconnection and sequentiality, we lose the systemic dimension which differentiates interlocks from simple locks.

Through interconnections and sequentiality of key distribution it is possible to design infinite mandatory sequences of actions. These sequences constitute the physical expression of safety procedures for the blockage of the equipment/machinery in the occasion of inspections and maintenance.

Companies have only two options: leave the application of safety procedures to the conscientiousness of the operators, or, thanks to interlocking, integrate them into the technical system and the working environment. Interconnecting creates rigid sequences of activity and access which reduce the discretional actions of workers to zero, generating the maximum safety for both workers and equipments during blockage procedures for inspections and/or maintenance. Maintenance is the most frequent application context for interlocks, which contribute in significantly reducing the number of injuries and deaths on the job.

Arel interlocks are exclusively mechanic or electromechanic. This choice is strictly related to their safety functions, this way reducing the error rate to the minimum, lower than electric or electronic locks, and not generating false positives. In other words they may break but, differently from electric or electronic blocks, they never allow the starting of incorrect and potentially dangerous procedures.

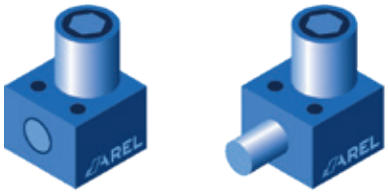
How interlocks function

In order to fully comprehend the great applicative potential of interlocks it is necessary to further explore the functioning mechanisms, that is the way in which the interconnection between the elements of the system and its unequivocal dimension is generated.

Starting point of the system, which is composed by at least two elements, is the functioning mechanism of the single lock and its correct installation. Overlooking the aspects related to the installation, which are important but represent an exogenous variable, we will focus on the lock functioning and we will analytically describe the dimensions of singularity and interconnection between locks which create the uniqueness of the system.

The first dimension of uniqueness lies in the fact that every lock has its own key, expression of a variant among thousands possible combinations. For this reason each key

can be considered unique as it is the only one (together with its copies, if requested by the customer) containing the sequence required to open the lock. This dimension guarantees that, during the passage from one element to the other, the "witness" is unequivocally linked to this element of the system.
The second dimension through which uniqueness and interconnection are created is constituted by the functioning mechanism of each single element of the system (the tumbler) which has two possible positions:

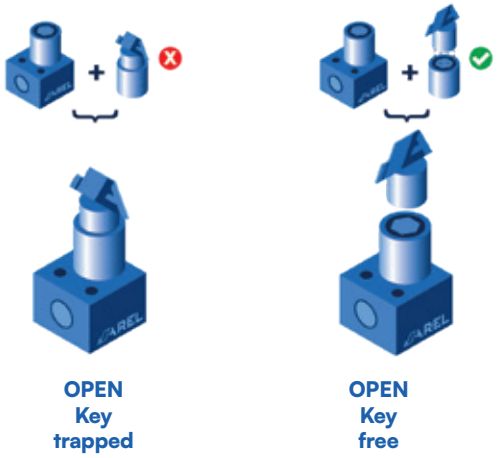


Open **Closed**

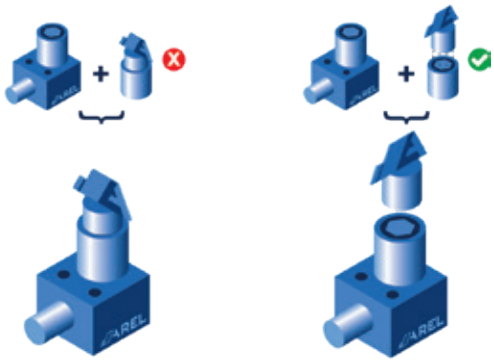
These two positions represent the founding elements of the interlocking language, to which are associated two states:

Key trapped **Key free**

Through the combination of the first two positions (**Open - Closed**) it is possible to unequivocally define the position of the single element, and through the combination of the two states (**Key trapped - Key free**) it is possible to activate the interconnection with the other elements of the system.

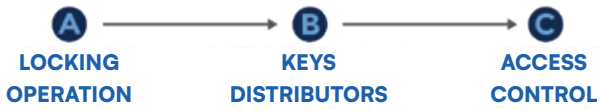


OPEN Key trapped **OPEN Key free**



CLOSED Key trapped **CLOSED Key free**

The single elements of the interlocking system are classified in three macro-families of products, differing in their function:



The **LOCKING OPERATION** is the element allowing the isolation of the danger for the worker, being it electrical or mechanic. Through this isolating action the non-dangerous condition of the system is guaranteed.

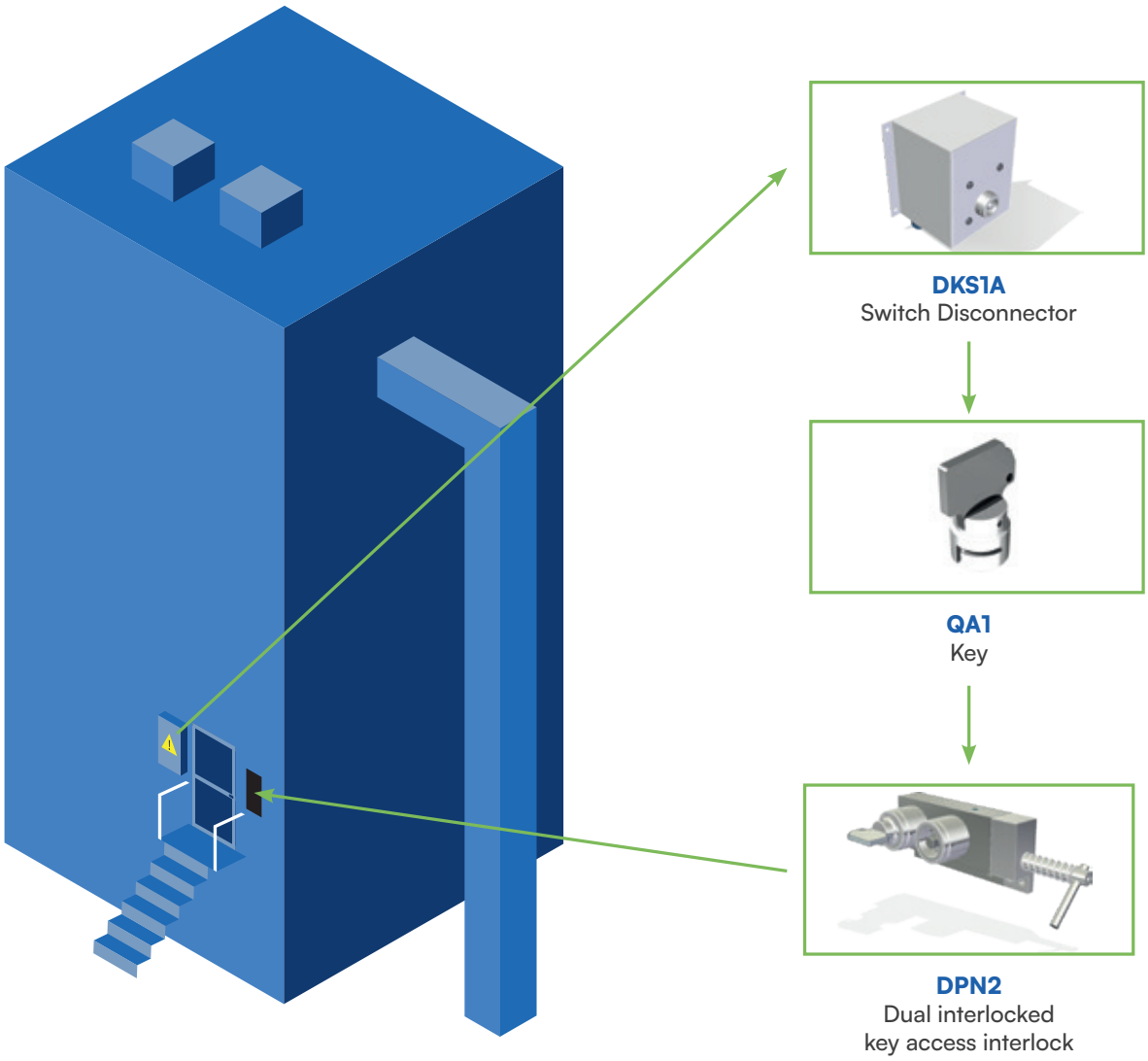
The **KEYS DISTRIBUTION** is the element allowing to physically and logically interconnect the elements of the system, building connections and multiplying them between the bolt block and the door block.

The **ACCESS CONTROL** is the element regulating the access to the potentially dangerous equipment/machinery on which to operate the inspection or maintenance procedure.

APPLICATION EXAMPLES

ISOLATION

Integrated security system for access control to hazardous areas

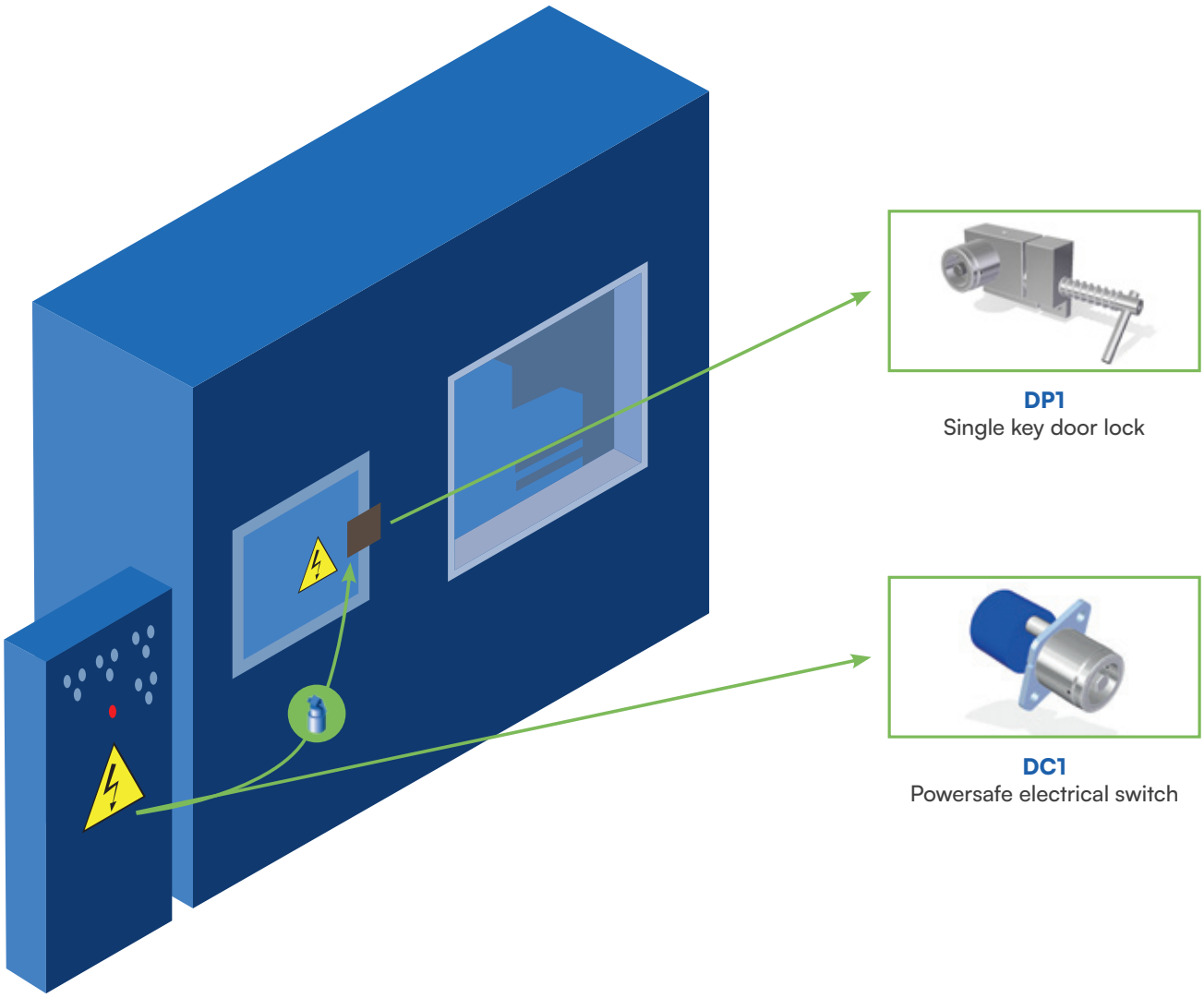


Application description

The key switch for disconnectors has been designed to function as part of an integrated safety system combined with access control to hazardous areas. Typical machines that use the key switch on disconnectors are those at high risk, where complete power isolation is required before access is allowed.
The removal of the key from the operating lock (disconnector key switch) changes the power supply conditions of the machine, putting it in a safe state. This key can then be removed and used to unlock access via the door release lock. In this way, the access door can only be opened when the power supply has been cut or otherwise switched to safe conditions. The machine cannot be restarted until the door is closed and the key is removed to be reinserted into the operating lock (disconnector key switch).

ISOLATION

Machine Guarding



DP1
Single key door lock

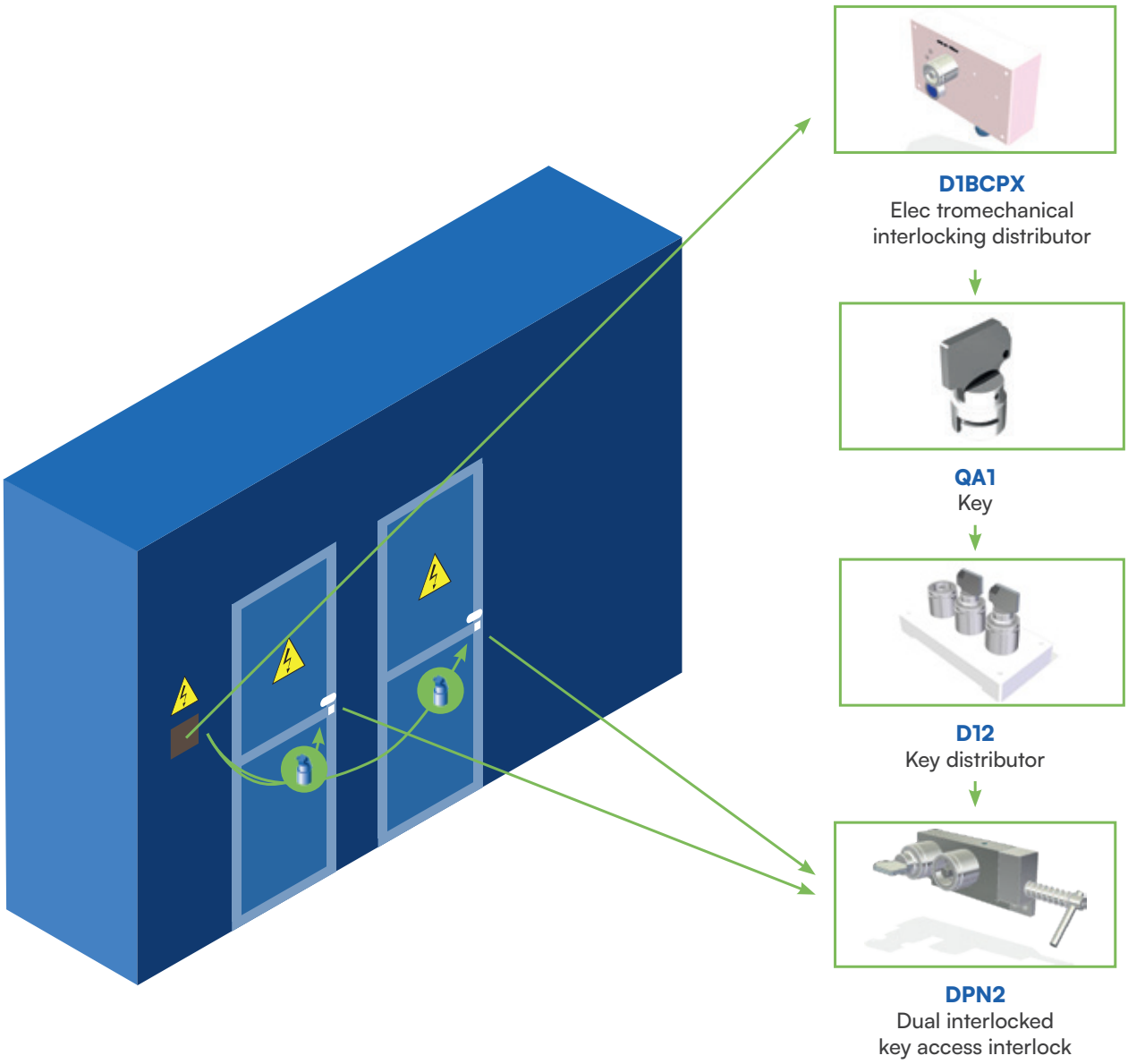
DC1
Powersafe electrical switch

Application description

A typical application for the protection of environments and machinery with a single access point involves the use of an electrical switch with single-key operation. It is usually used in conjunction with a single-key access unlocking device. The key-operated electrical switch interrupts the machine's safety circuit, ensuring that the machine is locked when the key is turned and removed. The key can then be inserted into the access unlocking lock to open the door or trapdoor. The machine cannot be restarted until the door is locked again, the key is removed, and returned to the electrical operating lock.

ISOLATION

Protection of machinery with multiple access to hazardous areas

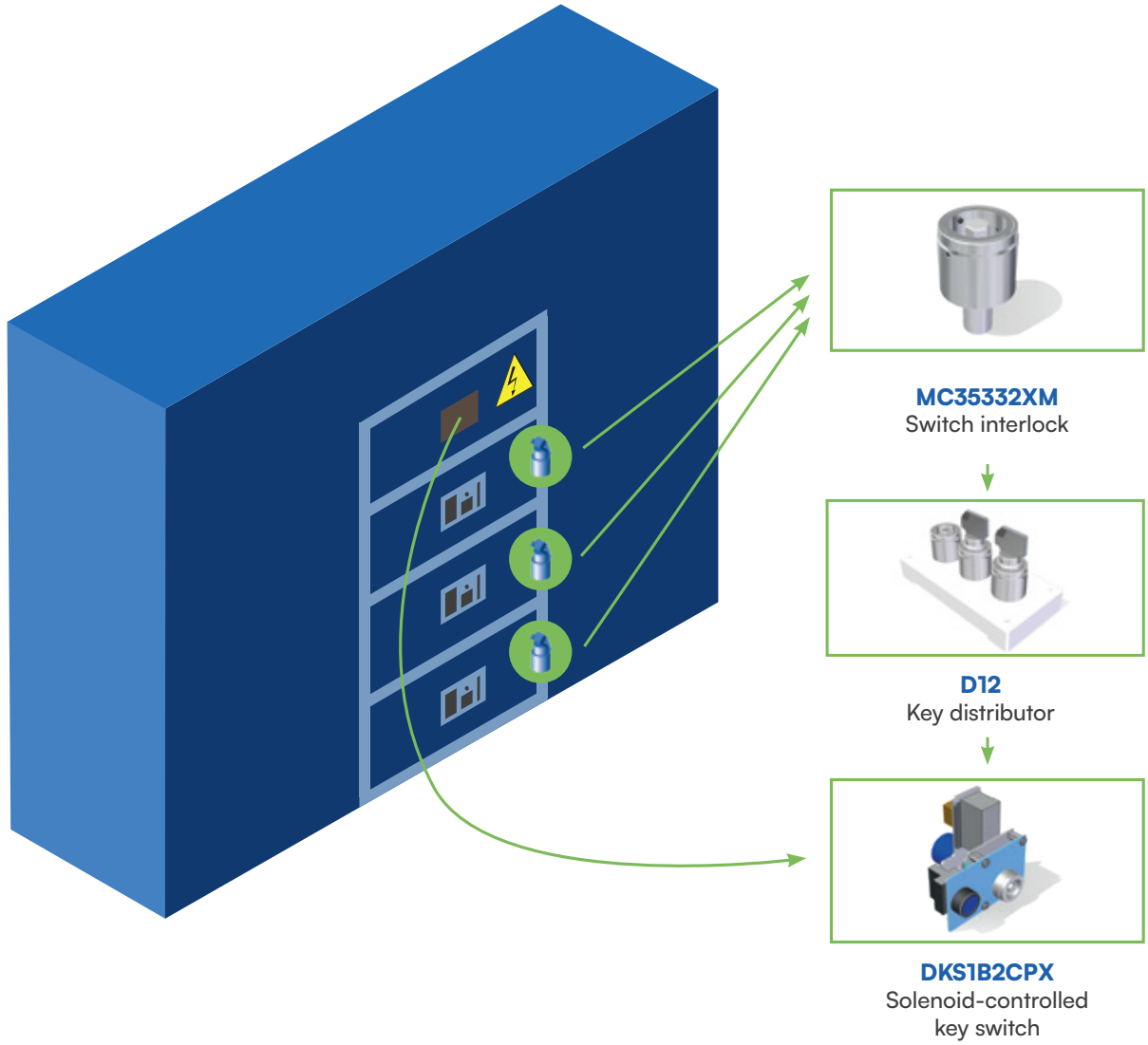


Application description

A typical application for the protection of environments and machinery with multiple access points involves the use of an electrical operating lock in combination with a key exchanger and a single-key or double interlocked key access device for full-body entry.
The typical interlocking system operates by isolating the machinery and controlling access to hazardous areas. The removal of the power isolation key from the interlock changes the condition of the power supply to the machinery, putting it in a safe state and enabling the release of keys to personnel. These keys can then be used to unlock single- or double-key access locks.
Only when all the keys have been reinserted into the key exchanger can the isolation key be released to restart the machine.

ISOLATION

Access control for uninterruptible power supply (UPS) systems

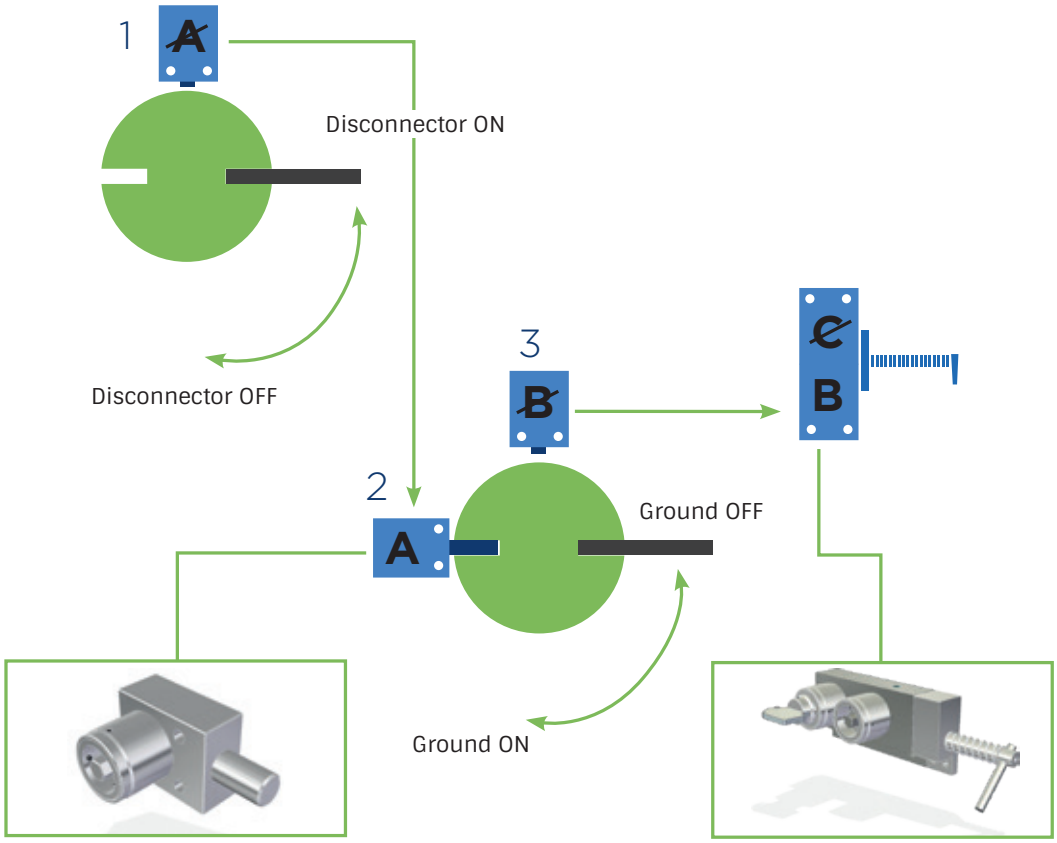


Application description

A typical application for controlling the maintenance bypass procedure of an uninterruptible power supply (UPS) is the use of a solenoid-locked key switch.
The purpose is to prevent the UPS from being improperly taken offline during maintenance operations.
Under normal operating conditions, the maintenance output switch is closed and the critical load is supplied through the UPS. The interlock ensures that the maintenance bypass cannot be activated until the UPS has been put into bypass mode. Only in this condition does it become possible to transfer control and proceed with the next operation.
The transfer sequence thus achieves the intended result: it guarantees continuity of power to the critical load through the maintenance bypass switch, without the risk of accidental disconnections or incorrect procedures.

ISOLATION

Security systems for safe control of switches or valves that prevent access to dangerous areas



DB11
Bolt interblock

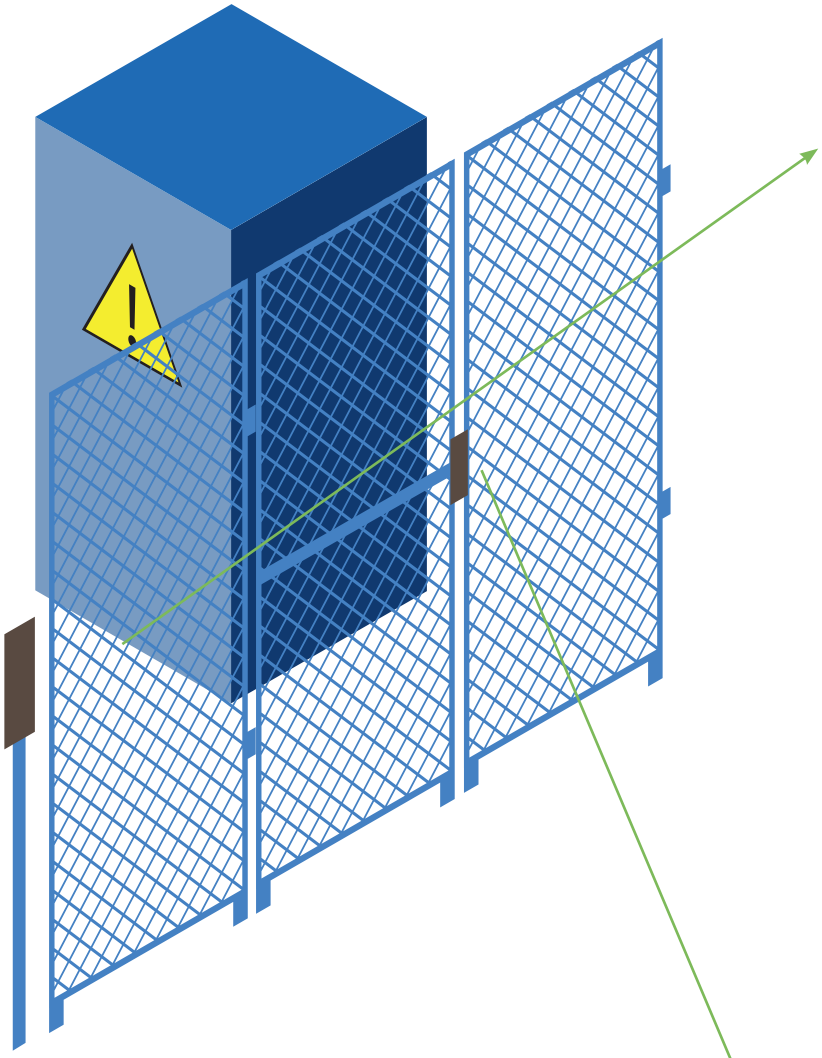
DPN2
Dual interlocked
key access interlock

Application description

These are safety systems that use mechanical key interlocks. While the system is powered, the access doors to the hazardous area remain locked. Key A is trapped in lock (1) while the process is active and the line is energized. To access the hazardous area, the disconnector is moved to the OFF position and bolt A is advanced, locking the disconnector in the open (OFF) position. Key A is then removed and taken to the grounding switch. By inserting and turning Key A in the second lock (2), the operation of the grounding lever is released. Once rotated, the slot on the lever aligns with the next lock (3), where Key B is trapped. Key B can now be removed from lock (3), locking the lever in the closed position and ensuring that the earth connection cannot be interrupted. The system is now isolated and earthed, and Key B can be used to operate the access unlocking lock on the door to the hazardous area.

