KSD
Switch Disconnector



The KSD is a key driven non-fused switch disconnector suitable for power isolation. The standard KSD comes with either 4 or 6 poles plus 2 auxiliary early break contacts. The KSD lock portions are manufactured from either brass or stainless steel. It can be supplied either for mounting into an existing panel or in an IP65-rated lockable enclosures, available in mild steel or stainless steel.

OPERATION

The Castell KSD Switch Disconnector is typically used for machine isolation applications in order to protect the hazardous area from access while power is on.

KSD Switch Disconnector

1

Key is trapped, power is on.



While the power is on and a machine is running, the key is trapped in the KSD Switch Disconnector.

2

To switch power off turn and release the key.



To switch the power off turn and release the key from the KSD unit. This will change the condition of the forced break contacts from closed to open.

3

Key is released, power is off.



The power is off until the key is replaced in the KSD Switch Disconnector.

The KSD is available for different switching loads as KSD32, KSD63, KSD125 and KSD160 as standard versions (with 32, 63, 125 and 160 amps power isolation respectively). Special versions, KSD250, KSD315 and KSD400, are available upon special request.

Please refer to page 7 for more ordering details.

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USAGE

The KSD Switch Disconnector is designed to be part of a safety system and is used to isolate power.

The KSD Switch Disconnector is not designed for security purposes.

No hazardous substances were used in the manufacture of this product.

INSTALLATION

The KSD unit should be mounted to a surface using suitable fasteners (please refer to drawing on page 5 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 (please refer to drawing on page 6 for more installation details).

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

KSD switch disconnector 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 interlock must be inspected every 6 months. Safety checks should include ensuring the keys and switch operate in the correct safety operating conditions (see page 1).

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

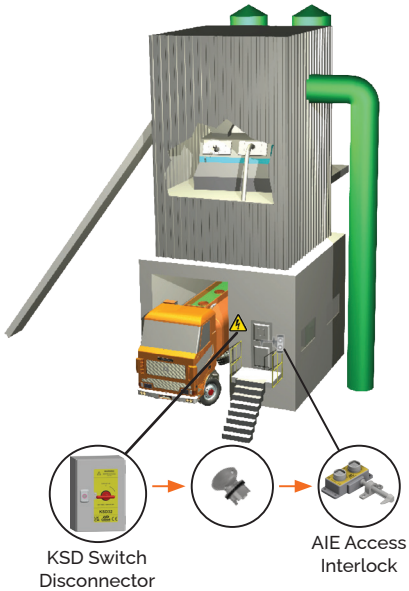
	KSD Switch Disconnector
Temperature rating	Minimum: -5°C [23°F]
	Maximum: 55°C [131°F]
Type of mounting	Surface mount (FOB) & add other row for Mounting fasteners: 3/8" or M10
Weight	KSD32 = 4.5 kg, KSD63 = 4.5 kg, KSD125 = TBA, KSD160 = TBA, KSD250 = TBA, KSD315 = TBA
Material	Brass or Stainless steel lock, IP65 Mild / Stainless steel enclosure
Power isolation	32A, 63A, 125A, 160A (standard) & 250A, 315A, 400A (available upon request)
Motor isolation (AC Values) / Switch polarity	32 A: AC-23 A 11 kW AC-3 7.5 kW
	63 A: AC-23 A 22 kW AC-3 18.5 kW
	125 A: AC-23 A 45 kW AC-3 37 kW
	160 A: AC-23 A 55 kW AC-3 45 kW
B10d	1,000,000
Shock & vibration	In accordance with BS EN 60068-2-6 & BS EN 60068-2-27
PL rating	PLc
Switch standards	IEC 947-3
Switch approvals	UL, CSA
Operation	Suitable for 1,000,000 operations

APPLICATION

The KSD Switch Disconnector is designed to operate as part of an integrated safety system, controlling access to hazardous areas. Typical machinery using the KSD range are motor driven, high risk applications where complete isolation of the power supply is required before access is granted.

The removal of the key in the KSD changes the condition of the electrical supply to the machine to a safe condition. This key can now be removed and used to gain access to the hazardous area via the access interlock.

The machine cannot be restarted until the access door is closed and locked, and the key is returned and re-inserted into the KSD unit.



