KSUPS
Solenoid Controlled Switch



The KSUPS is a solenoid controlled switch. It is designed for, and primarily used in Uninterruptable Power Supply (UPS) bypass systems. The KSUPS ensures that the key may only be removed once the UPS system is in a safe condition. The KSUPS can be manufactured from either brass or stainless steel. The unit is supplied ready for mounting into a panel. It is available with a range of solenoid voltage options; 24, 110 and 240 VAC or VDC.

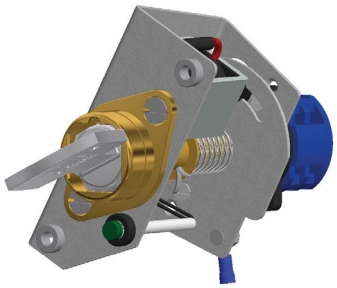
OPERATION

The Castell KSUPS solenoid control switch is typically used in UPS bypass systems.

KSUPS Solenoid Controlled Switch

1

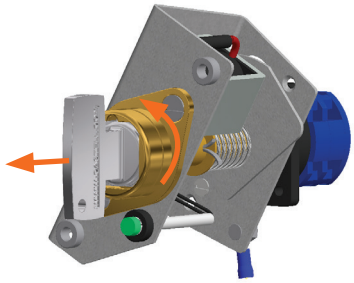
Key is trapped while power is on, solenoid is de-energised.



While the power is on, the key is trapped in the KSUPS unit.

2

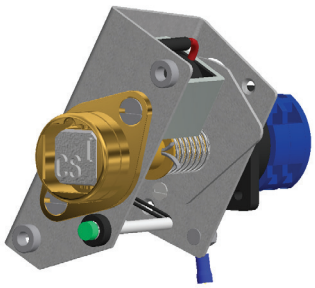
Solenoid is energised by an external signal. When the LED illuminates, key can be turned and released.



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.

3

Solenoid is energised, switch is locked out and key is free.



The key may then be removed.

The KSUPS is available with different solenoid voltages as AC or DC: 24, 110 or 240 V (12, 30, 48, 125, 125, 220, available upon request)

The KSUPS is available in standard configurations with either 4 or 6 poles. Contact arrangements can be 2NO/2NC, 3NO/3NC, or all contacts closed (key trapped) and all contacts open (key free). Other switch configurations are available on request.

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USAGE

The KSUPS solenoid controlled switch is designed to be part of an electrical safety system.

The KSUPS solenoid controlled switch is not designed for machine guarding.

For machine guarding applications, please refer to Castell KSS20 range.

No hazardous substances were used in the manufacture of this product. The product can be disposed of in standard waste.

INSTALLATION

The mounted panel units should be fitted to a flat surface, 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.

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 M5 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.

The manufacturer should be consulted when use in a corrosive environment is planned.

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.

The switch should be inspected periodically, as required. Safety checks should include checking the solenoid energises and engages in the locking cams. When de-energised, key should only be removable in the correct safe operating conditions (see page 1).

Check the switch is operating correctly with a continuity checker.

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

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TECHNICAL DATA

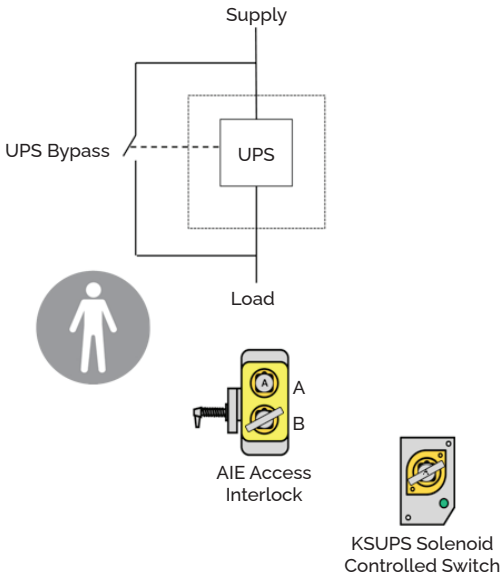
	KSUPS Solenoid Controlled Switch
Temperature rating	Ambient temperature of stages: open at 100% lu/lth - 55°C during 24 hours with peaks up to 60°C, enclosed at 100% lthe - 35°C during 24 hours with peaks up to 40°C
	Storage temperature: -40°C to 85°C (in case temperature below -5°C no shock load permissible)
Type of mounting	Panel mount using M5 anti-tamper fasteners (please refer to drawing on page 4 for more details)
Weight	0.6 kg
Material	Brass or Stainless steel lock
Power isolation	20 A
Voltage	24, 110, 240 VAC or VDC (12, 30, 48, 125, 220, available upon request)
Switch approvals	UL,CSA, CCC
B10d	1,000,000
Conformation declaration	CE