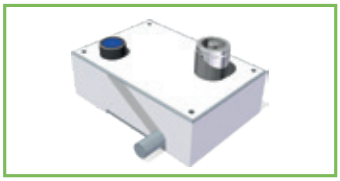
ISOLATION

Integrated security system that controls access to hazardous areas with time delay



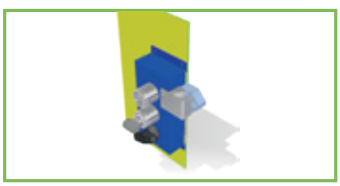
DC1
Powersafe electrical switch

QA1
Key



D11BCPXT
Electromechanical interlocking distributor

QA1
Key



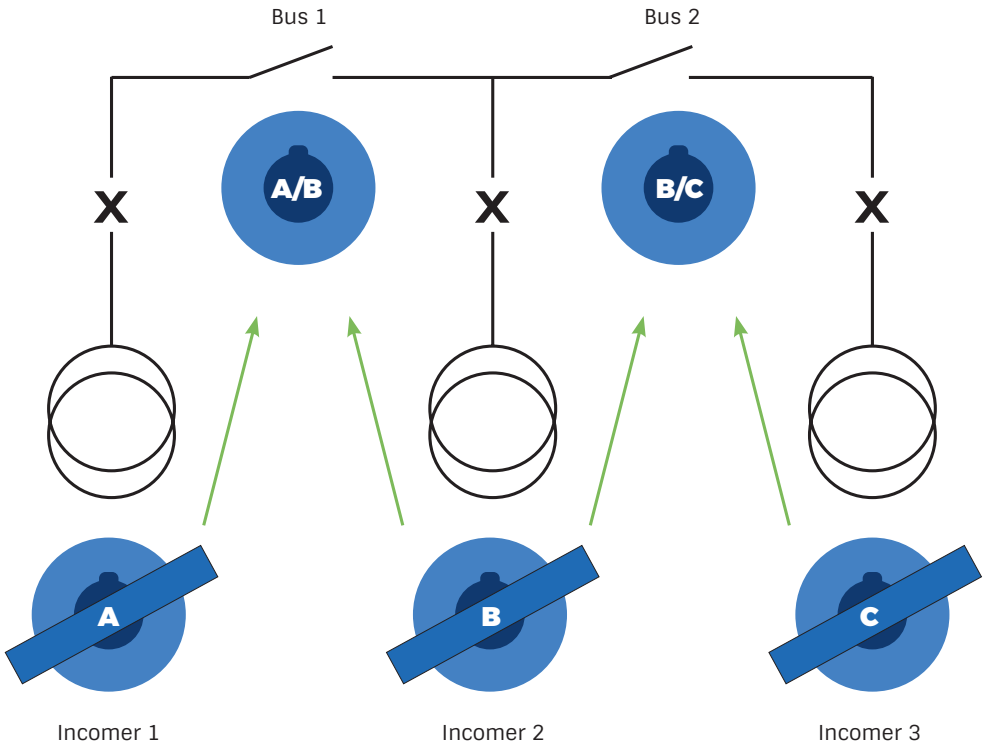
DAPN2
Antipanic-bar door lock

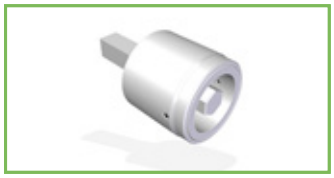
Application description

In a typical application, the mechanical time delay unit is designed to operate as part of an integrated safety system controlling access to hazardous areas. Releasing the isolation key (Key A) from a key switch, e.g. DC, cuts off power to the machine. Key A is then inserted into the time delay unit and activated, starting the timer. After the timeout period has elapsed, another key (Key B) can be released (the delay must be longer than the machine's stopping time). Key B can then be taken to the DAPN2 access interlock, allowing the machine room door to be opened. The machine cannot be restarted until the door is closed and the key is returned to the key exchanger.

ISOLATION

Need to ensure that more arrivals are not put in parallel





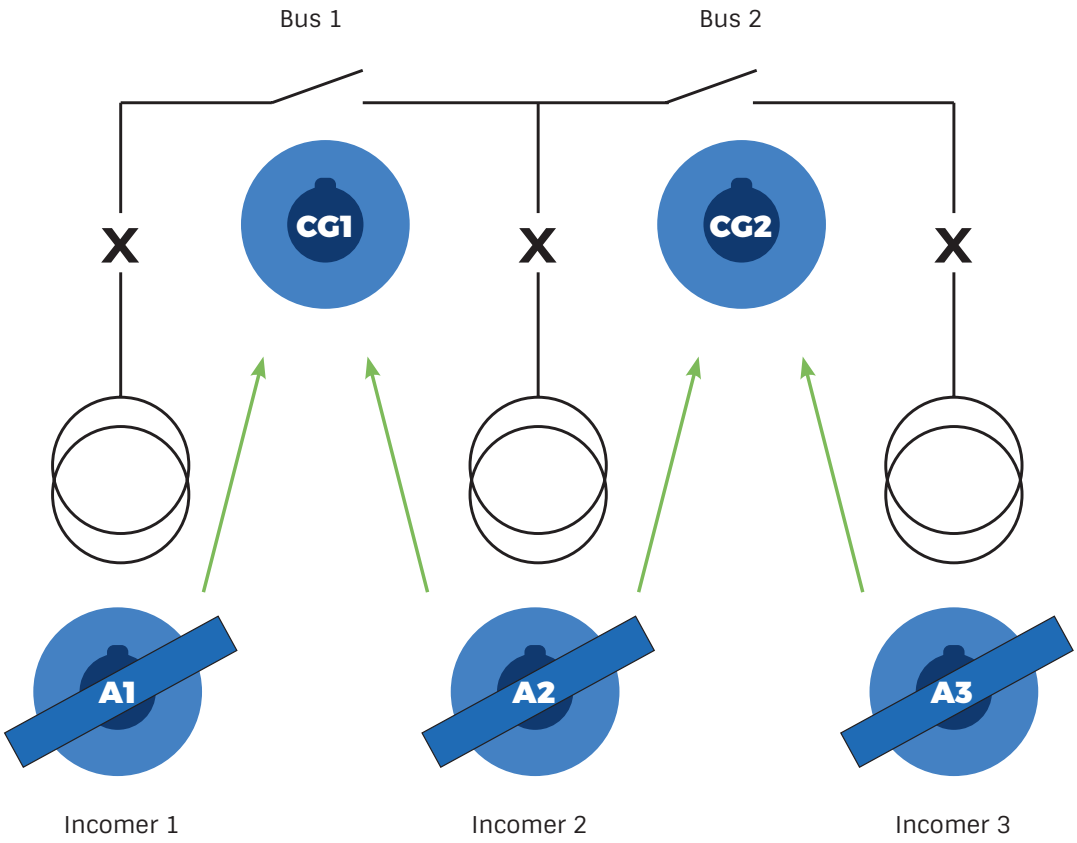
MC3533
Switchgear Interlock

Application description

MC interlocks can be used to ensure that multiple incomers are not paralleled. When all incomers are closed, the busbars remain open. In this example, to close Bus 1, either incomer A or B must be opened. The key is removed from incomer A or B (locking it in the open position) and inserted into the A/B bus switch.
To close Bus 2, either B or C must be opened and the corresponding key (B or C) transferred to the B/C switch.

KEY EXCHANGE BOXESES

Ensure that there are no more power supplies to the bus bars in the electrical cabinet



Application description

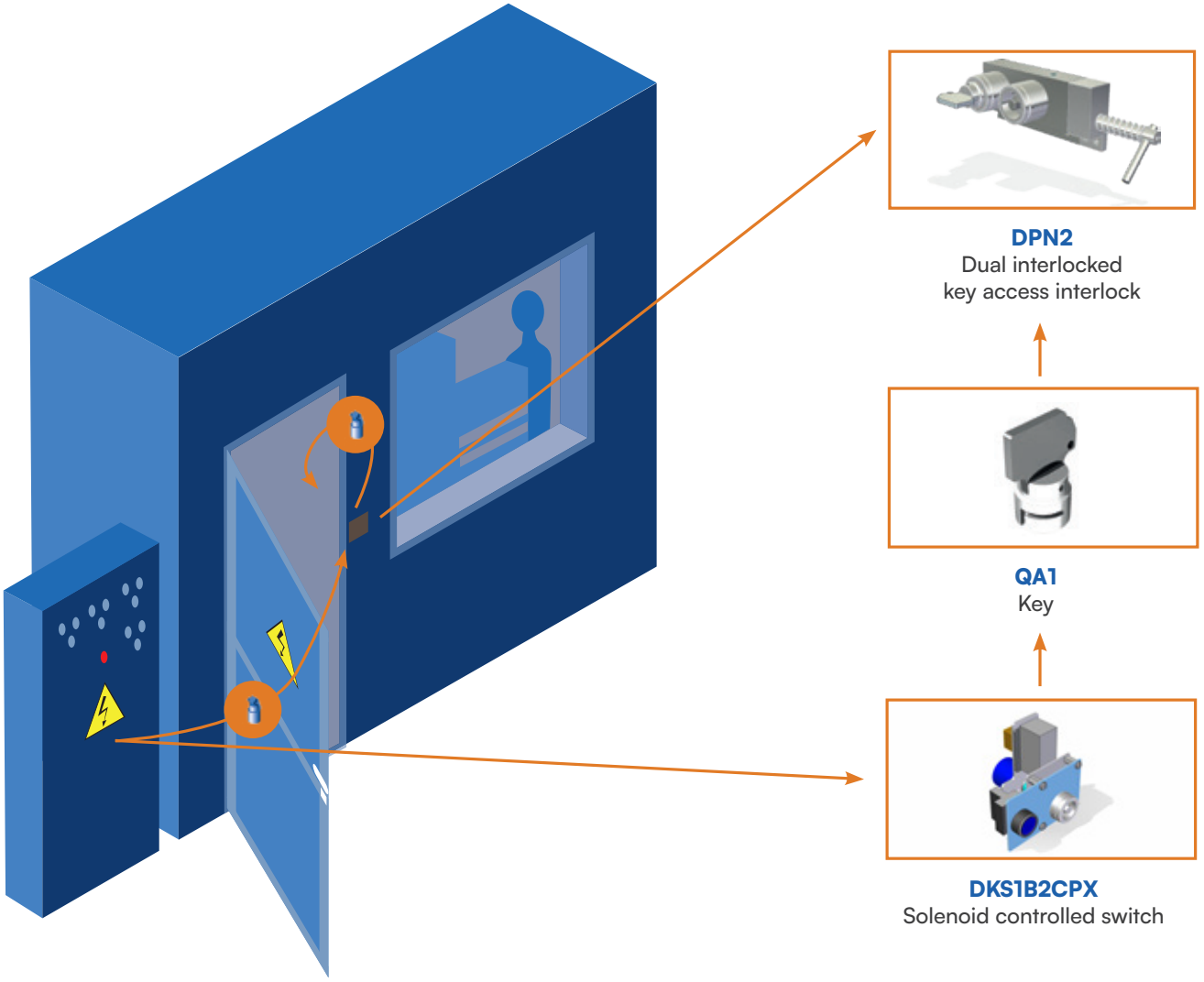
In the application shown in picture, key A1 will work for arrival 1, key A2 will work for arrival 2 and key A3 for arrival 3. key CG1 operates the bus tie 1, while key CG2 operates the bus tie 2. To an inserted key, the corresponding switch is closed.
The system shown is in position 1 (see table) and has closed arrivals and open junctions. To change the system to condition 2, key A1 is inserted into the distributor and the selector knob is moved to condition 2. In this position, the key CG1 can be removed and busbar switch CG1 closed.

	A1	A2	A3	CG1	CG2
Pos 1	F	F	F	T	T
Pos 2	T	F	F	F	T
Pos 3	F	T	F	F	T
Pos 4	F	T	F	T	F
Pos 5	F	F	T	T	F

F= Free Key (key inserted in the switch)
T= Trapped Key (key locked in the key exchanger = switch open)

ACCESS CONTROL

FULL BODY ACCESS
Machinery protection with full access to the hazardous zone (not visible operator)

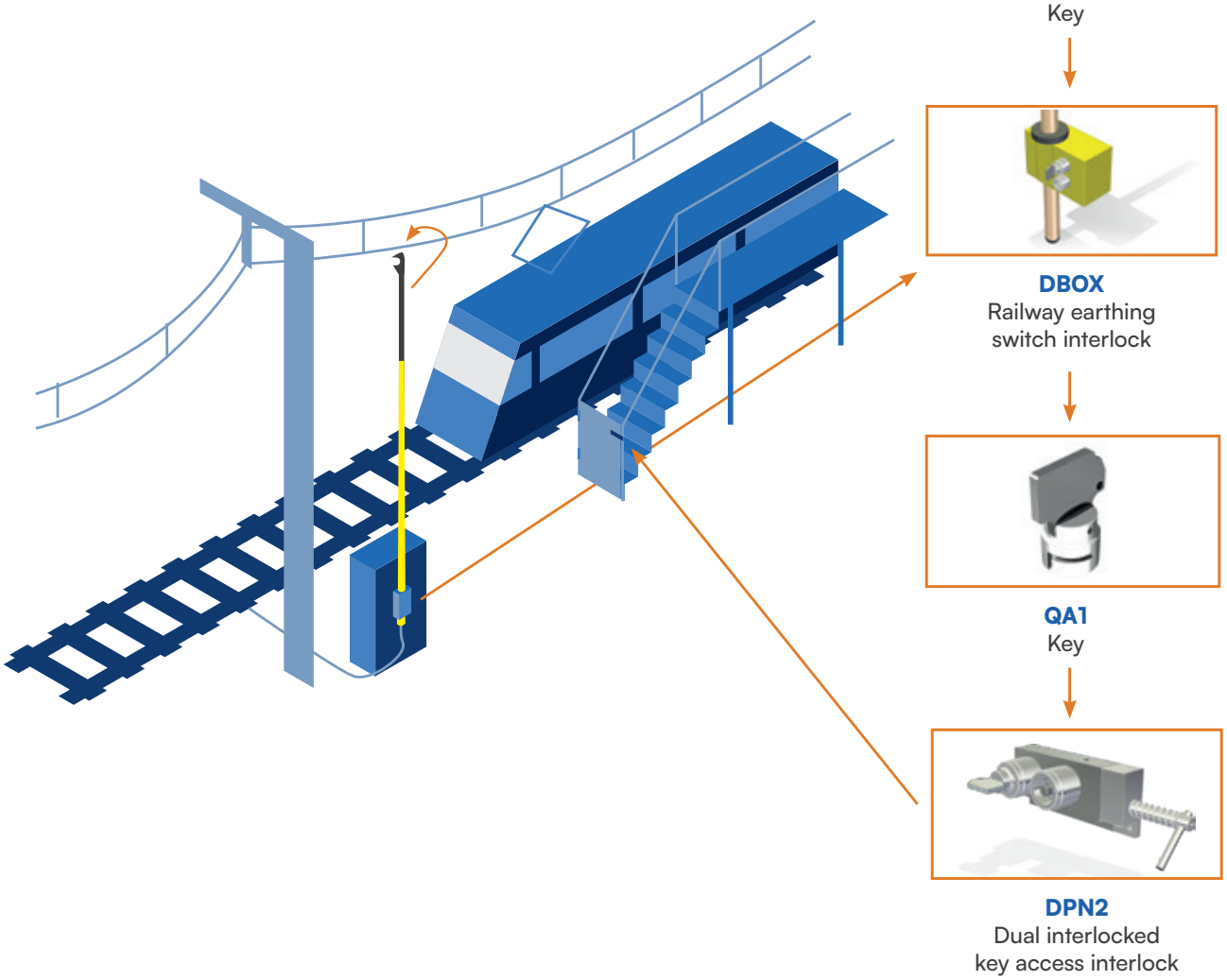


Application description

A typical application in the control activity of machinery with full body access, involves the use of the interlock with a double interlocked key for the protection of personnel from the possibility of access before the machinery is deactivated and subsequently that the operator may be inadvertently closed in the dangerous area. The dual-key access interlock is used as part of a security system, which ensures that a machine is stopped before access to the hazardous area.
The system provides a key switch for power supply. Removing the isolation key from the key switch isolates the power supply to the machine. This key is transferred to the interlock with a double access key and inserted into the lock. This allows the door opening and the release of the personal key and slides the side bolt, which traps the isolation key. The personal key is then brought to the hazardous area by the operator to protect himself against accidental starting.
The machine can not be restarted until the personal key is returned, the bolt is reinserted in the dual key interlock and the isolation key is removed and returned to the key switch.

ACCESS CONTROL

Maintenance protection railway with full body access to hazardous area (not visible operator)

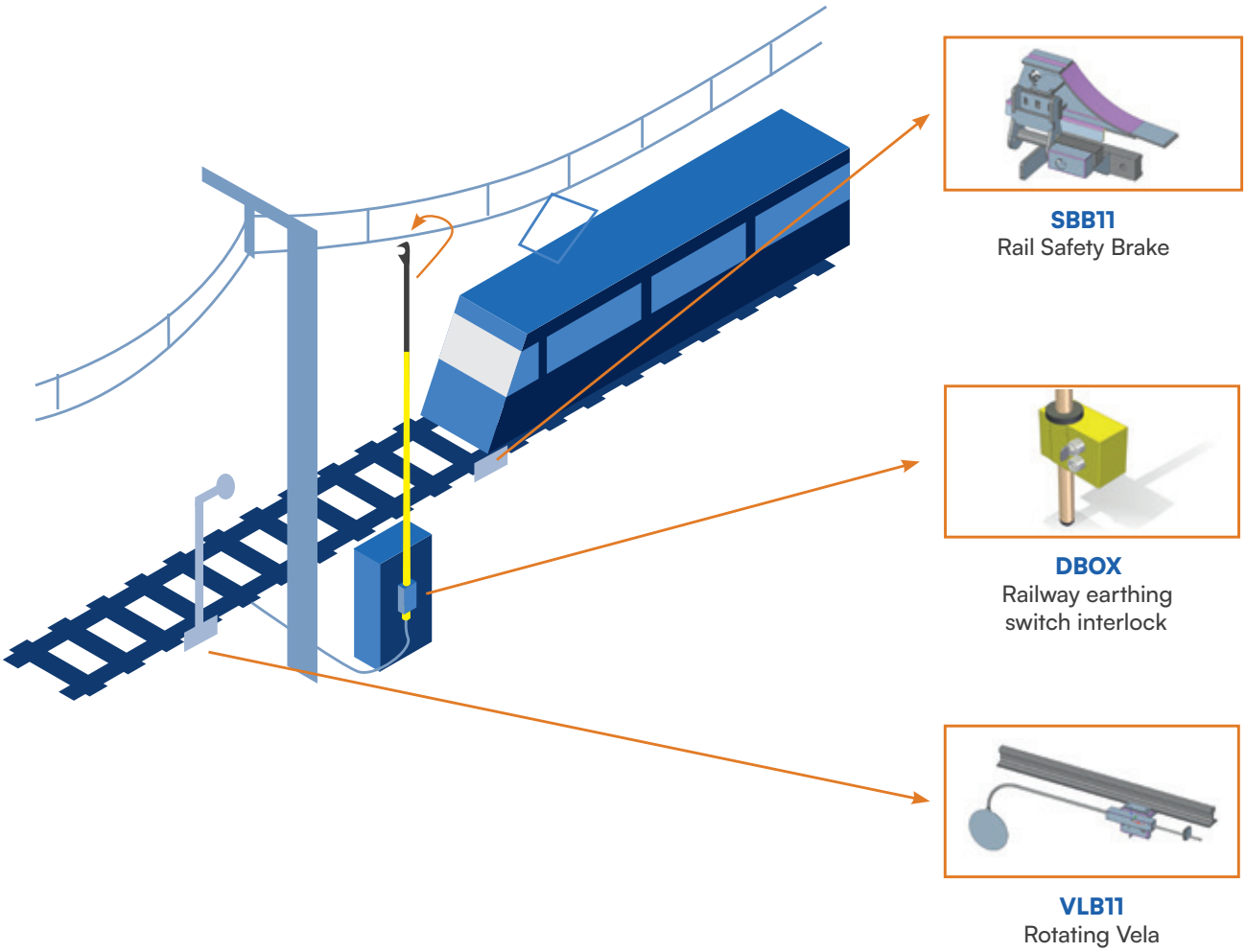


Application description

A typical application in railway maintenance activities involving full body access uses a double key access interlock to protect personnel from entering the hazardous area before the traction power has been switched off and to prevent it from being inadvertently re-energized while work is in progress. The double key access interlock is used as part of a safety system that ensures traction power shutdown and earthing before access to the danger zone.
The system includes a switching box (often with three keys) for electrical power supply. Removing the isolation key from the switch cuts off the power supply. This key is then transferred to the double key interlock (Railway Earthing Switch Interlock - Secure Box) and inserted into the lock. This allows the release of both the earthing stick and the key to open the double key access lock to the maintenance area (imperiale), which represents the source of danger. This key is then inserted into the access lock, which releases the personal key and traps the isolation key. The operator then takes the personal key into the hazardous area as protection against accidental re-energization and lock-in.
The traction power cannot be restored until the personal key is returned, the lock cylinder is reinserted into the double key interlock, and the isolation key is removed and placed back into the Secure Box together with the earthing stick.

ACCESS CONTROL

Railway maintenance safety with rolling stock lockout and operational signaling



SBB11
Rail Safety Brake

DBOX
Railway earthing switch interlock

VLB11
Rotating Vela

Application description

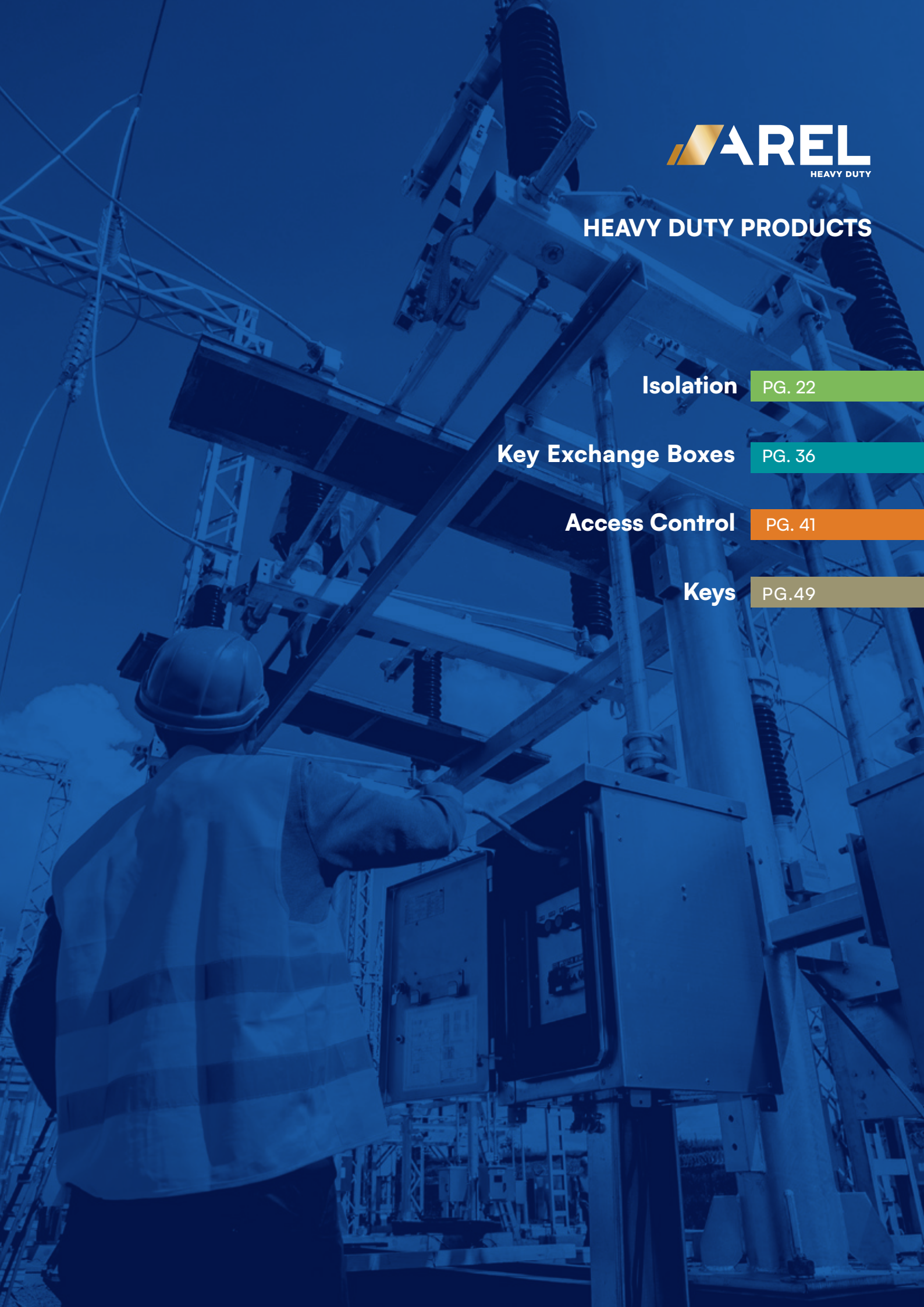
During railway maintenance activities inside depots or dedicated areas, the safety of both operators and rolling stock is ensured through a system of complementary devices.

The **Rail Safety Brake** is a wheel chock specifically designed to optimize restoration time and costs. Unlike conventional methods that cause the locomotive to derail, the Safety Brake stops it. Its key innovation is “tallonabilità” - the controlled breakage of a single element in the event of impact. The system can be reset with the cost of a single brass screw, resulting in significant time and cost savings.

The **rotating Vela** acts as an immediate visual signal. Technologically different from any previous solution, the Vela is a mobile stop signal that regulates rolling stock movement. Its advantage lies in being anchored to the rail, operated by a specifically engineered mechanism, and controlled through an AREL interlock - meaning it cannot be forgotten or left unused.

Finally, the **Secure Box** safely manages the interlock between the disconnector and the earthing stick, preventing unauthorized operations and coordinating the operating sequence.

Integrated together, these devices create a protected working environment, reducing risks and ensuring the efficiency of railway maintenance operations.