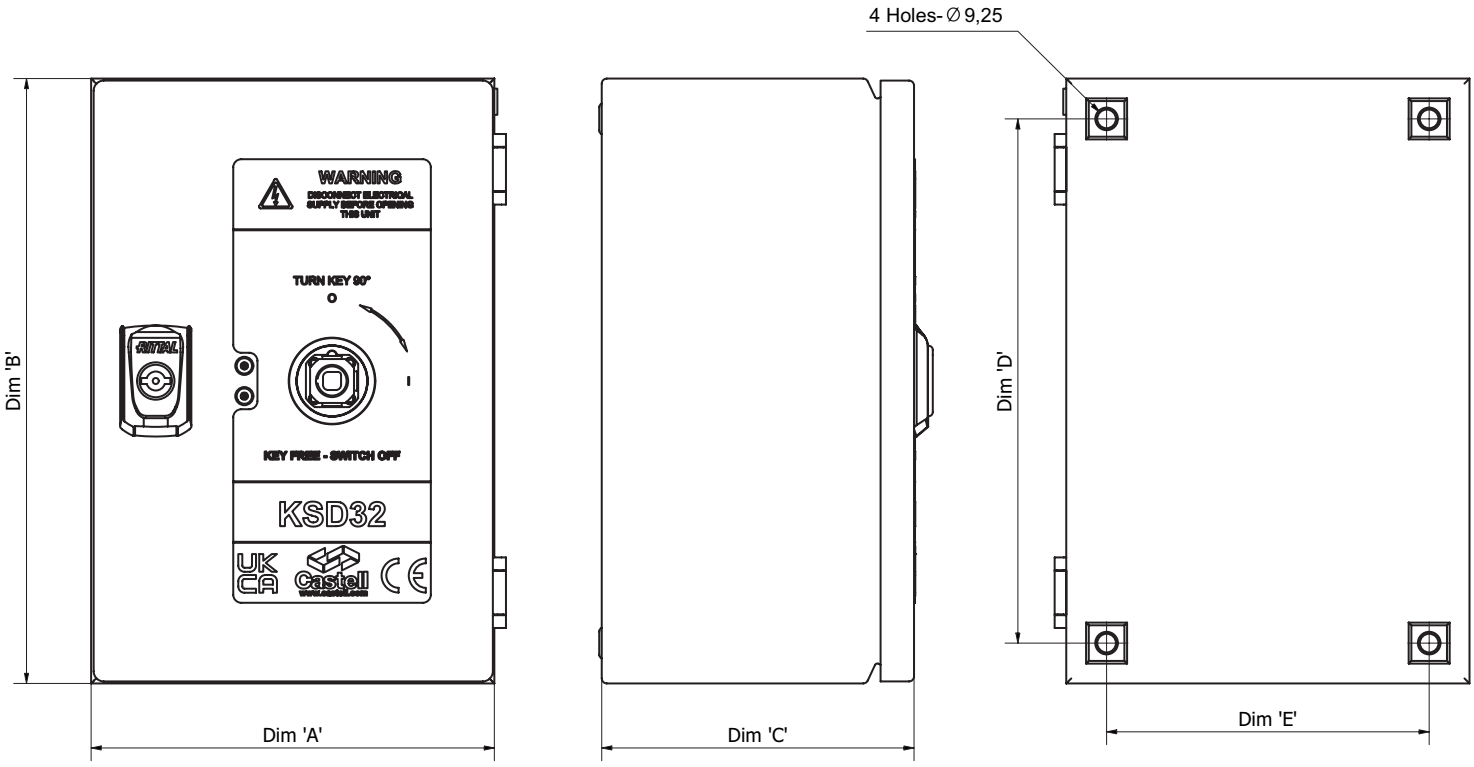
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DRAWING

Dimensions: in mm

Note: For safe mounting, use security screws

KSD



KSD Mild Steel Enclosure Dimensions

Dim.	KSD32 (4P & 6P)	KSD63 (4P & 6P)	KSD125 (4P)	KSD125 (6P)	KSD160 (4P)	KSD160 (6P)	KSD250 (4P)	KSD315 (4P)	KSD250 (6P)	KSD315 (6P)
A'	200	200	300	380	300	380	380	380	500	500
B'	300	300	400	600	400	600	600	600	500	500
C'	155	155	210	210	210	210	210	210	300	300
D'	260	260	360	560	360	560	560	560	460	460
E'	160	160	260	340	260	340	340	340	460	460