APPLICATION

While the UPS is running, the key is trapped in the KSUPS interlock. The key can only be turned and released when the UPS is put into bypass. This will energise the solenoid via a remote signal from the UPS system.

Turning the key changes the condition of the switch and releases the key, which can now be transferred to the AIE access interlock. This allows access to the UPS for maintenance.

The UPS will remain in a safe state until the key is returned from the AIE and inserted back into the KSUPS and trapped. This allows the UPS to be returned to service.



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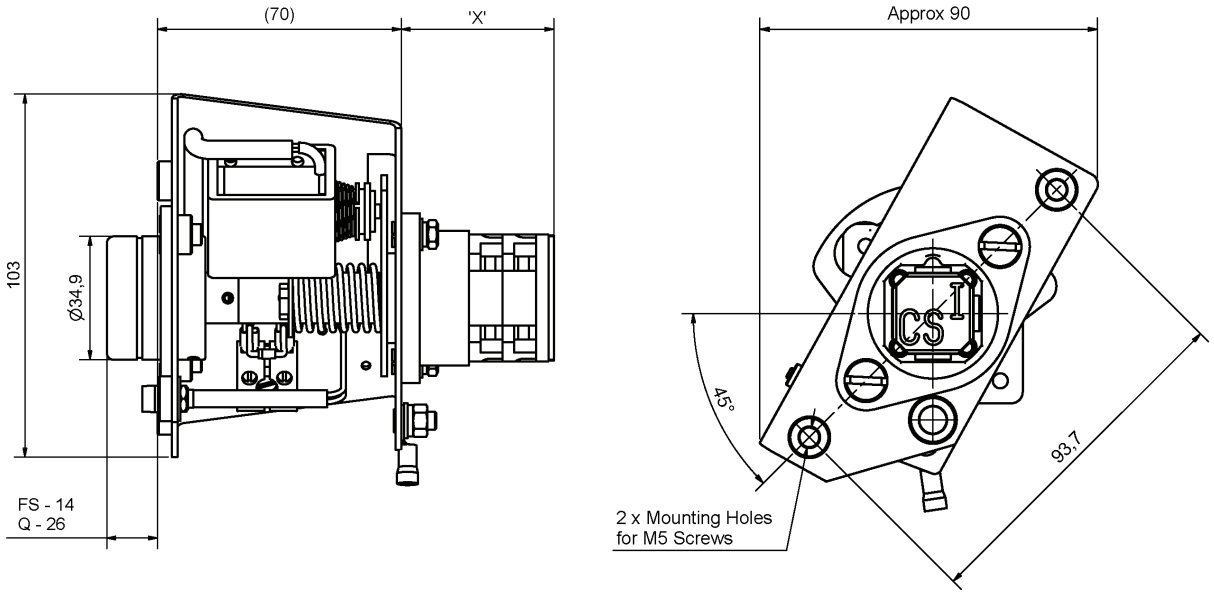
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DRAWING