AREL HEAVY DUTY

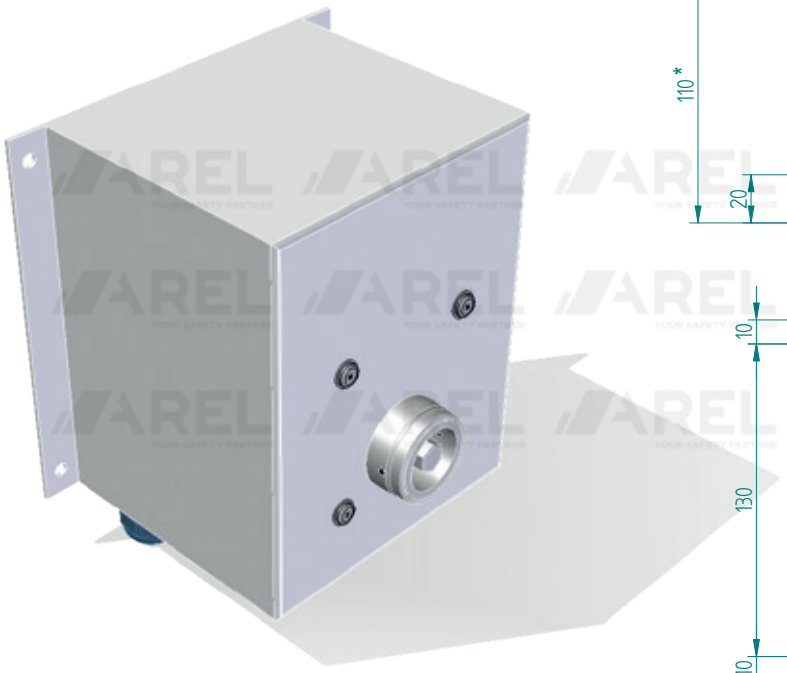
HEAVY DUTY PRODUCTS

ISOLATION

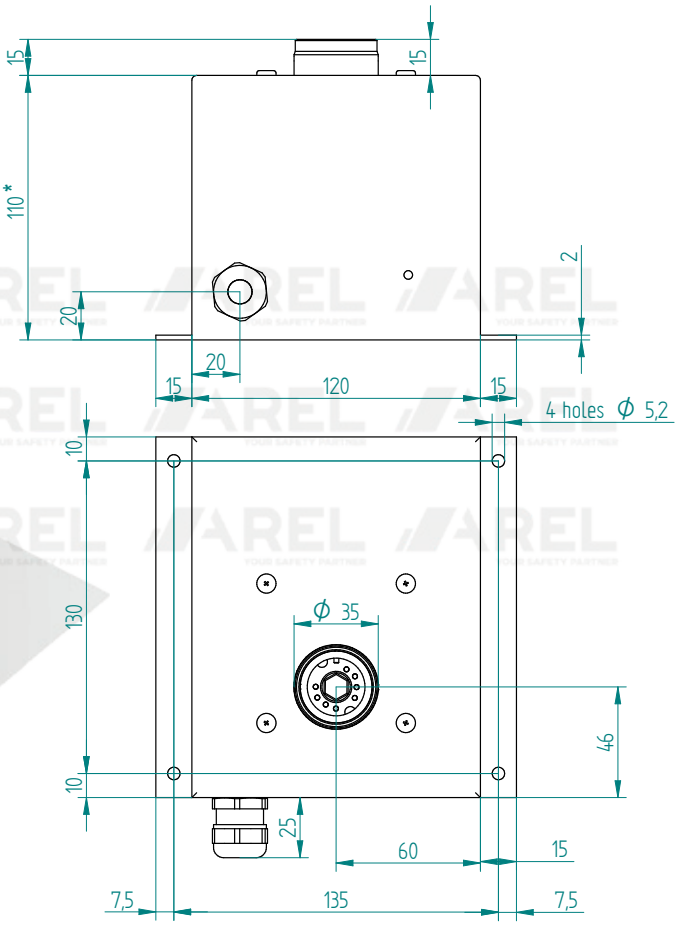
DKSA/IP

Switch disconnector

H190.01A32/DKSA1-2C/IP



* 3C = 125 mm



Product features

- Key switch for disconnectors. Used for current and motor isolation;
- Equipped with a 4-pole main switch (NO);
- Material: nickel-plated brass;
- Suitable for use in both corrosive and non-corrosive environments;
- Panel mounting;
- Stainless steel enclosure.

Standard

32A switch,
with 2 elements (4 NO),
2 positions (0-1);
IP65 stainless steel enclosure;
Kraus & Naimer “CA” series switch.

Variants	Description
H190.01A32/DKSA1C/IP	With 1-element switch (2 NO)
H190.01A32/DKSA1-3C/IP	With 3-element switch (6 NO)
H190.01A63/DKSA1-2C/IP	With 63A switch
H190.01A125/DKSA1-2C/IP	With 125A switch

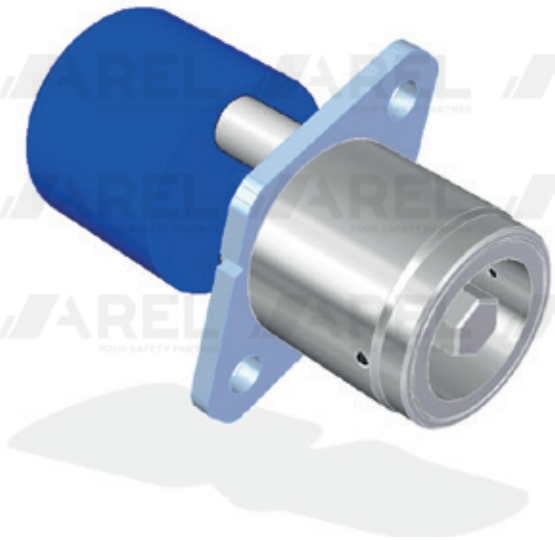
The code shown in the variant list is partial. The final unique product code depends on the required combination.

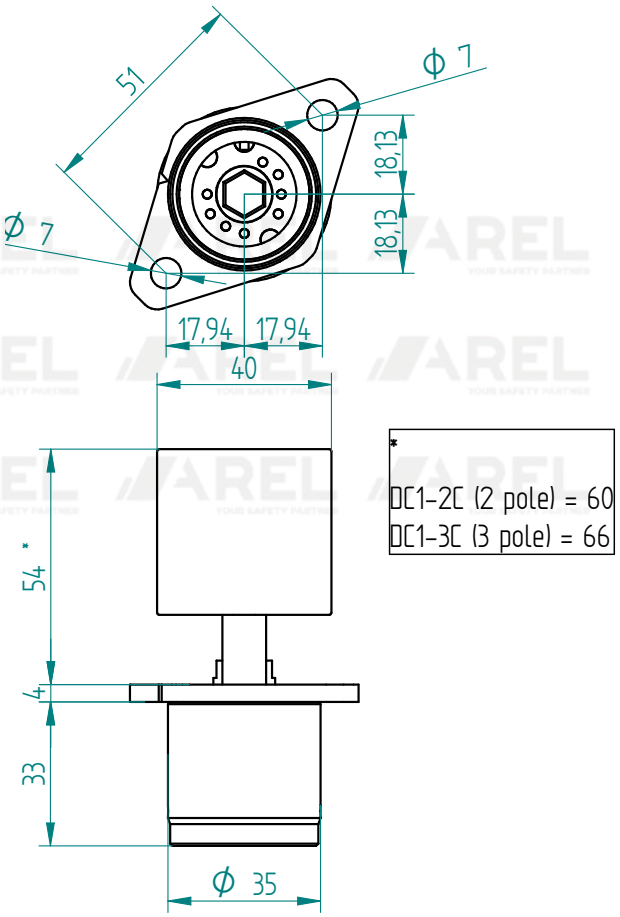
ISOLATION

DC

Powersafe electrical switch

H180.01A20/DC1-2C





Product features

- Key-operated electrical switch;
- Designed for machine control circuits;
- Intended for short-term, off-load isolation;
- Material: nickel-plated brass;
- Suitable for non-aggressive, corrosive, and heavy-duty environments;
- Suitable for panel or rear-panel mounting;
- Available in 20 A as standard and 25 A on request.

Standard

20A switch,
with 2 elements (4 NO),
2 positions (0-1);
Kraus & Naimer “CA” series switch.

Variants	Description
H180.01A20/DC1	With 1-element switch (2 NO)
H180.01A20/DC1-3C	With 3-element switch (6 NO)

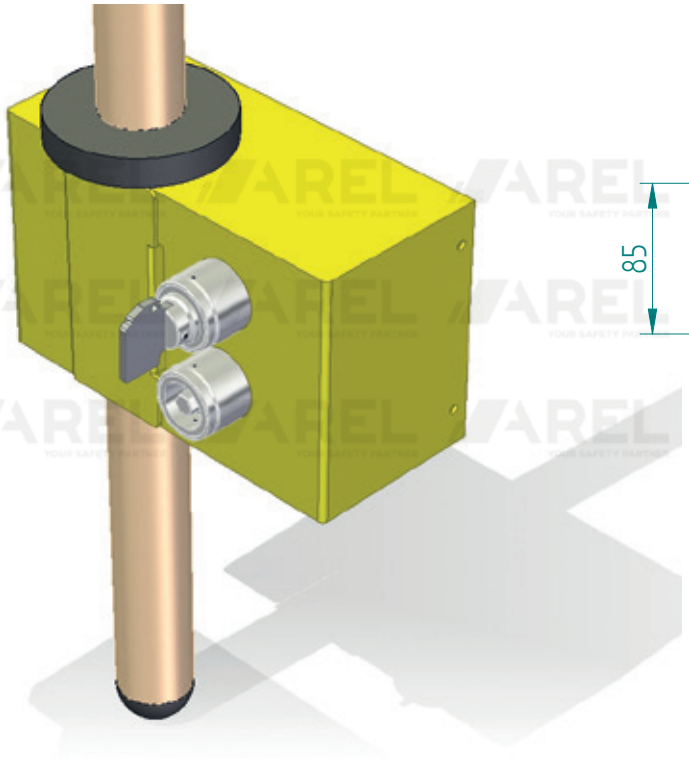
The code shown in the variant list is partial. The final unique product code depends on the required combination.

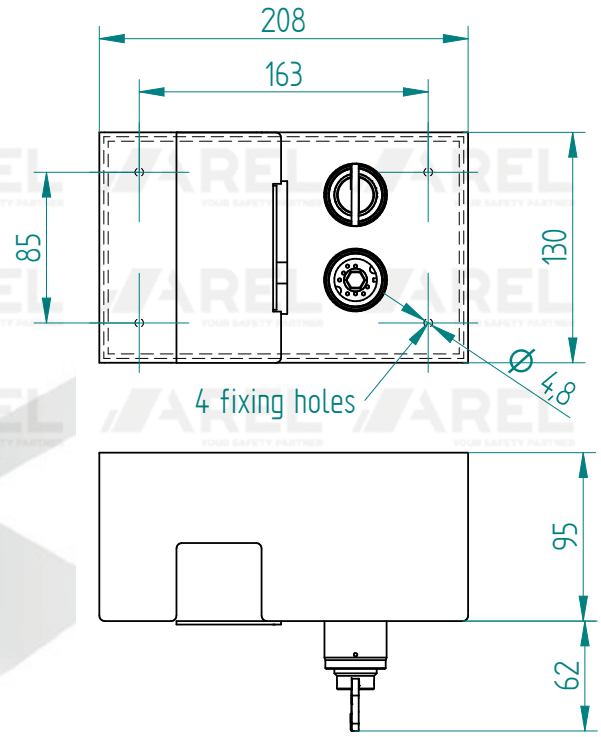
ISOLATION

DBox

Railway grounding blocking device (Patented)

H68.DBox12





Product features

- Secure Box is a patented product, an innovative safety device designed for carrying out maintenance work on electrical lines, particularly on railway power lines inside rolling stock maintenance depots. Secure Box increases the level of safety on site during maintenance operations on railway electrical lines;
- Two-key earthing stick interlock for the interconnection between the earthing blade selector and the earthing stick, and between the earthing stick and the key exchanger box;
- Dedicated bracket for storing the earthing stick in the rest position;
- Bracket for pole mounting (M pole) of the earthing stick interlock device;
- Bracket and ring for flag attachment.

Standard

Painted steel box with yellow epoxy coating;
Nickel-plated brass cylinders.

Accessories

Bracket for earthing stick storage

High-visibility signaling flag

Accessories included with the lock H68.DBox12

Pole mounting plate

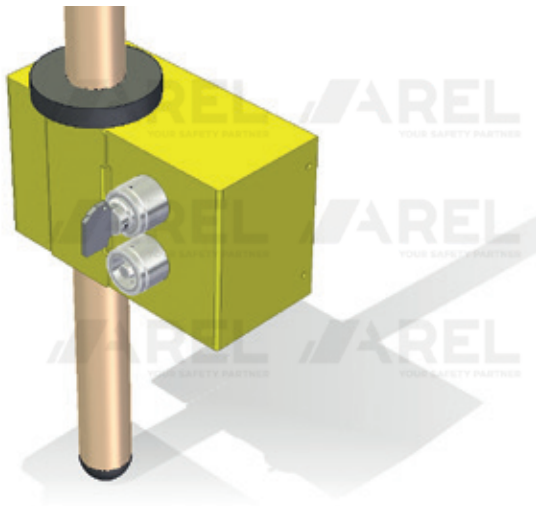
V68.STAFPM

ISOLATION

Products dedicated to the railway sector

Secure Box

H68.DBox12

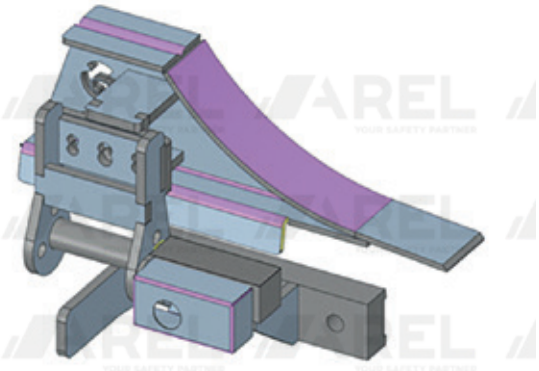


Product features

See previous page.

Rail Safety Brake

H68.SBB11

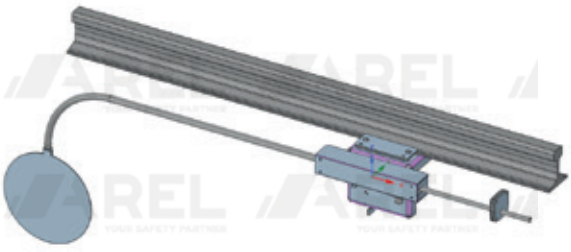


Product features

The Rail Safety Brake is a wheel chock specifically designed to optimize restoration time and costs. Unlike conventional methods that cause the locomotive to derail, it stops the train. The innovative feature of our Safety Brake is its “tallonabilità,” meaning the controlled breakage of a single component in the event of an impact. It can be reset at the cost of a single brass screw, resulting in significant time and cost savings.

Rotating vela

H68.VLB11



Product features

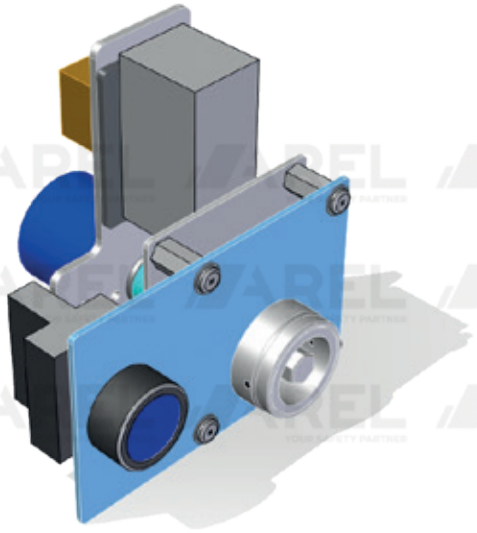
The rotating Vela serves as an immediate visual signal. Technologically different from anything that came before, the Vela is a mobile stop signal that regulates rolling stock movement. Its advantage lies in being anchored to the rail, operated through a specifically engineered mechanism, and controlled by an AREL interlock, making it impossible to overlook or leave unused.

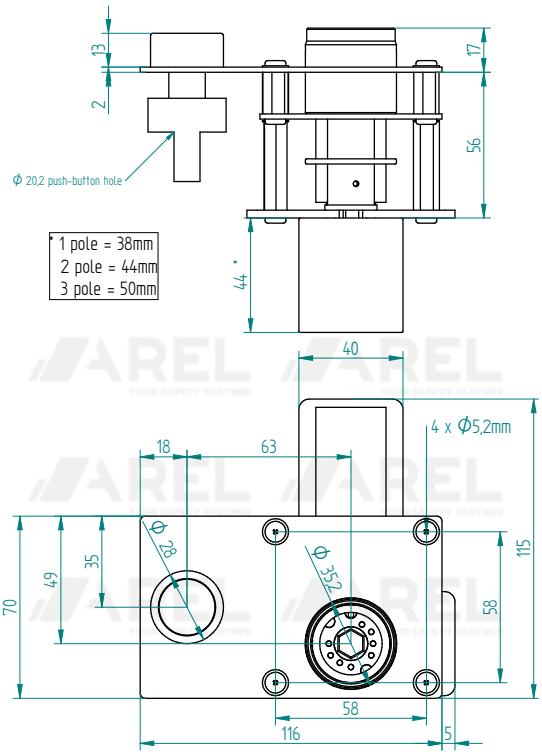
ISOLATION

DKS-B

Solenoid controlled switch

H180.01A20/DKS1B2CPX





Product features

- Solenoid-controlled trapped key interlock;
- Mainly used in UPS (Uninterruptible Power Supply) systems;
- Ensures that access can only be granted when the UPS is in a safe condition;
- Material: nickel-plated brass;
- Suitable for use in corrosive and non-corrosive environments;
- Supplied ready for backpanel mounting.

Standard

20A switch, with 2 elements (4 NO), 2 positions (0-1);
One key extraction solenoid lock (B);
One blue illuminated push button with 1 NO contact (PX);
Solenoid voltage: 110 VDC;
Kraus & Naimer “CA” series switch.

Variants	Description
H180.01A20/DKS1BCPX	With 1-element switch (2 NO)
H180.01A20/DKS1B3CPX	With 3-element switch (6 NO)
H180.01A20/DKS1B2C	Without push button
H180.01A20/DKS1B2CPX/I	With key locked in inserted position
H180.01A20/DKS1B2CPX/IE	With key locked in both positions
H180.01A20/DKS1B2CP	With non-illuminated push button
H180.01A25/DKS1B2CPX	With 25A switch
H180.01A20/DKS1B2CPXd	With two contacts on the push button (2 NO)
H185.01A20/DKSA1B2CPX	Housed in polyester junction box
H190.01A20/DKSA1B2CPX/IP	Housed in IP65 metal enclosure

Other voltages available: 24-120-230 VAC / 24-110 VDC

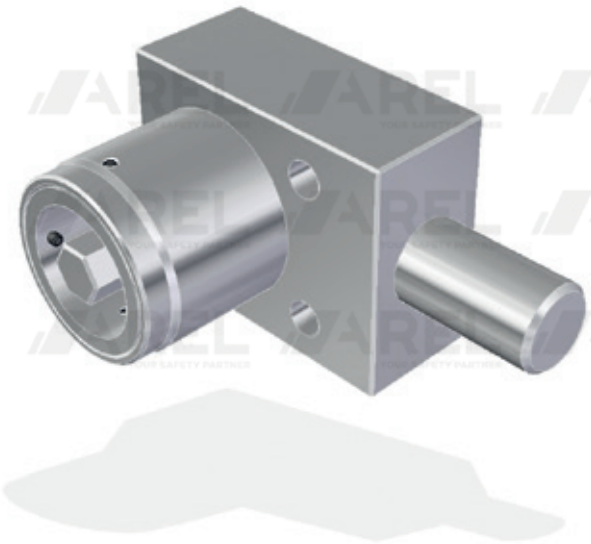
The code shown in the variant list is partial. The final unique product code depends on the required combination.

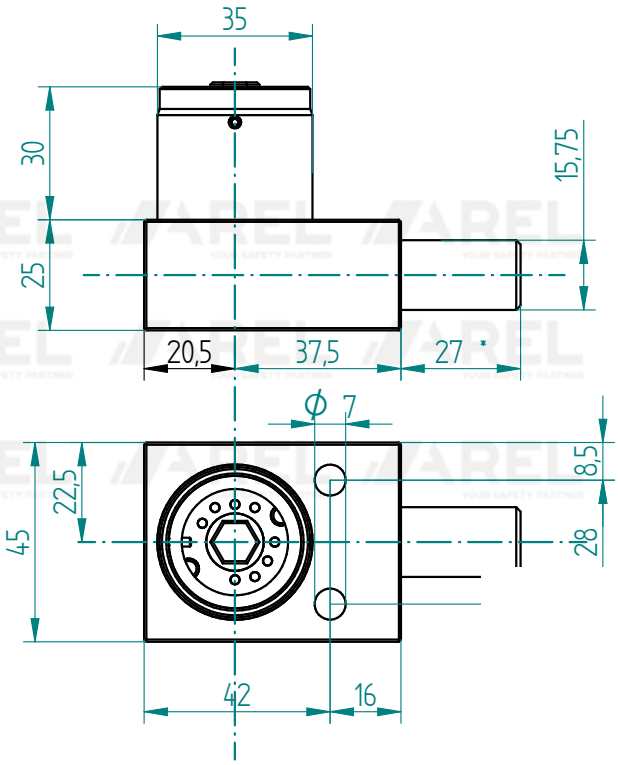
ISOLATION

DB

Bolt lock

H55.DB11





Product features

- Mechanical key interlock;
- Designed for the control of electrical panels, valves, and general operating mechanisms;
- Supplied with a 15.92 mm diameter cam, available in various lengths;
- Material: nickel-plated brass;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 30 kN (stainless steel) and 19 kN (brass).

Standard

Bolt stroke 19.5 mm;
Bolt diameter 15.92 mm;
Nickel-plated brass.

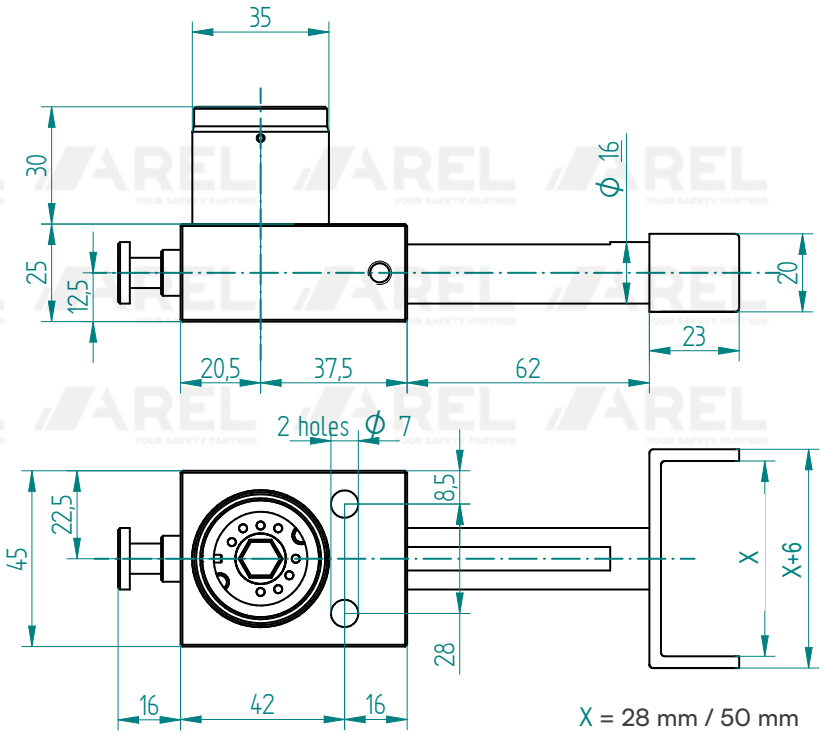
Variants	Description
H55.DB11/020	With bolt flush with the lock
H55.DB11/2343	With bolt minimum projection 23 mm
H55.DB11/xy	With bolt minimum projection “x” mm

ISOLATION

DB11XCL

Bolt lock

H55.DB11XCL



Product features

- Mechanical key interlock;
- Designed for the control of electrical panels and general operating mechanisms;
- Supplied with a terminal in 2 sizes (see below);
- Material: nickel-plated brass, stainless steel;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 19 kN.

Standard

60 mm manual stroke;
Stainless steel “U” terminal.

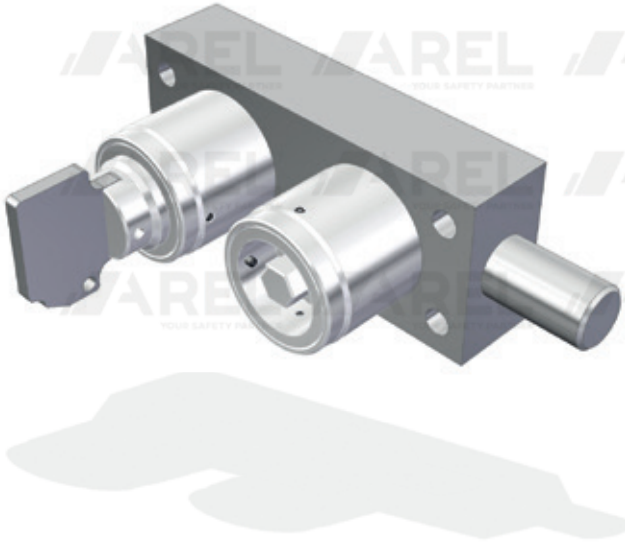
Variants	Description
H55.DB11XCL2885	28 mm utili di apertura terminale a “U”
H55.DB11XCL5085	50 mm utili di apertura terminale a “U”

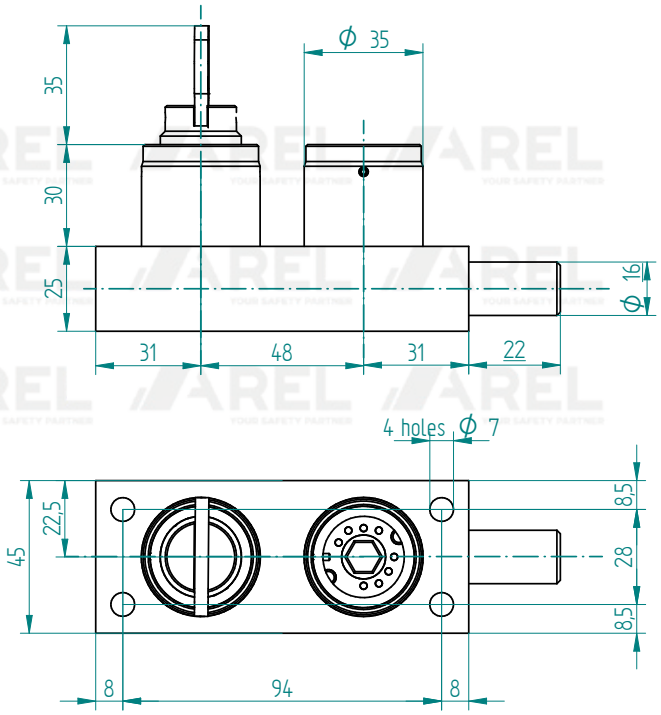
ISOLATION

DB

Dual key bolt interlock

H55.DBm12





Product features

- Dual key bolt interlock;
- The double key operating lock is a mechanical key interlock operated by one key. The second key serves as a safety key for the operator;
- Designed for the control of electrical panels, valves, and general operating mechanisms;
- Supplied with a 15.92 mm diameter bolt, available in various lengths;
- Material: nickel-plated brass;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 19 kN.

Standard

Bolt stroke 19.5 mm;
Bolt diameter 15.92 mm;
Nickel-plated brass.

