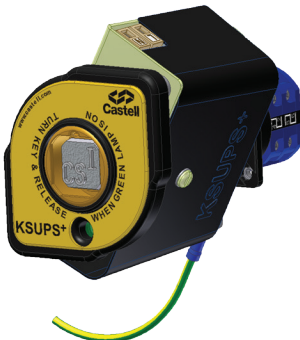


KSUPS+ Solenoid Controlled Switch

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KSUPSP-FSB-P-C04

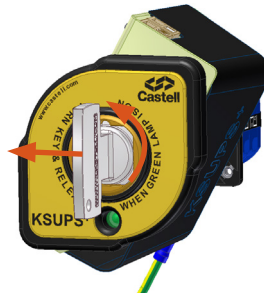
The KSUPS+ is a solenoid controlled trapped key interlock. It is primarily used in uninterruptable power supply (UPS) systems. The KSUPS+ ensures that access can only be gained once the UPS is a safe condition. The KSUPS+ is manufactured from either brass or stainless steel making it ideal for use in standard or harsh corrosive environments. The unit is supplied ready for mounting into an existing panel. The KSUPS+ comes with a multi-voltage range of input voltages: 24, 110 and 240 VAC or VDC.

Operation

The Castell KSUPS+ solenoid controlled switch is typically used in uninterruptable power supply control systems.

KSUPS+ Solenoid Controlled Switch

- ① Key is trapped while power is on, solenoid is de-energised.
- ② Solenoid is energised by external signal. As the LED illuminates, key can be turned and released.
- ③ Solenoid is energised, switch is locked out and key is free.



1. While the power is on and a machine is running, the key is trapped in the KSUPS+ unit.
2. To release the key, an external signal must be received to energise the solenoid. With the solenoid energised, the LED will illuminate to confirm that the key can be removed ensuring the power is off.
3. The key can now be removed and taken to open the door lock and gain access to the machine area.

The KSUPS+ can operate with a range of input voltages: 24, 110 or 240 VAC or VDC.

The KSUPS+ comes with 4 switch contacts as standard with contacts arrangements as 2NO/2NC or 4 Pole ON/OFF. Auxiliary sets of contacts are available on request.



KSUPS⁺ Solenoid Controlled Switch

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Usage

The KSUPS⁺ 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 such as the AI, AIE or Salus.



The KSUPS⁺ solenoid controlled switch is not designed for security purposes.

Installation

Installation should be carried out by a qualified electrical engineer.

The front of panel units should be mounted to a flat surface using 2 suitable M6 fixing screws. Holes should be drilled in the panel to accept the lock mounting (please refer to drawing on page 4 for more details). The lock face should be sealed to the panel for ingress protection.

The faceplate is pushed on and clips on to the lock portion.



Cables should be connected to the switch in accordance with the applicable wiring diagrams. Ensure that the unit is bonded for earth continuity (see drawing on page 4 for more installation details).



IMPORTANT:

The interlock should be mounted using anti-tamper fasteners to prevent unauthorised removal.



The KSUPS⁺ range of solenoid controlled switches must be installed by a competent and qualified person who has read and understood these instructions. Please retain this document in your technical file.



KSUPS⁺ connections should be suitably terminated with bootlace ferrules or similar.

Installation not in accordance with these instructions may result in incorrect or unsafe operation.

Maintenance

Periodic visual checks should be carried out by the site manager / safety officer.

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



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



KSUPS+ Solenoid Controlled Switch

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Technical Data

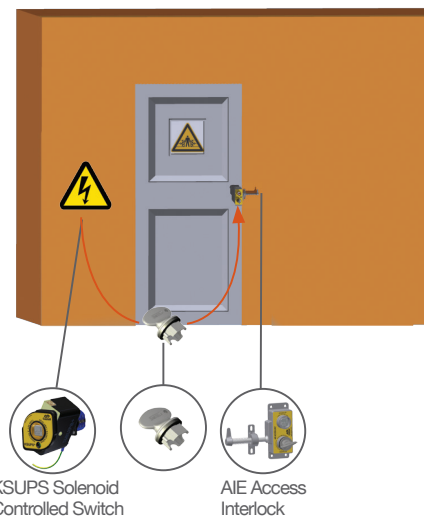
Temperature Rating	-25°C ice free to +55°C.		
Type of Mounting	Panel mount using suitable fasteners (please refer to drawing on page 4 for more details)		
Weight	0,6 kg		
Material	Brass/Stainless steel		
Power Isolation	20A		
Voltage	24V AC/DC	110-230V AC/DC	(+/- 5%)
Nominal Power Consumption	24V AC/DC: 9,5VA / 5,5W	110-230V AV/DC: 17VA / 5,5W	
Switch Approvals	BS,UL,CSA & VDE or CCC		
MTTF Certification	Available on request		

Application

A typical application of KSUPS+ solenoid controlled switch is the control of access to uninterruptable power supply (UPS) systems.

