

ERTK Solenoid Controlled Key Switch



The ERTK is a heavy-duty solenoid controlled key driven electrical switch interlock ideal for the controlled isolation or switching of low current. This product is used where a process can send a signal to release a key, e.g. a robot has to finish a cycle prior to isolation.

Upon removal of the key, the ERTK switch contacts change to isolate the process. This type of isolator should be used for short term, off load isolation.

The unit is ready for mounting into an existing panel or in an enclosure up to IP65 rated.

The ERTK is manufactured from either brass, polycarbonate or stainless steel making it suitable for use in standard or harsh corrosive environments.



Trapped Key Interlocks



INDUSTRY



ENERGY



Railway

USAGE

The ERTK solenoid controlled switch is designed to be part of a safety system and is used to isolate the power releasing a key which is then used to gain access to a hazardous area via an access interlock.



The ERTK can't be used as an access lock.

INSTALLATION



To prevent unauthorized removal, the lock must be mounted using rivets or M5 stainless steel safety fixing screws (washers, nuts and screws).

MAINTENANCE

Periodic visual checks should be carried out to check for deformation or corrosion/erosion/acid aggregating by the site manager/safety officer. Clearing the marking/closing of the lock attachment.

Do not lubricate lock barrel with oil or grease, use Powder Graphite if necessary.



In case of defects being detected please contact your nearest Serv Trayvou Support Department for further actions. Please see Contact section for contact details.

TECHNICAL DATA

Temperature rating	Contact STI for details										
Weight	1,1 kg										
Type of mounting	Panel mounting or enclosure										
Material	- Barrel: Nickelled brass - Internals: Brass & stainless steel - Flip cap: Stainless steel 304 - Marking plate: Aluminium (glued) - Plate glue: Acrylic - Loctite AA330										
Product finish	Start from 2 key entries, red (RAL 3000) polyester paint front										
Enclosure	From IP 55 polycarbonate enclosure										
Power isolation	20A										
Voltage	24V AC/DC - 48V AC/DC - 110V AC/DC - 230V AC/DC										
Nominal power consumption	<table border="0"> <tr> <td>Operating factor 15%</td> <td>Operating factor 100%</td> </tr> <tr> <td>24 V - 40W</td> <td>24 V - 10W</td> </tr> <tr> <td>48V - 40W</td> <td>48V - 10W</td> </tr> <tr> <td>110V - 42W</td> <td>110V - 10W</td> </tr> <tr> <td>230V - 48W</td> <td>230V - 10W</td> </tr> </table>	Operating factor 15%	Operating factor 100%	24 V - 40W	24 V - 10W	48V - 40W	48V - 10W	110V - 42W	110V - 10W	230V - 48W	230V - 10W
Operating factor 15%	Operating factor 100%										
24 V - 40W	24 V - 10W										
48V - 40W	48V - 10W										
110V - 42W	110V - 10W										
230V - 48W	230V - 10W										
Motor isolation (AC values) / Switch polarity	690V/4P Contact STI for other configurations										
Homologation	Switch: IEC 60947										
Salt spray resistance	Contact STI for details										
IP Rating	Contact STI for details										
Mechanical life	Contact STI for details										
B10d	Contact STI for details										
Diagnostic coverage (%)	Contact STI for details										
Retention force	Contact STI for details										
Shock & vibration (IK)	Contact STI for details										
Dielectric	Contact STI for details										
ROHS	Certificate available on request										
REACH	Certificate available on request										
Conflict mineral	Certificate available on request										

OPTIONS

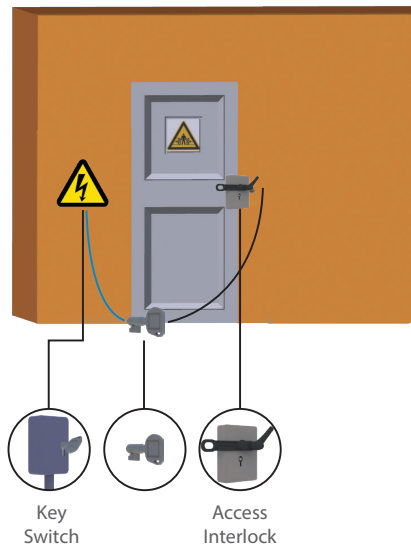
- 1 to 6 key entries
- Standard Switch 20-2C, 30-1C or 30-3C
- Plate mounting, stainless steel or polycarbonate cabinet
- Flip cap
- ATEX explosive area
- Solenoid duty factor 100%
- Without pushbutton
- Without LED

APPLICATION

ERTK solenoid controlled switch is typically used machine-guarding where a high degree of inertia. It is usually used in combination with an access interlock such as the RTG for part body access or an access interlock with an exchange key for full body access control.

The ERTK breaks the machine safety circuit, ensuring a machine is shut down. Once the machine has completed the cycle, an external signal is received by the solenoid, which is indicated by an illuminated LED. Activating the green button on the ERTK will enable the key to be turned and removed ensuring the power is locked out. The key can then be taken to the NX access interlock to enable access to the machine.

The machine cannot be restarted until the door is closed, the latch is trapped in the NX access interlock and the key is removed and taken to the ERTK solenoid controlled switch.