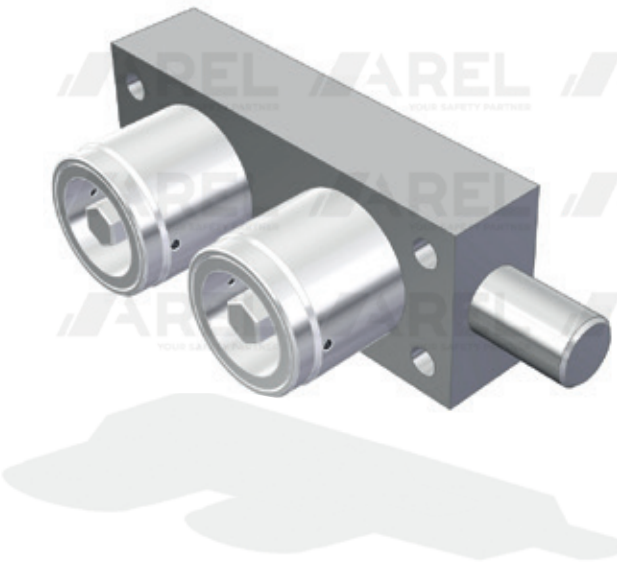
Variants	Description
H55.DBm12/LT	With bolt lockable by padlock
H55.DBm12/xy	With bolt minimum projection “x” mm

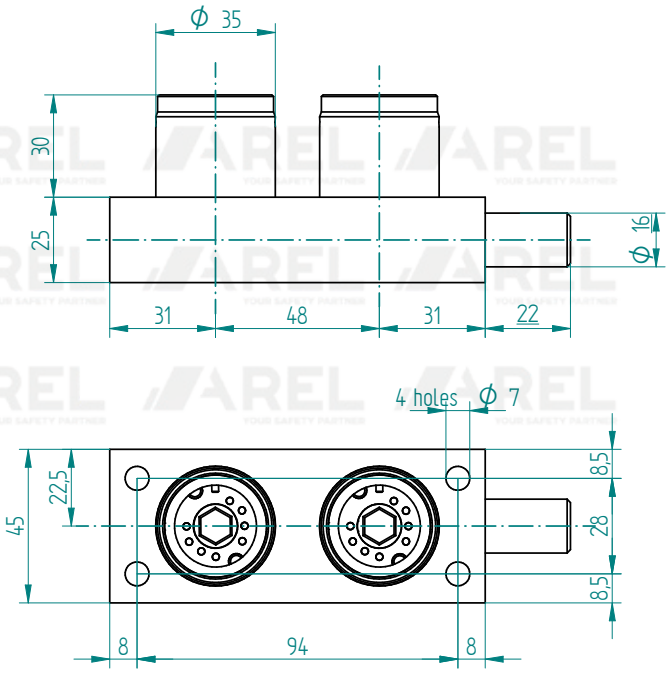
ISOLATION

DB

Dual key bolt

H55.DBmK12





Product features

- Dual key bolt interlock;
- The double key operating lock is a mechanical key interlock operated by two keys;
- Designed for the control of electrical panels, valves, and general operating mechanisms;
- Supplied with a 15.92 mm diameter bolt, available in various lengths;
- Material: nickel-plated brass;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 19 kN.

Standard

Bolt stroke 19.5 mm;
Bolt diameter 15.92 mm;
Nickel-plated brass.

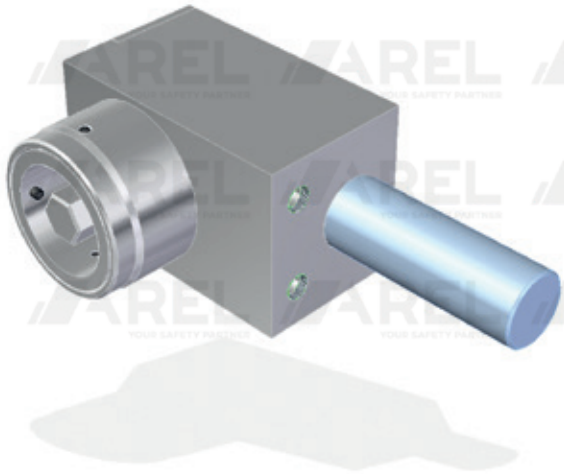
Variants	Description
H55.DBmK12/020	With bolt flush with the lock
H55.DBmK12/2343	With bolt minimum projection 23 mm
H55.DBmK12/xy	With bolt minimum projection “x” mm

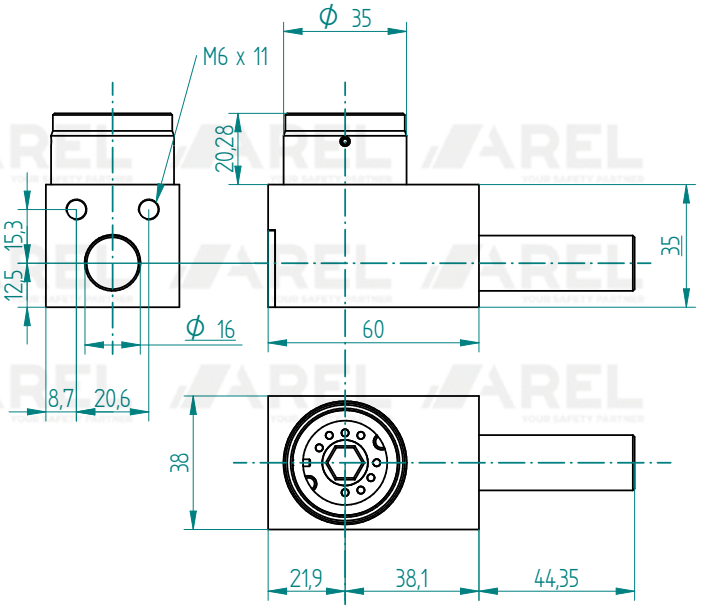
ISOLATION

MB

Bolt lock

H55.MB11





Product features

- Mechanical key interlock;
- Designed for the control of electrical panels, valves, and general operating mechanisms;
- Supplied with a 15.92 mm diameter bolt;
- Material: nickel-plated brass, stainless steel bolt;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 30 kN (stainless steel).

Standard

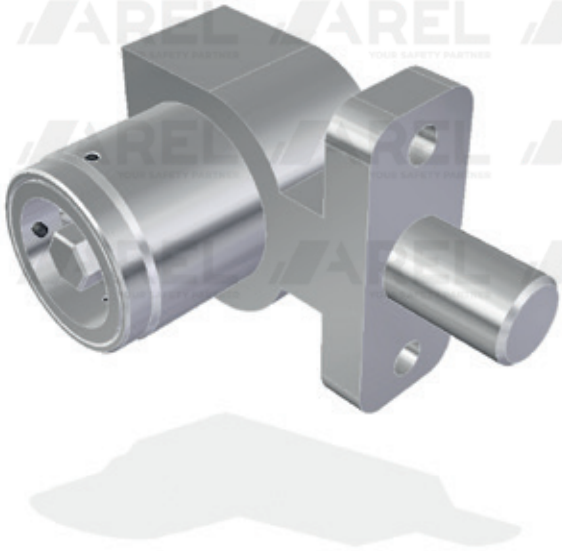
Bolt stroke 19.5 mm;
Bolt diameter 15.92 mm;
Nickel-plated brass;
Stainless steel bolt.

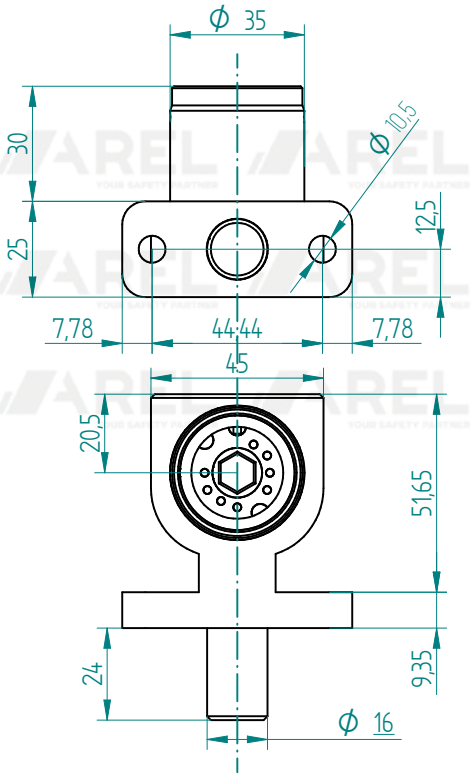
ISOLATION

DBD11

Bolt lock

H55.DBD11





Product features

- Dual key bolt interlock;
- Designed for the control of electrical panels, valves, and general operating mechanisms;
- Supplied with a 15.92 mm diameter bolt;
- Material: nickel-plated brass;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 19 kN (brass).

Standard

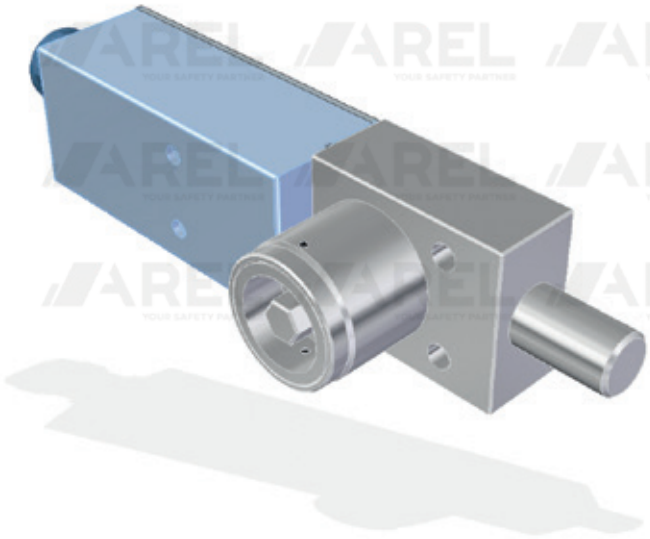
Bolt stroke 19.5 mm;
Bolt diameter 15.92 mm;
Nickel-plated brass.

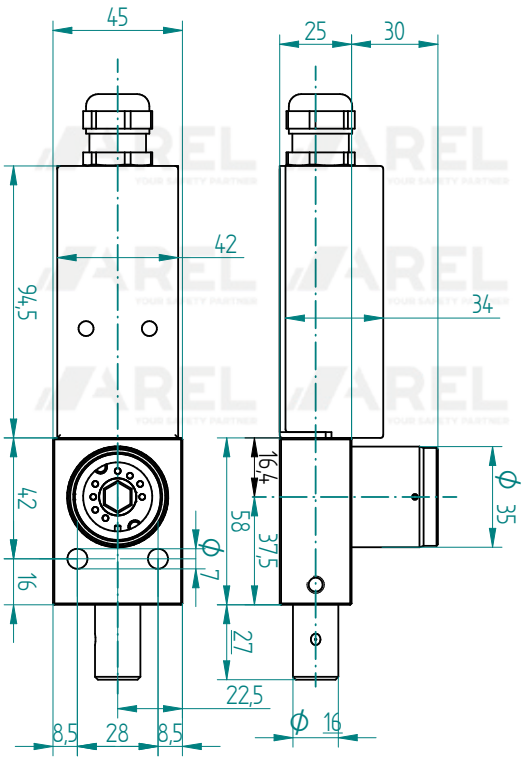
ISOLATION

DBC

Bolt interlock with safety switch

H56.DBC11





Product features

- Mechanical key interlock;
- Equipped with electrical monitoring and signaling contacts;
- Designed for the control of electrical panels or valves;
- Supplied with a 16 mm diameter bolt, available in various lengths;
- Supplied with NO + NC contacts; IP67 protection rating;
- Material: nickel-plated brass;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 19 kN.

Standard

Bolt stroke 19.5 mm;
Bolt diameter 16 mm;
NO-NC limit switch contacts;
Nickel-plated brass;
Stainless steel contact box.

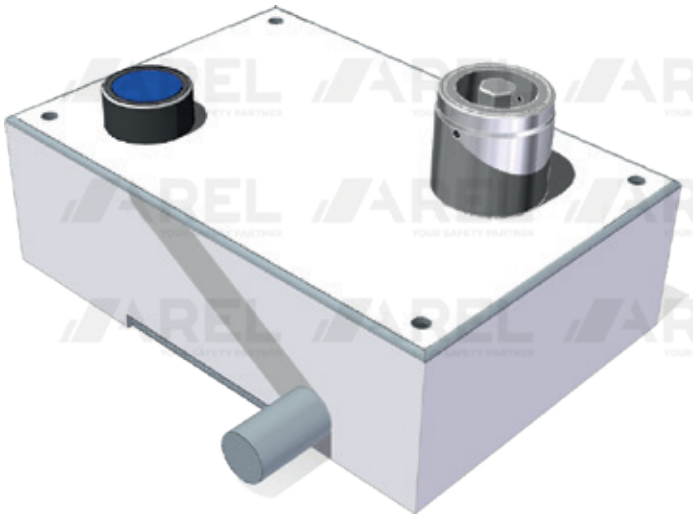
Variant	Description
H56.DBC11/020	With bolt flush with the lock

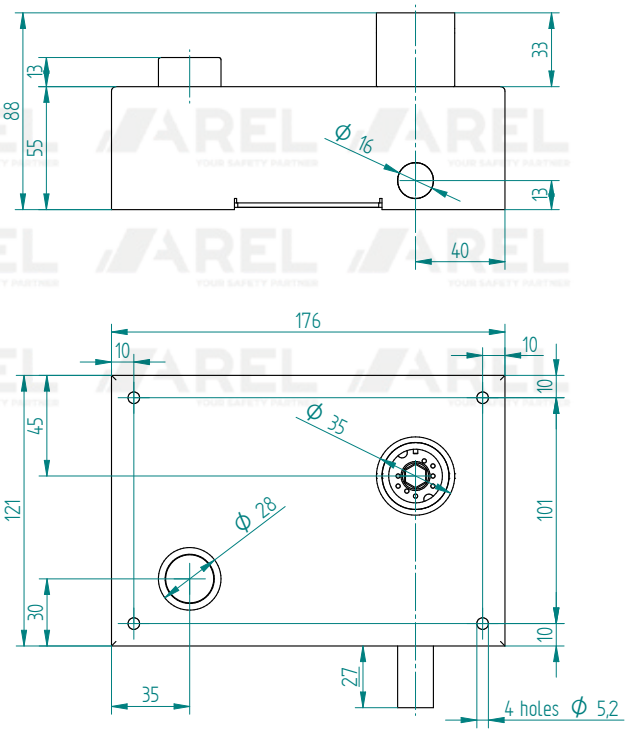
ISOLATION

DBB

Solenoid controlled bolt lock with safety switch

H56.DB11BCPX





Product features

- Equipped with electrical monitoring and signaling contacts;
- Designed for the control of electrical panels or valves;
- Supplied with a 16 mm diameter bolt, available in various lengths;
- Supplied with NO + NC contacts;
- Material: nickel-plated brass;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 30 kN (stainless steel).

Standard

Bolt stroke 19.5 mm;
Bolt diameter (stainless steel) 16 mm;
NO-NC limit switch contacts;
Nickel-plated brass cylinder;
Stainless steel contact box.

Variants	Description
H56.DB11B2CPX	With 2 signaling contacts (2 NO - 2 NC)
H56.DB11BCP	With non-illuminated push button
H56.DB11BCPXd	With two contacts on the push button (2 NO)

It is possible to request versions with a combination of these options. For example:

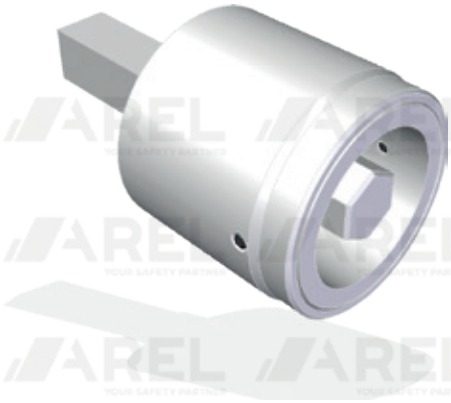
H56.DB11B2CP	With 2 signaling contacts (2 NO - 2 NC) and non-illuminated push button

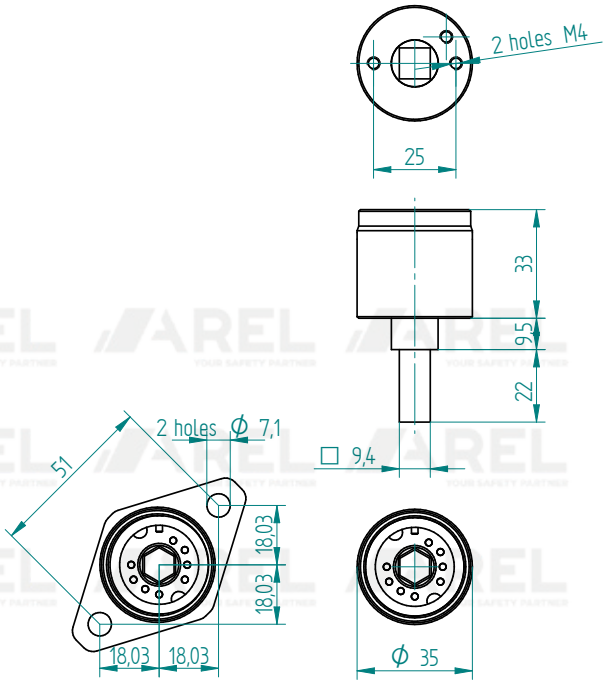
ISOLATION

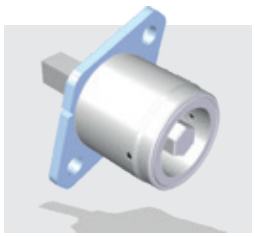
MC

Switchgear interlock

H50.MC3533



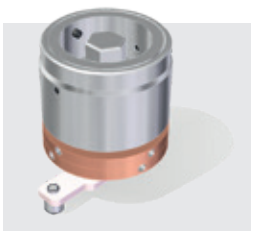




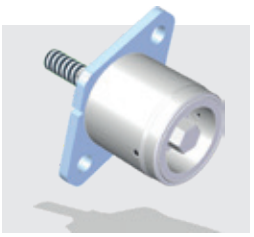
PA

MTZ

2XM



AN



F8

Product features

- Interlock lock for switches;
- Designed for use as a mechanical interlock for electrical panels through a mechanical connection with the isolation mechanism;
- Equipped with a 9.4 mm square pin, 22 mm long, which can be used to operate an isolator;
- Custom connection options available, compatible with major brands and models of disconnector equipment;
- Shaft movement closes the isolator;
- Material: nickel-plated brass;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Clockwise rotation (to insert the key).

Standard

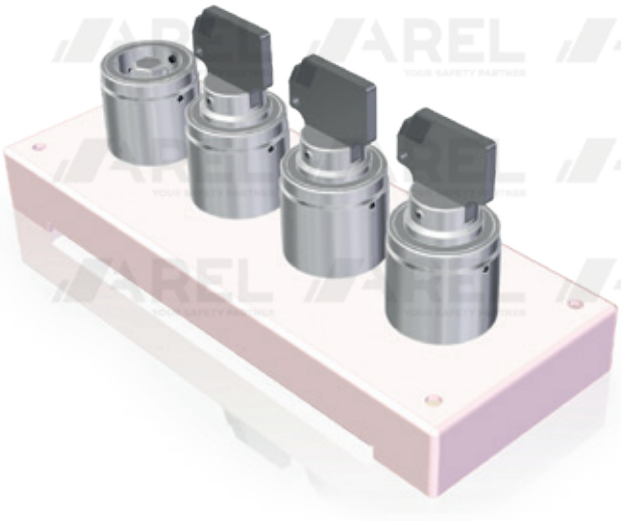
Nickel-plated.

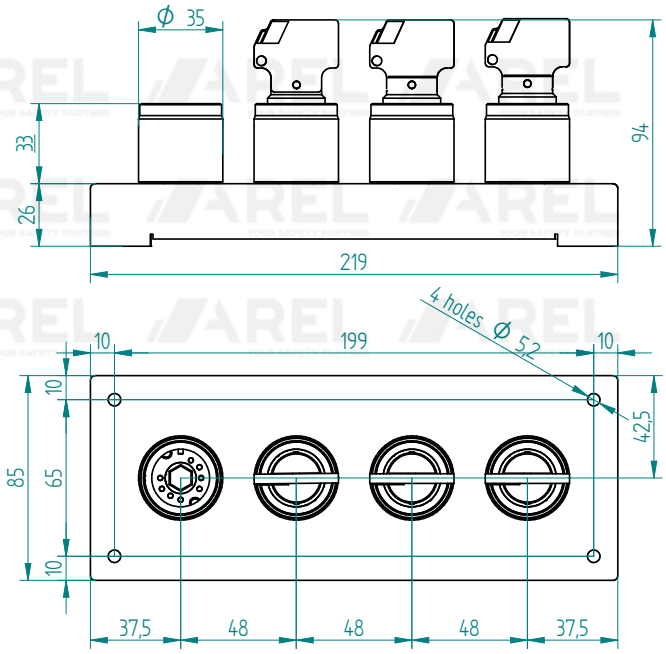
Variants	Description
H50.MC3533PA	With front-panel mounting
H50.MC3533MTZ	Custom connection
H50.MC35332XM	Custom connection
H50.MC3533AN	Custom connection
H50.MC3533F8	Custom connection

KEY EXCHANGE BOXES

D
Key exchange box

H70.04/D13 (H70.aa/Dbbcc)





Product features

- Designed to enable sequential key release;
- This type of product is typically required when there are multiple access points to a hazardous area;
- Designed to serve as the link between operating locks for isolation and access interlocks;
- Material: nickel-plated brass and stainless steel housing;
- Available in different configurations and number of locks (b free c);
- Supplied with a housing suitable for both panel and back-panel mounting.

Standard

Painted stainless steel box RAL 7035;
aa = total number of cylinders;
bb = number of free cylinders (from left);
cc = number of released cylinders;
Nickel-plated brass cylinders and keys.

Variant	Description
H70.aa/Dbbcc	Infinite “bbcc” combinations

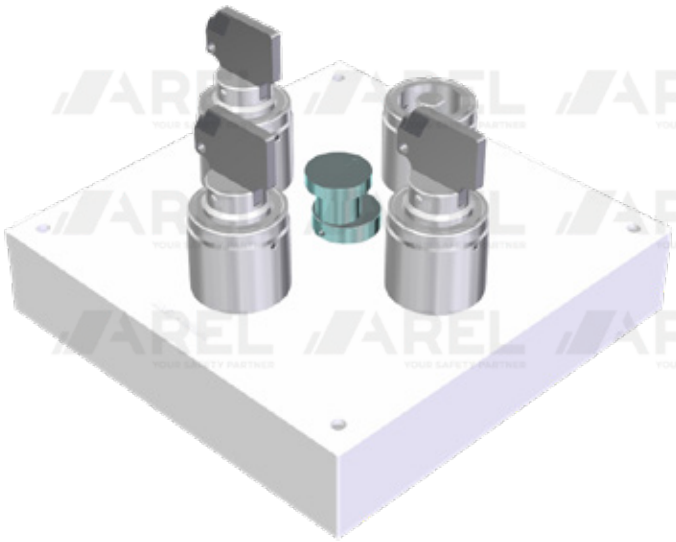
For key exchangers with more than 8 cylinders → Box with 2 or more rows.
Box length on a single row → L = 27 + (aa * 48).

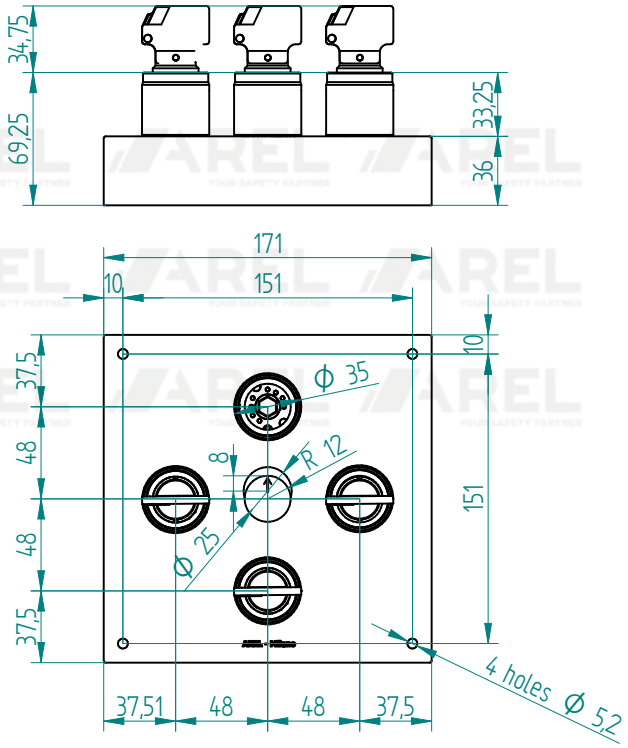
KEY EXCHANGE BOXES WITH LOGIC MANAGEMENT (IF-AND-OR-NOT)

D-SC

Key selector box

H72.04/D1x4/SC1





Product features

- Selective key distributor;
- Designed for controlled key release through the positioning of the selector knob;
- Typically used in electrical panel applications where parallel power supplies must be prevented;
- Available with 2 to 4 selector knob positions (more than 4 on request);
- Material: nickel-plated brass and stainless steel housing;
- Supplied with a housing suitable for both panel and back-panel mounting.

Standard

Painted stainless steel box RAL 7035;
Selection of the key to be released;
Nickel-plated brass cylinders and keys.

Variants	Description
H72.04/D1x4/SC3	Selection of the key to be locked
H72.03/D1x3/SC1	3-cylinder version with selection of the key to be released
H72.03/D1x3/SC2	3-cylinder version with selection of the key to be locked

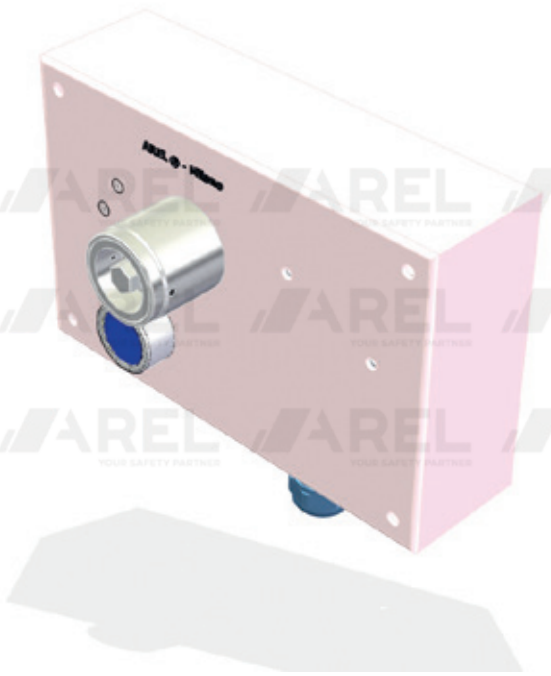
NB: This is only an example of the possibilities offered by the H72 key exchanger family.

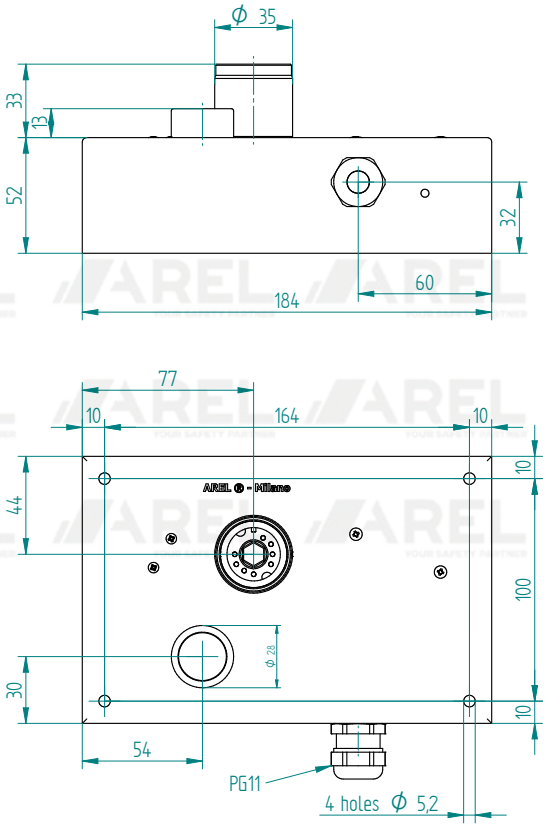
KEY EXCHANGE BOXES

DBCP

Electromechanical interlocking distributor

H81.01/D1BCPX





Product features

- Electromechanical key exchangers are designed to control key extraction through the use of microswitches, solenoids, push buttons, and timers;
- Solenoid-controlled trapped key interlock;
- Material: nickel-plated brass and stainless steel housing;
- Suitable for use in corrosive and non-corrosive environments;
- Supplied with a housing suitable for both panel and back-panel mounting.

Standard

Painted stainless steel box RAL 7035;
One key extraction solenoid lock (B);
One NO-NC signaling contact on the key (C);
One blue illuminated push button with 1 NO contact (PX);
2 m multipolar cable;
Solenoid voltage: 110 VDC.