The key is released when the UPS system gives a signal to the KSUPS+ to energise the solenoid when it is in a safe state to allow access.

The key can then be taken to gain access to the protected area. The UPS cannot commence until the key is removed and taken to the KSUPS+.



EC-Declaration

We, the manufacturers, declare that the components, detailed herein and placed on the market, comply with all the essential health and safety requirements applying to them.

Empowered signatory:

Dr T.C. Whelan
Managing Director

KSUPS+ Solenoid Controlled Switch

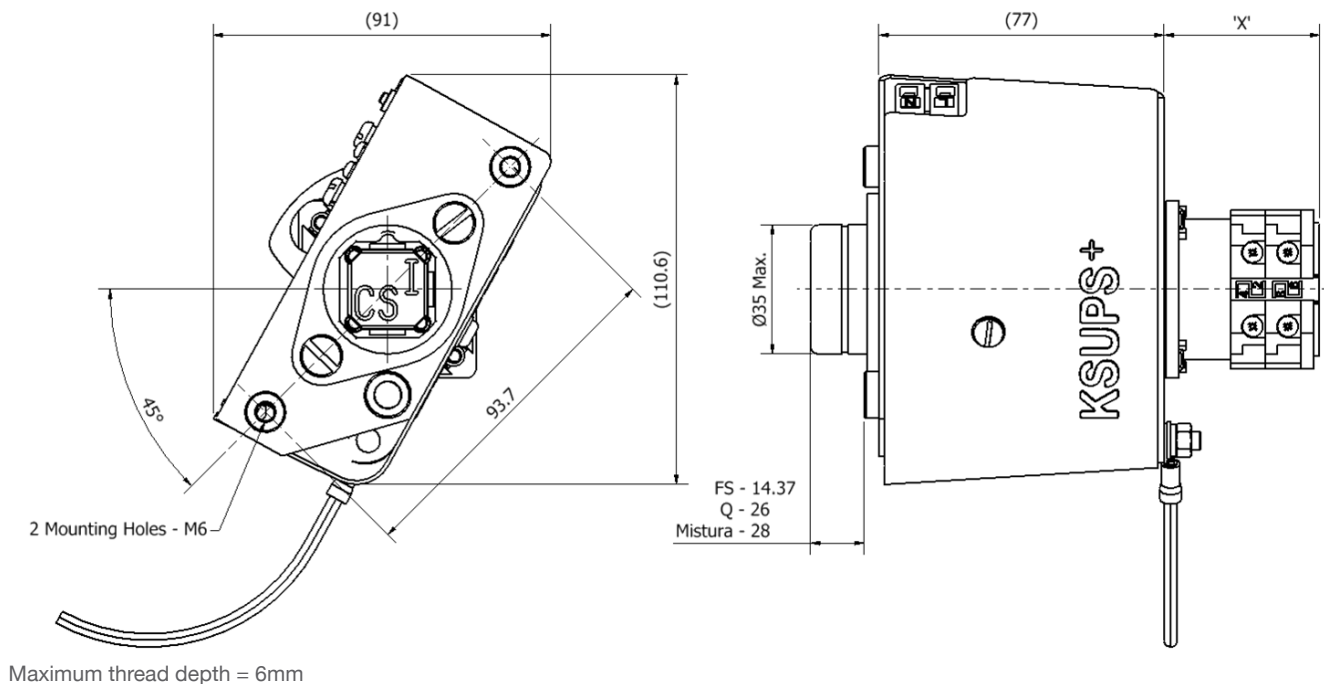
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Drawing

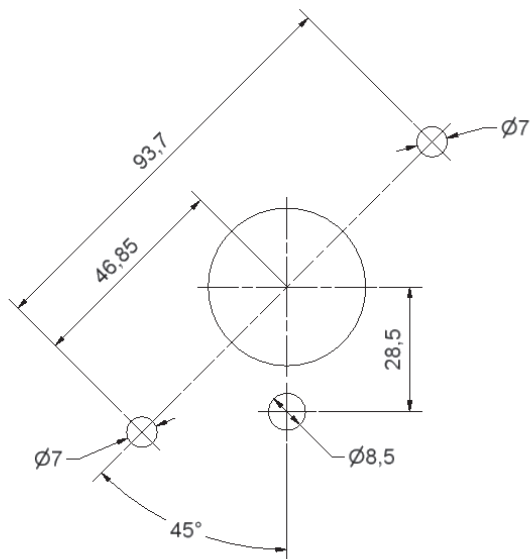
Dimensions:
in mm

Note: For safe mounting, use security screws

KSUPS+



Panel Mounting Details



Dimension Reference 'X'	
No of Poles	Length
4 Poles	42,0 mm
6 Poles	51,5 mm
8 Poles	61,0 mm
10 Poles	70,5 mm
12 Poles	80,0 mm