KSD Stainless Steel Enclosure Dimensions

Dim.	KSD32 (4P & 6P)	KSD63 (4P & 6P)	KSD125 (4P)	KSD125 (6P)	KSD160 (4P)	KSD160 (6P)	KSD250 (4P)	KSD315 (4P)	KSD250 (6P)	KSD315 (6P)
A'	200	200	300	380	300	380	380	380	500	500
B'	300	300	380	600	380	600	600	600	500	500
C'	155	155	210	210	210	210	210	210	300	300

Note: Pre drilled holes are not available on the stainless steel version.
Castell offers wall mounting brackets, sold separately.

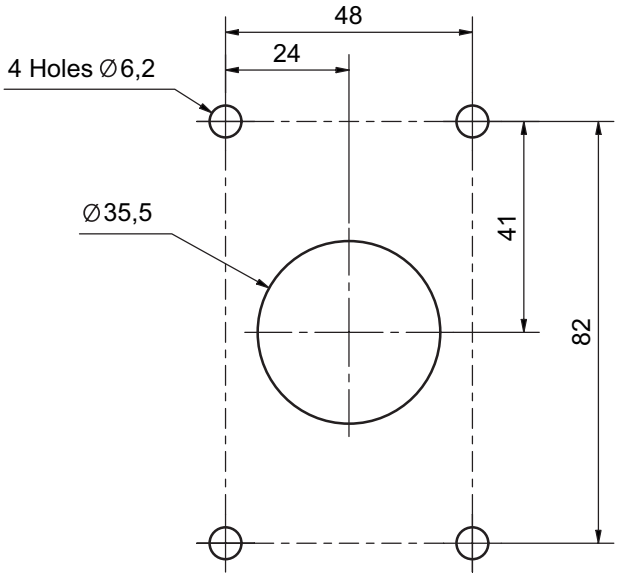
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DRAWING