Variants	Description
H81.01/D1B2CPX	With 2 signaling contacts (2 NO - 2 NC)
H81.01/D1B2CPX/V	With key locked in inserted position
H81.01/D1B2CPX/OV	With key locked in both positions
H81.01/D1BCPX/R	With rear cable outlet
H81.01/D1mBCPX	With side terminal block (no cables)
H81.01/D1BCP	With non-illuminated push button
H81.01/D1BCPXd	With two contacts on the push button (2 NO)

Other voltages available: 24-120-230 VAC / 24-110 VDC

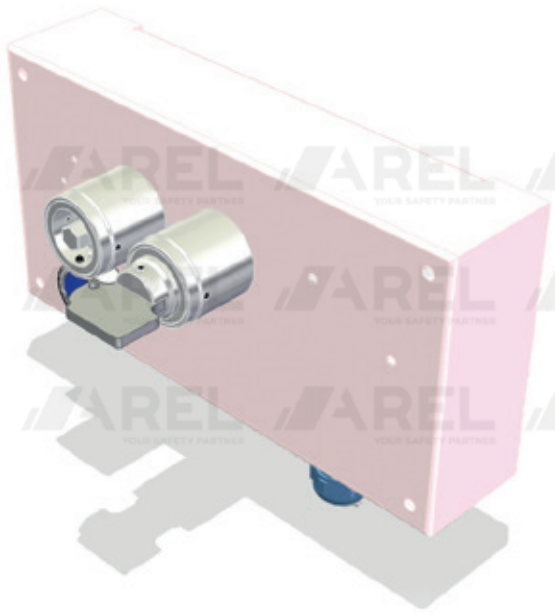
The code shown in the variant list is partial. The final unique product code depends on the required combination.

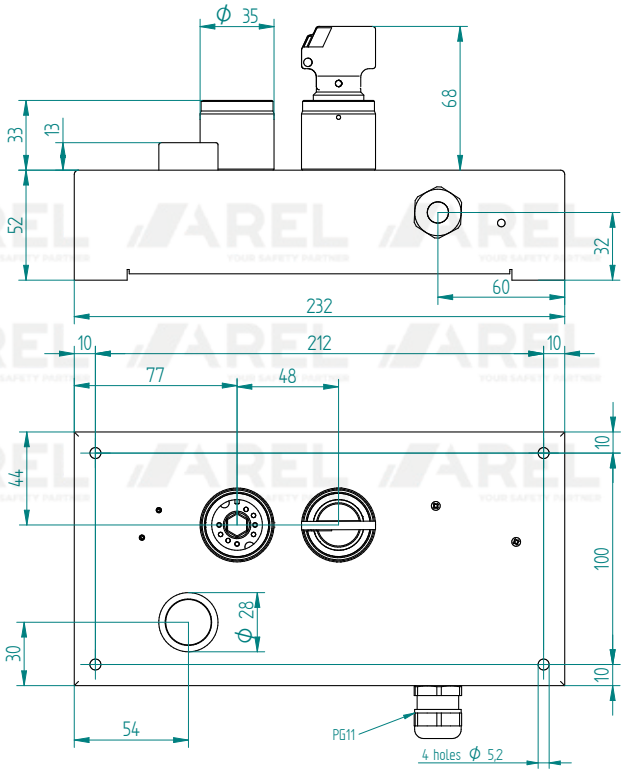
KEY EXCHANGE BOXES

DBCP

Electromechanical interlocking distributor

H81.02/D11BCPX





Product features

- Electromechanical key exchangers are designed to control key extraction through the use of microswitches, solenoids, push buttons, and timers;
- Solenoid-controlled trapped key interlock;
- Material: nickel-plated brass and stainless steel housing;
- Suitable for use in corrosive and non-corrosive environments;
- Supplied ready for back-panel mounting.

Standard

Painted stainless steel box RAL 7035;
One key extraction solenoid lock (B);
One NO-NC signaling contact on the first key;
One blue illuminated push button with 1 NO contact (PX);
2 m multipolar cable;
Solenoid voltage: 110 VDC.

Variants	Description
H81.02/D2BCPX	With two non-interlocked cylinders (2 keys in or out)
H81.02/D11B2CPX	With 2 signaling contacts (2 NO - 2 NC)
H82.02/D11-2B2C2PX	With 2 solenoid locks, 2 contacts, and 2 illuminated push buttons
H81.02/D11BCPX/R	With rear cable outlet
H81.02/D11mBCPX	With side terminal block (no cables)
H81.02/D11BCP	With non-illuminated push button
H81.02/D11BCPXd	With two contacts on the push button (2 NO)

Other voltages available: 24-120-230 VAC / 24-110 VDC

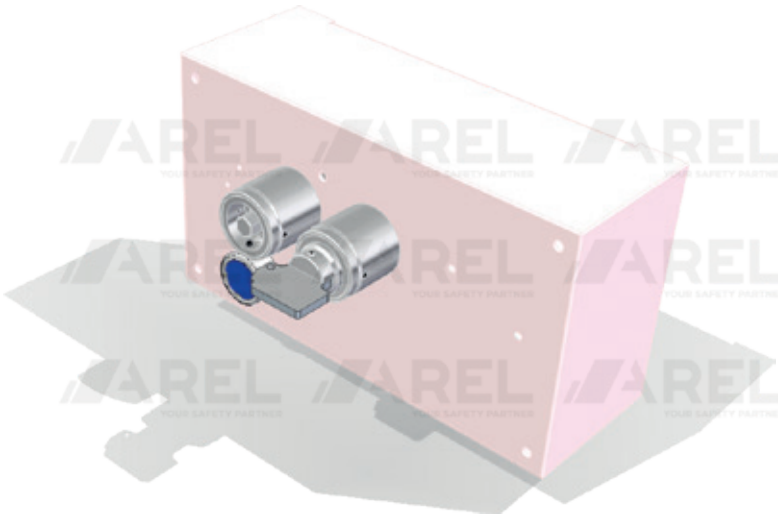
The code shown in the variant list is partial. The final unique product code depends on the required combination.

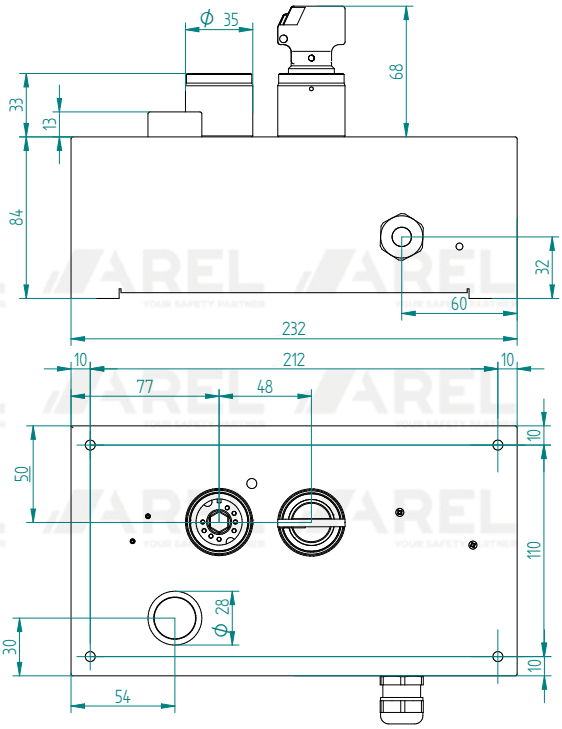
KEY EXCHANGE BOXES

DBCPT

Key distribution with time delay unit

H83.02/D11BCPXT





Product features

- Electromechanical key exchangers are designed to control key extraction through the use of microswitches, solenoids, push buttons, and timers. The timer controls the moment when the key can be removed, ensuring that the access and maintenance area is in a safe condition;
- Solenoid-controlled trapped key interlock;
- Material: nickel-plated brass and stainless steel housing;
- Suitable for use in corrosive and non-corrosive environments;
- Supplied ready for back-panel mounting.

Standard

Painted stainless steel box RAL 7035;
One key extraction solenoid lock (B);
One NO-NC signaling contact on the first key;
One blue illuminated push button with 1 NO contact (PX);
2 m multipolar cable;
Solenoid voltage: 110 VDC;
Relay timer set to 12 minutes.

Variants	Description
H83.01/D1BCPXT	With a single cylinder
H83.02/D2BCPXT	With two non-interlocked cylinders (2 keys in or out)
H83.02/D11B2CPXT	With 2 signaling contacts (2 NO - 2 NC)
H83.02/D11-2B2CPT	With 2 solenoid locks
H83.02/D11BCPXT/R	With rear cable outlet
H83.02/D11mBCPXT	With side terminal block (no cables)
H83.02/D11BCPT	With non-illuminated push button
H83.02/D11BCPXdT	With two contacts on the push button (2 NO)

Other voltages available: 24-120-230 VAC / 24-110 VDC

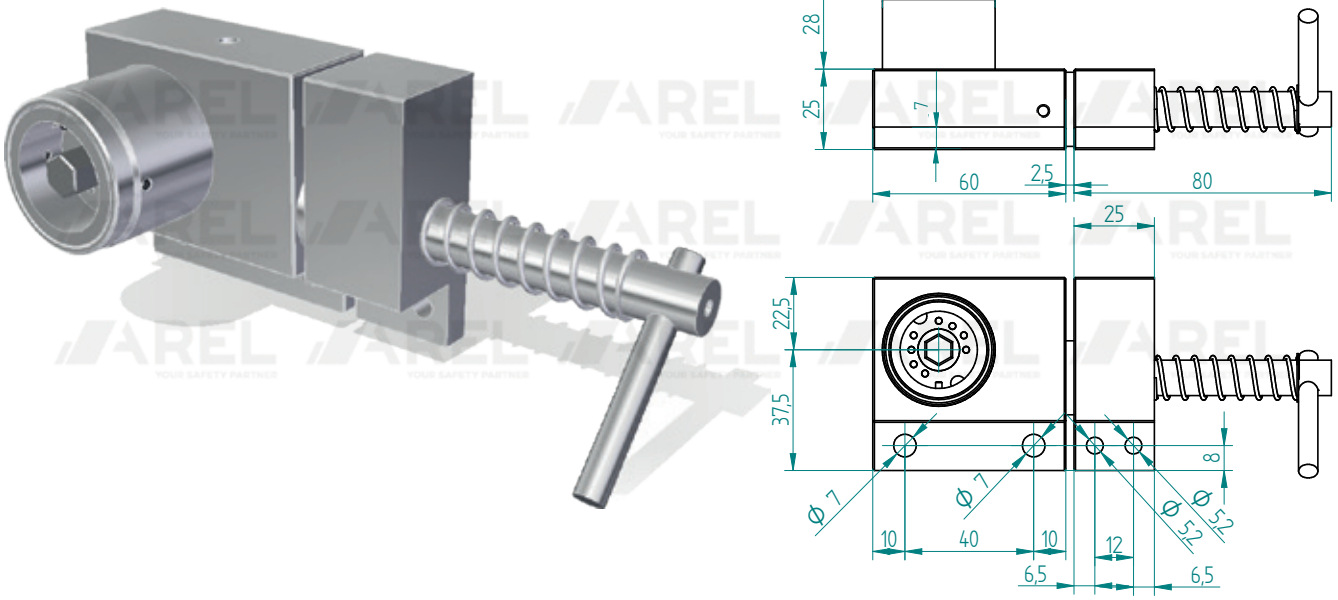
The code shown in the variant list is partial. The final unique product code depends on the required combination.

ACCESS CONTROL

DP

Single key door lock

H65.DP1



Product features

- Single key door interlock for partial access (visible operator);
- Ideal for use on hinged or sliding doors;
- Material: nickel-plated brass;
- Suitable for standard or harsh environments, corrosive conditions, and heavy-duty applications;
- Supplied ready for front-panel mounting;
- Bolt shear strength: 24 kN.

Standard

Left-hinged door;
Nickel-plated brass;
Stainless steel handle and spring.

Variants	Description
H65.DP1ck	Without bracket and handle with 15 cm chain
H65.DP1/180	Right-hinged door

It is possible to request versions with a combination of these options. For example:

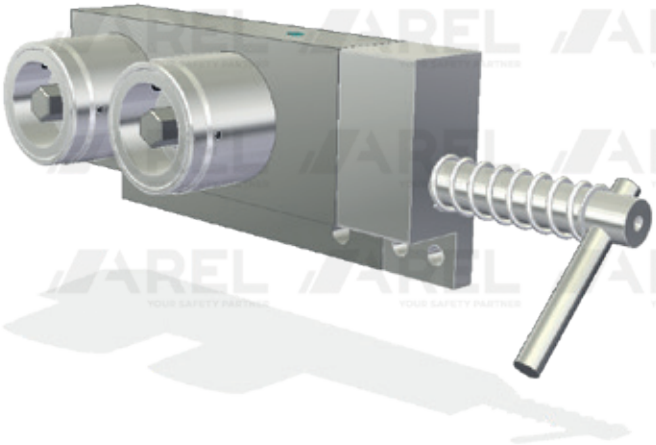
H65.DP1ck/180	Without bracket and right-hinged door

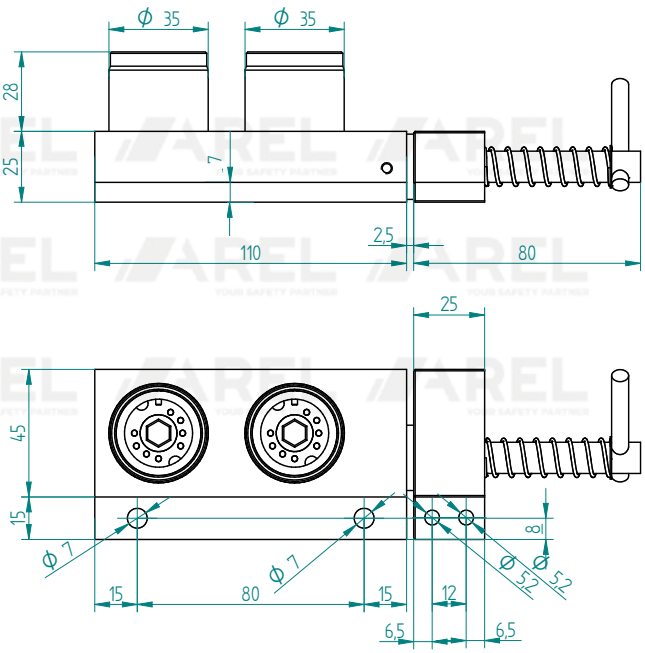
ACCESS CONTROL

DP

Dual key access interlock

H65.DP2





Product features

- Dual key door interlock for partial access (visible operator);
- Double authorization required for opening;
- Ideal for use on hinged or sliding doors;
- Material: nickel-plated brass, stainless steel;
- Suitable for standard or harsh environments, corrosive conditions, and heavy-duty applications;
- Supplied ready for front-panel mounting;
- Bolt shear strength: 24 kN.

Standard

Left-hinged door;
Nickel-plated brass;
Stainless steel handle and spring.

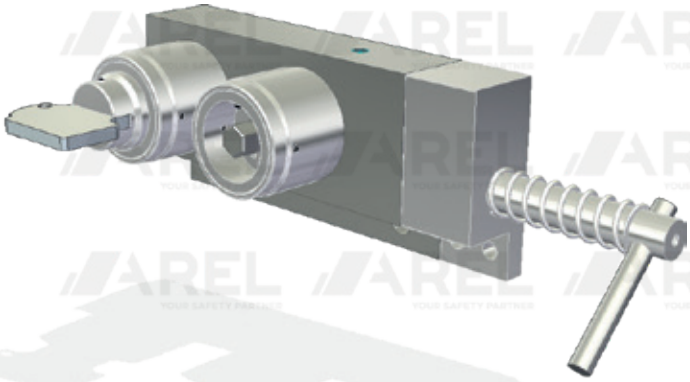
Variants	Description
H65.DP2ck	Without bracket and handle with 15 cm chain
H65.DP2/180	Right-hinged door

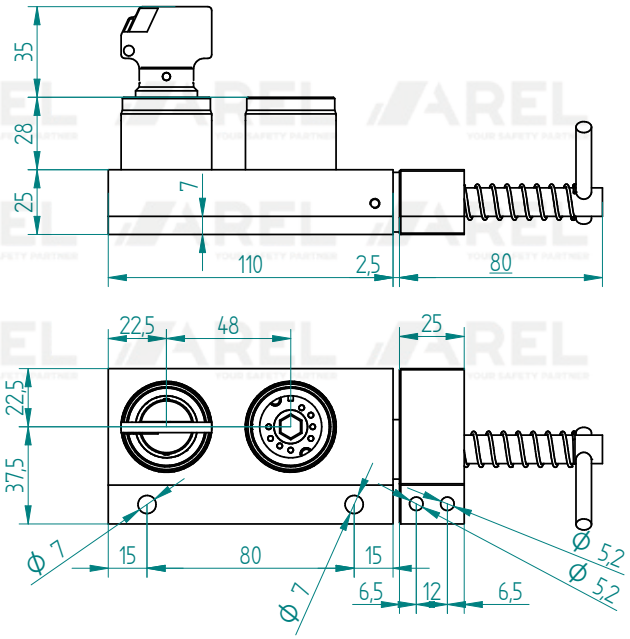
ACCESS CONTROL

DP

Dual interlocked key access interlock (full body access)

H65.DPN2





Product features

- Dual key bolt interlock for full access (operator not visible);
- The first key opens the door, the second is the operator safety key;
- Ideal for use on hinged or sliding doors;
- Material: nickel-plated brass, stainless steel;
- Suitable for standard or harsh environments, corrosive conditions, and heavy-duty applications;
- Supplied ready for front-panel mounting;
- Bolt shear strength: 24 kN.

Standard

Left-hinged door;
Nickel-plated brass;
Stainless steel handle and spring.

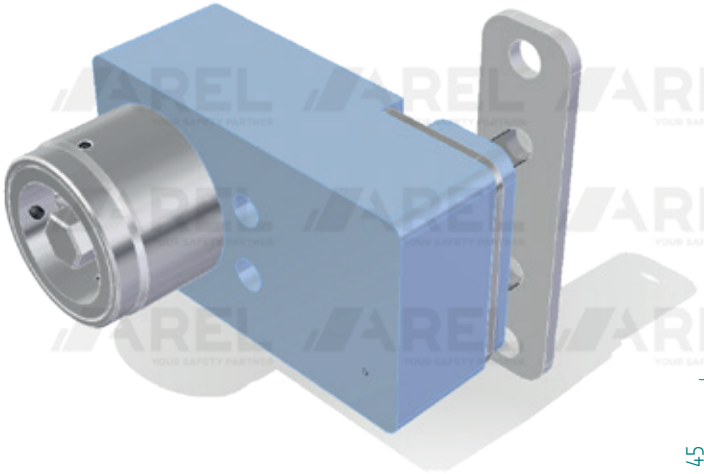
Variants	Description
H65.DPN2ck	Without bracket and handle with 15 cm chain
H65.DPN2/180	Right-hinged door

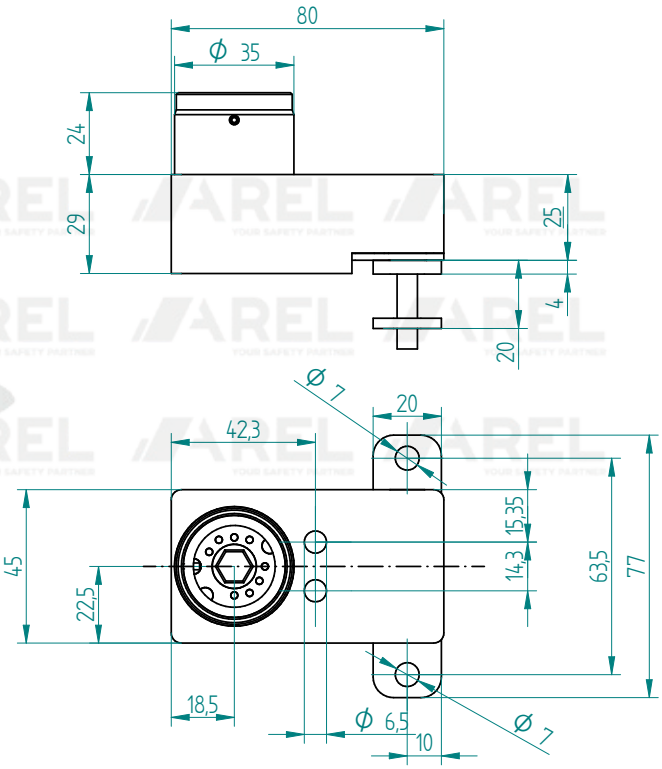
ACCESS CONTROL

DPK

Single key door lock

H65.DP1Ks





Product features

- Single key door interlock for partial access (visible operator);
- Ideal for use on single hinged doors;
- Material: nickel-plated brass, aluminum, stainless steel;
- Suitable for standard or harsh environments, corrosive conditions, and heavy-duty applications;
- Handle shear strength: 10 kN.

Standard

Left-hinged door;
Nickel-plated brass;
Aluminum bracket.

Variants	Description
H65.DP1Kr	Stainless steel bracket
H65.DP1Ks/180	Right-hinged door

It is possible to request versions with a combination of these options. For example:

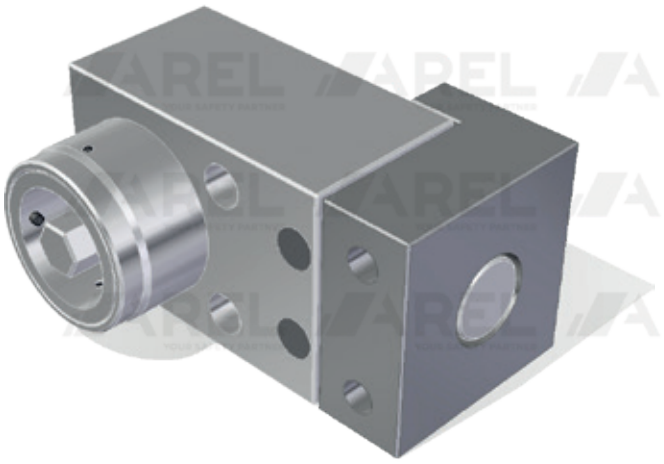
H65.DP1Kr/180	With stainless steel bracket and right-hinged door

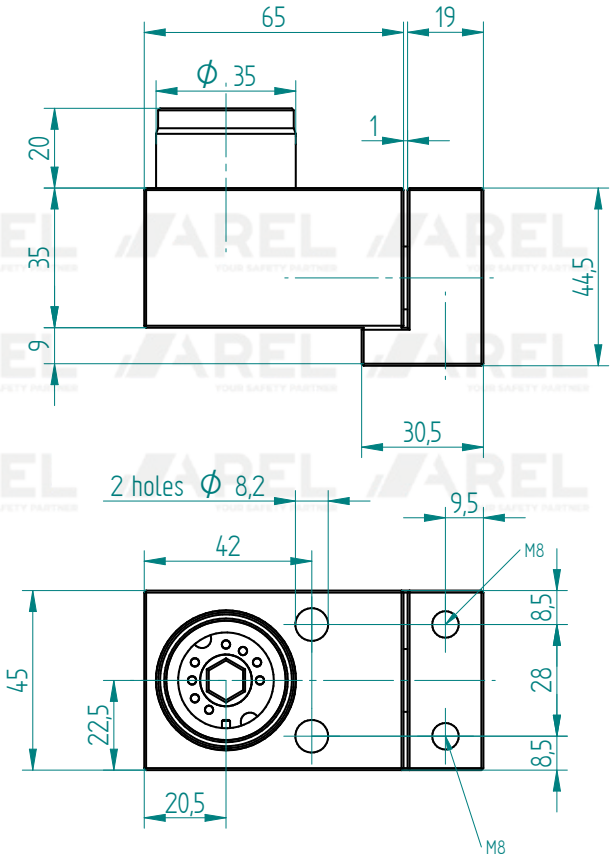
ACCESS CONTROL

DPUs

Single key swing door lock

H65.DP1Us





Product features

- Single key door interlock for partial access (visible operator);
- Ideal for use on hinged doors;
- Includes a lock body and a strike plate mounted on the door frame;
- Material: nickel-plated brass;
- Suitable for standard or harsh environments, corrosive conditions, and heavy-duty applications;
- Bolt shear strength: 24 kN.

Standard

Left-hinged door;
Nickel-plated brass.

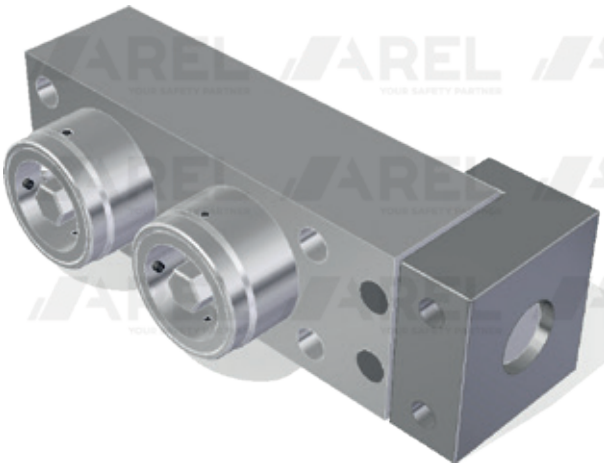
Variant	Description
H65.DP1Us/180	Right-hinged door

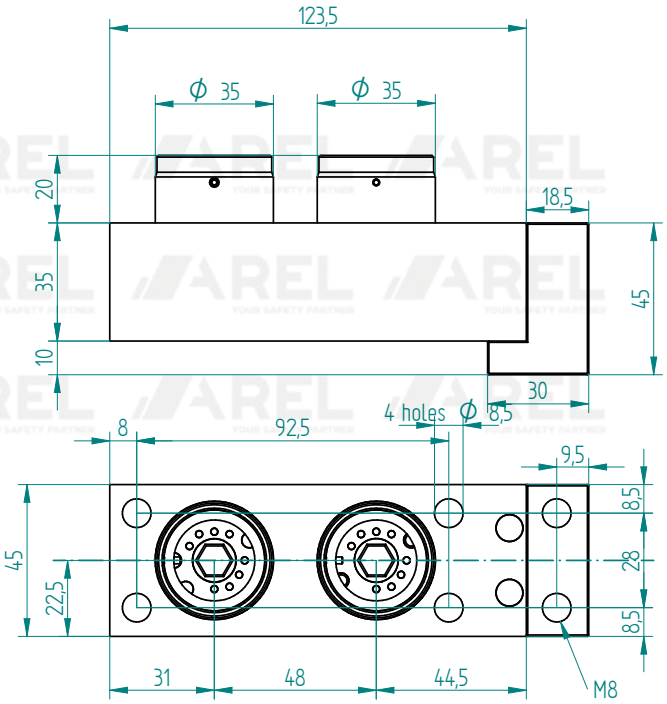
ACCESS CONTROL

DPUs

Dual key access interlock

H65.DP2Us





Product features

- Dual key door interlock for partial access (visible operator);
- Double authorization required for opening;
- Ideal for use on hinged or sliding doors;
- Material: nickel-plated brass;
- Suitable for standard or harsh environments, corrosive conditions, and heavy-duty applications;
- Supplied ready for back-panel mounting;
- Bolt shear strength: 19 kN.

Standard

Left-hinged door;
Nickel-plated brass.