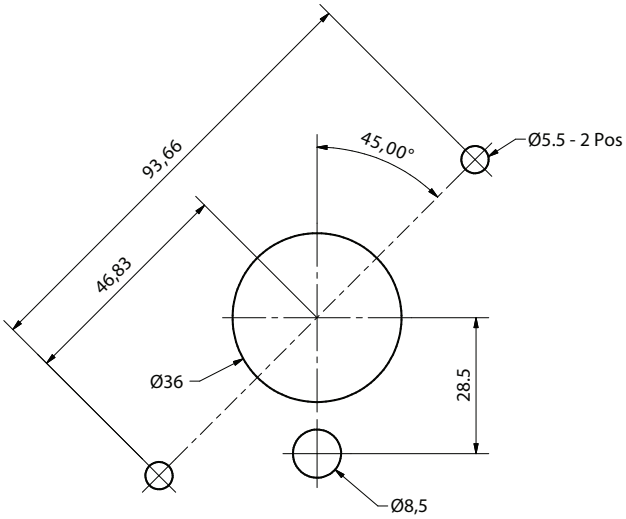
Dimensions: in mm

Note: For safe mounting, use security screws

KSUPS



Panel cut-out details

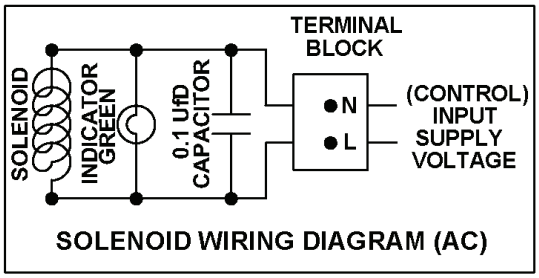


Dimension Reference 'X'	
No of Poles	**Length**
4 Poles	42.0 mm
6 Poles	51.5 mm
8 Poles	61.0 mm
10 Poles	70.5 mm
12 Poles	80.0 mm
14 Poles	89.5 mm
16 Poles	99.0 mm

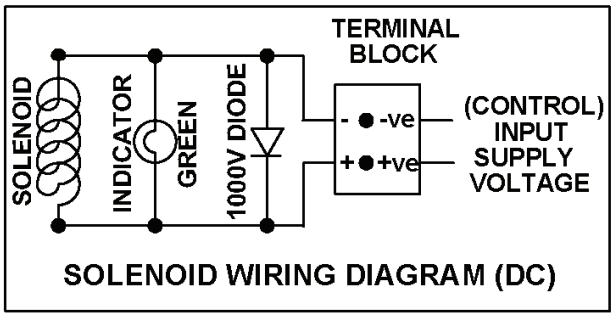
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WIRING DIAGRAM

Solenoid Wiring Diagram (AC)

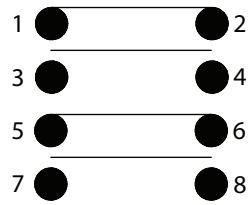


Solenoid Wiring Diagram (DC)

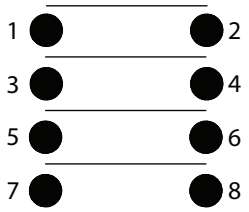


Contacts Wiring Diagrams

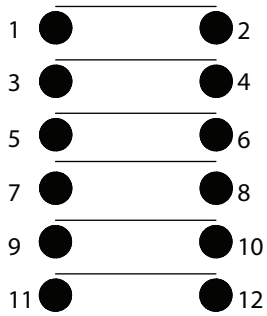
Key Free, 4 Pole 2N/O+2N/C Switch



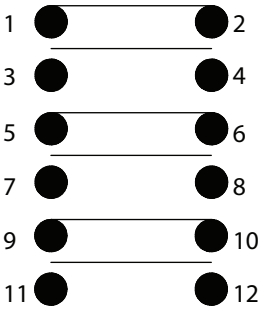
Key Free, 4 Pole Off/On Switch



Key Free, 6 Pole Off/On Switch



Key Free, 6 Pole 3N/O+3N/C Switch



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ORDER INFORMATION

	Component type	1	2		3		4	5		6	7		8
Part number	UPS (KSUPS)	-			-		-			-			
Example	UPS	-	FS	B	-	P	-	CO	4	-	110	A	TBA

1	Lock portion type	FS (1) / Q (1)
2	Material	B = Brass / S = Stainless steel
3	Mounting	P = Panel Mount (BOB- back of board)
4	Contacts arrangement in normal position	CO = NO/NC arrangement (contacts closed/open) / CC = NC arrangement (all contacts closed)
5	Number of contacts	4 / 6, standard 8 / 10 / 12 (available upon request)
6	Solenoid voltage	110 / 24 / 240, standard 12 / 30 / 48 / 60 / 125 / 220 (available upon request)
7	Current	VAC = A / VDC = D
8	Lock portion symbol(s)	FS (1) up to 3 characters / Q (1) up to 6 characters

(1)

FS - Lock type	Q - Lock type
Up to 3 characters	Up to 6 characters
	

Special construction available upon enquiry

ACCESSORIES

	Product	Part number
	Flip Cap	FLIP-S

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