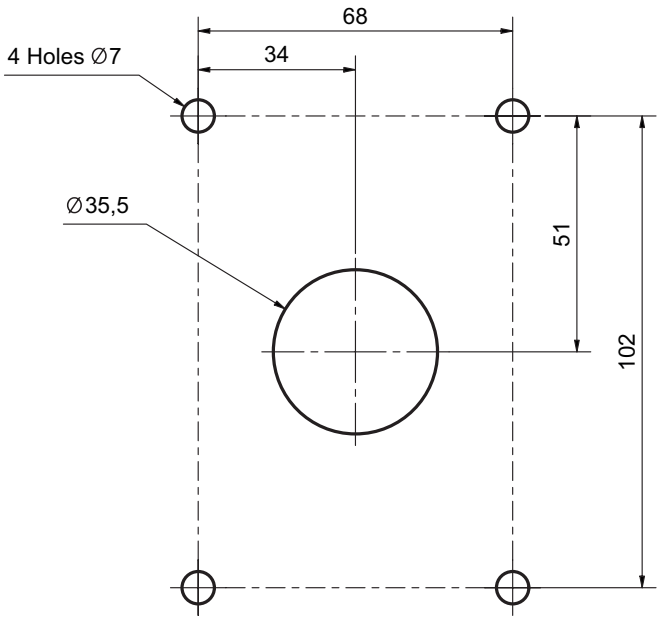
Dimensions: in mm

Note: For safe mounting, use security screws

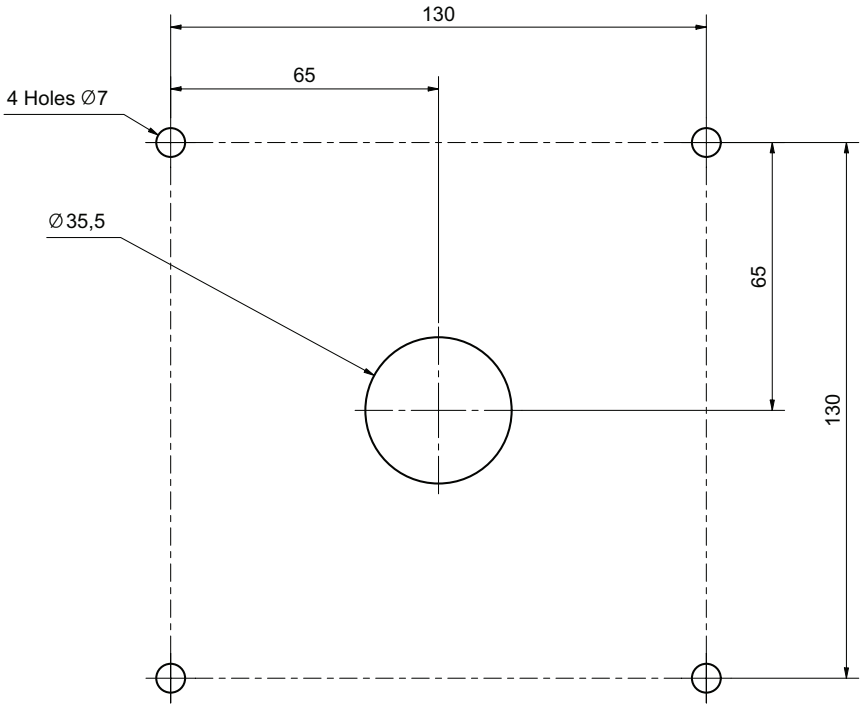
Mounting Holes Details for KSD32 & 63



Mounting Holes Details for KSD125, 160, 250, 315 4 Pole



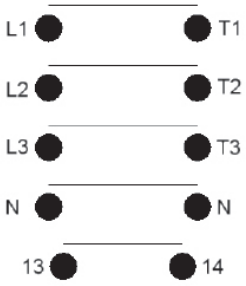
Mounting Holes Details for KS315 6 Pole



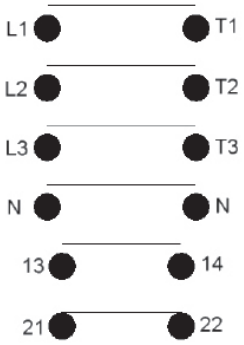
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WIRING DIAGRAM

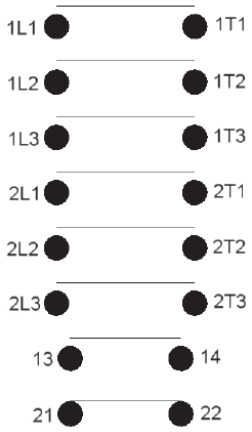
4 Pole 1N/O AUX



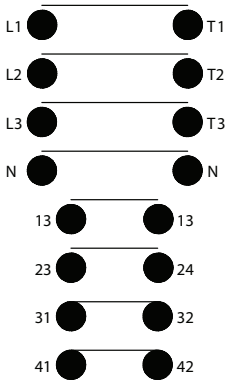
4 Pole 1N/O 1N/C AUX



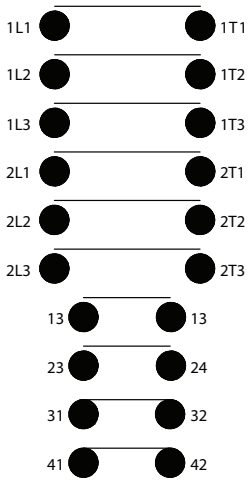
6 Pole 1N/O 1N/C AUX



4 Pole 2N/O+2N/C AUX



6 Pole 2N/O 1N/C AUX



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ORDER INFORMATION

	Component type	1	2	3	4	5	6	7	8	9
Part number	D (KSD)		-		-	-		-		
Example	D	32	- FS	B	- F	- CC	6	- CO	2	TBA

1	Isolation	32A, 63A, 125A, 160A (standard) / 250A, 315A, & 400A (available upon request)
2	Lock portion type	FS (1) Q (1) (not recommended for switches over 63A) KSD-R Stainless steel key should be used for all KSDs, regardless of amperage or application
3	Material	B = Brass / S = Stainless steel
4	Mounting	P = Panel mount (BOB- back of board) / F = Front of board, (FOB- mild steel enclosure) / SF = Stainless steel enclosure (not available with brass locks)
5	Main contacts arrangement in normal position (key in)	CC = NC arrangement (all contacts closed, standard)
6	Number of main contacts	4 / 6
7	Auxiliary contacts arrangement in normal position	CO
8	Number of auxiliary contacts	2 = 1NO+1NC (only available with 32A & 63A) / 4 = 2NO+2NC
9	Lock portion symbol	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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