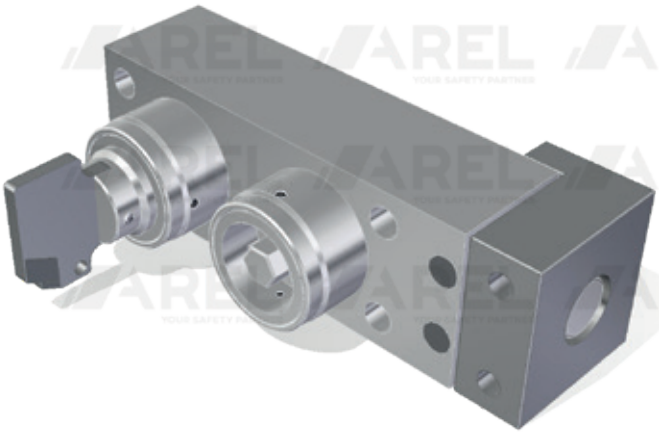
Variant	Description
H65.DPN2Us/180	Right-hinged door

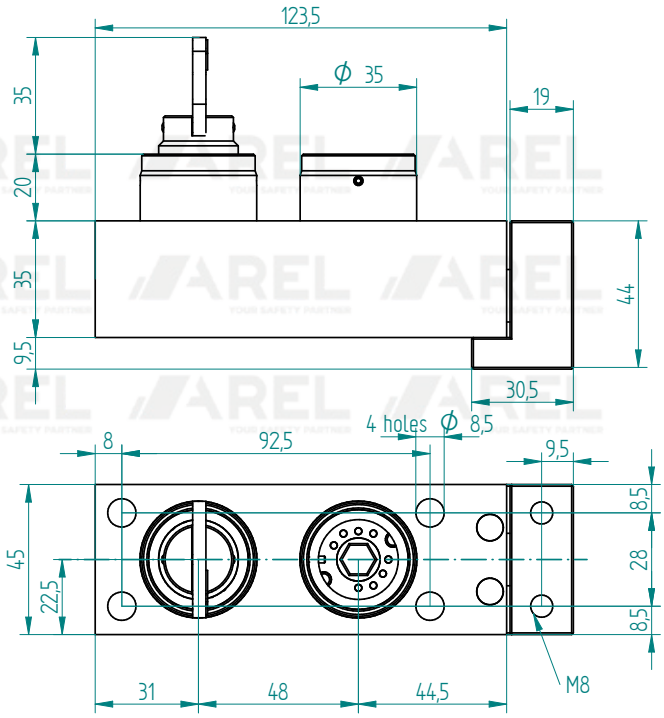
ACCESS CONTROL

DPUs

Dual interlocked key access interlock (full body access)

H65.DPN2Us





Product features

- Dual key bolt interlock for full access (operator not visible);
- The first key opens the door, the second is the operator safety key;
- Ideal for use on hinged or sliding doors;
- Material: nickel-plated brass;
- Suitable for standard or harsh environments, corrosive conditions, and heavy-duty applications;
- Supplied ready for back-panel mounting;
- Bolt shear strength: 19 kN.

Standard

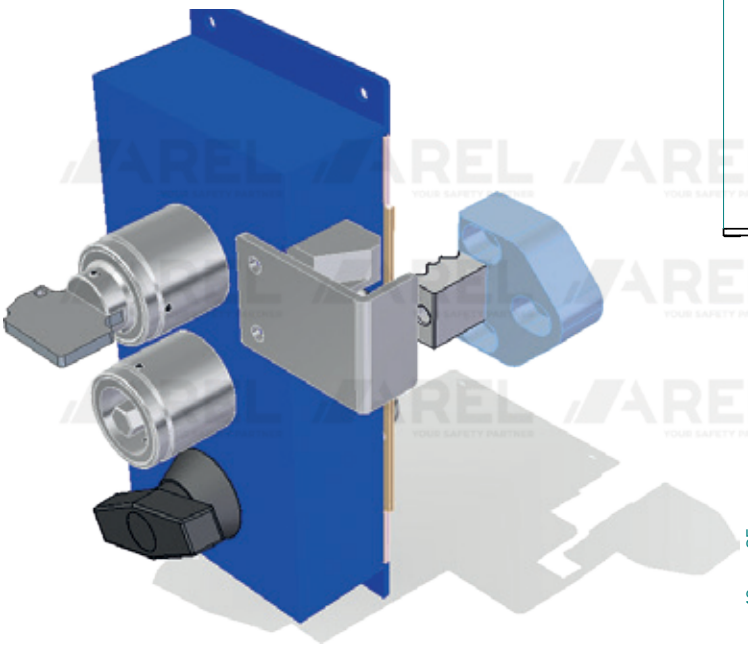
Left-hinged door;
Nickel-plated brass.

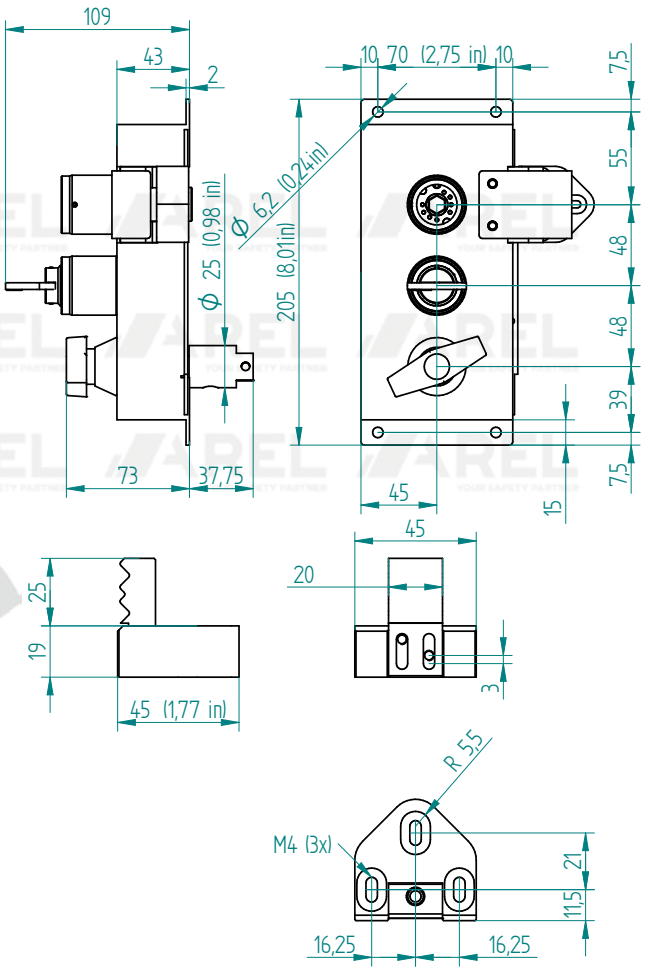
Variant	Description
H65.DPN2Us/180	Right-hinged door

DAP

Antipanic-bar door lock

H01.DAPN2





Product features

- Dual key bolt access interlock with emergency exit system (operator not visible);
- Ideal for use on hinged doors;
- The first key opens the door, the second is the operator safety key;
- Material: nickel-plated brass, stainless steel;
- Suitable for applications such as fire protection, railway workshops, turbine plants, and the offshore sector;
- Supplied ready for back-panel mounting;
- Available with internal CISA panic bar.

Standard

Blue epoxy-painted stainless steel box RAL 5002;
Nickel-plated brass lock body and cylinders;
Glass-fiber reinforced nylon handle;
Stainless steel bracket.

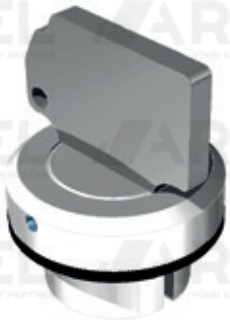
Variants	Description
H01.DAP2	Dual non-interlocked key, visible operator
H01.DAP1	Single key, visible operator

KEYS

QA
Keys

H85

H85.QA1



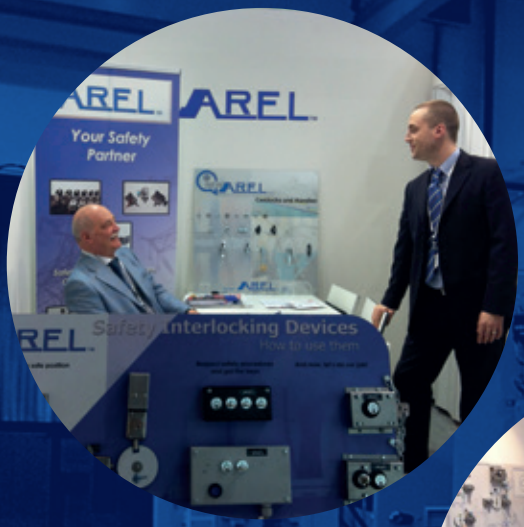
H85.QA1-IP

Product features

- Key selection available to meet a wide range of applications;
- Nickel-plated brass key range;
- Custom coding: SYMBOL (CODE) to be specified at the time of order:
  - Select up to 15 characters;
  - Any alphanumeric configuration (A-Z) and (0-9);
- Master keying available.

IMPORTANT NOTE

- Keys are always ordered separately to maintain the interlock logic and ensure system safety.
- The marking font used is “DOTUM” - size and positioning are at AREL’s discretion to optimize text visibility.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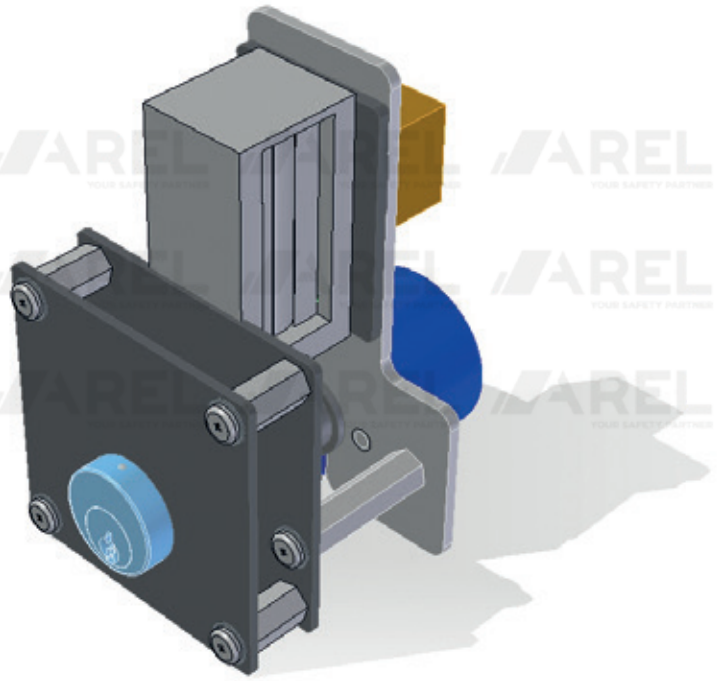
LIGHT DUTY PRODUCTS

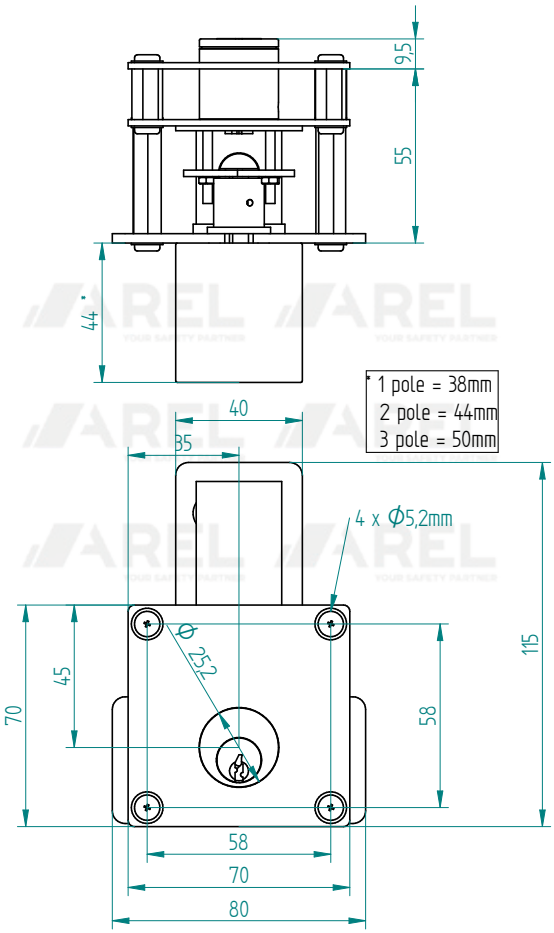
ISOLATION

SKS

Electric key switch

V180.01A20/SKS1-2C





Product features

- Key-operated electrical switch;
- Designed for machine control circuits;
- Intended for short-term, off-load isolation;
- Material: chrome-plated brass and stainless steel;
- Suitable for non-aggressive, corrosive, and heavy-duty environments;
- Back-panel mounting;
- Polycarbonate housing with IP65 protection rating (panel mounting version);
- Available in 20 A as standard and 25 A on request.

Standard

20 A switch,
with 2 elements (4 NO),
2 positions (0-1).

Variants	Description
V180.01A20/SKS1	With 1-element switch (2 NO)
V180.01A20/SKS1-3C	With 3-element switch (6 NO)
V180.01A25/SKS1-2C	With 25 A switch
V185.01A20/SKS1-2C	Housed in IP67 polyester junction box
V190.01A20/SKS1-2C	Housed in IP65 stainless steel enclosure

Other voltages available: 24-120-230 VAC / 24-110 VDC

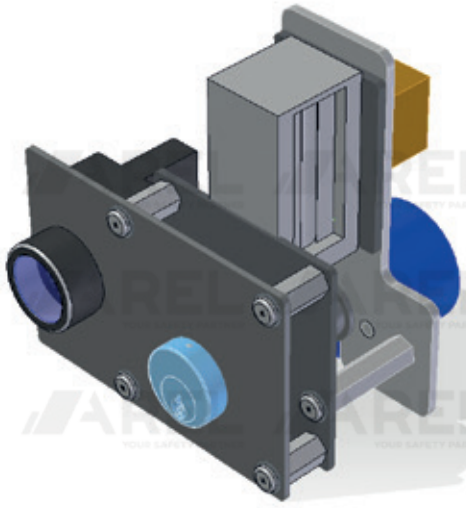
The code shown in the variant list is partial. The final unique product code depends on the required combination.

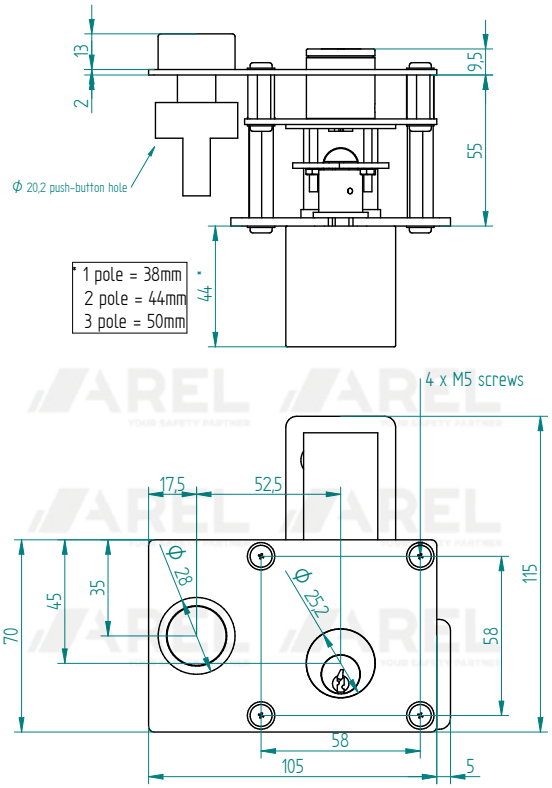
ISOLATION

SKSB

Key switch controlled by solenoid

V180.01A20/SKS1B2CPX





Product features

- Solenoid-controlled trapped key interlock;
- Mainly used in UPS (Uninterruptible Power Supply) systems;
- Ensures that access can only be granted when the UPS is in a safe condition;
- Material: nickel-plated brass, stainless steel;
- Suitable for use in corrosive and non-corrosive environments;
- Supplied ready for back-panel mounting.

Standard

20 A switch, with 2 elements (4 NO), 2 positions (0-1);
One key extraction solenoid lock (B);
One blue illuminated push button with 1 NO contact (PX);
Solenoid voltage: 110 VDC.

Variants	Description
V180.01A20/SKS1BCPX	With 1-element switch (2 NO)
V180.01A20/SKS1B3CPX	With 3-element switch (6 NO)
V180.01A20/SKS1B2C	Without push button
V180.01A20/SKS1B2CPX/I	With key locked in inserted position
V180.01A20/SKS1B2CPX/IE	With key locked in both positions
V180.01A20/SKS1B2CP	With non-illuminated push button
V180.01A25/SKS1B2CPX	With 25 A switch
V180.01A20/SKS1B2CPXd	With two contacts on the push button (2 NO)
V185.01A20/SKSA1B2CPX	Housed in IP67 polyester junction box
V190.01A20/SKSA1B2CPX	Housed in IP65 stainless steel enclosure

Other voltages available: 24-120-230 VAC / 24-110 VDC

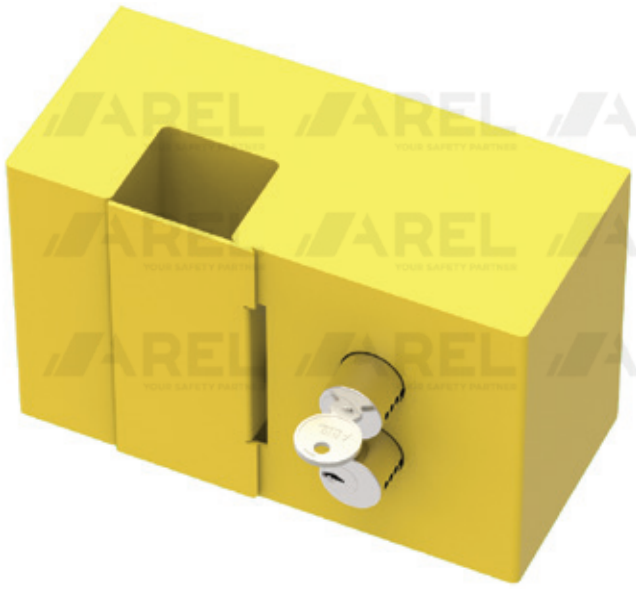
The code shown in the variant list is partial. The final unique product code depends on the required combination.

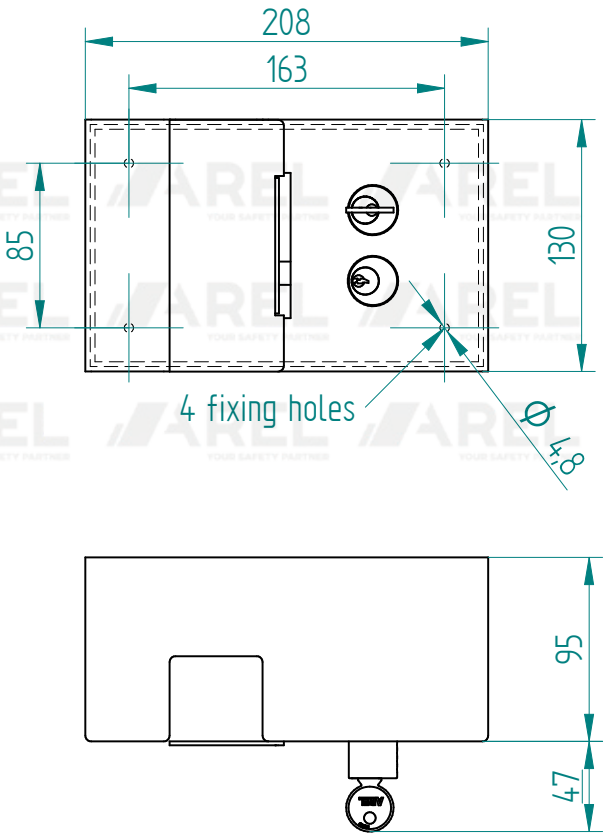
ISOLATION

SBox

Railway grounding blocking device (patented)

V68.SBox12





Product features

- Secure Box is a patented product, an innovative safety device designed for carrying out maintenance work on electrical lines, particularly on railway power lines inside rolling stock maintenance depots. Secure Box increases the level of safety on site during maintenance operations on railway electrical lines;
- Two-key earthing stick interlock for the interconnection between the earthing blade selector and the earthing stick, and between the earthing stick and the key exchanger box;
- Dedicated bracket for storing the earthing stick in the rest position;
- Bracket for pole mounting (M pole) of the earthing stick interlock device;
- Bracket and ring for flag attachment.

Standard

Epoxy yellow painted steel box;
Chrome-plated brass cylinders.

Accessories

Bracket for earthing stick storage

High-visibility signaling flag

Accessories included with the lock V68.SBox12

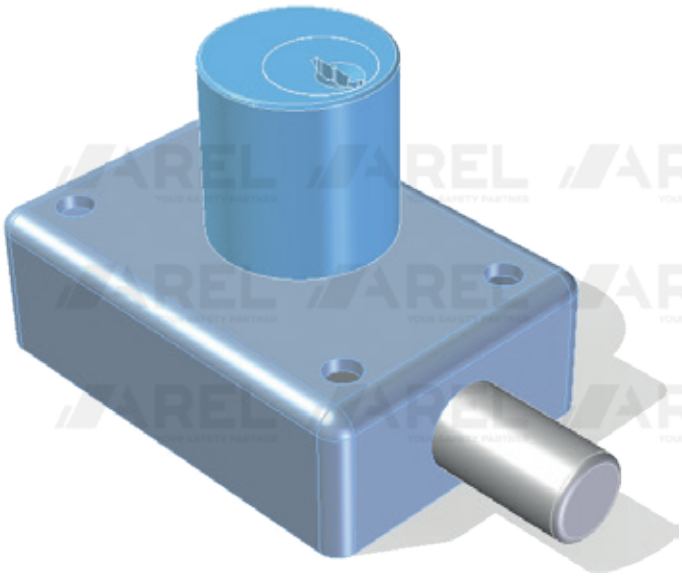
Pole mounting plate

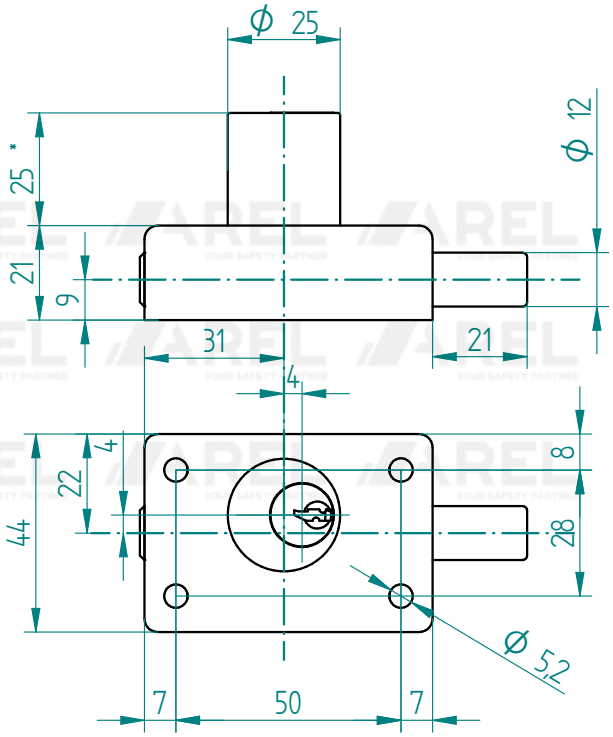
V68.STAFPM

ISOLATION

SB
Bolt lock

V55.SB11





Product features

- Operating locks are used to control disconnection operations by engaging or disengaging the control mechanisms;
- Designed for the control of electrical panels, valves, and general operating mechanisms;
- Supplied with a 12 mm diameter bolt, available in various lengths;
- Material: chrome-plated brass and stainless steel;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 25 kN.

Standard

Bolt stroke 15 mm;
Bolt diameter 12 mm;
Cylinder height 25 mm.

Variants	Description
V55.SB11/CS.A20	With 20 mm stroke
V55.SB11/D10	With bolt diameter 10 mm
V55.SB11/D6-L21	With bolt diameter 6 mm
V55.SB11/Lx	With bolt length variable up to x
V55.SBL11	With cylinder height 61 mm
V55.SBXL11	With cylinder height 75 mm
V55.SBN11	With reverse function (key withdrawn — bolt retracted inside)

It is possible to request versions with a combination of these options. For example:

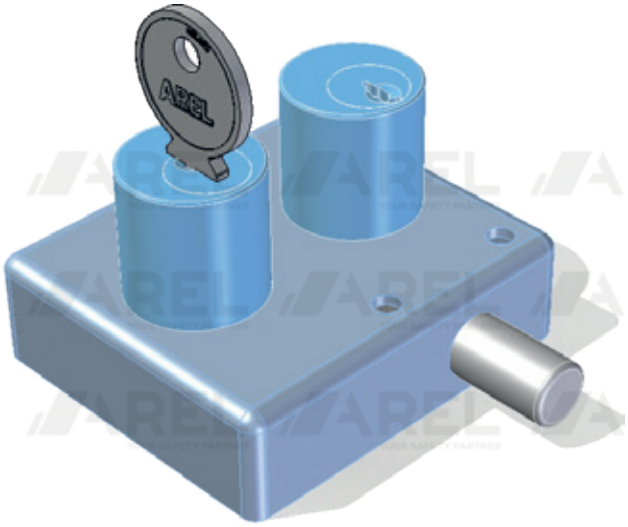
V55.SBL11/CS.A20	With 20 mm stroke and 61 mm cylinder height

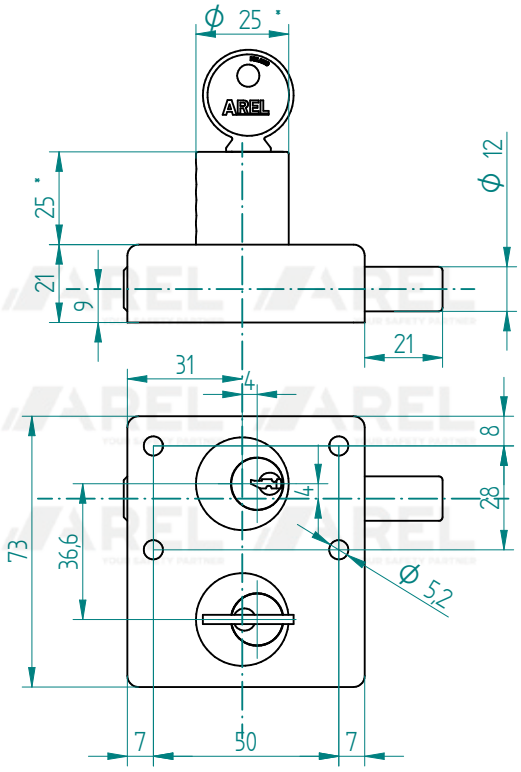
ISOLATION

SB

Bolt lock interlocked double key

V55.SB12





Product features

- Operating locks are used to control disconnection operations by engaging or disengaging the control mechanisms;
- Designed for the control of electrical panels, valves, and general operating mechanisms;
- Supplied with a 12 mm diameter bolt, available in various lengths;
- Material: chrome-plated brass and stainless steel;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 25 kN.

Standard

Bolt stroke 15 mm;
Bolt diameter 12 mm;
Cylinder height 25 mm.

Variants	Description
V55.SB12/CS.A20	With 20 mm stroke
V55.SB12/D10	With bolt diameter 10 mm
V55.SB12/D6-L21	With bolt diameter 6 mm
V55.SB12/Lx	With bolt length variable up to x
V55.SBL12	With 61 mm cylinder height
V55.SBXL12	With 75 mm cylinder height
V56.SBCS12/67	With rear enclosed limit switch IP67
V56.SBCF12/SX	With side limit switch (right or left)

It is possible to request versions with a combination of these options. For example:

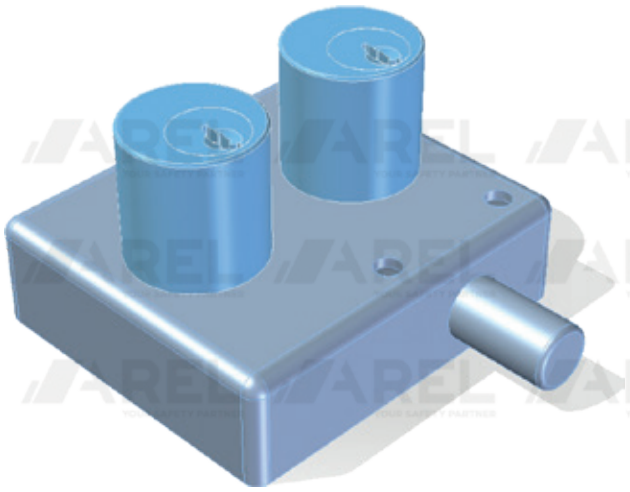
V55.SBL12/CS.A20	With 20 mm stroke and 61 mm cylinder height

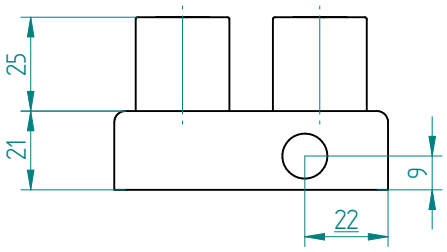
ISOLATION

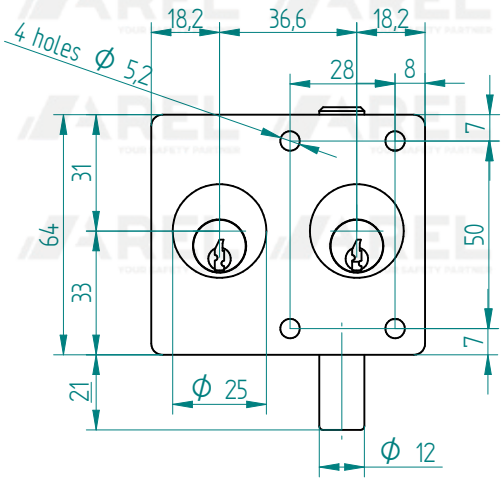
SB

Bolt lock double key

V55.SBK12







Product features

- Operating locks are used to control disconnection operations by engaging or disengaging the control mechanisms;
- Designed for the control of electrical panels, valves, and general operating mechanisms;
- Supplied with a 12 mm diameter bolt, available in various lengths;
- Material: chrome-plated brass and stainless steel;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 25 kN.