KSUPS+ Solenoid Controlled Switch

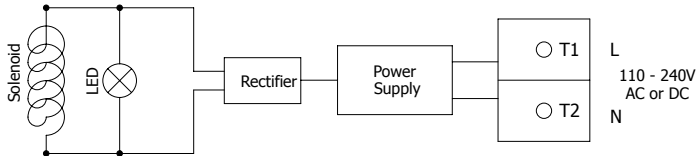
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Wiring Diagram

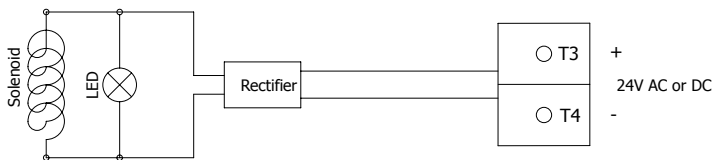
Dimensions:
in mm

Note: For safe mounting, use security screws

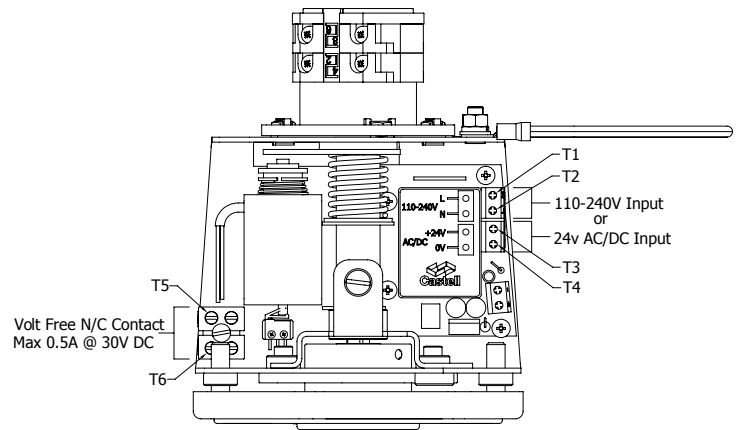
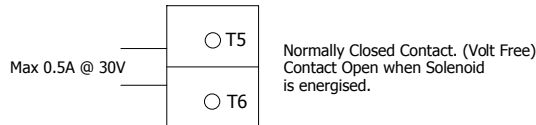
SOLENOID WIRING DIAGRAM (110 - 240V AC OR DC)



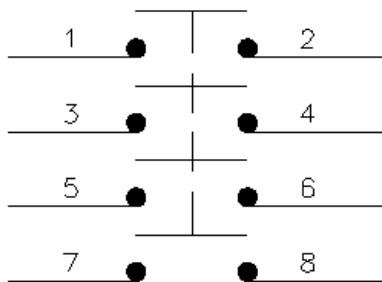
SOLENOID WIRING DIAGRAM (24V AC OR DC)



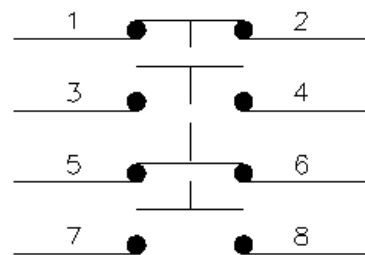
TERMINAL FOR SOLENOID POSITION MONITORING



Contacts Wiring Diagram



Key Free - Switch off - 4NC



Key Free - 2 NO/2NC

KSUPS+ Solenoid Controlled Switch

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Order Information

	Product Type	1	2	3	4	5	6
Part Number	KSUPSP						
Example	KSUPSP	FS	B	P	C/O	4	TBA

1	Lock portion type	FS ⁽¹⁾ / Q ⁽¹⁾
2	Lock portion material	B = Brass / S = Stainless steel
3	Mounting	P = Panel mount (back of board), standard
4	Contacts arrangement in normal position (key in)	C/O = NO/NC arrangement (contacts closed/open) CC = NC arrangement (all contacts closed)
5	Number of contacts	4, standard
6	Lock portion symbol	FS ⁽¹⁾ up to 3 characters / Q ⁽¹⁾ up to 6 characters

(1) **FS - Lock type** Up to 3 characters
Q - Lock type Up to 6 characters

Special construction available upon enquiry



Contact Information



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