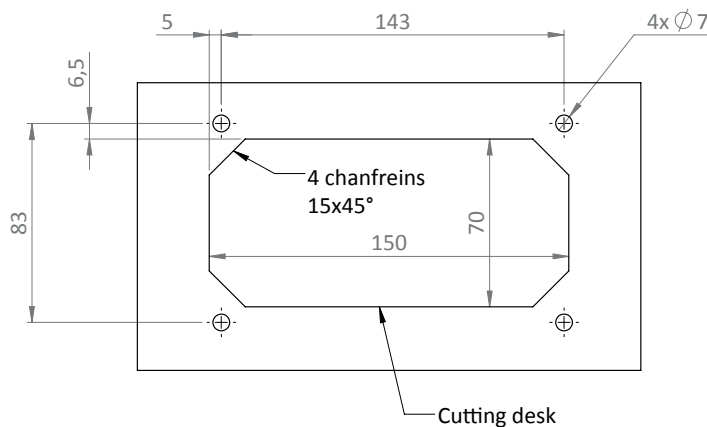
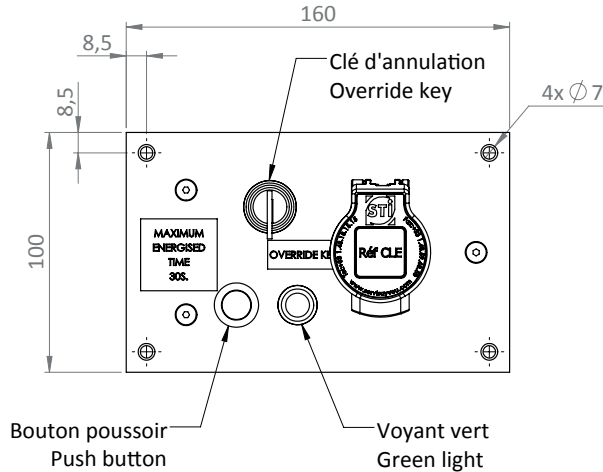
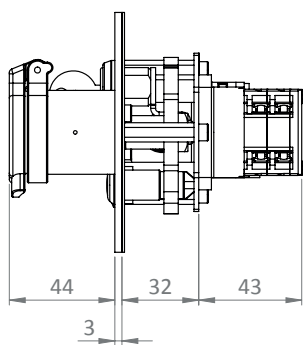


DRAWING

Dimensions: in mm

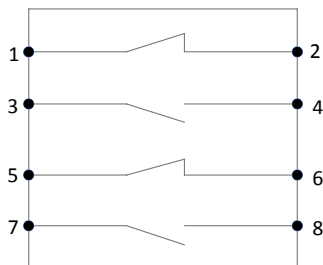
Note: For safe mounting, use security screws

ERTK

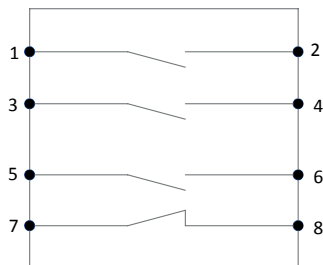


WIRING DIAGRAM

ERTK



Rotary switch 202F - 5,5 kW
(contacts in key free configuration)



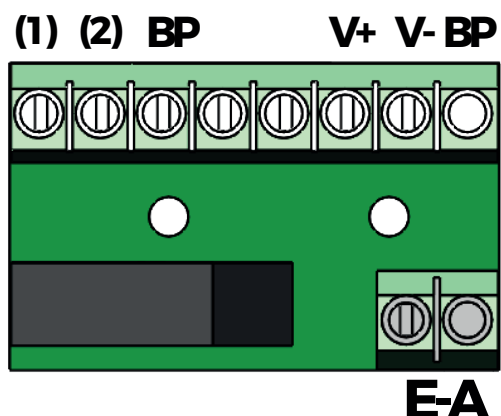
Rotary switch 301F - 5,5 kW
(contacts in key free configuration)

Dénomination	C6	C7
Contacts	20-2F	30-1F
Puissance	5,5 kW	5,5 kW

Wiring identification connection on STI card:

(1) (2) : AC/DC inputtension

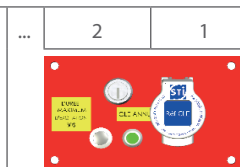
BP : Push button (wire by STI)
V+ V- : light (wire by STI)
E-A : solenoid (wire by STI)



ORDER INFORMATION

	Component type	1	No. of entries	2	3	No. of contact	4	5	6
Part number	ERTK								
Example	ERTK	E	1	SP	FS	1	C6	E	000

1	Panel-mount or Box	E = panel mounted B = RTK integrated into box (IP55 polycarbonate as standards)
2	Lock function	SP = release key with presence of tension RP = trap the key trapping with presence of tension
3	Key condition	NS = No contact FS = Contact in front BS = Contact at back
4	Type of contact	C6 = 2O-2C, 5.5kW, CA10 C7 = 3O-1C, 5.5kW, CA10F C9 = 3O-3F, 11kW, CA25 C11 = 3O-3F, 18.5kW, C42 C0 = No contact
5	Language	A = English F = French E = Spanish G = German
6	Special work order	For dedicated applications. This number is assigned by STI for a suitable product. 0000 applies for standard items.



CONTACT INFORMATION

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