Standard

Bolt stroke 15 mm;
Bolt diameter 12 mm;
Cylinder height 25 mm.

Variants	Description
V55.SBK12/CS.A20	With 20 mm stroke
V55.SBK12/D10	With bolt diameter 10 mm
V55.SBK12/D6-L21	With bolt diameter 6 mm
V55.SBK12/Lx	With bolt length variable up to x
V55.SBKL12	With 61 mm cylinder height
V55.SBKXL12	With 75 mm cylinder height
V56.SBCSK12/67	With rear enclosed limit switch IP67
V56.SBCFK12/SX	With side limit switch (right or left)

It is possible to request versions with a combination of these options. For example:

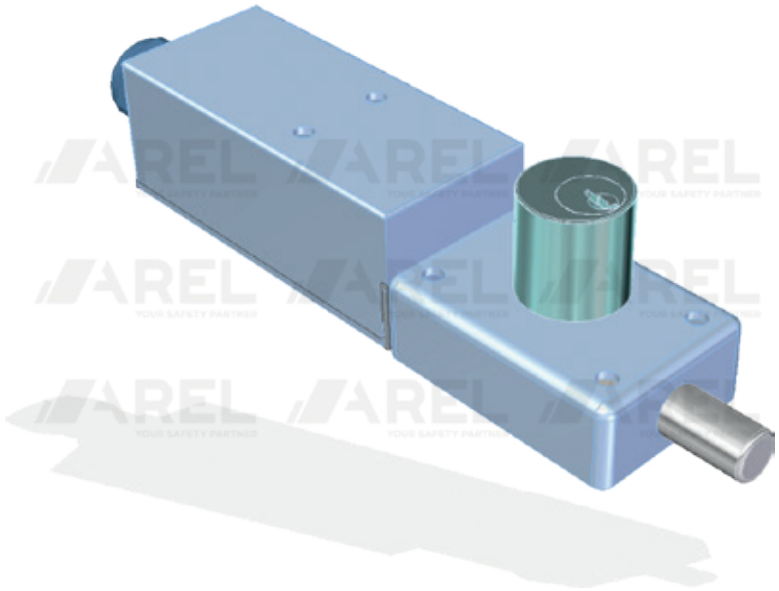
V55.SBKL12/CS.A20	With 20 mm stroke and 61 mm cylinder height

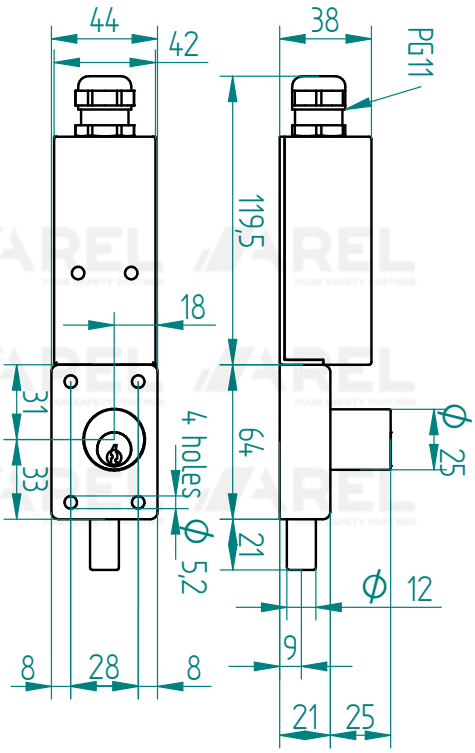
ISOLATION

SBC

Bolt lock with safety switch

V56.SBC11/67





Product features

- Operating locks are used to control disconnection operations by engaging or disengaging the control mechanisms;
- Equipped with electrical monitoring and signaling contacts;
- Designed for the control of electrical panels or valves;
- Supplied with a 12 mm diameter bolt, available in various lengths;
- Supplied with NO + NC contacts, IP67 protection rating;
- Material: chrome-plated brass and stainless steel;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 25 kN.

Standard

Bolt stroke 15 mm;
Bolt diameter 12 mm;
Cylinder height 25 mm;
NO-NC limit switch contacts.

Variants	Description
V55.SBC11/CS.A20	With 20 mm stroke
V55.SBC11/D10	With bolt diameter 10 mm
V55.SBC11/D6-L21	With bolt diameter 6 mm
V55.SBC11/Lx	With bolt length variable up to x
V55.SBLC11	With 61 mm cylinder height
V55.SBXLC11	With 75 mm cylinder height
V56.SBCN11	With reverse function (key withdrawn — bolt retracted inside)

It is possible to request versions with a combination of these options. For example:

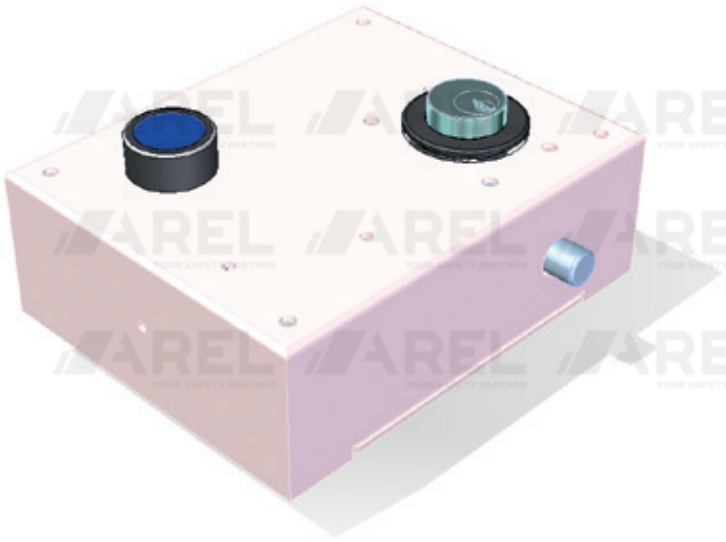
V55.SBCL11/CS.A20	With 20 mm stroke and 61 mm cylinder height

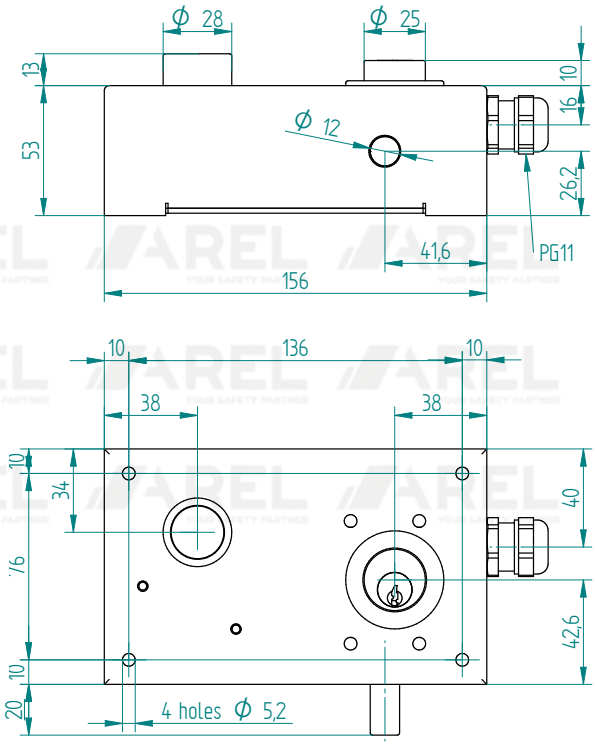
ISOLATION

SBB

Solenoid controlled bolt lock with safety switch

V56.SBCF11BPX





Product features

- Operating locks are used to control disconnection operations by engaging or disengaging the control mechanisms;
- Equipped with electrical monitoring and signaling contacts and a solenoid lock;
- Designed for the control of electrical panels or valves;
- Supplied with a 12 mm diameter bolt, available in various lengths;
- Supplied with NO + NC contacts, IP67 protection rating;
- Material: brass and stainless steel;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 25 kN.

Standard

Bolt stroke 15 mm;
Bolt diameter 12 mm;
Cylinder height 25 mm;
Limit switch contacts with common terminal.

Variants	Description
V56.SBCF11BPX/CS.A20	With 20 mm stroke
V56.SBCF11BPX/D10	With bolt diameter 10 mm
V56.SBCF11BP	Without illuminated push button

Other voltages available: 24-120-230 VAC / 24-110 VDC

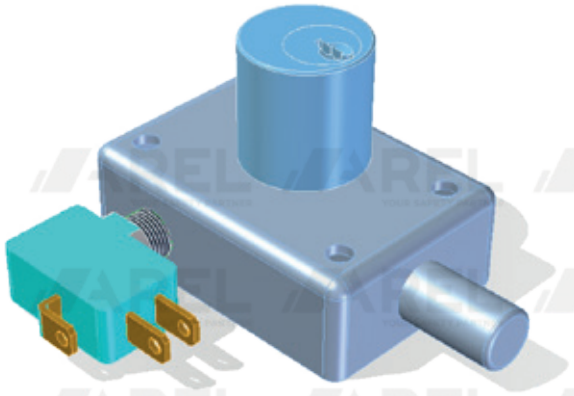
The code shown in the variant list is partial. The final unique product code depends on the required combination.

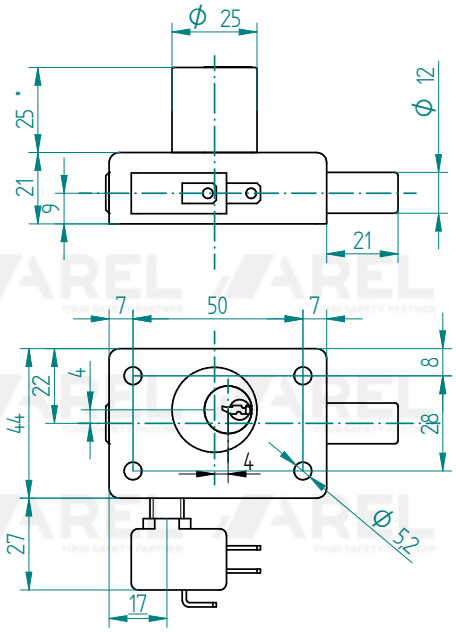
ISOLATION

SBC

Bolt lock with safety switch

V56.SBCF11





Product features

- Operating locks are used to control disconnection operations by engaging or disengaging the control mechanisms. It differs from the standard model by the presence of a limit switch, which allows an additional signaling and control function to be integrated into the operation;
- Equipped with electrical monitoring and signaling contacts and a solenoid lock;
- Designed for the control of electrical panels or valves;
- Supplied with a 12 mm diameter bolt, available in various lengths;
- Supplied with NO + NC contacts (with common terminal);
- Material: brass and stainless steel;
- Suitable for use in corrosive, non-corrosive, or harsh environments;
- Bolt shear strength: 25 kN.

Standard

Bolt stroke 15 mm;
Bolt diameter 12 mm;
Cylinder height 25 mm;
Limit switch contacts with common terminal.

Variants	Description
V56.SBCF11/DX/CS.A20	With 20 mm stroke
V56.SBCF11/DX/D10	With bolt diameter 10 mm
V56.SBCF11/DX/D6-L21	With bolt diameter 6 mm
V56.SBCF11/DX/Lx	With bolt length variable up to x
V56.SBCFL11/DX	With 61 mm cylinder height
V56.SBCFXL11/DX	With 75 mm cylinder height
V56.SBCFN11/DX	With reverse function (key withdrawn — bolt extended)
V56.SBCF11/SX	With left-side contact

It is possible to request versions with a combination of these options. For example:

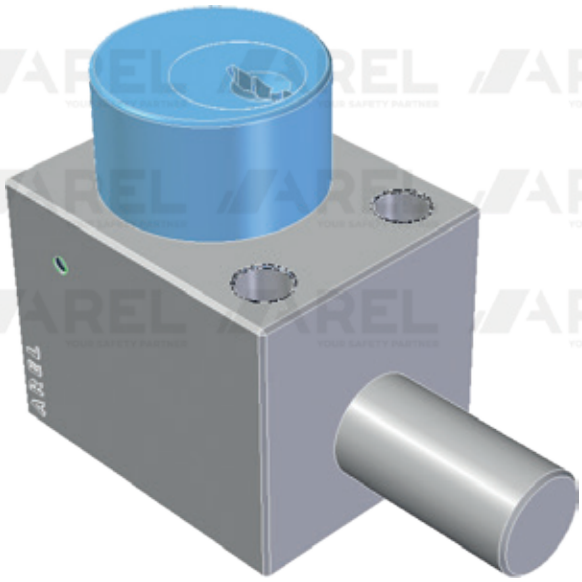
V56.SBCFL11/SX/CS.A20	With 20 mm stroke and 61 mm cylinder height, left side

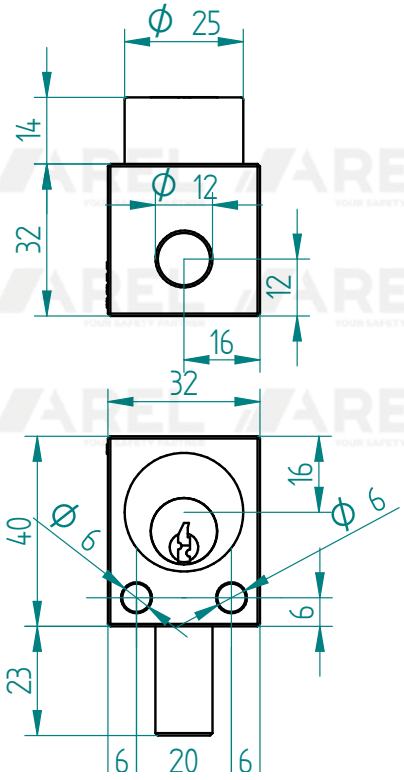
ISOLATION

MB25K

Bolt lock

V53.MB25K





Product features

» Operating locks are used to control disconnection operations by engaging or disengaging the control mechanisms.

Standard

Bolt stroke 8 mm;
Bolt diameter 12 mm;
Cylinder height 14 mm.

Variants	Description
V53.MB25KCF/DX	With right-side limit switch
V53.MB25K/08	With bolt flush with the lock
V53.MB25K/D6	With bolt diameter 6 mm
V53.MB25K/Lx	With bolt length variable up to x

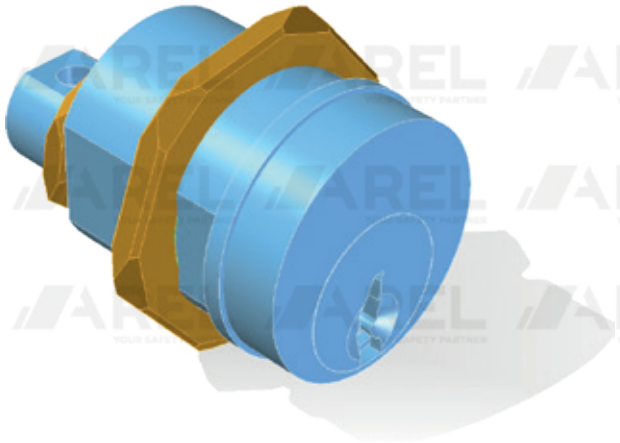
It is possible to request versions with a combination of these options. For example:

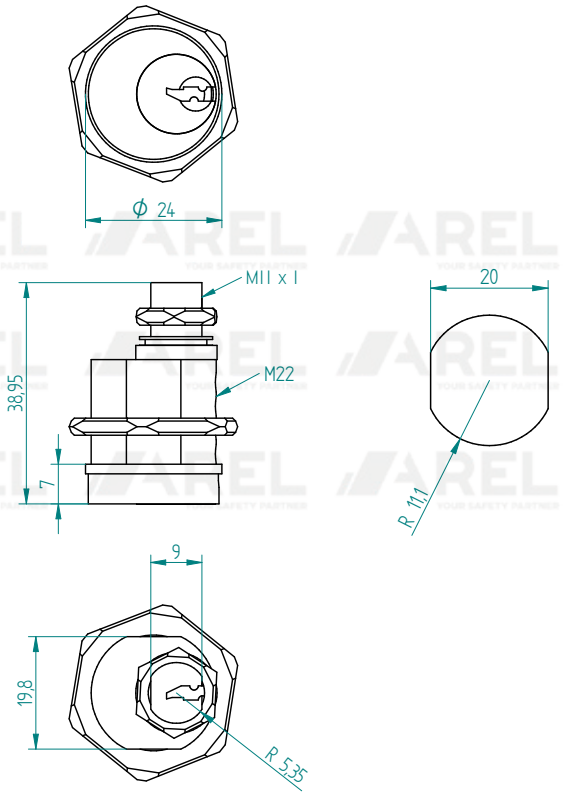
V53.MB25K/D6-L10	With bolt diameter 6 mm and maximum length 10 mm

ISOLATION

SC
Camlock

V50.SC1341/RDF





Product features

- Interlock lock for switches;
- Designed for use as a mechanical interlock for electrical panels through a mechanical connection with the isolation mechanism;
- Equipped with a cam carrier pin with M11 nut;
- Shaft movement closes the isolator;
- Material: brass and stainless steel;
- Suitable for use in corrosive, non-corrosive, or harsh environments.

Standard

Chrome-plated brass;
90° right-hand rotation;
180° rotation also available;
M11 nut.

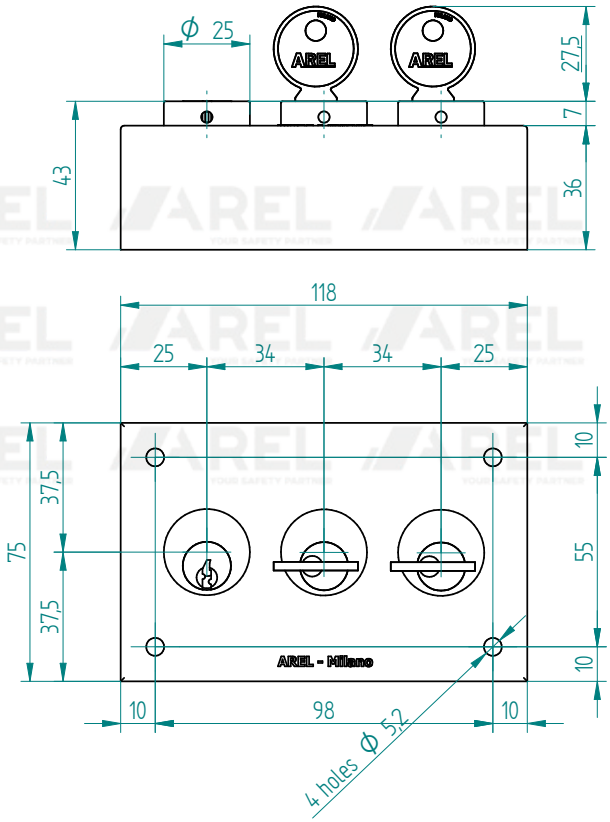
Variants	Description
V50.SC1341DX	M17 nut and 90° right-hand rotation
V50.SC1341SX	M17 nut and 90° left-hand rotation
V50.SC1341DX/RDF	M11 nut and 90° right-hand rotation
V50.SC1341SX/RDF	M11 nut and 90° left-hand rotation

KEY EXCHANGE BOXES

SD

Key exchange box

V70.03/SD12 (V70.aa/bbcc)



Product features

- Designed to enable sequential key release;
- This type of product is typically required when there are multiple access points to a hazardous area;
- Designed to serve as the link between operating locks for isolation and access interlocks;
- Material: nickel-plated brass, stainless steel;
- Available in different configurations and number of locks (b free c);
- Supplied with a housing suitable for both panel and back-panel mounting.

Standard

Black epoxy-painted stainless steel box;
aa = total number of cylinders;
bb = number of cylinders that release (from left);
cc = number of cylinders that are released.

Variants	Description
V70.aa/SDbbcc	Infinite “bbcc” combinations
V71.Xaa/SDbbcc	Unpainted stainless steel box

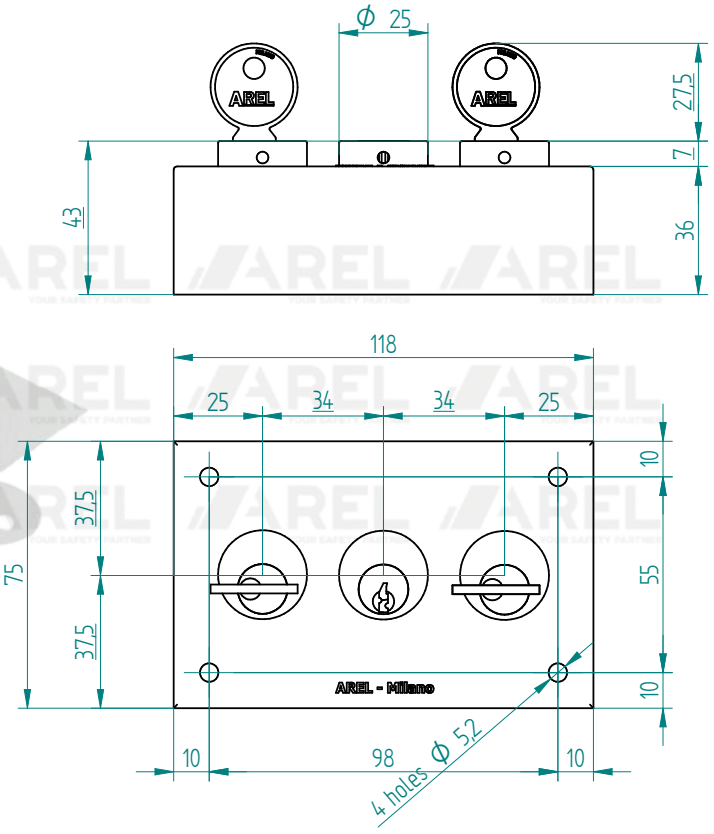
For key exchangers with more than 8 cylinders → Box with 3 rows.
Box length for a single row → L = 16 + (aa x 34).

KEY EXCHANGE BOXES WITH LOGIC MANAGEMENT (IF-AND-OR-NOT)

SD-MC

Key selector box

V72.03/SD12/S111/MC



Product features

- Designed for controlled key release through positioning of the central selection key with “OR” logic;
- Supplied with a housing suitable for both panel and back-panel mounting.

Standard

Black epoxy-painted stainless steel box.

Variant	Description
V72.05/SD14/S212/MC	Versione a 5 cilindri

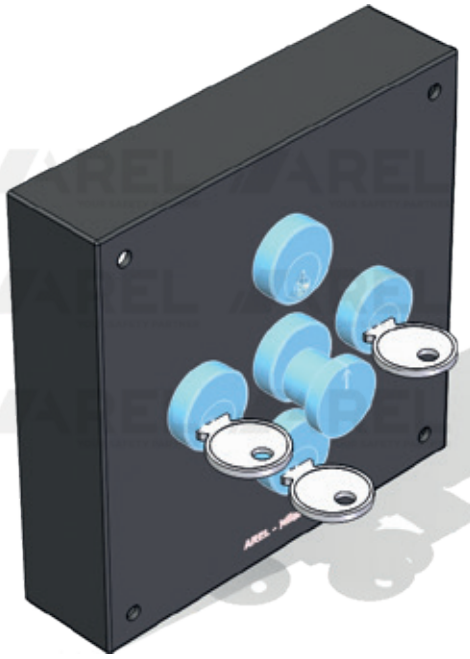
NB: This is only an example of the possibilities offered by the V72 key exchanger family.

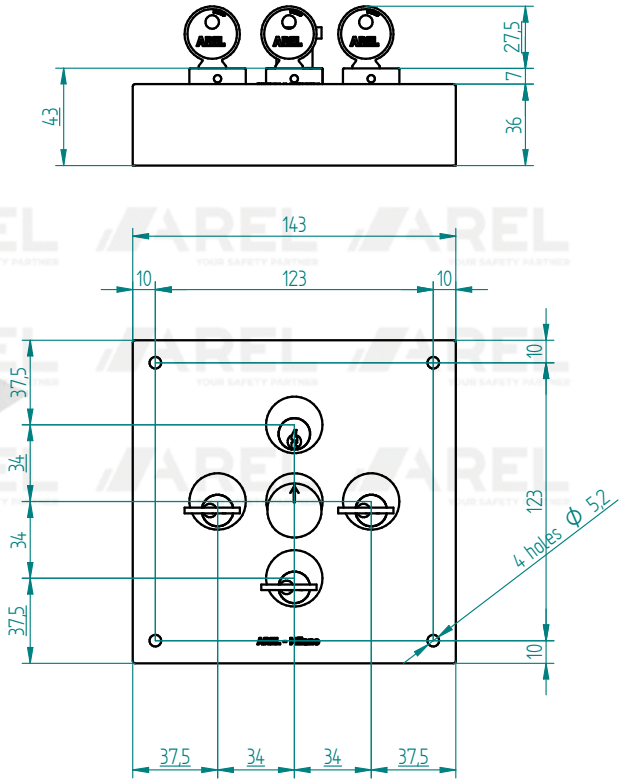
KEY EXCHANGE BOXES WITH LOGIC MANAGEMENT (IF-AND-OR-NOT)

SD-SC

Key distributor with knob selector

V72.04/SD1x4/SC1





Product features

- Selective key exchanger;
- Designed for controlled key release through positioning of the selector knob;
- Typically used in electrical panel applications where parallel power supplies must be prevented;
- Available with 3 to 4 selector knob positions (more than 4 on request);
- Material: nickel-plated brass and stainless steel housing;
- Supplied with a housing suitable for both panel and back-panel mounting.

Standard

Black epoxy-painted stainless steel box.

Variants	Description
V72.04/SD1x4/SC3	Selection of the key to be locked
V72.03/SD1x3/SC1	3-cylinder version with selection of the key to be released
V72.03/SD1x3/SC2	3-cylinder version with selection of the key to be locked

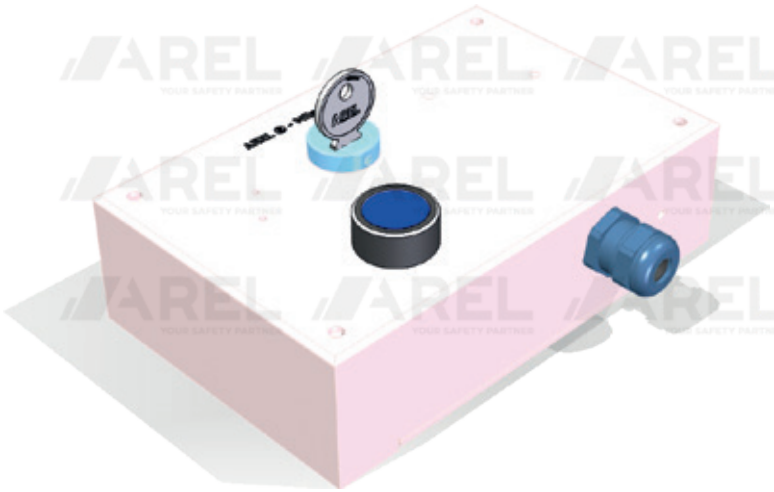
NB: This is only an example of the possibilities offered by the V72 key exchanger family.

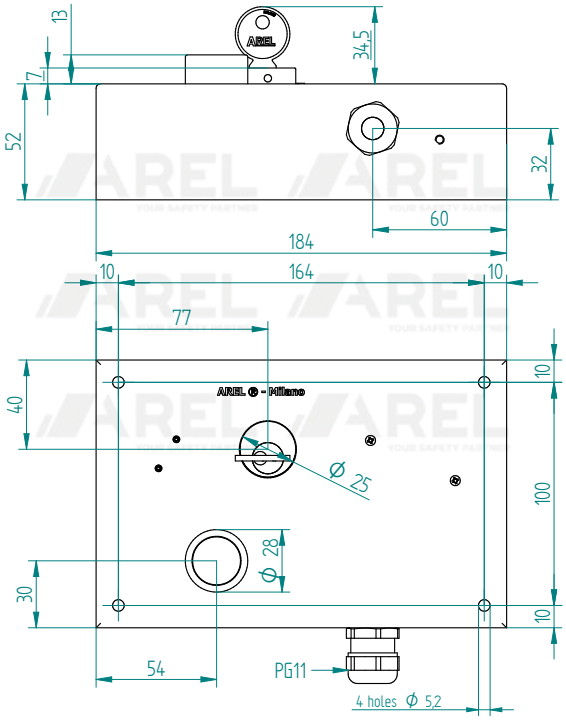
KEY EXCHANGE BOXES

SDB

Electromechanical key distribution

V81.01/SD1BCPX





Product features

- Electromechanical key exchangers are designed to control key extraction through the use of microswitches, solenoids, push buttons, and timers;
- Solenoid-controlled trapped key interlock;
- Material: nickel-plated brass and stainless steel housing;
- Suitable for use in corrosive and non-corrosive environments;
- Supplied ready for both panel and back-panel mounting.

Standard

Painted stainless steel box RAL 7035;
One key extraction solenoid lock (B);
One NO-NC signaling contact on the key (C);
One blue illuminated push button with 1 NO contact (PX);
2 m multipolar cable;
Solenoid voltage: 110 VDC.

Variants	Description
V81.01/SD1BCP	With non-illuminated push button
V81.01/SD1BCPXd	With two contacts on the push button (2 NO)
V81.01/SD1B2CPX	With 2 signaling contacts
V81.01/SD1BCPX/R	With rear cable outlet

Other voltages available: 24-120-230 VAC / 24-110 VDC

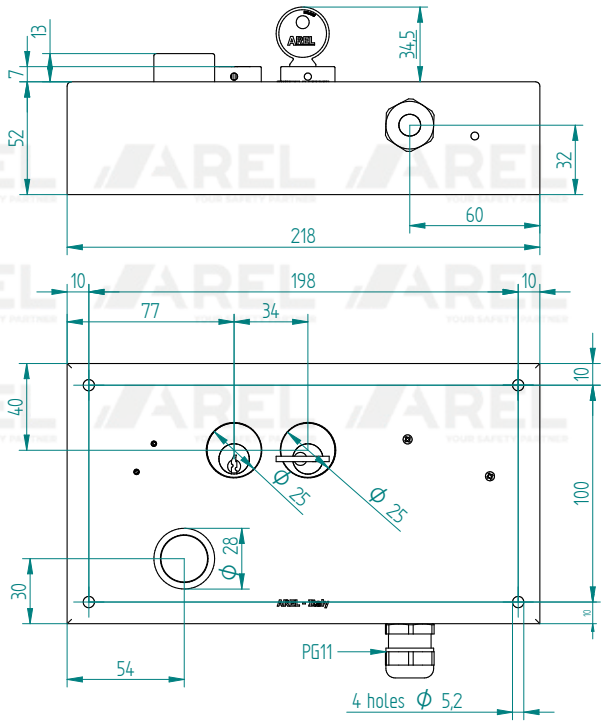
The code shown in the variant list is partial. The final unique product code depends on the required combination.

KEY EXCHANGE BOXES

SDB

Electromechanical key distribution

V81.02/SD11BCPX



Product features

- Electromechanical key exchangers are designed to control key extraction through the use of microswitches, solenoids, push buttons, and timers;
- Solenoid-controlled trapped key interlock;
- Material: nickel-plated brass and stainless steel housing;
- Suitable for use in corrosive and non-corrosive environments;
- Supplied ready for back-panel mounting;
- Also available in 3-, 4-, or 5-cylinder configurations (V81.03 - 04 - 05).

Standard

Painted stainless steel box RAL 7035;
One key extraction solenoid lock (B);
One NO-NC signaling contact on the first key;
One blue illuminated push button with 1 NO contact (PX);
2 m multipolar cable;
Solenoid voltage: 110 VDC.

Variants	Description
V81.02/SD2BCPX	With two non-interlocked cylinders (2 keys in or out)
V81.02/SD11B2CPX	With 2 signaling contacts (2 NO - 2 NC)
V81.02/SD11-2BCPX	With 2 solenoid locks
V81.02/SD11BCPX/R	With rear cable outlet
V81.02/SD11BCP	With non-illuminated push button
V81.02/Sd11BCPXD	With two contacts on the push button (2 NO)

Other voltages available: 24-120-230 VAC / 24-110 VDC

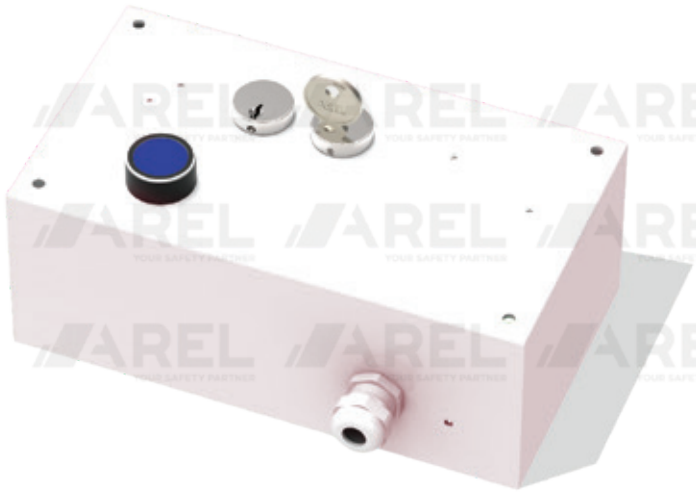
The code shown in the variant list is partial. The final unique product code depends on the required combination.

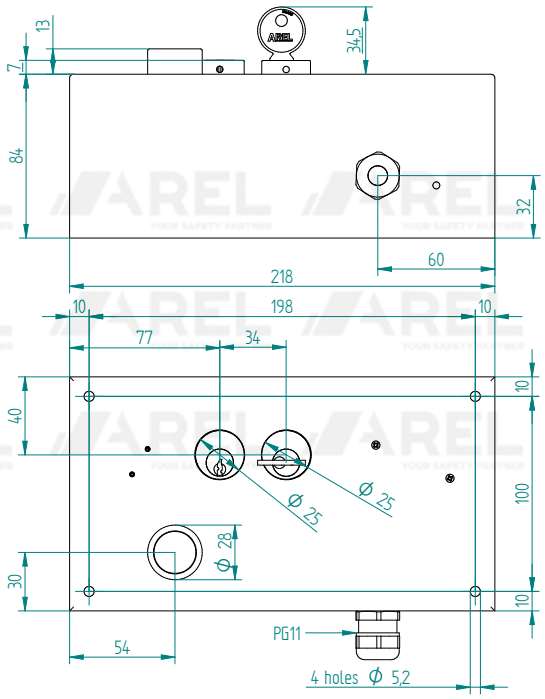
KEY EXCHANGE BOXES

SDBT

Key distribution with time delay unit (timed)

V83.02/SD11BCPXT





Product features

- Electromechanical key exchangers are designed to control key extraction through the use of microswitches, solenoids, push buttons, and timers. The timer controls when the key can be removed, ensuring that the access and maintenance area is in a safe condition;
- Trapped key interlock controlled by a timer connected to a solenoid;
- Material: nickel-plated brass and stainless steel housing;
- Suitable for use in corrosive and non-corrosive environments;
- Supplied ready for back-panel mounting.

Standard

Painted stainless steel box RAL 7035;
One key extraction solenoid lock (B);
One NO-NC signaling contact on the first key;
One blue illuminated push button with 1 NO contact (PX);
2 m multipolar cable;
Solenoid voltage: 110 VDC;
Relay timer set to 12 minutes.

Variants	Description
V83.01/SD1BCPXT	With a single cylinder
V83.02/SD2BCPXT	With two non-interlocked cylinders (2 keys in or out)
V83.02/SD11B2CPXT	With 2 signaling contacts (2 NO - 2 NC)
V83.02/SD11-2BCPXT	With 2 solenoid locks
V83.02/SD11BCPXT/R	With rear cable outlet
V83.02/SD11BCPT	With non-illuminated push button
V83.02/SD11BCPXdT	With two contacts on the push button (2 NO)

Other voltages available: 24-120-230 VAC / 24-110 VDC

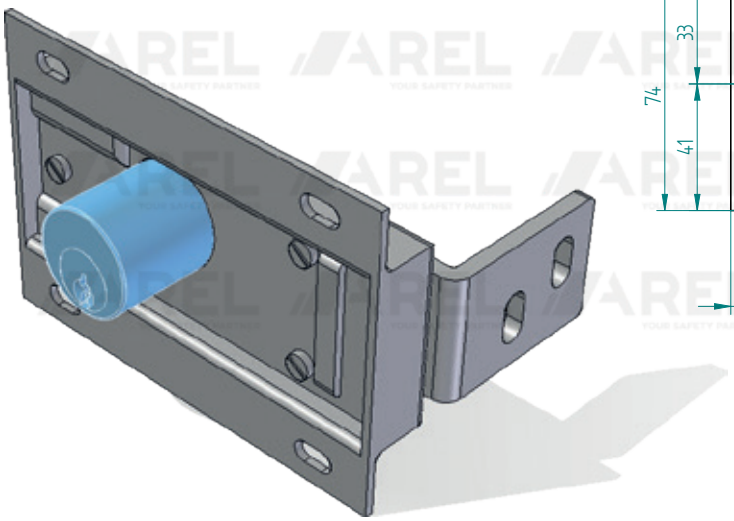
The code shown in the variant list is partial. The final unique product code depends on the required combination.

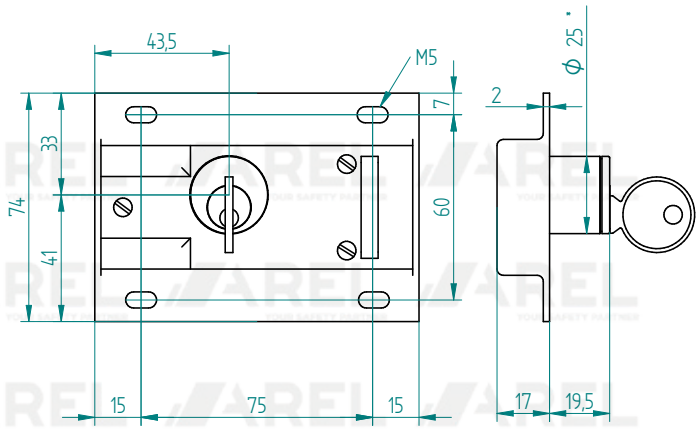
ACCESS CONTROL

SBP

Single key door lock

V65.SBP1





Product features

- Door interlocks are installed on the doors of MV/HV transformer cabins/boxes and in all rooms where maximum security is required;
- Single key door interlock for partial access (visible operator);
- Ideal for use on hinged doors;
- Material: nickel-plated brass and stainless steel;
- Supplied ready for back-panel mounting.

Standard

"N" bracket;
Cylinder height 25 mm;
Left-hinged door.

Variants	Description
V65.SBP1/STAF-D	With "D" type bracket
V65.SBP1/STAF-L	With "L" type bracket
V65.SBP1/STAF-P	With "P" type bracket
V65.SBP1/180	Right-hinged door
V65.SBPL1	Cylinder height 56 mm
V65.SBPXL1	Cylinder height 70 mm

It is possible to request versions with a combination of these options. For example:

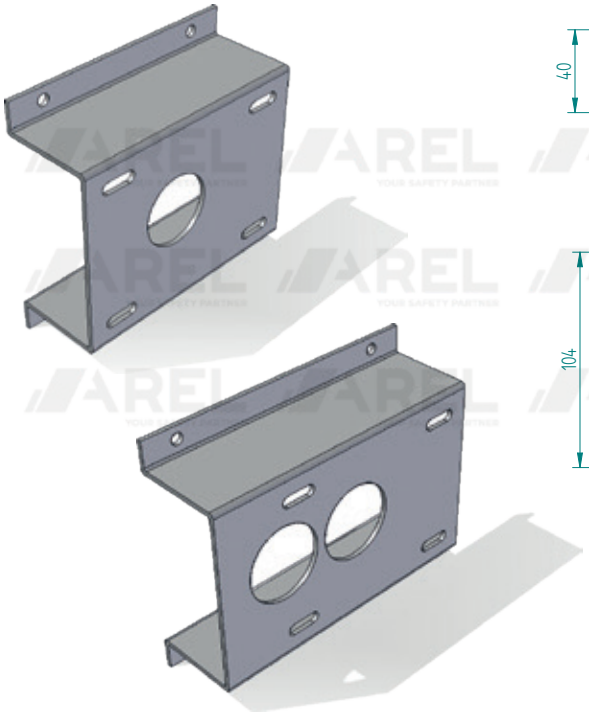
V65.SBPXL1/STAF-D	With "D" type bracket and 70 mm cylinder height

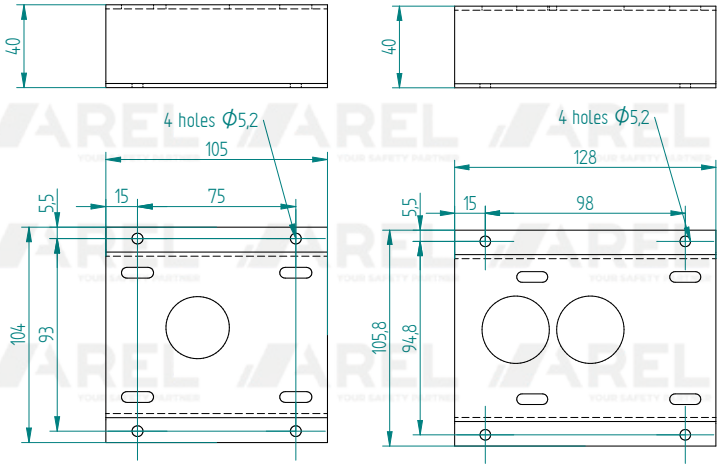
ACCESS CONTROL

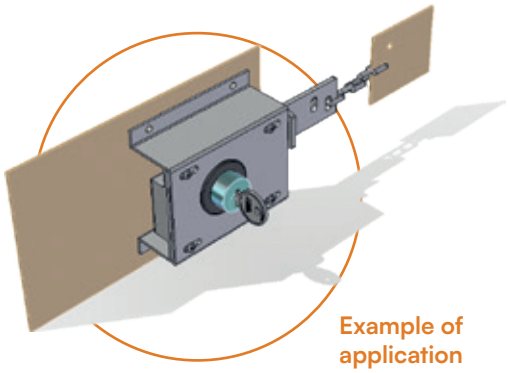
SEP

Special erection plate

V90.SEP1-P36MW/BP







Example of application

Product features

» The SEP has been designed to install door interlocks in cases where standard installation is not possible or suitable, for example on sliding doors, inspection hatches, or containers. The SEP plate must be supplied with a plate and chain; moreover, the required bracket is not the standard one, but the “D” type.

Standard

Stainless steel;
Accessories: chain with plate for welding and “D” type bracket.

Variants	Description
V90.SEP1-P36MW/BP	SEP for single key door interlock
V90.SEP2-P36MW/BP	SEP for dual key door interlock

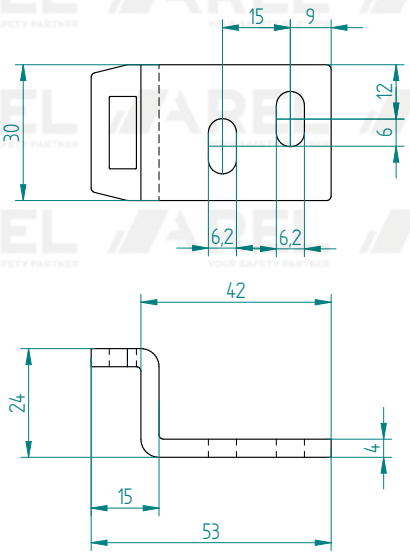
Chain variants	Description
V90.CAT01xSEP	Chain and plate for SEP (15 cm)
V90.CAT02xSEP	Chain and M8 bolt for SEP (15 cm)

ACCESS CONTROL

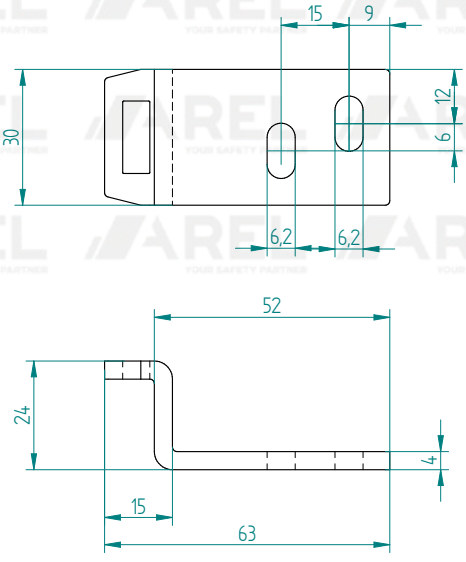
SBP
Brackets

V67 bracket for SBP N-L

staffa/stirrup N

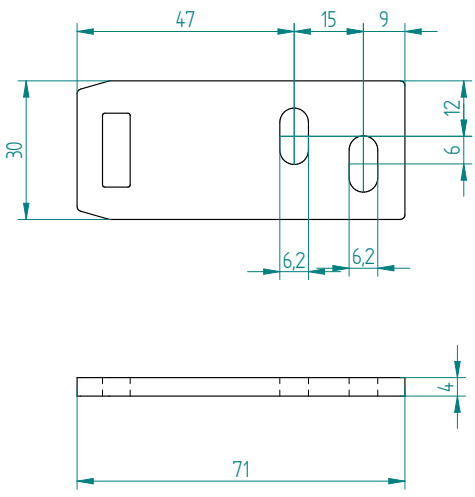


staffa/stirrup L

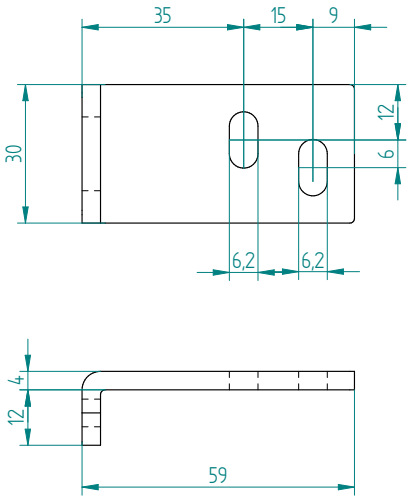


V67 bracket for SBP P-D

staffa/stirrup P



staffa/stirrup D

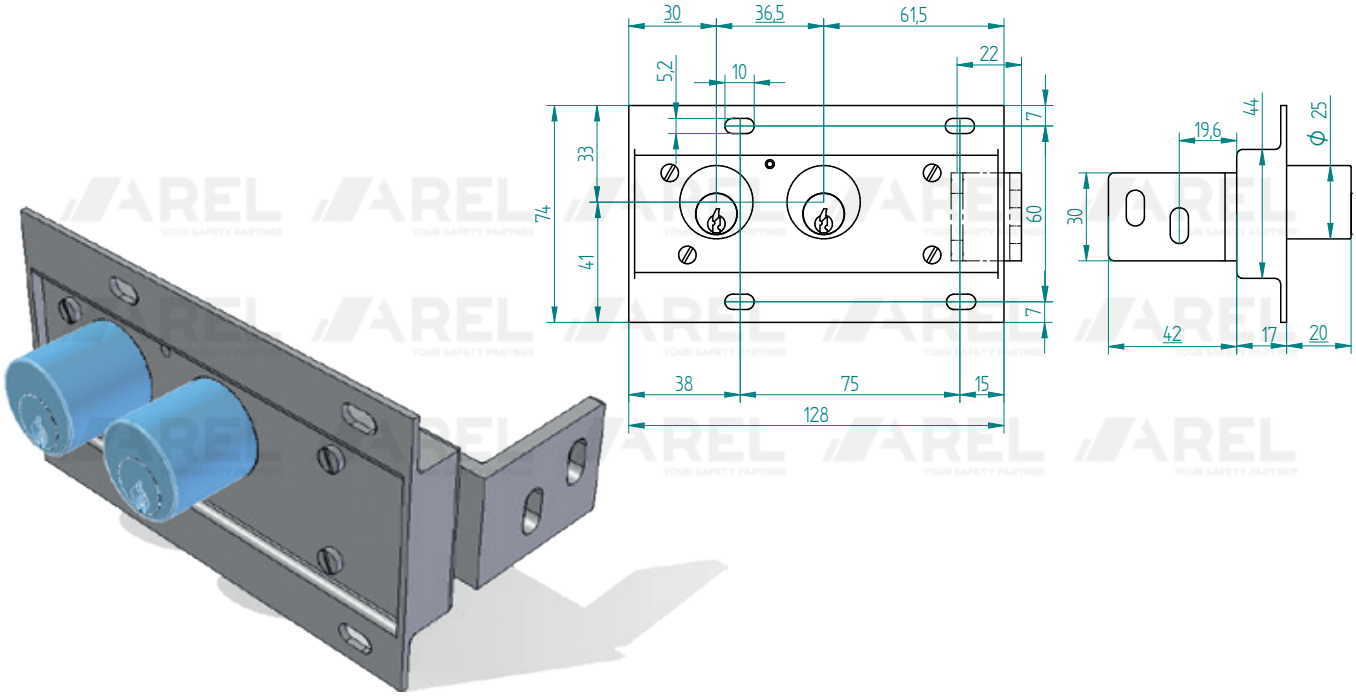


ACCESS CONTROL

SBP

Dual key access interlock

V70.SBP2



Product features

- Door interlocks are installed on the doors of MV/HV transformer cabins/boxes and in all rooms where maximum security is required;
- Dual key door interlock for partial access (visible operator);
- Ideal for use on hinged doors;
- Material: nickel-plated brass and stainless steel;
- Supplied ready for back-panel mounting.

Standard

"N" bracket;
Cylinder height 25 mm;
Left-hinged door.

Variants	Description
V65.SBP2/STAF-D	With "D" type bracket
V65.SBP2/STAF-L	With "L" type bracket
V65.SBP2/180	Right-hinged door
V65.SBPL2	Cylinder height 56 mm
V65.SBPXL2	Cylinder height 70 mm

It is possible to request versions with a combination of these options. For example:

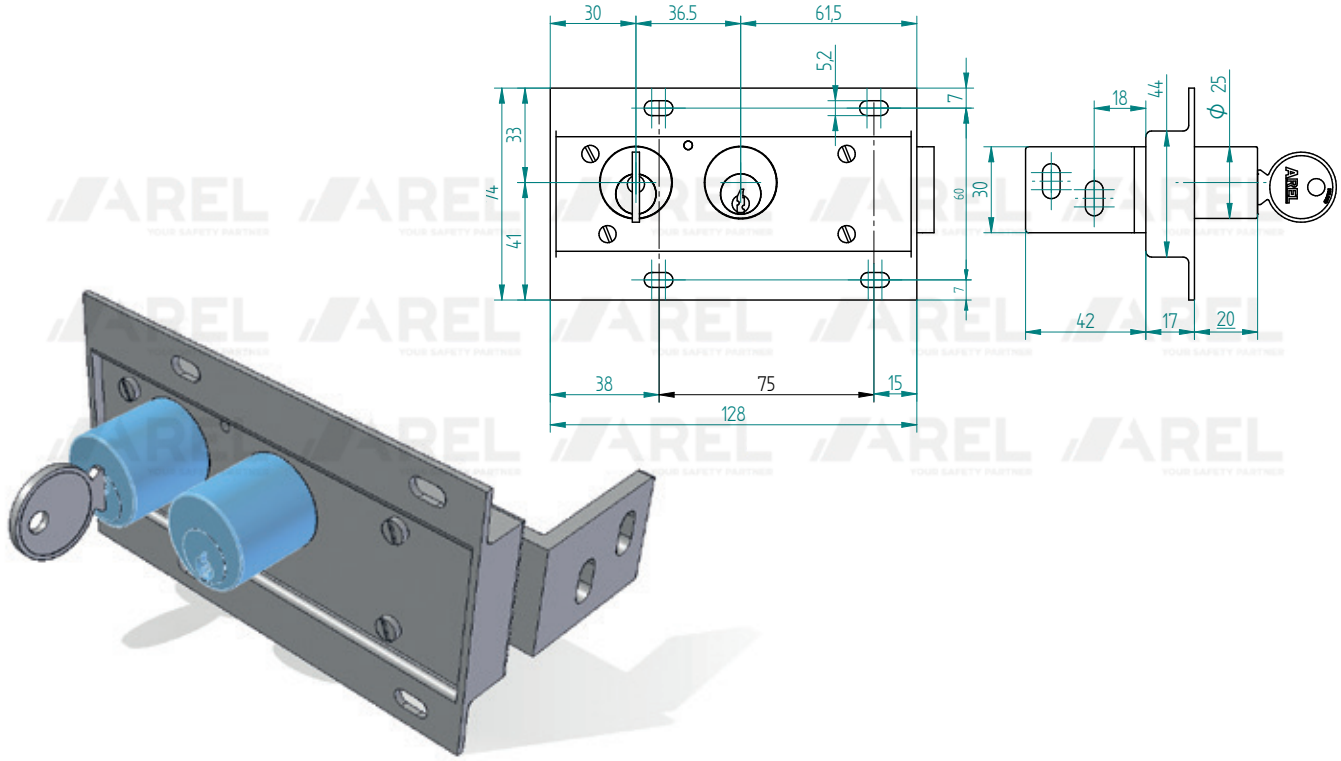
V65.SBPXL2/STAF-D	With "D" type bracket and 70 mm cylinder height

ACCESS CONTROL

SBP

Dual interlocked key access interlock (full body access)

V65.SBPN2



Product features

- Door interlocks are installed on the doors of MV/HV transformer cabins/boxes and in all rooms where maximum security is required;
- Dual key bolt interlock for full access (operator not visible);
- Ideal for use on hinged doors;
- Material: nickel-plated brass and stainless steel;
- Supplied ready for back-panel mounting.

Standard

"N" bracket;
Cylinder height 25 mm;
Left-hinged door.

Variants	Description
V65.SBPN2/STAF-D	With "D" type bracket
V65.SBPN2/STAF-L	With "L" type bracket
V65.SBPN2/180	Right-hinged door
V65.SBPNL2	Cylinder height 56 mm
V65.SBPNXL2	Cylinder height 70 mm

It is possible to request versions with a combination of these options. For example:

V65.SBPNXL2/STAF-D	With "D" type bracket and 70 mm cylinder height

KEYS

QL
Keys

V85

V85.QL1

Product features

- Nickel silver alloy key;
- Possibility to manufacture locks with master key (which opens all locks - V36);
- Custom coding: TEXT to be specified at the time of order:
  - **MICRODOTS:**
    - **Select up to 7 characters;**
    - Any alphanumeric configuration (A-Z) and (0-9);
  - **LASER:**
    - **Select up to 15 characters;**
    - Any alphanumeric configuration (A-Z) and (0-9);
- Master keying available.

IMPORTANT NOTE

Keys are always ordered separately to maintain the interlock logic and ensure system safety.

Variants	Description
V85.QL1SC	Spare keys
V85.QL1SP	Replacement keys
V36.QL1	Master key

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www.trappedkey.com

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